SPEC-HEAD LICENSING:
THE SCOPE OF THE THEORY

Yoryia Agouraki

Thesis submitted for the degree of Doctor of Philosophy

University College London
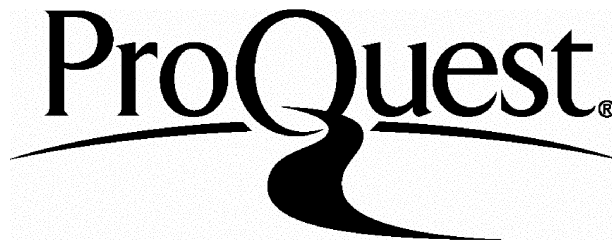
ProQuest Number: 10016720

ProQuest 10016720

Abstract

This dissertation is a study of Spec-head Licensing within the Principles and Parameters framework. I examine Spec-head Licensing in three configurations, namely Polarity Item Licensing, Focussing and the Clitic-Construction. The language providing most of the data is Modern Greek (MG). I also discuss English and Romance data.

In chapter II, I examine Existential Polarity Items (EPI's). I argue that there is a cluster of properties that can be attributed to propositional operators, the operators modifying the proposition in the philosopher's sense of the term. Namely, propositional operators license EPI's and give rise to inner island effects. The claim is advanced for MG and English. It is further suggested that there are interpretational differences between EPI *anyone* and *someone*.

In chapter III, I consider properties of foci. I claim that the Focus-Criterion is different from the Wh-Criterion. It is also argued that foci always have scope over Neg. Finally, I present some evidence against Quantifier Raising. It is suggested that scope ambiguity between quantifiers is an epiphenomenon bearing crucially on the Focus-Criterion.

In chapter IV, I look at the Clitic-Construction (CLC), the construction involving a DP and a matching clitic. I argue that the position occupied by the object DP in MG CLC is both an A- and A'-position. Clitic Doubling is claimed generally to involve syntactic verb-focussing. Complex Inversion in French is analysed as subject CLC. The parametrization of CLC is addressed next. MG has only object CLC while French has only subject CLC. I suggest that the presence versus absence of object CLC correlates with the Class 1 / Class 2 distinction of languages (Koopman and Sportiche (1991)).

In chapter V, I attempt some generalizations on the previous discussion. The following seem to be the basic properties of Spec-head mechanisms: licensing of extraction, licensing of A-properties and licensing of operators.

Acknowledgements

ΠΡΩΤΑΘΛΗΤΕΣ

Βγαίνω μια βόλτα στην Αθήνα
και βλέπω φάτσες γελαστές.
Θα ξανάρθει η ρουτίνα
και θα ξανάρθουνε βροχές.
Θα ξανάρθει η ρουτίνα
Μα κάτι άλλαξε από χτες.

Είμαστε πια πρωταθλητές.
Έρχονται άλλες εποχές.

Δεν ήταν μάγια και κατάρες
που δεν κερδίζαμε ποτέ.
Είμασταν πάντοτε παιχτάρες,
μα δεν αλλάζαμε μπαλιές.
Είμασταν πάντοτε ψυχάρες,
μα δεν πιστεύαμε ποτέ.

Είμαστε πια πρωταθλητές.
Έρχονται άλλες εποχές.

Πιες απ' το κύπελλο σαμπάνια,
να τραγουδήσουμε αγκαλιά
για τη χαμένη περηφάνεια,
για τη χαμένη μας μαγκιά.
Για τη χαμένη περηφάνεια
που θυμηθήκαμε ξανά.

Είμαστε πια πρωταθλητές.
Έρχονται άλλες εποχές.

Φατμέ, ΠΑΛΚΟ

Table of Contents

Chapter I

Introduction

1.1 Organisation of the Thesis

This dissertation is a study of Spec-head Licensing within the Principles and Parameters framework. I examine Spec-head Licensing in three configurations, namely Polarity Item Licensing, Focussing and the Clitic-Construction[1] (CLC). My aim has been to investigate the properties of Spec-head Licensing not so much in order to provide detailed descriptions of individual Spec-head agreement configurations as to illustrate the scope of a theory of Spec-head Licensing.

In chapter II, a characterisation of the set of Existential Polarity Items (EPI's) is attempted. In chapter III, I consider LF properties of focussed constituents and how they can be derived from the Focus-Criterion. The main point of chapter IV is that the position occupied by the object DP in the Clitic-Construction in MG is a mixed position with both A- and A'-properties. In chapter V, I consider Spec-head licensing mechanisms with respect to S-structure and LF. It is suggested that all LF movement results from the satisfaction of well-formedness Criteria.

The language providing most of the data is Modern Greek (MG). I also discuss English and Romance data. My target, though, has been to contribute to the theory of UG and not merely to offer a description of any language.

For the reader to be able to follow the discussion of the MG data, a minimum knowledge of MG syntax is required: MG is a pro-drop and 'free word order' language, whatever the latter turns out to mean. The subject is generated in a VP-internal position and does not have to raise to the Spec of IP.

I will next summarize the content of chapters II to V.

In chapter II, I examine Existential Polarity Items (EPI's). The main claim put forward is that propositional operators license EPI's. The set of propositional operators consists exhaustively of Neg, WH, F, the conditional, the necessity and the possibility operators. On the basis of the Neg-Criterion in (1) (cf. Brody 1990 and Haegeman and Zanuttini 1990) on the relation between NEG Operators (cf. (2))

---

[1] I use 'Clitic-Construction' as a general term to refer to both Clitic-Left-Dislocation and Clitic Doubling.

and Negative heads, I formulate the more general P(olarity)I(tem)-Criterion (cf. (3)).

(1) Neg-Criterion:

a. A NEG-operator must be in a Spec-head configuration with an X-zero [NEG].

b. An X-zero [NEG] must be in a Spec-head configuration with a NEG operator.

(2)

a. NEG-operator: a NEG phrase in a scope position

b. Scope position: A left-peripheral A'-position (i.e. either VP-adjoined or a specifier position).

(3) PI-Criterion:

a. A PI must be in a Spec-head configuration with its licenser.

b. The licenser of a PI must be in a Spec-head configuration with that PI.

The PI-Criterion is more general than the Neg-Criterion in that it describes the relation between different types of PI's, i.e. EPI's, Negative Polarity Items (NPI's) or Free Choice PI's (FCPI's), and their licensers. The level of application for the PI-Criterion varies crosslinguistically. Polarity Item Licensing is also considered in the light of other Criteria.

(4), below, is an example of EPI licensing by the necessity operator.

(4) tha   píye   puthená   me   fílus
     must   went-he anywhere   with friends
     'He must have gone somewhere with friends.'

The semantics of EPI's is investigated next. I argue that EPI's are operators and that EPI's should not be analysed similarly to existential quantifiers, as is standard practice. There are claimed to be interpretational differences between EPI's and existential quantifiers.

I go on to argue that the set {Neg, WH, F, the conditional, the necessity and the possibility operators} are the propositional operators. Namely, the members of this set modify the proposition in the philosopher's sense of the term. In the

philosophical literature a proposition is taken to be the semantic content of a sentence disambiguated with reference assigned and tense specified. Those operators that are not propositional are called nonpropositional operators. I assume that the set of nonpropositional operators consists exclusively of quantifiers, wh-phrases, foci and Polarity Items.

A cluster of properties is attributed to the set consisting of Neg, WH, F, the conditional, the necessity and the possibility operators. These are given in (5):

(5)
a. They license EPI's.
b. They are propositional operators.
c. They induce inner island effects.

The pair in (6) illustrates property 5(c). In 6(a) the inner island effect is induced by the necessity operator.

(6)a. *jatí$_i$ tha ípe óti ton apélisan t$_i$?
   why must said-he that him-cl sacked-they
   '*Why$_i$ must he have said that he was sacked t$_i$?'

   b. jatí$_i$ ípe óti ton apélisan t$_i$?
   why said-he that him-cl sacked-they
   'Why$_i$ did he say that he was sacked t$_i$?'

I claim that property 5(b) is the defining property of the set {Neg, WH, F, the conditional, the necessity and the possibility operators} and replace (5) with (7):

(7) Propositional operators have the following properties:
a. They license EPI's.
b. They induce inner island effects.

(7) works for the MG data. A problem, however, is posed by English, which has properties 5(b) and (c) but not 5(a). The set of EPI licensers in English, i.e. Neg, WH and the conditional operator, does not include all propositional operators. As a first approximation to the problem, a weak solution is put forward. The difference between English and MG is explained in terms of an alleged UG

parameter. The condition that all languages satisfy could be claimed to be (8), below, and the patterning between PI type and propositional operators as its licensers is subject to parametric variation. This is how the difference between English and MG with respect to EPI licensers would be accounted for.

(8) Propositional operators license PI's.

The advantages and disadvantages of this solution are considered and it is finally rejected in favour of what will be termed a 'strong' solution. I maintain that English conforms to claim 5(a) and that claim 5(a) is only prima facie contradicted by the English data. I argue that the parameter involved in the difference between MG and English is not a UG parameter but a lexical one. In particular, I suggest that English has more than one instantiation of EPI's, namely *anyone* , *someone* and *one* . The matching between each EPI instantiation and propositional operators is fixed. The strong solution to the puzzle presented by English is schematised in (9), below:

(9)
a. The matching between EPI's and propositional operators is not subject to parametric variation.

b. The matching between EPI instantiations and propositional operators can be subject to parametric variation.

The three instantiations of EPI's in English are in complementary distribution as far as their licensers are concerned. *anyone* is licensed by Neg, WH and the conditional operator. EPI *someone* is licensed by F, certain necessity and possibility operators. *one* is licensed by certain other necessity and possibility operators. The claim that *someone* is ambiguous between an existential quantifier and an EPI is the solution I propose for the problem raised by English with respect to 5(a).

In chapter III, I look at the licensing of foci. Languages may have phonetic foci (cf. (10)), i.e. constituents stressed in situ, syntactic foci (cf. (11)), i.e. constituents in a clause-peripheral position specific to foci, or both phonetic and syntactic foci.

(10) o Yánnis aghapái ti   MARIA
      the Yannis loves the MARIA
      'Yannis loves MARIA.'

(11) ti MARIA aghapái o Yánnis
      the MARIA loves the Yannis
      'Yannis loves MARIA.'

I follow Brody's (1990) theory of Focussing, which posits a
F(ocus)P(hrase), hosting, in its specifier position, syntactic foci as early as at S-
structure and phonetic foci by LF, and a corresponding F(ocus)-Criterion (cf.
(12)).

(12) F-Criterion
a. A focussed phrase must be in a Spec-head configuration with F.
b. F must be in a Spec-head configuration with a focussed phrase.

The theory is illustrated with examples from MG. I examine next the
relation, if any, between the F-Criterion and the Wh-Criterion. Brody (1990)
claims, on the basis of interrogative wh-phrases in Hungarian, that the Wh-
Criterion is not distinct from the F-Criterion. He assumes that interrogative wh-
phrases are necessarily focussed. The Wh-Criterion is, therefore, taken to be a
subcase of the F-Criterion. I argue, instead, that the Wh-Criterion is distinct from
the F-Criterion. In fact, I suggest that the Wh-Criterion could be considered as a
subcase of the P(olarity)I(tem)-Criterion.

Next I consider the relation between foci and sentential negation (Neg) and I
advance claim (13), below. I argue against Jackendoff's (1972) 'Neg Association
with Focus' Rule. Jackendoff claims that sentential negation and Focus can have
either scope with respect to one another.

(13) Foci have scope over Neg.

Finally I present some evidence against Quantifier Raising (QR). According
to May (1985), quantifiers raise and adjoin to IP at LF. I look at scope ambiguity
cases between quantifiers. The reason why I discuss QR here is because I suggest
that some readings of the putative QR interact crucially with the F-Criterion. The

point I make is that when there are two quantifiers, hierarchical relations, based on c-command actively defined, determine the interpretation unless the lower quantifier is focussed. It is focussing of the lower quantifier, and not the rule of QR, that gives us the other scope possibility. Showing that scope ambiguity between quantifiers is an epiphenomenon is taken to be an argument against QR.

In chapter IV, I look into the Clitic-Construction (CLC). The term Clitic-Construction refers to the cooccurrence of a DP and a matching clitic. Instances of CLC where the DP precedes the clitic are known as Clitic-Left-Dislocation (CLLD) (cf. example (14)) while instances of CLC where the DP follows the clitic are known as Clitic Doubling (CD) (cf. example (15)).

(14) ta lulúdhia *(ta) éfere o Vassílis
   the flowers-Acc them-cl brought-he the Vassilis-Nom
   'As for the flowers, Vassilis brought them.'

(15) *(ta) éfere ta lulúdhia o Vassílis
   them-cl brought-he the flowers-Acc the Vassilis-Nom
   'Vassilis did bring the flowers.'

It is argued that the Clitic-Construction is a Spec-head agreement configuration involving movement. The object DP moves from its canonical position to the Specifier of a CliticPhrase (ClP). The clitic matching the object DP in phi-features is the head of the CliticPhrase. The CliticPhrase is quite high in the clausal tree, immediately below the FocusPhrase and above IP. Movement of the object DP to the Spec of the CliticPhrase is required by the Clitic-Criterion in (16).

(16) Clitic-Criterion:
A DP must be in a Spec/head relation with a matching clitic.
A clitic must be in a Spec/head configuration with a matching DP

The nature of the Spec of the CliticPhrase in MG is examined next. It is claimed that it is a mixed position with both A- and A'-properties. The standard tests of Binding, Reconstruction and Parasitic Gaps Licensing are used to identify the properties of that position. It is shown that DP's in the Spec of ClP can act as binders for pronouns, an A-property. DP's in the Spec of ClP are also shown to license Reconstruction and parasitic gaps, both A'-properties. Further tests for the

14

A- and A'-status of [Spec,ClP] are used. It is shown that the Spec of ClP can be a theta-position, another A-property. Additional evidence for the claim that the Spec of ClP is an A-position comes from the fact that quirky subjects obligatorily participate in CLC. Moreover, DP's in Spec of ClP are shown to pattern with subjects in a number of properties. It is suggested that this can constitute a further, though not necessary, test for A-positions; namely, passivized and raised DP's also have properties of subjects while this is not the case with DP's in Spec of AGR-O". The properties of subjects that DP's in Spec of ClP share are the following: They can be the gap in pseudo-relatives. They can appear in the controlled position associated with control verbs. They can be modified by subject-oriented adverbs. Also, the Spec of ClP can be the target position of raising. A further argument for the Spec of ClP being an A'-position is taken to be the fact that CLC is a licensing mechanism for nonlocal movement.

Clitic Doubling is claimed to generally involve syntactic verb-focussing. What CD amounts to is CLC plus verb-focussing. It is suggested that the position of the object DP is the same in both CLLD and CD. In CD the object DP is in the Specifier of a CliticPhrase, while the verb has raised to the head F of FP. This syntactic movement of the verb captures the native speakers' intuition that in CD the verb is necessarily focussed.

Complex Inversion in French is analysed as subject CLC. There seem to be differences between subject CLC in French and object CLC in MG. For one thing, subject CLC in French is much more limited than object CLC in MG. Second, the motivation for subject CLC in French appears to be different than the motivation for object CLC in MG. Namely, in object CLC in MG it is movement of the DP that triggers the appearance of the clitic, CLC being a licensing mechanism for A'-movement. In subject CLC in French it seems that the reverse applies. In particular, it looks as if the clitic appears first and triggers movement of the matching DP to the Spec of ClP.

The parametrization of the Clitic-Construction is also addressed. MG has CLC with objects. MG has no subject clitics. French has subject CLC only. French does not have object CLC although it has object clitics. I suggest that the presence versus absence of object CLC in a language with object clitics correlates with the Class 1 / Class 2 distinction of languages proposed by Koopman and Sportiche (1991). In Class 1 languages, e.g. English, the subject obligatorily moves from a VP-internal position to the Spec of IP. In Class 2 languages, on the other hand, e.g. Italian, the subject need not move to the Spec of IP. I argue that the presence

vs. absence of object CLC can be derived on the basis of the Class 1 / Class 2 distinction and the claim that the Spec of ClP is also an A-position.

An argument for the CliticPhrase is constructed next on the basis of Complex Inversion in French and verb-focussing in MG. In particular, syntactic verb-focussing in MG, i.e. movement of the verb to F, raises the following question. It seems to be impossible to focus the verb in a sentence with a specific object unless the object participates in the Clitic-Construction. Complex Inversion in French raises a similar question. It seems to be impossible to have the verb in C unless the subject participates in CLC. What V-to-I-to-F raising in MG and V in C in French show is that the ClP projection is there even when it is not overtly filled. My answer to the question why Complex Inversion is obligatory in French is that it is triggered by the verb being in C. Verb-focussing in MG and Complex Inversion in French are also revealing about the nature of the head and the specifier of the CliticPhrase. The obligatoriness of the projection ClP is taken to suggest that we have to do with an A-Spec and an A-head. This is a further argument, that could be added to those schematised above, for the claim that the Spec of ClP is also an A-position. It is only A-heads that are obligatorily projected. The distribution of the data follows from the application of the Head Movement Constraint. What the data show is that the Clitic-Criterion is triggered by movement either of a DP or of the verb. The data also show an interaction between the F-Criterion or the Wh-Criterion, on the one hand, and the Clitic-Criterion, on the other hand.

The present analysis of clitics does not seem to be compatible with Clitic Climbing. An alternative analysis treating Clitic Climbing as a raising structure is proposed. The clitic is taken to be base-generated in its S-structure position.

In chapter V, I draw together some of the conclusions reached in the discussion of individual Spec-head licensing mechanisms. 17(a) to (c), below, seem to be the basic properties of Spec-head Licensing involving mainly A'-heads.

(17)
a. Licensing of extraction
b. Licensing of A-properties
c. Licensing of operators

The question is raised how Spec-head Licensing relates to XP-movement both at S-structure and LF. Examples of 17(a) are overt Wh-movement, Syntactic Focussing and CLC. 1(a) can only be relevant for S-structure A'-movement.

16

Property 17(b) is illustrated by CLC in MG. It seems that a Spec-head agreement configuration exhibiting property 17(b) also has to apply at S-structure. Spec-head agreement configurations with property 1(c) apply either at S-structure or at LF, subject to parametric variation. Wh-movement, Focussing and PI-Licensing instantiate property 17(c). The operator property of foci is only licensed when foci are in a Spec-head configuration with the head F. Similarly, the operator property of Polarity Items (PI's) is only licensed when they are in a Spec-head configuration with some propositional operator. We see that Spec-head agreement mechanisms do not necessarily exhibit all three properties under (17). Focussing has properties 17(a) and (c). PI Licensing in MG has only property 17(c). Finally, CLC in MG has properties 17(a) and (b). The interaction between the various Spec-head agreement configurations also bears on the properties in (17) in virtue of a ban against multiple licensing of A'-movement.

Claim (18) is put forward next:

(18) All LF movement results from the satisfaction of well-formedness Criteria.

I argue that the interpretation of a sentence is determined by its S-structure plus the satisfaction of Criteria that apply at or by LF. Except for movement forced by well-formedness Criteria three other major types of LF movement are standardly assumed in the literature: Quantifier Raising (QR), LF Head Raising (LFHR) and Expletive Replacement (ER). The latter two do not affect the interpretation of the sentence and will not be discussed here. With respect to QR I draw on the discusion in chapter III, where it is argued that there are no scope ambiguities in multiple quantification structures and that apparent quantifier ambiguity is an epiphenomenon having to do with Focussing. The existence of scope ambiguities has been one of the arguments produced for having a QR rule. I suggest following Williams (1986, 1988) that there is no QR rule. It seems to be true, therefore, that the only type of LF movement rule bearing on the interpretation of the sentence is movement forced by well-formedness Criteria. The scope relations between sentential negation (Neg) and operators produce further evidence for the claim in (18), but also against QR. The discussion draws again on chapter III, where it is argued that foci always have scope over Neg and also that S-structure determines the scope of Neg and quantifiers unless the latter are focussed. The scope of Neg and Polarity Items is also examined. Claim (18) presents us with

a restricted model of LF and arguably constitutes a minimal hypothesis concerning LF properties and interpretations. Constituents in Spec-Head agreement configurations have wide-scope interpretation and disallow scope interactions.

Chapter II:

Polarity Items[1]

2.1 Introduction

In this chapter, I examine Existential Polarity Items[2] (EPI's). The main claim put forward is that propositional operators license EPI's. The set of propositional operators exhaustively comprises Neg, WH, F, the conditional, the necessity and the possibility operators.

In section 2.2, on the basis of the Neg-Criterion (cf. Brody 1990 and Haegeman and Zanuttini 1990) on the relation between NEG Operators and Negative heads, I formulate the more general P(olarity)I(tem)-Criterion (cf. (3)). In (1) and (2) you see Haegeman's (1992b) definitions for the Neg-Criterion and NEG-Operators, respectively.

(1) Neg-Criterion:

a. A NEG-operator must be in a Spec-head configuration with an X-zero [NEG].

b. An X-zero [NEG] must be in a Spec-head configuration with a NEG operator.

(2)

a. NEG-operator: a NEG phrase in a scope position

b. Scope position: A left-peripheral A'-position (i.e. either VP-adjoined or a specifier position).

(3) PI-Criterion

a. A PI must be in a Spec-head configuration with its licenser.

b. The licenser of a PI must be in a Spec-head configuration with that PI.

---

[1]Thanks go to Robyn Carston, Wynn Chao and Ruth Kempson for commenting on some of the ideas in this chapter. Wynn's generosity with her books was also a great help.

[2]See also Veloudis (1982) and Tsimpli and Roussou (1993).

The PI-Criterion describes the relation between different types of PI's, i.e. EPI's, Negative Polarity Items (NPI's) or Free Choice PI's (FCPI's), and their licensers. The level of application for the PI-Criterion varies crosslinguistically.

In section 2.3, I look at EPI's in MG. The set of EPI licensers in MG consists of Neg, WH, F, the conditional, the necessity and the possibility operators. (4), below, is an example of EPI licensing by the necessity operator.

(4) tha   píye   puthená   me   fílus
    must went-he anywhere   with friends
    'He must have gone somewhere with friends.'

The semantics of EPI's is looked into next, in section 2.4. The questions addressed are the following:

(i) What is the LF status of EPI's?

(ii) Are EPI's interpreted as existential quantifiers or not?

Questions (i) and (ii) are dealt with in sections 2.4.1 and 2.4.2, respectively. In section 2.4.1 I argue that EPI's are operators. In Appendix II, I argue against an alternative view that EPI's are variables, which is advanced by Aoun, Hornstein and Sportiche (1981). In Appendix I, it is shown that the argument advanced by Rizzi (1982) for the operator status of EPI's is a non-argument. In section 2.4.2 it is argued that there are interpretational differences between EPI's and existential quantifiers. Such a claim goes against the general consensus that EPI's should be analysed as existential quantifiers.

In section 2.5 I argue that the set {Neg, WH, F, the conditional, the necessity and the possibility operators} are propositional operators. Namely, the members of this set modify the proposition in the philosopher's sense of the term. In the philosophical literature proposition is taken to be the semantic content of a sentence disambiguated with reference assigned and tense specified. The distinction propositional operators vs. non-propositional operators is put forward. Propositional operators modify the 'proposition'. Those operators that are not propositional are called nonpropositional operators. I assume that the set of nonpropositional operators consists exhaustively of {quantifiers, wh-phrases, foci and Polarity Items}.

So far, we have a set consisting of Neg, WH, F, the conditional, the necessity and the possibility operators and we have attributed two properties to the members of this set, i.e. they license EPI's and they are propositional operators. In section 2.6 it is shown that the members of this set also give rise to inner island effects. Consider, for instance, the ungrammatical 5(a) versus the grammatical 5(b). In 5(a) the inner island effect is induced by the necessity operator.

(5)a. *jatí$_i$ tha   ípe   óti   ton   apélisan   t$_i$?
       why   must   said-he   that   him-cl   sacked-they
       '*Why$_i$ must he have said that he was sacked t$_i$?'

b. jatí$_i$ ípe   óti   ton   apélisan   t$_i$?
   why   said-he   that   him-cl   sacked-they
   'Why$_i$ did he say that he was sacked t$_i$?'

We have, therefore, the cluster of properties in MG in (6), and discussed in section 2.7.

(6) Neg, WH, F, the conditional, the necessity and the possibility operators have the following properties:
a. They license EPI's.
b. They are propositional operators.
c. They induce inner island effects.

I claim that property 6(b) is the defining property of the set; so (6) above is replaced by (7) below.

(7) Propositional operators have the following properties:
a. They license EPI's.
b. They induce inner island effects.

(7) seems to work, if we limit our attention to the MG data. A problem is posed by English, which has properties 6(b) and (c) but not (a). The set of EPI licensers in MG is larger than the same set in English. Namely, Neg, WH and the conditional operator are the only EPI licensers in English. The problem is discussed in section 2.8 and a weak solution is put forward. A parameter appears to be

involved. This could be a UG parameter. Namely, we could have a weaker claim than 7(a), possibly (8) below:

(8) Propositional operators license PI's.

Claim (8) holds for both MG and English, and, I believe, universally. All it says is that the licensers of EPI's, NPI's and FCPI's belong to the set of propositional operators. For instance, the FCPI licenser in English, i.e. the possibility operator, belongs to this set. Together with (8) we would need a specification to the effect that the patterning between PI types and PI licensers is subject to parametric variation. This is how the difference between English and MG with respect to EPI licensers would be accounted for. The advantages and disadvantages of this solution are considered. First of all, parametric variation in PI licensing seems to be relevant for EPI's only. For instance, in both English and MG the only FCPI licenser is the possibility operator. Claim (8), though observationally adequate, creates question (9). Question (9), in fact, reduces to question (9'), given that there is no parametric variation in NPI and FCPI licensing.

(9) Why is there parametric variation in the matching of PI types and PI licensers?

(9') Why is there parametric variation in EPI Licensing?

I go on to propose a strong solution to the problem raised by English. I will maintain that English conforms to claim 7(a). Of course, I will have to explain why claim (7) is prima facie contradicted by the English data. I argue that the parameter involved in the difference between MG and English is not a UG parameter but a lexical one. I suggest that English has more than one instantiation of EPI's, namely *anyone* , *someone* and *one* . The matching between each EPI instantiation and propositional operators is fixed. The strong solution to the puzzle presented by English is schematised in (10), below:

(10)
a. The matching between EPI's and propositional operators is not subject to parametric variation.

22

b. The matching between EPI instantiations and propositional operators can be subject to parametric variation.

The three instantiations of EPI's in English are in complementary distribution as far as their licensers are concerned. *anyone* is licensed by Neg, WH and the conditional operator. EPI *someone* is licensed by F, certain necessity and possibility operators. *one* is licensed by certain other necessity and possibility operators. The claim that *someone* is ambiguous between an existential quantifier and an EPI is the solution I propose for the problem raised by English with respect to 7(a). I show that the alleged ambiguity of *someone* is not a stipulation on the basis of the discussion in section 2.4.2, where I argue that the logical representation of EPI's differs from that of existential quantifiers.

Finally, in section 2.10 Polarity Item Licensing is reconsidered in the light of the other Criteria.

2.2 The P(olarity)I(tem)-Criterion

Brody (1990) argued that Negative Polarity Items (NPI's) can be in a Spec-head configuration with Neg as early as S-structure in Hungarian. He assumes that Spec-head agreement between NPI's and Neg must obtain by LF in all languages. Haegeman and Zanuttini (1990) put forward the same proposal, formulated as the Neg-Criterion (cf. (11)). As can be seen, the Neg-Criterion is along the lines of the Wh-Criterion. The Neg-Criterion refers to the relation between NEG Operators (cf. (12)) and Negative heads.

(11) Neg-Criterion:

a. A NEG-operator must be in a Spec-head configuration with an X-zero [NEG].

b. An X-zero [NEG] must be in a Spec-head configuration with a NEG operator.

(12)

a. NEG-operator: a NEG phrase in a scope position

b. Scope position: A left-peripheral A'-position (i.e. either VP-adjoined or a specifier position).

On the basis of the Neg-Criterion, I formulate the more general PI-Criterion (cf. (13)). The PI-Criterion is more general than the Neg-Criterion in that it describes the relation between different types of PI's, i.e. Existential Polarity Items (EPI's), Negative Polarity Items (NPI's) and Free Choice Polarity Items (FCPI's), and their licensers.

(13) PI-Criterion

a. A PI-operator must be in a Spec-head configuration with its licenser.

b. The licenser of a PI-operator must be in a Spec-head configuration with that PI-operator.

The question is raised how (13) subsumes cases where there are no PI's. The same question has been raised with respect to the Neg-Criterion. Rizzi's (1990) answer to it is that the Spec of NegP is filled by a sentential negation operator, phonetically realized in French as *pas* , presumably in English as *not* , in West Flemish as *nie* , or phonetically null, as in Italian and Spanish, for instance. This is how Rizzi derives inner islands induced by Neg. So (13) actually covers both NPI Licensing and Neg islands. Extraction of an XP cannot pass through the Spec of NegP because that position is filled with a sentential negation operator, either overtly or not. The constituent in Spec of NegP blocks successive cyclic extraction out of the lower VP. We could similarly claim that phonetically null operators fill the Spec of PI Phrases when there are no PI's. This assumption is supported by the fact that all PI licensers give rise to inner island effects, as we see in section 2.6. It seems, therefore, that we need to assume that the PI-Criterion obtains even when there are PI licensers but no PI's[1].

The level of application of the PI-Criterion, as was the case with the Neg-Criterion, varies crosslinguistically. The PI-Criterion must apply by LF. In MG the PI-Criterion applies at LF[2].

---

[1]The problem raised in this paragraph is more general. For all Criteria we would need to know whether they are satisfied when only the head of the relevant projection is filled. This also appears to be the case with respect to the WH-Criterion. Significantly, WH gives rise to inner island effects. The Clitic-Criterion appears to suggest a different treatment (see section 4.6).

[2]I express no view as to what to call the XP hosting the PI and its licenser. One proposal is that of Culicover (1991), who has a PI Phrase. For Culicover, the PI Phrase is also a FocusPhrase.

The motivation for having a PI-Criterion is that PI Licensing and the PI-Criterion are strongly reminiscent of the licensing of wh-phrases and the WH-Criterion. In wh-sentences there is a feature +WH under C and by LF the wh-phrase must fill the Spec of CP. In PI Licensing some element licenses the PI and in some languages the licenser and the PI appear in a Spec-head relation as early as S-structure (cf. NPI Licensing in Hungarian and the discussion in Brody 1990).

Rouveret (1982) and Vergnaud (in preparation)[1] present an argument against the claim advanced in Kayne (1981a) and Rizzi (1982) that PI's induce LF *that* -trace effects. Given that this can also be taken as an argument against the PI-Criterion I will discuss it next. Rouveret and Vergnaud argue that in superordinate[2] PI licensing, PI's do not raise by LF to acquire identical scope to their licensers, contrary to what is generally assumed (cf. Kayne 1981a, Rizzi 1982, Brody 1990, Haegeman and Zanuttini 1990)). If this is the case, then the configuration for *that* -trace effects does not arise at LF. Consequently, the ungrammaticality of the relevant examples must be due to some other reason. I quote from Rouveret (1992): 'Also, certain facts make one think that the force of the argument in Kayne with respect to the interpretation of NPI's is more apparent than real. The most serious objection to Kayne's analysis would be to claim that the phenomenon under consideration is not a scope phenomenon. His claim is that when *ne* cliticizes to the higher verb, the scope of *personne* includes the matrix clause. Consider the following sentence:

> (14)[3] je n'   exige   que tu   voies personne,
>   I not demand-I that you   see-you anyone
>
>   mais j' exige   que   tu   voies quelqu'un
>   but I demand-I that you   see-you someone
>   'I do not demand that you see anyone but I demand that you see someone.'

All the native speakers I have asked take this sentence to be contradictory: But, as Vergnaud observes (cf. Vergnaud in preparation), if what is said about the

---

[1] I do not have the manuscript. Vergnaud (in preparation) is quoted in Rouveret (1992).

[2] PI licensers are clausemate or superordinate. A clausemate licenser is in the same clause as the PI it licenses. A superordinate licenser is in a higher clause than the PI it licenses.

[3] The numbering is mine.

interpretation of *personne* was correct, we would, on the contrary, expect that there be no contradiction. Let us suppose that the NPI *personne* in (14) has wide scope and that *quelqu'un* has narrow scope. The relevant interpretation can be schematised in (15) below:

(15) for no x, x human, I demand that you see x and I demand that for y, y human, you see y [1].

The first part of the formula in (15), in which the negative quantifier has wide scope, does not contradict the second part of the formula.

Vergnaud observes that superordinate licensing is possible only when *personne* is stressed. It seems that we have to do here with a phenomenon that could be called 'echo negation' (on the analogy of echo questions) rather than with a real scope phenomenon.'

Notice that even if the PI in (14) had embedded scope, as Rouveret and Vergnaud want to claim, the incompatibility of the two clauses in (14) would not be explained. In particular the assumed LF (cf. (16)) does not explain why (14) is contradictory. The correct account for the incompatibility of the two clauses in (14) seems, therefore, to be of a different nature.

(16) I demand that for no x, x human, you see x and I demand that for y, y human, you see y.

Given Vergnaud's observation that superordinate licensing is possible only when *personne* is stressed, it seems that *personne* in (14) is an NPI and not an EPI[2]. French appears to allow superordinate NPI licensing but to exclude superordinate EPI licensing[3]. I rewrite (14) as (14'), below. If *PERSONNE* is an NPI, this means that it is interpreted as a negative universal quantifier. But then the formula for (14') cannot be (15). I suggest it is (17), instead. The incompatibility between the two clauses of (14) is no longer a problem for the PI-Criterion.

---

[1]The assumption is that x is different from y.

[2]French seems to have a distinction similar to that in MG (see section 2.3.1). *personne* is ambiguous between an EPI and an NPI. EPI *personne* cannot be stressed, while NPI *personne* is obligatorily stressed.

[3]More on this in Appendix I.

(14') je n' exige que tu voies PERSONNE,
I not demand-I that you see-you NOONE

mais j' exige que tu voies quelqu'un
but I demand-I that you see-you someone
'I demand that you see NOONE but I demand that you see someone.'

(17) for no x , x human, I demand that you see x and I demand that for
y , y human, you see y ; where y is one of the values of x .

PERSONNE in (14') defines the set $\{x$, y , z ,...$\}$. The variable y of *quelqu'un* belongs to the former set, hence the incompatibility of the two clauses of (14). The formula in (18) is clearer than the one in (17) and illustrates the interpretation of (14')

(18) for no member of the set $\{x$, y , z ,...$\}$, x , y , z ,... human, I demand that you see x , y , z ,... and I demand that for y , y human, you see y .

Example (14') is a clear case where the standard logical representation of negative universal quantifiers does not give us the right results. Rouveret and Vergnaud cite (14) as problematic but wrongly identify the problem as having to do with the scope of the PI. The fact that the formula in (15) does not justify the ungrammaticality of (14) indicates that the problem lies with the logical representation of PI's. I have shown that the argument presented in Rouveret (1992) and Vergnaud (in preparation) does not really challenge either the PI-Criterion or the claim that PI's give rise to LF *that*-trace effects.

To summarise, PI Licensing is a Spec-head agreement relation between PI's and their licensers. There is a PI-Criterion, which forces movement of PI's to the Spec of a PI Phrase, headed in each case by the PI licenser.

2.3 *Existential Polarity Items (EPI's) in MG*

The discussion in this section will concern EPI's in MG. In 2.3.1 I look at the distinction between EPI's and NPI's. In 2.3.2 I present EPI licensers. Notably, the set of EPI licensers in MG is larger than that of English.

2.3.1 Existential Polarity Items vs. Negative Polarity Items

kanís , *típota* , *poté* and *puthená*[1] are considered PI's because they always need to be licensed. In the absence of a licenser ungrammaticality arises (cf. (19)).

(19) *(dhen) ípa   típota
        not said-I anything
     'I did *(not) say anything.'

I shall claim that *kanís* , *típota* , *poté* and *puthená* are ambiguous[2] between EPI's and NPI's. The distinction between EPI's and NPI's is made along the following lines: NPI's have inherently negative meaning and Neg as their only licenser. EPI's do not have negative meaning and have a number of licensers, one of which may be Neg. So in MG we have, on the one hand, EPI's *kanís* , *típota* , *poté* and *puthená* , which, as we shall see in section 2.3.2, have a number of licensers, Neg being one of them. On the other hand, we have NPI's *KANIS* , *TIPOTA* , *POTE* and *PUTHENA*[3] , the only licenser of which is Negation[4]. The

---

[1]*kanís, típota, poté* and *puthená* translate as follows:

kanís : 'anyone' / 'noone'
típota : 'anything' / 'nothing'
poté : 'ever' / 'never'
puthená : 'anywhere' / 'nowhere'

[2]The same view is advanced in Tsimpli and Roussou (1993). Veloudis (1982), on the other hand, assumes that *kanís* , *típota* , *poté* and *puthená* are solely NPI's. The difference is not of substance but rather terminological. Veloudis follows Ladusaw (1979) in distinguishing between NPI's, e.g. *anyone* , and Affirmative Polarity Items (API's), e.g. *someone* .

[3]I write MG NPI's in capital letters because they are necessarily stressed / focussed.

[4]It also needs to be shown that NPI's *KANIS , TIPOTA , POTE* and *PUTHENA* are actually NPI's and not negative quantifiers. We have to do with NPI's and not with negative quantifiers for the following reasons:
 (i) Neg cannot be dropped (cf. (1)); It is a licenser, as I have already claimed.

(1) *(dhen) thélo   TIPOTA
        not want-I NOTHING
     'I want NOTHING.'

question is raised whether the distinction is justified, given that the lexical forms for EPI's and NPI's in MG are identical. Could we not say instead that kanís, típota, poté and puthená are only EPI's having a number of licensers, one of which is Negation? I believe not for the following reason: kanís, típota, poté and puthená can be focussed only when the licenser is Negation. Consider examples (20) and (21) in this respect.

(20)a. dhen thélo   típota
       not want-I anything
       'I do not want anything.'

   b. dhen thélo   TIPOTA
      not want-I NOTHING
      'I want NOTHING.'

(21)a. thélis   típota?
       want-you anything
       'Do you want anything?'

   b. *thélis   TIPOTA?
      want-you ANYTHING

The behaviour of PI's in MG with respect to Focussing suggests a dichotomy between EPI's and NPI's. When PI's can be focussed I assume they are NPI's. So there is a correlation between the NPI / EPI distinction and the +/- Focussing distinction. A point related to this correlation is the following: The c-command requirement on PI Licensing, namely the requirement that the licenser c-commands the PI, can be violated in the case of NPI's. Thus while EPI's are not licensed as preverbal subjects NPI's are. We can therefore assume that preverbal

---

(ii) If *KANIS , TIPOTA , POTE* or *PUTHENA* occupies a position higher than the verb, it cannot license an EPI, as is the case with English and Romance negative quantifiers. Contrast ungrammatical (3) with grammatical (2).

(2) Noone saw anything.

(3) *KANENAS ídhe   típota
     NOONE   saw-he anything

subject NPI's actually occupy the Spec of FP position and that they were licensed in a lower position, i.e. the VP-internal subject position.

I have argued that *kanís* , *típota* , *poté* and *puthená* are ambiguous between EPI's and NPI's. The test was Focussing. A slightly different hypothesis, also compatible with the Focussing facts under (20) and (21), would be to say that Neg is a licenser of NPI's only and not of both EPI's and NPI's. Under this hypothesis the licensers of EPI's in MG does not include Neg. There are data that decide in favour of the first hypothesis. The data bear on superordinate PI licensing in MG. Examples 22(a) and (b) show that there is no superordinate NPI licensing in MG while there is superordinate EPI licensing. It seems therefore right to adopt the first hypothesis and assume that Neg can license both EPI's and NPI's.

(22)a. dhen ípa   óti   thélo   kanéna

        not said-I that want-I anyone

        'I did not say that I want anyone.'

    b. *dhen ípa óti thélo KANENA

2.3.2 EPI Licensers

In this section I present the list of EPI licensers in MG[1]. It consists of Neg, WH, F, the conditional, the necessity and the possibility operators. I follow the

---

[1]There are other characterisations of the set of EPI licensers in MG except the one argued for here. In Veloudis (1982:181), for instance, EPI's are assumed to be able to occur in questions, negative sentences, sentences that exemplify subjunctives or imperatives, conditionals or the future marker *tha* , as well as several words or expressions (e.g. the frequency adverb *póte-póte* 'occasionally'). In Tsimpli and Roussou (1993:17) the generalization is that EPI's can be licensed in negative, non-deictic Tense clauses (e.g. conditionals, subjunctives / imperatives, gerunds) and interrogatives.

The generalizations in Veloudis (1982) and Tsimpli and Roussou (1993) are not without problems. For instance, there are *na* -clauses, the alleged subjunctive clauses, in which EPI's are not licensed (cf. (1)).

(1) *me ipokhréosan na   páo   puthená
    me forced-they that go-I anywhere

Similarly for gerunds (cf. (2)).

(2) *pijénontas puthená   thimíthike   to   radevú   tu
    going anywhere remembered-he the appointment his

analysis of the necessity and possibility operators in Kratzer (1981). Kratzer describes the semantic field of modal expressions along three axes specifying:

(i) a modal relation

(ii) conditions for the modal base

(iii) conditions for the ordering source

The modal relation is either necessity or possibility. There are two major types of modal bases: circumstantial modal bases, which are constituted by certain relevant facts or actual circumstances, and epistemic modal bases, in which we rely on what we know and are interested in what can turn out to be the case, given what we know. The function of the ordering source is to rank the modal base according to certain standards. The stereotypical conversational background, in which we rely on the normal course of events for someone, for a community etc., usually functions as ordering source. In a deontic modal base or ordering source we are interested in what is commanded by someone, by the Law, by a community's notion of politeness, by someone's goals etc. The empty modal base or ordering source is a special case of a circumstantial modal base or ordering source. Usually, the ordering source cannot be determined outside specific examples.

There are graded notions of modality. Grading involves an ordering source as well as a modal base. Concerning the grading of an epistemic modal base, other sources of information function as ordering sources and are not part of the modal base. Concerning the grading of circumstantial modal bases, various 'normative' conversational backgrounds (e.g. the Law, what is good, our plans and so on) could be proper ordering sources for a circumstantial modal base. There can be more than one ordering source involved in modal reasoning.

Kratzer's (1981) theory can also accommodate the gnomic operator. Chierchia and McConnell-Ginet (1990) suggest that Kratzer's (1981) analysis can be extended to the case of the gnomic operator, something only hinted at in Kratzer (1981). They remark that 'Some tenses ... have a generic interpretation. One of the main functions of generic sentences appears to be that of expressing capability or possibility...'. In the light of sentences like 1(a), below, I want to suggest that the gnomic operator can also express necessity. The reading of 23(a) becomes explicit in 23(b).

The descriptively adequate generalization is that any verb form can license an EPI as long as it can be interpreted as giving rise to the conditional, the necessity or the possibility operators.

(23)a. afú sinidhitopiísi kanís to próvlima prokhorí sti lísi tu

after appreciates anyone the problem goes on to the solution its

'After appreciating the problem, one goes on to its solution.'

b. One should first realise the problem and then go on to its solution.

So we can say that in gnomic sentences modal base is a circumstantial one. The ordering source is empty when the modal relation is possibility and normative when the modal relation is necessity.

(a) Negation

(24) *(dhen)[1] ídha kanéna

not saw-I anyone

'I did not see anyone.'

(b) WH

(25) thélis típota *(?)

want-you anything

'Do you want anything?'

(c) F

The feature F(ocus) can license EPI's (cf. 26(a)). Notice that EPI licensing by F is only possible when the verb is focussed. It is not the case that any focussed constituent in a clause can license EPI's. Contrast 26(a) and (b), where the subject DP is focussed. This behaviour is perhaps expected in a Spec-head agreement analysis of PI Licensing, according to which by LF the PI has to be in a Spec-head agreement relation with its licenser, F in this case. If some other constituent, and

---

[1]In this section I use for each EPI licenser the notation *(Licenser) in order to show that the element in parentheses is what licenses the EPI in each sentence. If the particular licenser in each of these examples is deleted and no other licenser is introduced, the sentence becomes ungrammatical.

not the verb is focussed, the Spec-head agreement configuration between the EPI and F is not possible because the F-Criterion must also be satisfied; the focussed XP must be in a Spec-head relation with F. The fact that F is a possible PI licenser is significant for two reasons. First, it shows that F is syntactically active. This is further evidence for the existence of the FP projection. Second, it is an argument against the free variable analysis of PI's, as we will see in section 2.4.2.

(26)a. IPE   ke kammiá kouvéda
       SAID-he also any   word
       'He DID say something.'

b. *o YORGHOS   ípe kammiá kouvéda
   the YORGHOS said-he any   word

(d) Conditional Operator[1] (CO)

(27) *(an) thélis   típota tilefónise mu
      if   need-you anything phone   me
      'If you need anything, phone me.'

(e) Necessity Operator (NO)

Example (28) involves the necessity operator against a circumstantial or a deontic modal base. What the verb denotes must happen.

(28) *(prépi)   na   dhis   kanéna apópse
       should-you that see-you anyone tonight
       'You should see friends tonight.'

---

[1]The conditional operator is not only triggered in conditional clauses, but also in imperatives and gerunds. Consider examples (1) and (2), respectively.

(1)   píjene   puthená   ke tha me   thimithís
      go-you-Imp anywhere and will me remember-you
      'If you go anywhere, you will remember my words.'

(2) pijénontas puthená   tha   kseskásis
    going-Ger anywhere will feel-you better
    'If you go somewhere, you will feel better.'

The necessity operator against a circumstantial or deontic modal base is also known as the deontic operator. The impersonal modal verb *prépi* 'must' and the Imperative mood (cf.(29)) are two instantiations of this operator in MG. Also, main *na* -clauses (cf. (30)), in most cases, and embedded *na* -clauses, sometimes, involve a necessity operator against a circumstantial or deontic modal base.*na* is a particle, traditionally analysed as a Subjunctive marker, which I analyse as a complementizer (cf. Agouraki (1991)).

(29)   dhes   kanéna apópse
        see-Imp-you anyone tonight
        'You should see friends tonight.'

(30) na   ghrápsis kanéna árthro to máio
        that write-you any   paper the may
        'You should write a paper in May.'

Example (31) involves the necessity operator against an epistemic modal base. What the verb denotes must be the case. The necessity operator against an epistemic modal base is also known by the name of epistemic operator.

(31) *(tha)   píye   puthená me   fílus
        may/must went-he   anywhere with friends
        'He may/must have gone somewhere with friends.'

Example (32) involves the necessity operator against a circumstantial modal base and a deontic ordering source.

(32) *(NO) afú sinidhitopiísi kanís to próvlima prokhorí sti   lísi   tu
        after appreciates anyone the problem goes on to the solution its
        'After appreciating the problem, one goes on to its solution.'

The necessity operator against a circumstantial modal base and a deontic ordering source is also known as the gnomic operator. In MG this operator is associated with the imperfective aspect. In example (33), below, this operator licenses an EPI in object position.

(33) típota   na   stenohoriúde   óli   vrískun
       anything-Acc to worry-they about all-Nom find-they
       'All people find something to worry about.'

Zubizarreta (1987) and Authier (1989) use the term 'generic operator' to refer to the necessity operator against a circumstantial modal base and a deontic ordering source. According to Zubizarreta (1987), the generic operator can be either overt, e.g. a generic adverbial modifier, or implicit. Consider Zubizarreta's examples (34) and (35):

(34) In this country vegetables are usually cooked in oil.

(35) Until recently the earth was believed to be flat.

Zubizarreta claims that in (35) there is an understood modal with a meaning equivalent to the adverb *generally* . The generic interpretation of middles is also relevant. For Zubizarreta middle verbs contain a hidden generic operator.

Example (36) involves the necessity operator against a stereotypical modal base.

(36) *(NO) o   prothipurghós vlépi   pu ke pu   kanéna ipurghó
          the prime minister sees occasionally   any   minister
          'The prime minister occasionally sees some minister.'

The necessity operator with a stereotypical modal base is also known as the habitual operator. It exists in sentences that refer to situations recurring customarily and is always implicit. Its presence is often marked by adverbs of quantification, e.g. *often* , *usually* , *occasionally* . The necessity operator with a stereotypical modal base is associated with the imperfective aspect in MG. N. Smith (1981) has shown that there is no grammaticalization of this operator in English; that it is compatible with all tense forms in English. It could be that there is no grammaticalization of this operator in languages that do not draw the imperfective / perfective aspect distinction. English is such a language.

I will next present some evidence that this operator is in fact an EPI licenser. Licensing has to obey c-command. This is evidence that Licensing takes place in

syntax. Contrast (37) with (38) below. In (38) the necessity operator in the main clause does not c-command the EPI contained in the adjunct clause, hence the ungrammaticality of the sentence.

(37) [paraponiése [óti   su   lívete   típota]] ki   [amésos
      complain-you that to you runs out of anything and straightaway

      su   to stélnun]
      to you it send-they
'As soon as you complain that you have run out of something, they send it
to you.'

(38) *[íse efkharistiménos][an ke   su   lívete   típota]
      you are   pleased   even if to you runs out of anything
      'You are pleased even when you do not have everything.'

(f) Possibility Operator (PO)[1]

Example (39) involves the possibility operator against a circumstantial or deontic modal base. What the verb denotes can happen.

(39) mi   niázese   pu dhen mayírepse *(PO)pérnume típota   apó to
      not get-you upset that not cooked-he   get-we anything on the

dhrómo
way
'Don't get upset that he has not cooked; we can get something on the way.'

The possibility operator against a circumstantial or deontic modal base is also known as the capabilitive operator. In MG it can be manifested with the personal verb *boró* 'can, may' or be implicit.

Example (40) involves the possibility operator against an epistemic modal base. What the verb denotes may be the case.

---

[1]The possibility operator can be defined in terms of the necessity operator. 'possible' is the same as 'not necessarily not'.

(40) *(PO) aftí   kséri   kanéna

        she   knows   anyone

        a.'She may know someone.'

        b.*'She knows someone.'

The possibility operator with an epistemic modal base is also known as the epistemic operator and can have various manifestations: the impersonal modal verb *borí* 'it can be', impersonal constructions (e.g. *íne pithanón* 'it is likely'), some sentential adverbs (e.g. *pithanós* 'probably', *ísos* 'perhaps') and the modal auxiliary *tha* 'will'. Note that *tha* is also the futurity marker in MG. *tha* has both a temporal and a modal use. I quote from Chung and Timberlake (1985:204-206): '...the past is known or established fact while the future is unknown and potential. ... The different temporal locations of an event- past, present and future- are inherently correlated with differences in mood. An event that will occur after the speech moment is non-actual and potential. Hence there is a correlation between future tense and non-actual potential mood ... . A consequence of these correlations is that temporal distinctions may be expressed by morphosyntactic categories that have wider modal functions.' *tha* is precisely an example of that.

Example (41) involves the possibility operator against a circumstantial modal base and an empty ordering source. This operator is also known as the gnomic operator. Example (42) involves the possibility operator against a stereotypical modal base. This operator is also known as the habitual operator.

(41) *(PO) dhen vríski   kanís   éfkola   dhuliá   stis méres mas

         not   finds   anyone   easily   a job   nowadays

        'One cannot easily find a job nowadays.'

(42) *(NO) vlépi   pu ke pu   kanéna

        sees   occasionally   anyone

        'Occasionally, he sees someone.'

The possibility operator / licenser is not always overt, as examples (39) to (42) show. Yet the only possible reading in example (40), for instance, is (a). For the reading in (b) to arise we must substitute the EPI *kanéna* for the existential quantifier *kápion* (cf.(43)).

(43) aftí kséri kápion

    she knows someone

    'She knows someone.'

Interestingly, there are verbs with properties similar to those of inherently negative verbs, only with respect to the possibility operator this time. Inherently negative verbs, e.g. *deny* , can be superordinate but not clausemate licensers of EPI's[1]. Likewise, there seem to be inherent possibility verbs[2]. Those verbs can function as superordinate but not clausemate licensers of EPI's. Consider (44) versus (45), below.

(44)   léi   na pái puthená apópse

      is thinking of that goes anywhere tonight

      'He is thinking of going / He may go somewhere tonight.'

(45)   *léi   kanís na pái sinemá apópse

      is thinking of anyone that goes to the movies tonight

      'Someone is thinking of going / Someone may go to the movies tonight.'

After presenting the set of EPI licensers in MG, I should note that in sentences with more than one EPI licenser ambiguities arise, depending on which is the EPI licenser. Consider an example[3] (46), which has the Neg, WH and the possibility operator as possible EPI licensers. For readings (a), (b) and (c) the licensers are Neg / WH, the possibility operator against a circumstantial modal base and the possibility operator against a stereotypical modal base, respectively.

·

---

[1] Consider examples (1) and (2), below:

(1) I deny I broke anything.

(2) *I deny anything.

[2] Inherent possibility verbs include the following: *léo na* 'to be thinking of, may, might', *sképtome na* 'to be thinking of, may, might', *pistévo na* 'maybe, may, might'.

[3] The example is from Tzartzanos (1945).

3 8

(46) íne na mi thimóni kanís me tétja prághmata?

    is that not gets angry anyone with such things

    a. 'Can anyone not get angry with such things?'

    b. 'Can one not get angry with such things?'

    c. 'Can someone not get angry with such things?'

In this section I advanced claim (47), below, for MG. (47) should be taken as a property of the members of the set {Neg, WH, F, the conditional, the necessity and the possibility operators}.

(47)

Neg, WH, F, the conditional, the necessity and the possibility operators: license EPI's.

I illustrated that there are more EPI licensers in MG than in English; the additional EPI licensers in MG being F, the necessity and the possibility operators. The main piece of evidence for taking these elements to be EPI licensers had to do with the observation that In each case if they were dropped, the EPI contained in the sentence was no longer licensed and the sentence became ungrammatical[1]. We also see that EPI licensing by F, the necessity and the possibility operators obeys a restriction that EPI licensing by the other operators is subject to. Namely, EPI's cannot be licensed in the Spec of IP position (cf. (48)).

(48)a. *kanénas írthe

       anyone came-he

       'Someone must have come.'

    b. írthe kanénas

        came-he anyone

        'Someone must have come.'

---

[1] It can also be shown that EPI licensing by those additional licensers obeys weak and strong islands. However, I will not undertake to illustrate this here.

We see that the locality and other conditions for EPI Licensing in the case of F, the necessity and the possibility operators are the same as those holding for the licensers Neg, WH and the conditional operator.

2.4 The Semantics of Existential Polarity Items

In this section I look into the semantics of Existential Polarity Items (EPI's). The questions addressed are the following:

(49)
a. What is the LF status of EPI's?

b. Are EPI's interpreted as existential quantifiers or not?

Questions 49(a) and (b) are dealt with in sections 2.3.1 and 2.3.2, respectively. In section 2.3.1, I argue that Existential Polarity Items are operators. The same view has been advanced by Rizzi (1982). In Appendix I, I review Rizzi's argument for the operator status of EPI's, which referred to LF *that* -trace effects induced by EPI's. There is also the view (cf. Aoun, Hornstein and Sportiche 1981) that EPI's are variables. The variable analysis of EPI's is discussed in Appendix II. In section 2.3.2 it is argued that there are interpretational differences between EPI's and existential quantifiers. Such a claim goes against the general consensus of analysing EPI's as existential quantifiers. My view is that EPI's are operators, as I argue in section 2.3.1, but not quantifiers.

2.4.1 Existential Polarity Items are Operators

In this section I put forward claim (50):

(50) Existential Polarity Items are operators.

I suggest that interaction with operators be taken as a sufficient, though not necessary, test for the 'operatorhood' of some constituent (either head or XP). Operators can interact with each other. For instance, modulo strict c-command

sentential negation (Neg) interacts with quantifiers. There is association[1] and subsequent amalgamation of meaning between Neg and quantifiers in its scope[2]. Example (51), therefore, means 'I saw few people.'.

(51) I did not see many people.

On the test of possible interaction with operators PI's are shown to be operators, as becomes clear in what follows. Namely, there is interaction between PI's and various operators but also among the PI's themselves. I take this as evidence that PI's are also operators. I will next produce interaction types between PI's and some operators. Consider 52(a) and (b), below:

(52)
a. Association with operators
b. Paired readings

I will argue for claim (50) by using EPI's. Concerning point 52(a), EPI's can, for instance, associate with WH, the possibility and the necessity operators. For instance, EPI's may associate with +WH and they are then interpreted as wh-phrases. It comes as little surprise, therefore, that a yes-no question containing an EPI can be interpreted as being simultaneously a yes-no question and a wh-question. WH and the EPI can associate to give the equivalent of a wh-phrase[3]. Consider example (53), below. 53(b) is a possible answer to 53(a).

(53)a. tu   férane   típota?
        him-cl brought-they anything
        'Did they bring him anything?'

---

[1] Sentential negation becomes constituent negation.

[2] This is S-structure scope, which is defined by strict c-command.

[3] I am not saying that association cannot also take place between WH and other constituents. Consider, for instance, examples of the same type as (1), below, which were brought to my attention by Neil Smith.

(1)a. Did they bring him a book?

   b. Yes. War and Peace.

Some indefinites undergo QR (cf. Diesing 1992). The indefinite in 1(a) is a quantifier that optionally associates with the WH operator, as becomes clear in 1(b).

b. (ne) mia tileórasi
   (yes) a television
   '(Yes,) a television.'

EPI's can also interact with the necessity operator. In the scope of the necessity operator EPI's display the force of plural indefinites. Consider (54), where the EPI *kanéna* is interpreted as a plural indefinite; *kanéna* there has the meaning of 'people'.

(54) dískola   sinadás   kanéna se aftín tin póli
      it is difficult meet-you anyone in this the city
      'It is difficult to meet anyone in this city.'

I move next to point 52(b). I will show that EPI's can participate in pair readings. In particular, when there is more than one EPI, pair interpretations arise. Consider example (55), which assumes pairings from a set of friends to a set of cultural events.

(55) pái   me kanéna fílo   se kamiá ekdhílosi
      goes with any   friend to any cultural event
      'From time to time he goes to some cultural event with some friend or other.'

Still under 52(b) we could mention cases where EPI's interact with wh-phrases to give rise to pair interpretations. Consider example (56), below:

(56) pios théli   na   tu   féro   típota
      who wants that him-cl bring-I anything
      'Who wants me to get him anything?'

Also, EPI's in the scope of universal quantifiers give rise to paired readings. Consider example (57). (57) cannot be continued ', namely Athens'.

(57) káthe ánthropos théli   na   pái   puthená
     every person wants that goes anywhere
     'Everyone wants to go somewhere.'

To summarize, in this section I have argued that EPI's are operators.

2.4.2 Existential Polarity Items vs. Existential Quantifiers

In this section the semantics of EPI's will be further looked into. I will argue that the interpretation of *anyone / kanís* differs from that of *someone / kápios* in that the first denotes a set while the second denotes an individual.

The common assumption is that *anyone / kanís* is interpreted as *someone / kápios*[1]. I will next argue against the assumption that *anyone / kanís* and *someone / kápios* have an identical interpretation. I will argue, precisely, that they differ in interpretation. The claim is advanced for English and MG. It could be that it extends to other languages but I have not done the necessary research that would permit me to put forward a claim about more languages.

We cannot simply assume that the difference between *anyone / kanís* and *someone / kápios* can reduce to the +/-specific distinction. Consider, for instance, example (58). It is not clear how *something* here can be taken to be specific.

(58) Say something, Helen.

A first indication for the view that *anyone* and *someone* differ in interpretation comes from an observation of the data. The lexical distinction between *anyone* and *someone* is fairly systematic across languages. You find it even in languages which have, for instance only one lexical item for the meanings of both 'anyone' and 'who'. The lexical distinction between *anyone* and *someone* across languages rather suggests a corresponding distinction in interpretation. If the distinction between *anyone* and *someone* is only lexical, it is difficult to account for the systematicity of the distinction across languages. It is much more likely that an interpretational distinction is also involved. The systematicity of the distinction across languages would, then, be explained.

---

[1]For MG this claim is advanced in Tsimpli and Roussou (1993). Veloudis (1982) argues that *kanís* is a quantifier while *kápios* functions as as a determiner, rather than as a a quantifier.

I will argue that the alleged interpretational difference between *anyone /
kanís* and *someone / kápios* has the form in (59).

(59)

a. *anyone / kanís* denotes a set.

b. *someone / kápios* denotes an individual.

In other words, I claim that the reference of *someone / kápios* can only be
an individual while the reference of *anyone / kanís* can equal a set with at least
one member, possibly more. Under this proposal *anyone / kanís* comes between
someone / kápios and universal quantifiers. *anyone / kanís* defines a set. This
set can equal or be bigger than the obligatorily one-member set defined by *someone
/ kápios* .

I will now present arguments for the claim that the interpretation of
someone / kápios differs from that of *anyone / kanís* along the dichotomy
individual / set interpretation. In each argument the behaviour of *someone / kápios*
will be contrasted with that of *anyone / kanís* . For reasons that will become clear
in section 2.9, it is important that the examples across which *anyone / kanís* and
someone / kápios are compared be not minimal pairs.

(a) Argument from Interpretation

I will next illustrate what I mean by saying that the individual / set
distinction applies to the distinction of *someone / kápios* vs. *anyone / kanís* .
Contrast sentences (60) and (61), below:

(60) Someone called this morning.

(61) Did anyone call this morning?

Sentence (60) could be continued with either 62(a) or (b) but, crucially, not
62(c). On the other hand, all three 62(a), (b) and (c) can be answers to (61)[1].

---

[1]Neil Smith (p.c.) points out that example (1), below, is a counterexample to the
claim I am making about the obligatorily 'individual' reading of *someone* .
Namely, 62(c) is an appropriate response to (1), as well.

(62)a. x called this morning.

b. y called this morning.

c. x and y called this morning.

I take it that claim 59(b) is not contradicted by examples where *someone* is in the scope of a universal quantifier (cf. (63)). Examples of this type give rise to paired readings; but in each one of these pairs *someone* is an individual.

(63) Everyone danced with someone.

(b) Argument from Pronouns

You can refer back to EPI's by using plural pronouns with true plural reference, but you cannot do the same with existential quantifiers. Consider example (64) versus example (65), in that respect.

(64) If you see anyone, tell them to wait for me[1].

(65) I know someone in Greece. They invited me to spend Christmas with them.

them in (64) can have plural reference. On the contrary, *they* and *them* in (65) cannot have plural reference. They are only acceptable when the speaker does

---

(1) Did someone call this morning?

These data are discussed in section 2.9, where I argue that *someone* can be ambiguous between an existential quantifier and an EPI reading and that it can have an EPI reading when in the scope of an EPI licenser. In the main text I have deliberately chosen a sentence, i.e. (60), where *someone* is not in the scope of an EPI licenser. Significantly, (1) contains an EPI licenser, namely WH.

[1] I am aware that if in (64) we substitute *someone* for *anyone* (cf. (1)), the judgements are as for (64). My comment will be the same as in the previous footnote. Namely, I refer the reader to section 2.9, where I claim that *someone* in the scope of an EPI licenser can function as an EPI.

(1) If you see someone, tell them to wait for me.

not want to disclose the identity / gender of the person in question. But that is plural number without plural reference. The point to remember is that *anyone* can have plural reference, while *someone* cannot.

(c) Argument from Interaction with Negation

Contrast examples (66) and (67), below:

(66) I did not see someone.

(67) I did not see anyone.

If the reading of *someone* and the reading of *anyone* were the same, then the two sentences above should mean exactly the same. But they do not. (66) can only mean 'I did not see a specific individual' while (67) can only mean 'I saw nobody.'

I do not think that the distinct readings of (66) and (67) are a function of scope. A scope account of the readings in (66) and (67) would probably have to say that *someone* has scope above Neg while *anyone* has scope below Neg. We would have to offer as a descriptive generalisation that these are the only scope possibilities between *someone* or *anyone* and a c-commanding Neg. So we would have to accept that in the interaction with Neg *someone* and *anyone* pattern differently; this would be a case where *someone* and *anyone* have different properties, a case casting suspicion on the claim that *anyone* should be analysed like *someone* .

I believe, instead, that the distinct readings of (66) and (67) are evidence for claim (59).

(d) Argument from Interaction with WH

The idea behind this argument is the same as in the previous argument. Both are cases where *anyone* and *someone* are compared when they interact with some operator. The operator used here is WH. The difference in interpretation between *anyone* and *someone* is seen once more. Examples (68) and (69), below, do not have the same meaning. This is not expected if we hold the view that *anyone* is interpreted like *someone* .

(68) Did you see some people?

(69) Did you see any people?

A scope account of the readings of (68) and (69) would go as follows: In (68) *some people* has scope over WH while in (69) *any people* has scope over WH. We would further have to specify that these are the only possible readings. This would in turn imply that *someone* and *anyone* have different properties with respect to interaction with WH.

I take, instead, the different interpretations of examples (68) and (69) to support claim (59).

(e) The Incompatibility Argument

This argument is inspired[1] by the argument presented in Rouveret (1992) and Vergnaud (1992) against Kayne's (1981a) and Rizzi's (1982) claim that PI's induce LF *that* -trace effects (for a discussion see section 2.2). Consider example (70), below, the two parts of which are unanimously assumed to be contradictory according to native speakers' intuitions.

(70) dhen thélo   na   dhis   kanéna alá thélo   na   dhis   kápio
     not want-I that see-you anyone but want-I that see-you someone
     'I do not want you to see anyone but I want you to see someone.'

We saw in section 2.3.1 that MG allows superordinate EPI licensing but excludes superordinate NPI licensing. (70) involves superordinate EPI licensing. We have to account for the incompatibility of the two clauses in (70). If we suppose that EPI's are interpreted as existential quantifiers, the formula for (70) is (71), below. (71) does not explain why (70) is contradictory.

(71) for no x , x human, I want that you see x and I want that for y , y human, you see y , where x is different from y .

---

[1]The data are similar modulo the differences in PI Licensing between French and MG.

In (71) we used different variables for *kanéna* and *kápio* , x and y respectively. We could check whether the incompatibility of the two clauses in (70) could be derived if we used the same variable, x , for both *kanéna* and *kápio* , as in (72), below.

(72) for no x , x human, I want that you see x and I want that for x , x human, you see x .

The incompatibility of the two clauses in (70) is now explained, but a different problem comes up. We would assume that the speaker in (70) does not express a view for any other value of *kanéna* . But that is not true. The state of affairs described by (73), for instance, would be incompatible with the first clause in (70); but we have no explanation for this incompatibility if we adopt (72).

(73) I want that for y , y human, you see y .

I suggest that (70) has the LF in (74). *kanéna* defines the set $\{x , y , z ,...\}$. The variable y of *kápio* belongs to the former set, hence the incompatibility of the two clauses in (70).

(74) for no member of the set $\{x , y , z ,...\}$, x , y , z ,... human, I want that you see x , y , z ,... and I want that for y , y human, you see y .

Example (70) is a clear case where the standard logical representation of EPI's does not give us the right results, as does the assumed set interpretation of EPI's.

So far I have presented five arguments for claim (59). I will next consider a potential counterargument to 59(a). One might say that 59(a) is prima facie true but is really an epiphenomenon. This is in fact a legitimate claim within the variable analysis of EPI's. According to this analysis EPI's are bound by an unselective binder[1], i.e. their licenser, hence their 'set' reading. Roughly speaking I can see how WH, the conditional, the necessity and the possibility operators could interact

---

[1]The term is from Lewis (1975).

with EPI's to give rise to set readings. But only roughly speaking. In the cases of the necessity and the possibility operators, for instance, more careful examination suggests that the unselective binder would have to be not the operator itself but rather its modal base or its ordering source, depending on the individual case. What I have in mind is what are sometimes referred to as the gnomic and the habitual operators. And that is not always possible, either. Namely, when we have an epistemic modal base, Neg or F as an EPI licenser, I do not see how it is possible to claim that we have quantification over times that would ultimately give us the set reading of the EPI's. Deriving the set reading of EPI's from a free variable analysis of them relies crucially on the licenser. Not all EPI licensers could give the set reading through an association with EPI's. But the 'set' interpretation is characteristic of EPI's irrespective of what the licenser is. Neither the free variable analysis of EPI's nor some other notion of association between the licenser and the EPI can successfully derive in all cases the 'set' interpretation of EPI's. Consider, for instance, F as an EPI licenser. There is no obvious way in which one could claim that F, for instance, and an EPI associate to give rise to a set interpretation of the EPI. F cannot be plausibly assumed to constitute quantification over times. It seems, therefore that the free variable analysis of EPI's, as well as the assumption that there is association between the EPI and its licenser cannot consistently account for the 'set' interpretation of EPI's. F, clearly does not lend itself to an analysis of this kind.

In this section I presented arguments for the claim that there is an interpretational distinction between *anyone* / *kanís* and *someone* / *kápios* . In particular, I argued that *anyone* / *kanís* have a 'set' interpretation while *someone* / *kápios* have an 'individual' interpretation. I also showed that the 'set' interpretation of EPI's cannot be derived through an interaction of EPI's with their licensers.

2.5. Propositional Operators

In section 2.3.2 we saw that the set {Neg, WH, F, the conditional, the necessity and the possibility operators} are EPI licensers in MG. The main question addressed in this section, as well as in the next section, is whether the set of EPI licensers forms a natural class. This could only be argued for if more properties are shown to characterise this set. The answer to the question will be positive. There is in fact a cluster of properties associated with the set {Neg, WH, F, the conditional,

the necessity and the possibility operators}, only one of which is EPI licensing. In this section I identify a second property of this set. Namely, the members of the set are propositional operators; they modify the proposition in the philosopher's sense of the term. Propositional operator is, I believe, the notion that replaces the vague concept of 'affective operator' (cf. Klima 1964).

We have established that the set of EPI licensers in MG consists of Neg, WH, F, the conditional, the necessity and the possibility operators. Next I will look at the semantics of the members of this set. In GB syntax the assumption is that Neg, WH and the conditional element are operators, also referred to as affective operators (cf. Rizzi 1991). The same elements are also taken to be operators in Logic. It is further assumed by logicians (cf. Kratzer 1981, McCawley 1981 and Chierchia and McConnell-Ginet (1990), among others) that the necessity and possibility markers are also operators. With respect to F, I am not aware of any proposal in the literature that it is an operator (See, however, below and in chapter III, where I put forward such a proposal). I follow Brody (1990) and assume it is a functional head higher than IP. What the members of the set {Neg, WH, F, the conditional, the necessity and the possibility operators} have in common is that they modify the proposition in the philosopher's sense of the term. For philosophers, proposition is the semantic content of a sentence disambiguated with reference assigned and tense specified[1]. Neg, WH, F, the conditional, the necessity and the possibility markers are not included in the proposition; they are propositional operators. This is the second property of the members of the {Neg, WH, F, the conditional, the necessity and the possibility operators}. Consider claim (75), below. Claim (75) is advanced universally.

(75)

Neg, WH, F, the conditional, the necessity and the possibility operators:
are propositional operators.

If we also take into account claim (47) it appears that we have the cluster of properties in (76).

---

[1]This use of the term 'proposition' should be distinguished from Fillmore's (1968) use of the term, who claims that clauses are made up of two constituents corresponding to a modality and a proposition. Semantically modals take saturated predicates or propositions as arguments. Tns would go under modality and be a propositional operator in Fillmore's terms.

(76)

Neg, WH, F, the conditional, the necessity and the possibility operators:

a. license EPI's

b. are propositional operators

I return to claim (75) now. The notion of propositional operator is as restrictive as is needed here. We cannot talk in terms of syntactic operators because we would have to include quantifiers, wh-phrases, foci and polarity items. The notion of sentential operator used in intensional predicate calculus (IPC) will not do either. In IPC logic sentential operators are higher predicates that take predicates as arguments, i.e. modify whole sentences (cf. Chierchia and McConnell-Ginet (1990)). Crucially, temporal operators are also assumed. Sentential operators in IPC will include the set {Neg, WH, F, the conditional, the necessity and the possibility operators} plus the alleged temporal operators. But Tns does not license EPI's. We could keep the IPC notion of sentential operators for the discussion of EPI's if we were to combine it with the claim in Enç (1981), Dowty (1982) and Hornstein (1979, 1981, 1990) that Tns is not an operator. In fact, not everyone using a predicate calculus logic agrees that Tense is an operator (cf. Dowty 1982). So we could keep a predicate calculus logic and say that the members of the set {Neg, WH, F, the conditional, the necessity and the possibility operators} are higher predicates, i.e. they take sentential arguments. The sentential argument is, logically, an open sentence, i.e, a formula with one or more free variables. Consider also Lewis (1975), who, for instance, takes adverbs of quantification to be the main operator over and above other operators that the sentence may have. Lewis treats adverbs of quantification as unselective quantifiers and contrasts them with the familiar 'selective' quantifiers. Unselective quantifiers bind not just one variable, but an unlimited number of them simultaneously. Notably, they are not assumed to leave behind a variable.

Propositional operators are a subset of syntactic operators. They should be contrasted with quantifiers, wh-phrases, foci and polarity items. The standard assumption is that all syntactic operators raise by LF and have scope at least over IP. I will propose a distinction within syntactic operators, a distinction between propositional vs. non-propositional operators. The criterion for the distinction is the following. Propositional operators modify the proposition. Non-propositional operators do not modify the proposition; they are part of the proposition.

Quantifiers, wh-phrases, foci and polarity items are thus taken to be non-propositional operators. The split between propositional vs. non-propositional operators appears to be further motivated. Propositional operators do not bind variables, while non-propositional operators bind variables, which obey conditions on movement[1]. In syntactic terms the propositional vs. non-propositional operators distinction can also be translated into a distinction between operators which are functional heads vs. operators that are not functional heads. Propositional operators are either functional heads or some value under a functional head. All propositional operators are functional heads but not vice versa. Propositional operators are operators which head functional projections of the verb. And this makes sense because only those can modify the proposition.

A problem pointed out by M. Brody (p.c.) is the following: If both the head and the specifier are filled by operators for the satisfaction of the PI-Criterion, how does the meaning of the sentence come about? I take this to be a general problem, not specific to the theory presented here. Most EPI licensers are generally assumed to be operators. And so are PI's in some theories (cf. Kayne 1980a and Rizzi 1982). Consider also Rizzi's (1990) account of how inner island effects are derived and his assumption that when in a language sentential negation fills the head Neg of NegP the Spec of NegP is filled by a Neg-operator that blocks adjunct A'movement. The problem pointed out by M. Brody is not necessarily a problem. It could be that the head and the Spec in all Spec-head agreement configurations need to agree in +/- operator status. This seems to be generally true.

One cannot help observing the similarity between claim (76), which I proposed for MG, and claim (77)[2], which Klima (1964) put forward for English.

(77)

Neg, WH and the conditional operator:

a. license EPI's

b. are affective operators

---

[1]Note that the distinction I propose here between propositional vs. nonpropositional operators is more general than Lewis's (1975) distinction between unselective vs. selective quantifiers; the present distinction is more general in that it refers to all operators and not just quantifiers and adverbs of quantification.

[2]The formulation of the claim is mine.

In Klima's account 77(b) is not independently motivated but is just offered as a name for the elements Neg, WH and the conditional operator. These elements are assumed to share a common grammatico-semantic feature, the feature 'affective', which is not further defined. In claim (76), instead, 76(b) is independently motivated. I am suggesting that the notion of propositional operator should replace that of affective operator. More evidence for this will be presented in the next section, where it is shown that all propositional operators give rise to inner island effects.

2.6 Inner Island Effects

I have shown that a cluster of properties can be attributed to the set {WH, Neg, F, the conditional, the necessity and the possibility operators}. This is claim (76), repeated below. In this section I will add a third property to this cluster, namely 76(c).

(76)
Neg, WH, F, the conditional, the necessity and the possibility operators:
a. license EPI's
b. are propositional operators

(76)
Neg, WH, F, the conditional, the necessity and the possibility operators:
c. give rise to inner island effects

Negation is said to give rise to inner island effects. Namely, it blocks extraction of adjuncts, while it leaves extraction of arguments unaffected (cf. 78(a) and (b)).

(78)a. How_i do(*n't) you think he repaired the car t_i?

b. $What_i$ do(n't) you think he repaired t_i?

Rizzi (1990) gave the argument / adjunct asymmetry induced by Neg islands a unified treatment with the argument / adjunct asymmetry induced by Wh islands under ECP (cf. 79(a) and (b)).

(79)a. *How$_i$ do you wonder whether he repaired the car t$_i$?

b. ?What$_i$ do you wonder whether he repaired t$_i$?

I will next briefly present Rizzi's unified account of the argument / adjunct asymmetry in Wh islands and Neg islands. Rizzi (1990, 1991) argues for relativized minimality and proposes that the following minimality condition holds on antecedent government: a certain type of government relation is blocked by the intervention of a potential governor of the same type. In the case of a Wh-chain, potential interveners are A'-specifiers, i.e. Specs of CP. The unification between Wh islands and Neg islands is achieved on the following lines. Neg islands can be reduced to the same explanation as Wh islands, if we assume that negative clauses involve a NegP. According to Rizzi (1991), 'The Spec of NegP may be filled by a sentential negation operator, phonetically realized as French *pas* , presumably English *not* , West Flemish *nie* , or phonetically null, as in Italian, Spanish etc.. Alternatively, it may be filled (at the latest at LF) by the movement of a negative quantifier. The negative head may be phonetically realized as French *ne* , Italian *non* , West Flemish *en-* (optionally), or null, as in English, German, etc. Such a uniform substructure will have an effect analogous to the effect of Wh CP's: the intervention of the A' specifier will block an antecedent government relation in A' chains. Negative Islands and Wh Islands can thus receive a uniform treatment under Relativized Minimality.'

Significantly, both Neg and WH are members of the set {Neg, WH, F, the conditional, the necessity and the possibility operators}. What I will illustrate next is that all the members of this set give rise to inner island effects, that is they block extraction of adjuncts but not of arguments[1]. The observation that there is a correlation between PI Licensing and giving rise to inner island effects is first found in Rizzi (1990:19): 'It would then seem that inner-island effects are determined by "affective" operators, in Klima's (1964) sense - that is, operators licensing negative polarity items.' Rizzi has in mind WH and Neg and states a correlation. The proposal I make is more comprehensive and also the emphasis is different. My proposal is that there is a set of elements with three properties. Two of these

---

[1]The behaviour of the conditional operator cannot be checked for independent reasons. There is a filter in MG against the head and the Spec of CP being both filled with interrogative elements.

properties are EPI Licensing and inducing inner island effects. Neither of these two properties is the defining property of the set. Although Rizzi's observation is a correct description of facts, it does not make reference to primitive notions. It seems to me that the term "affective" operator is not a primitive notion, whereas the term "propositional" operator is.

Separately from his discussion of inner island effects Rizzi (1990:116,ft 16) remarks that modals in some cases appear to block embedded construals of preposed adjuncts. Rizzi does not state a connection between this observation and the observation that WH and Neg induce inner island effects. In my proposal the two observations relate. What those cases are is precisely inner island effects induced by modals. The sources Rizzi quotes for claiming that modals may block embedded construals of embedded adjuncts are Travis (1984) and Pesetsky (p.c.). Travis (1984:171-2) gives an example of an inner island induced by negation (i.e. (80)) and contrasts it with an example with no negation (i.e. (81) given in Lasnik and Saito (1984)).

(80) *[How slowly]$_i$ won't you say Mary gave the book to Joan t$_i$?

(81) [How slowly]$_i$ did Sean say that Matthew gave Jared the book t$_i$?

Travis goes on to observe that the contrast between (80) and (81) 'is not a core case since, as soon as the matrix verb is given more content, the construction worsens'. She gives examples (82) and (83) to illustrate her point.

(82) *[How slowly]$_i$ should Sean have said that Matthew gave Jared the book t$_i$?

(83) *[How slowly]$_i$ might Sean believe that Matthew gave Jared the book t$_i$?

Examples (82) and (83) involve a necessity operator and a possibility operator, respectively. What examples (82) and (83) show is that modal operators also give rise to inner island effects. Examples (82) and (83) should each be contrasted with example (80).

I will next illustrate inner island effects with F, the conditional, the necessity and the possibility operators. In each case I will give a pair of examples. The first

55

member of each pair is grammatical, in contrast with the second member of each pair, which is ungrammatical. The two members of each pair are marked by the absence vs. presence, respectively, of some operator. Consider:

(i) F

(84)a. jatí_i léi óti éftiakse to aftokínito t_i ?
　　　why says that fixed-he the　car
　　　'Why_i does he say that he fixed the car t_i ?'

　　b. *jatí_i LEI óti éftiakse to aftokínito t_i ?
　　　why SAYS that fixed-he the　car
　　　'*Why_i does he SAY that he fixed the car t_i ?'

(ii) Necessity Operator

(85)a. jatí_i　ípe　óti　me　misí t_i ?
　　　why said-he that me-cl hates
　　　'Why_i did he say that he hates me t_i ?'

　　b. *jatí_i　na　pi　óti　me　misí t_i ?
　　　why must say-he that me-cl hates
　　　'*Why_i must he say that he hates me t_i ?'

(86)a. jatí_i　ípe　óti　ton　apélisan　t_i ?
　　　why said-he that him-cl sacked-they
　　　'Why_i did he say that he was sacked t_i ?'

　　b. *jatí_i　tha　ípe　óti　ton　apélisan　t_i ?
　　　why must said-he that him-cl sacked-they
　　　'?Why_i must he have said that he was sacked t_i ?'

(87)a. jatí_i　ípan　to kalokéri óti tha　páne ekdromí t_i ?
　　　why said-they the summer that will go-they trip
　　　'Why_i did they say last summer that they would go on a trip t_i ?'

b. *jatí$_i$ léghane páda   ta kalokéria óti   tha   páne ekdromí t$_i$?

    why said-they always the summers that will go-they trip

    '*Why$_i$ did they always use to say that they would go on a trip t$_i$?'

(i) Possibility Operator

(88)a. jatí$_i$ léi   óti   éftiakse   to aftokínito t$_i$?

    why   says that fixed-he the   car

    'Why$_i$ does he say that he fixed the car t$_i$?'

b. *jatí$_i$ borí   na léi   óti   éftiakse   to aftokínito t$_i$?

    why   can-he that says that fixed-he the   car

    '*Why$_i$ can he say that he fixed the car t$_i$?'

(89)a. pos$_i$ anakínose   o Yánnis   óti   ftiákhni aftokínita t$_i$?

    how   announced the Yannis that repairs   cars

    'How$_i$ did Yannis announce that he repairs cars t$_i$?'

b. *pos$_i$ anakinóni kanís   óti   ftiákhni aftokínita t$_i$?

    how   announces   one that repairs   cars

    '*How$_i$ does one announce that one repairs cars t$_i$?'

English[1] patterns with MG, as the translations of examples (84) to (89) illustrate. I also checked Italian[2],which seems to conform to the above picture.

Rizzi accounts for the inner island effects induced by WH and Neg by saying that they constitute violations of Relativized Minimality. In these two cases, there is a CP and a NegP, respectively, with its specifier position filled; this is why adjunct extraction is ruled out. The question is raised whether a similar explanation

---

[1]My informants for English were Robyn Carston and Neil Smith. Robyn Carston pointed out to me that the following contrast could also be relevant.

(1)a. Why did he fix the car, did he say?

   b. Why did he fix the car, * can he say? / *did he use to say?

Most probably it is, but I cannot say anything more specific for the moment.
[2]Rita Manzini helped me with the Italian data. Native speakers who get Neg islands also get weak islands in the Italian translations of examples (84) to (89).

could be put forward for the inner island effects induced by F, the necessity and the possibility operators. In principle it could be. We would need to say that verbal functional projections headed by operators give rise to inner island effects as their Spec is either overtly or silently filled in all cases.

For claim 76(c) to go through we also need to show that we do not get inner island effects with non-propositional operators. The crucial example would be one involving quantifiers because in all other cases a non-propositional operator presupposes a corresponding propositional operator (cf. wh-phrases, foci and polarity items). Rizzi (1990) has shown that quantifiers do not trigger inner-island effects. Consider example (90), which allows an embedded construal of *why* across *many people* .

(90) Why do many people think that he fixes cars?

Claim 76(c), repeated below, seems therefore to be well substantiated. I suggest that it is equally well motivated to replace the vague notion of "affective" operator with that of propositional operator.

(76)
Neg, WH, F, the conditional, the necessity and the possibility operators:
c. give rise to inner island effects

2.7 The Proposal

The picture so far is the following. There is a set of elements with three properties (cf. 76(a) to (c)).

(76)
Neg, WH, F, the conditional, the necessity and the possibility operators:
a. license EPI's
b. are propositional operators
c. give rise to inner island effects

On the basis of properties 76(a), (b) and (c) I claim that the set {Neg, WH, F, the conditional, the necessity and the possibility operators} forms a natural class. The question is raised whether one of these properties is more basic than the other

two in the sense of being the defining property of the set. It seems to me that the defining property of the set, if there is one, cannot be either 76(a) or 76(c). Both 76(a) and (c) have to do with locality restrictions. I will claim that the defining property of the natural class in question is 76(b), namely the fact that the members of the set are exclusively propositional operators[1]. Claim (91) replaces claim (76) and is advanced for both MG and English[2].

(91)

Propositional operators:

a. license EPI's

b. give rise to inner island effects

Claim (91) shows a relation between three superficially independent parts of the grammar, namely operators, EPI Licensing and inner island effects.

2.8 A Problem

A problem for claim (91), and in particular for 91(a), is posed by English. The problem is addressed in this section and a weak solution is suggested.

Properties 91(a) and (b) are intended as biconditionals. Namely, all and only propositional operators license EPI's; and all and only propositional operators give rise to inner island effects. Saying, as I did in the previous section, that claim (91) is advanced for both MG and English automatically raises a problem with respect to English, which has property 91(b) but not 91(a) as a biconditional. While it is true that EPI licensers in English belong to the set of propositional operators, it is not true that all propositional operators license EPI's in English. Namely, F, the

---

[1]Veloudis (1982) also presents a unifying account for EPI licensers in MG by marking all EPI licensers as +affective in the spirit of Klima's (1964) analysis of English EPI's. But such an account is not explanatory. The feature [affective] is not found elsewhere in the grammar and is just posited for the discussion of EPI's. Klima observes that Neg, WH and *only* have a common feature, which he names 'affective' but does not define it any further. Veloudis notes that in MG the +affective feature can also characterise the Subjunctive, the Imperative, the Future and a group of expressions and adverbs such as *póte póte* 'from time to time' and so on. Veloudis's account is not explanatory because the 'affective' elements are not identified in terms of an independent test.

[2]Whether claim (91) could be advanced for more languages, perhaps universally, is something I have not looked into sufficiently to be able to express a view here. It would be desirable, though.

necessity and the possibility operators do not license EPI's in English, as the ungrammaticality of examples (92), (93) and (94), respectively, shows.

(92) *He DID say anything.
  'He DID say something.'

(93) *You should see anyone tonight.
  'You should see friends tonight.'

(94) *She may know anyone there.
  'She may know someone there.'

In view of the unavailability of F, the necessity and the possibility operators as EPI licensers in English we need to relax claim 91(a) up to a point. It would seem wise to substitute 91(a) with a weaker claim that could cover both English and MG, namely (95). Claim (95) appears to have universal status, as 91(a) was intended to have, and at the same time can correctly describe the parametrisation between English and MG with respect to EPI licensing.

(95) Propositional operators license PI's.

Claim (95) holds for both MG and English, and, I believe, universally. All it says is that the licensers of EPI's, NPI's and FCPI's belong to the set of propositional operators. For instance, the FCPI licenser in English, i.e. the possibility operator, belongs to this set. Together with (95) we would need a specification to the effect that the patterning between PI types and PI licensers is subject to parametric variation. This is how the difference between English and MG with respect to EPI licensers would be accounted for.

I will next consider the advantages and disadvantages of the solution in (95). First of all, parametric variation in PI licensing seems to be relevant for EPI's only. For instance, in both English and MG the only FCPI licenser is the possibility operator. Claim (95), though observationally adequate[1], raises question (96). Question (96), in fact, reduces to question (96'), given that there is no parametric variation in NPI and FCPI licensing.

---

[1]at least prima facie

(96) Why is there parametric variation in the matching of PI types and PI licensers?

(96') Why is there parametric variation in EPI Licensing?

The fact that parametric variation seems to affect EPI's only makes claim (95) look suspiciously less plausible than initially assumed. Claim (95) is observationally but not explanatorily adequate. I feel that the task ahead of us is not simply to describe the difference between English and MG concerning the set of EPI licensers in each of the two languages, as (95) does very well, but rather to account for this difference between English and MG. This is what I attempt to do in the next section.

2.9. A Solution

Section 2.8 ended with the observation that what we really have to do is not just describe but, most importantly, account for the parametrisation of EPI licensers that English and MG illustrate. In this section the question of UG parametrisation is argued to be nonexistent. To account for the allegedly apparent-only parametrisation a strong solution is put forward relying crucially on the interpretational difference between *anyone* and *someone* proposed in section 2.4.2.

I want to suggest that English conforms to claim 87(a). Of course, I have to explain why claim 91(a) is prima facie, at least, contradicted by the English data (cf. examples (92), (93) and (94)). I will argue that the parameter involved in the difference between MG and English is not a UG parameter, as claim (95) suggests, but a lexical one. I suggest that English has more than one instantiation of EPI's, namely *anyone* , *someone* and *one* . Claim 91(a) holds for English, too. At the same time there is a fixed matching between the EPI instantiations, i.e. *anyone* , *someone* and *one* , and propositional operators. The three instantiations of EPI's in English are in complementary distribution as far as their licensers are concerned. *anyone* is licensed by Neg, WH and the conditional operator. EPI *someone* is licensed by F as well as by certain necessity and possibility operators. *one* is licensed by certain other necessity and possibility operators. The strong solution to the puzzle presented by English EPI licensing is schematised in (97), below:

(97)

a. The matching between EPI's and propositional operators is not subject to parametric variation.

b. The matching between EPI instantiations and propositional operators can be subject to parametric variation.

Claim (98), below, permits me to keep 91(a).

(98) *someone* is ambiguous[1] between an existential quantifier and an EPI.

I am claiming that *someone* is ambiguous between an existential quantifier and an EPI when in the scope of propositional operators. We do not, therefore, need to relax claim 91(a) in favour of claim (95). What we will say, instead, is that English has more than one instantiation of EPI's. Thus in examples (99) to (101), below, *something* and *someone* can have either an EPI reading or an existential quantifier reading. We should be able to tell the difference if I am right, as I argued in section 2.4.2, that *someone* outside the scope of propositional operators differs in interpretation from *anyone* . The claim that *someone* is ambiguous between an existential quantifier and an EPI is the solution I propose for the problem raised by English with respect to 91(a). It can be shown that the alleged ambiguity of *someone* is not a stipulation, on the basis of the discussion in section 2.4.2, where I argue that the logical representation of EPI's differs from that of existential quantifiers.

(99) He DID say something.

(100) I must tell someone immediately.

(101) She may know someone there.

something and *someone* in (99), (100) and (101) pattern with EPI's with respect to the properties discussed in section 2.4.2. Namely, they may have plural reference. In general, when *someone* is in the scope of a propositional operator, it

---

[1]Ambiguities of this type have already been suggested. It has been shown, for instance, that wh-phrases in situ are ambiguous. I am referring to Pesetsky's (1987) proposal that only some wh-in-situ undergo movement by LF.

can have a 'set' reading. In all other cases the 'set' reading is unavailable for *someone* . Significantly, when *someone* is in the scope of a propositional operator, a plural pronoun with true plural reference can be used to refer back to it (cf. (102))

(102) Relationships are peculiar. You always end up with someone when you are not looking for them.

Also, if we introduce a Neg operator (cf. (103)) or a WH operator (cf. (103)) in the sentence the reading of *someone* is like that of an EPI. Thus in (103) it is not the case that a specific individual is negated; instead, the interpretation of the sentence is 'I must tell nobody immediately.'. Similarly in (104) WH can have scope over *someone* .

(103) I must not tell someone immediately.

(104) Must I tell someone immediately?

Another type of evidence that there are two kinds of *someone* is the following: when *someone* is in the scope of a propositional operator, it can be focussed. In all other cases *someone* cannot be focussed. Consider examples (105) and (106) in this respect.

(105)a. They must have talked to someone.

b. They must have talked to SOMEONE.

(106)a. Someone has just called.

b. *SOMEONE has just called.

A further piece of evidence for the claim in (98), also related to focussing, is the following. The Spec of IP does not appear to be a position in which PI's are easily focussed. If we take English we see that in clausemate licensing EPI's are not licensed in Spec of IP if the licenser is some operator under I. Contrast 107(a) and (b). This is the familiar c-command condition on EPI licensing. In Free Choice

Polarity Item Licensing FCPI's can be licensed in Spec of IP but they are obligatorily focussed. Contrast (108) and (109)[1].

(107)a. I have not seen anyone.

b. *Anyone has not seen me.

(108)a. I can imitate any linguist.

b. I can imitate ANY linguist.

(109)a. *Any boy can fool himself.

b. ANY boy can fool himself.

Significantly, *someone* exhibits the same patterning as FC *anyone* when in a sentence with a propositional operator. Consider examples (110) and (111), below.

(110)a. You must have seen someone on your way here.

b. You must have seen SOMEONE on your way here.

(111)a. *Someone can certainly do that.[2]

b. SOMEONE can certainly do that.

The facts carry over to MG. It seems that MG *kápios* is also ambiguous between an existential quantifier and an EPI. MG EPI's are not licensed in Spec of IP position. Also, *kápios* cannot be focussed unless it is in the scope of a

---

[1] I will not comment on the contrast between 109(a) and (b).
On the significance of Focussing for the licensing of PI's in [Spec,IP] as opposed to all other positions, it is perhaps relevant to remember again that there is no asymmetry in NPI licensing in MG, where NPI's are necessarily focussed.
[2] It was crucial that I find a context where *someone* cannot be taken as an existential quantifier.

propositional operator. Interestingly, *kápios* as an EPI in Spec of IP is necessarily focussed[1]. Consider examples 112(a) to (c):

(112)a. tha   érthi   kápios   dhen borí
       will come-he someone it can't be otherwise
       'Someone is bound to come.'

b. *kápios   tha   érthi   dhen borí
   someone will come-he it can't be otherwise

c. KAPIOS   tha   érthi   dhen borí
   SOMEONE will come-he it can't be otherwise

The +/-EPI dichotomy for *someone* cannot be reduced to the +/-specific dichotomy[2]. First of all, the +/-EPI dichotomy for *someone* is a scope phenomenon. It depends crucially on the presence vs. absence of EPI licensers. On the other hand, the +/-specific dichotomy is not a matter of scope, as Ioup (1977) and Enç (1991) show. Second, -specific does not equal a 'set' reading. +EPI, however, does imply a 'set' reading.

It could be argued against the strong solution presented in this section that it is not really a solution; rather it takes a difference from one part of the system and puts it in another part of the system. Namely, that it does away with the difference between English and MG with respect to EPI Licensing but has to state that English has different instantiations of EPI's and posit further an ambiguity of *someone* between an existential quantifier and an EPI. I believe it is more desirable to have language-internal parametrisation than crosslinguistic parametrisation. Also, the proposed interpretational difference between existential quantifiers and EPI's is not a theoretical construct but is argued for independently, as I showed in section

---

[1]The same facts work as an argument for the EPI licenser status of modal operators. If modal operators are indeed EPI licensers, one would expect that they, too, cannot license EPI's in Spec of IP. This is indeed the case.

[2]It must be admitted, however, that the intuition that EPI's are -specific is a first, though not sufficient, step towards a better understanding of EPI's. Interestingly, Fodor (1970) notes that the nonspecific reading of an indefinite arises when the indefinite occurs inside an opaque context. Propositional attitude verbs, negation and modals are taken to be among the factors that can create opaque contexts for indefinites. Karttunen (1976) remarks that noun phrases inside an opaque context do not establish discourse referents.

2.4.2. It is also needed for languages like MG where all propositional operators license EPI's.

I have argued that English *someone* is ambiguous between an existential quantifier and an EPI when it is in the scope of a propositional operator. The same proposal can be put forward for MG *kápios* 'someone', if we apply the tests we applied in the case of English *someone* . So, MG *kanís* 'anyone' and *kápios* 'someone' can be used interchangeably in the scope of propositional operators in the EPI reading. The question is actually raised whether there are any circumstances where one of the two is excluded. The answer is yes. If we want to focus the EPI, *kápios* must be used. *kanís* cannot be focussed in the EPI reading[1]. We have the following interesting picture: In MG and English where either *kanís / anyone* or *kápios / someone* can be used as EPI's, *kápios / someone* are the only possibility, if we want focussed EPI's. *kanís / anyone* cannot be focussed[2]. *kápios / someone* as existential quantifiers cannot be focussed, either; but *kápios / someone* as EPI's can be focussed.

Question (113) is raised at this point:

(113) Are *anyone* and *someone* the only instantiations of EPI's in English?

I believe not. I would like to suggest that the list is longer. It seems to me that *one* in subject position is another instantiation of EPI's in English. Also, when *you* [3] is synonymous with *one* I take it to be an EPI, as well. *anyone* , *one* and EPI *someone* are in complementary distribution as far as their licensers are concerned.

I also want to propose that arbitrary null Categories are EPI's. For English this means an EPI analysis of arbitrary PRO. For other languages the proposal will include arbitrary subject pro and arbitrary object pro. Their licenser is either the necessity or the possibility operator. Significantly, the semantics of arbitrary null categories is not any different from the semantics of EPI's.

---

[1] *KANIS* is an NPI (see section 2.3.1).

[2] I have a tentative explanation for this. Stressed EPI's in English would be no different than FCPI's. Stressed EPI's in MG would be no different than NPI's. *kanís* in MG is ambiguous between an NPI and an EPI, the relevant factor being presence vs. absence of stress. *anyone* in English is ambiguous between a FCPI and an EPI, the relevant factor being again presence vs. absence of stress.

[3] The second person singular pronoun can be an EPI in MG, as well.

With respect to arbitrary PRO its complementary distribution with *one* is indicative. I have argued that *one* should be analysed as an EPI. The complementarity between *one* and arbitrary PRO depends crucially on the -/+ Tns dichotomy.

Lebeaux (1984) was the first to notice the particular interpretation of PRO in examples like (1), below:

(114) [[PRO$_i$ to know me] is [PRO$_i$ to love me]].

There are two instances of PRO in (114). Interestingly the two PRO's in (114) are necessarily coreferential. This is known as linked reference phenomena in equative structures. Coreference needs to be explained. In my analysis of arbitrary PRO as an EPI coreference in (114) is an epiphenomenon. We have two instances of EPI PRO, which are necessarily coreferential.

A few words about arbitrary object pro now. In section 2.4, I briefly discussed the free variable analysis of EPI's. The equivalent of that analysis for null objects is put forward by Authier (1989). The gist of Authier's analysis is that null objects are base-generated as free variables which are bound by an adverb of quantification at LF.

I take null objects in French to be pro's. In French object pro's are only licensed in the scope of either the necessity or the possibility operator. I analyse arbitrary null objects (cf. (115) from Authier (1989)) as EPI's.

(115) Cette drogue rend [e] fou.
      'This drug makes you crazy.'

I also want to suggest that arbitrary subject pro should be analysed as an EPI. Arbitrary subject pro is either second person singular or third person plural and is always in the scope of either the necessity or the possibility operator.

I have argued that the set of EPI licensers is the same in English and MG, and in all languages for that matter; all propositional operators license EPI's in English, as well.

67

2.10 Polarity Item Licensing Reconsidered

In this final section I will summarise the main points of the discussion so far and bring out some extensions. In particular, I will add some thoughts on the relation, if any, between the PI-Criterion and the other Criteria proposed in the literature, namely the Wh-Criterion and the Focus-Criterion.

A PI-Criterion was put forward stating that by LF PI's and their licensers must be in a Spec-head agreement configuration. EPI's were shown to be operators. The set of EPI licensers was argued to be the same universally. It consists of propositional operators, which have two properties. Namely, they license EPI's and give rise to inner island effects. It was also argued that *someone / kápios* are ambiguous between existential quantifiers and EPI's.

I will next investigate briefly if there is a relation between the PI-Criterion and other Criteria. There has been discussion in the literature (cf. Brody 1990) on the relation between the Wh-Criterion and the F-Criterion. The idea was that the Wh-Criterion could be reduced to the F-Criterion, the assumption being that wh-phrases are necessarily focussed. I argue against this assumption in chapter III. What I want to argue for, instead, is that the relation is between the Wh-Criterion and the PI-Criterion and that ultimately the Wh-Criterion reduces to the PI-Criterion. Namely, I want to suggest that the Wh-Criterion is not a basic notion but one of the forms of the PI-Criterion, in fact part of an EPI-Criterion. Empirical evidence for this claim comes from languages in which the same item functions as a wh-word and an EPI. Chinese is such a language. While English and MG distinguish between wh-phrases and EPI's, Chinese does not. Chinese has the same word, *shei* , for EPI's and wh-phrases. If we take propositional operators and the items they license across languages, we see that some languages have more instantiations than others. If we compared English, MG and Chinese, we could say that English comes first having more instantiations of EPI's than the other two languages, i.e. *who , anyone , someone , one* , MG comes second, with only two instantiations, namely *pios* 'who' and *kanís* , and Chinese comes third, with only one instantiation, namely *shei* . The important notion, I want to argue, is Licensing by propositional operators. The various realisations across languages are of secondary importance. Further evidence for reducing the Wh-Criterion to the PI-Criterion comes from comparing the semantics of wh-phrases and EPI's. For instance, in section 2.4.2 we saw that even in languages which keep the lexical

distinction between wh-words and EPI's the interpretation of EPI's in the scope of WH parallels that of wh-phrases.

Appendix I
LF that -Trace Effects

In section 2.4.1, I argued that EPI's are operators. An independent argument, that I do not agree with, is presented in Kayne (1981a) and Rizzi (1982) for the same claim. The argument, which will be discussed next, has to do with alleged LF *that* -trace effects induced by PI's. The relevant examples are 1(a) and (b), below. Operators are generally assumed to raise by LF. The contrast between 1(a) and (b) has been claimed to reduce to a well-known property of movement in general, namely that all movement has to obey the ECP. By LF the PI in both 1(a) and(b) raises to acquire the same scope as its licenser. The trace left behind is properly governed in 1(b) but not in 1(a). The offensive trace in 1(a) is not properly head governed. The LF representations of 1(a) and (b) are 1'(a) and (b), respectively.

> (1)a. *Je   n'   ai exigé   que personne téléphone.
>   I   not demanded-I that anyone   phone

>   b. ?Je n'   ai exigé   que tu   voies personne.
>   I   not demanded-I that you see-you anyone

> (1')a. [Je [$_{NegP}$ personne$_i$ [$_{Neg'}$ n']] ai exigé [que [e$_i$ téléphone]]]

>   b. [Je [$_{NegP}$ personne$_i$ [$_{Neg'}$ n']] ai exigé [que [tu voies e$_i$]]]

In section 2.2 I discussed an argument advanced by Rouveret (1992) and Vergnaud (in preparation) against the existence of LF *that* -trace effects induced by PI's. I claimed that it was not a good argument. I will next put forward different arguments against the claim that PI's give rise to LF *that* -trace effects.

A. Lack of LF *that* -Trace Effects in English

The behaviour of PI's in 1(a) and (b) is not characteristic of all languages. In particular, it is not characteristic of other languages which have been independently shown to exhibit *that* -trace effects. The contrast between 1(a) and (b) does not seem to obtain in PI Licensing in general but rather to be specific to certain languages. This looks suspicious. We would expect all languages with S-structure *that* -trace effects to show LF *that* -trace effects in PI Licensing. The prediction is not borne out. English is a case in point. These data are known and they are discussed in the literature (see Aoun et al 1981 and Hornstein). Contrast example 1(a) from French with example (2) from English. If 1(a) is out as a violation of the *that* -trace filter, it is difficult to understand why the same configuration is O.K. in English, even though English has S-structure *that* -trace effects. Example (2) suggests that there are no LF *that* -trace effects in English. The question is why. A state of affairs whereby there are LF *that* -trace effects, but they are not exhibited by all languages with S-structure *that* -trace effects lacks plausibility.

(2) She did not say that anyone had called.

The account in Aoun et al (1981) for the grammaticality of (2) as opposed to the ungrammaticality of 1(a) goes as follows. *personne* is an operator while *anyone* is a variable. However, it does not seem optimal to suggest that PI's are operators in some languages, e.g. the Romance languages but not in others, e.g. English[1]. I take the data in (1) and (2) to suggest not a parametric variation in the status of PI's but rather some parametric variation in the properties of PI Licensing.

B. EPI's vs. NPI's

I think that a potential account of the data in (1) lies in Vergnaud's remark[2] that superordinate licensing is possible only when *personne* is stressed. 1(a) and (b) should therefore be rewritten as 3(a) and (b):

(3)a. *Je n' ai exigé que PERSONNE téléphone.
      I not demanded-I that NOONE   phone

---

[1]It would not be optimal either to suggest that in both the Romance languages and English PI's are operators but only in the Romance languages do they raise by LF.
[2]already presented in section 2.2

b. ?Je n' ai exigé que tu voies PERSONNE.

I not demanded-I that you see-you NOONE

The generalization[1] seems to be that French allows superordinate NPI licensing but disallows superordinate EPI licensing. This is further confirmed by the following data from Rouveret (p.c.)[2]:

(4)a. *Je n' ai exigé que personne téléphone.

I not demanded-I that anyone telephones

'I did not demand that anyone telephones.'

b. Je n'ai exigé que PERSONNE téléphone.

(5)a. ?Je n' ai exigé que tu voies personne.

I not demanded-I that you see-you anyone

'I did not demand that you see anyone.'

b. Je n'ai exigé que tu voies PERSONNE.

Given the observation in Vergnaud (in preparation) that in superordinate PI licensing in French the PI's are necessarily stressed, I rewrite the acceptability judgements in 4(a) and 5(a) as 4'(a) and 5'(a), respectively.

(4')a. **Je n' ai exigé que personne téléphone.[3]

I not demanded-I that anyone telephones

'I did not demand that anyone telephones.'

(5')a. *Je n' ai exigé que tu voies personne.

I not demanded-I that you see-you anyone

'I did not demand that you see anyone.'

---

[1]already suggested in section 2.2

[2]Examples (4) and (5) are taken by Rouveret (1992) and Vergnaud (1992) to show that superordinate PI licensing in the subject position is possible only when the PI is stressed, superordinate licensing of nonsubject PI's being licensed in either case.

[3]The two stars on 4'(a) indicate not so much extreme ungrammaticality but rather a worse ungrammaticality than in 5'(a).

MG is the mirror image of French with respect to superordinate PI Licensing (see also section 2.3.1). Consider examples (6) and (7):

(6)a. dhen ípa   óti   tilefónise kanénas
      not said-I that   phoned-he   anyone
      'I did not say that anyone called.'

    b. *dhen ípa óti tilefónise KANENAS

(7)a. dhen ípa   óti   thélo   kanéna
      not said-I that   want-I anyone
      'I did not say that I want anyone.'

    b. *dhen ípa óti thélo KANENA

French and MG seem to obey conditions (8) and (9), respectively.

(8) In French:
    a. There is no superordinate licensing of EPI's.
    b. There is superordinate licensing of NPI's.

(9) In MG:
    a. There is superordinate licensing of EPI's.
    b. There is no superordinate licensing of NPI's.

LF *that* -trace effects cannot be invoked at all in the explanation of the MG data in examples (6) given that the subject position occupied by the PI is the VP-internal subject position. The situation here is analogous to the lack of S-structure *that* -trace effects in Italian. It has been shown that Italian exhibits no S-structure *that* -trace effects because extraction takes place not from the Spec of IP but from a postverbal VP-adjoined subject position[1]. Also, it would be suspicious to suggest that LF that -trace effects arise for NPI's but not for EPI's.

---

[1] If we take into account the VP-internal subject hypothesis of Koopman and Sportiche (1991), one could suggest that this postverbal, allegedly VP-adjoined subject position is actually a right-branching Spec of VP.

I want to suggest that the French data possibly need to be reinterpreted in the light of the MG data. The marginal status of 5(a), as the question mark indicates, should not be ignored. The question why 4(a) is starred while 5(a) is only marked with a question mark remains open for the moment. I will return to it later on.

The contrast between French vs. English, as illustrated in 1(a) and (2), is no longer problematic. It reduces to a specification that English allows superordinate EPI licensing but French does not.

C. Superordinate vs. Clausemate Licensing

Another argument against LF *that* -trace effects of the data under examination would be to show that ungrammaticality in those cases is not a result of superordinate licensing. Namely, to show that grammaticality also obtains in the corresponding examples with clausemate licensing. I will now present the relevant data. The distinction of French and MG PI's into EPI's and NPI's will be used in the discussion. I want to point out the following parallelism between 4'(a) and 10(a).

(4')a. **Je n'   ai exigé   que personne téléphone
        I not demanded-I that anyone telephones
        'I did not demand that anyone telephones.'

(10)a. *Personne ne   téléphone.
        anyone not telephones

     b. PERSONNE ne   téléphone.
        NOONE   not telephones

What the contrast between 10(a) and (b) shows is that subject EPI's cannot be licensed. Subject NPI's, on the other hand, are licensed. The reason for the ungrammaticality of 10(a) does not seem to be the lack of c-command by the licenser because c-command does not obtain in 10(b) either and yet that sentence is grammatical. We need to establish next whether the difference between 10(a) and (b) has anything to do with the grammatical function of the subject or with the Spec of IP position. The question cannot be answered on the basis of French because

French does not allow VP-internal subjects (cf. Koopman and Sportiche 1991). For this reason the discussion will turn to MG. MG is similar to French in that the same PI forms are ambiguous between EPI's and NPI's. Crucially, MG is different from French in that it allows VP-internal subjects. Consider examples 11(a) to (c) and the corresponding tree-diagrams in (12).

(11)a. *kanénas dhen   tilefoní
         anyone not telephones

  b. dhen   tilefoní   kanénas
      not   telephones anyone

  c. KANENAS dhen   tilefoní
      NOONE   not telephones

(12)a.

b.

7 4

c.
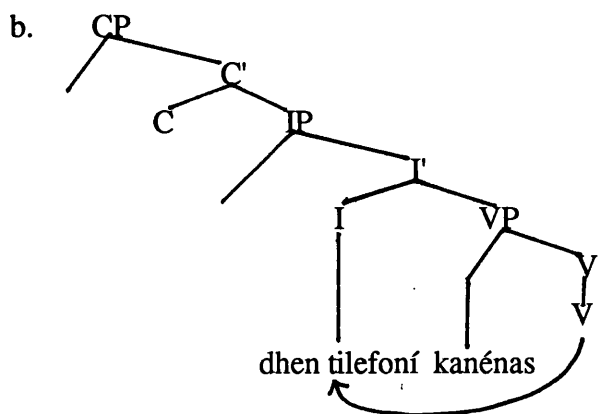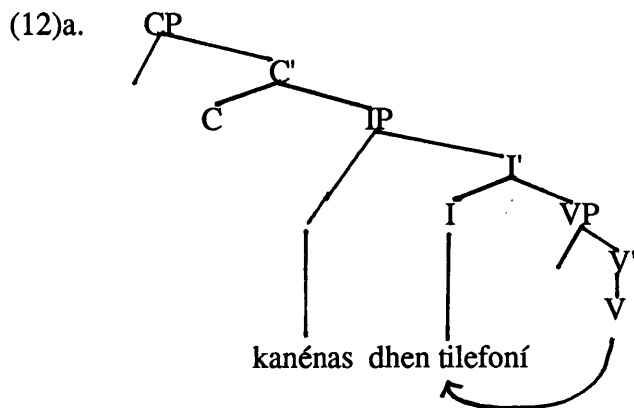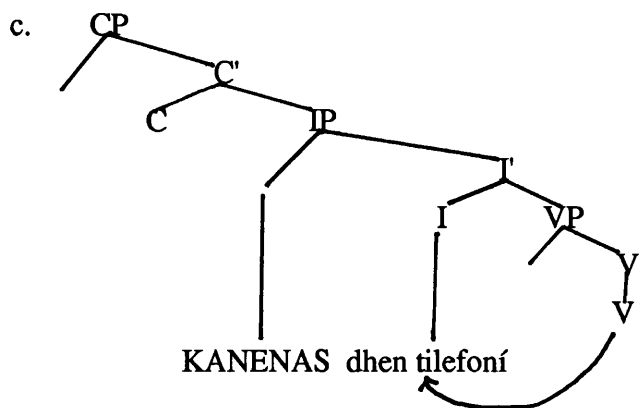
The contrast between 11(a) and (b) suggests that the problem lies in the Spec of IP position and not in the grammatical function of the subject. It seems that in some languages there are restrictions on the class of constituents that can occupy the Spec of IP position. We can, therefore, suppose that the ungrammaticality of 4'(a) reduces to the ungrammaticality of 10(a) and has nothing to do with LF *that -trace* effects.

At this point I want to go back and comment on the two stars versus one star contrast of examples 4'(a) and 5'(a), repeated below. It seems to me that this contrast is not different in nature than the contrast between 6(b), repeated below, and (13).

(4')a. **Je n'   ai exigé   que personne téléphone.
          I not demanded-I that anyone telephones
          'I did not demand that anyone telephones.'

(5')a. *Je n'   ai exigé   que tu   voies personne.
          I not demanded-I that you see-you anyone
          'I did not demand that you see anyone.'

(6)b. **dhen ípa   óti tilefónise KANENAS
          not said-I that phoned-he NOONE
          'I did not say that anyone called.'

(13) *dhen ípa   óti kanénas tilefónise
          not said-I that anyone phoned-he

75

4'(a) is worse than 5'(a) because it is a violation of two language-specific principles, one is (8), repeated below, and the other is (14), while 5'(a) is a violation of (8) but not (14).

(8) In French:
  a. There is no superordinate licensing of EPI's.
  b. There is superordinate licensing of NPI's.

(14) French and MG impose restrictions on the class of constituents that can occupy the Spec of IP position.

Similarly, 6(b) is a worse violation that (13). Namely 6(b), flouts both (9) and (14), while (13) only flouts (9).

(9) In MG:
  a. There is superordinate licensing of EPI's.
  b. There is no superordinate licensing of NPI's.

Arguments A, B and C have illustrated the problems of the LF *that* -trace effects story in the case of PI Licensing.

Let me recapitulate the main points of the analysis proposed for alleged LF *that* -trace effects. I have suggested that we have to do with two distinctions, namely the clausemate / superordinate PI Licensing distinction and the EPI / NPI distinction, and how they crossclassify in a language. The picture that has emerged is the following. Some languages allow superordinate licensing of EPI's only. In these languages, irrespective of whether the NPI is a subject or not, a superordinate licenser cannot license an NPI. Other languages allow superordinate licensing of NPI's only. In those languages, a superordinate licenser cannot license an EPI, irrespective of whether the EPI is a subject or not. It seems that MG belongs to the first group of languages while French belongs to the second group of languages. The further complication is added that it may be that the Spec of IP is available to NPI's but not EPI's irrespective of clausemate or superordinate licensing. This is the case in both MG and French.

Appendix II
Aoun et al (1981)

In this section I will consider Aoun et al's (1981) arguments that PI's are variables and not operators. Aoun et al do not actually make the point that crosslinguistically PI's are variables, but rather that this is the case with respect to EPI *anyone* in English. However, they would not be likely to argue that the status of PI's is subject to parametrization, parametrisation in this kind of property being an undesirable claim. The reason why Aoun et al (1981) proposed that EPI's are variables in English is the absence of LF *that* -trace effects. I look at EPI's in English because I believe that a crosslinguistic parametrisation of their status (operator / nonoperator) is not the optimal picture.

One of the tests applied to check the operator status of a functional head or a lexical maximal projection[1] is indications of LF movement. The common assumption in GB has been that operators move[2] by LF. So, movement effects are effectively operator effects. LF *that* -trace effects and WCO effects are movement effects that also count as operator effects. The possibility of binding pronouns without c-commanding them is also a property of operators that could be used as a test for the status of PI's. Aoun et al present three arguments for the variable status of EPI's in English (cf. 1(a) to (c)) based on these three properties of operators. A general comment is in order before I proceed. Aoun et al undertake the task of showing that PI's are not quantifiers. They take 'quantifiers' and 'operators' to be synonymous terms[3].

(1)

a. lack of *that* -t effects

b. lack of WCO[4]

c. EPI's may bind a pronoun without c-commanding it

---

[1] Also, a lexical head in some theories (cf. Heim 1982).

[2] In some proposals there is no movement but coindexation. Coindexation is then used as a device for marking scope.

[3] See chapter III, where I argue that quantifiers do not raise at LF. I keep, however, the assumption that quantifiers are operators.

[4] Cf. Lasnik and Stowell 1991.

In Appendix I, I challenged the view that LF *that* -trace effects characterise operator EPI's. I assume, therefore that the lack of LF *that* -trace effects does not show that EPI's in English are not operators and I do not look further into this question with respect to English.

The contrasts drawn by Aoun et al in the discussion of arguments 1(b) and (c) will be shown not to be relevant and will not, therefore, be valid for the discussion. In fact, contrary to what arguments 1(b) and (c) are purported to show, EPI's and operators in English do not behave differently with respect to the parameters examined in those arguments. After discussing arguments 1(b) and (c) I will suggest that the two arguments are actually related.

I will now look at argument 1(b), namely the absence of WCO with EPI's in English. WCO effects is an instance of movement effects. Operators give rise to WCO effects because they raise by LF. WCO is a ban against a pronoun binding a variable on its right, namely against the configuration in (2). If EPI's showed WCO effects, this would mean they are operators. The cited examples are (3) vs. (4) below.

(2) *[Operator$_i$...Pronoun$_i$...Variable$_i$]

(3) [$_{CP}$[$_{IP}$[That he$_i$ might be laughed at] won't bother anyone$_i$.]]

(4) *[$_{CP}$[$_{IP}$[That he$_i$ might be laughed at] won't bother everyone$_i$.]]

According to Aoun et al, the presence versus absence of grammaticality in examples (3) and (4), respectively, can be explained on the assumption that EPI's in English, contrary to quantifiers, do not raise at LF. Consequently, at LF the WCO configuration arises for quantifiers but not for EPI's.

Contrary to what Aoun et al assume, I do not think that example (4) is excluded as a WCO violation. In fact, if in (4) we replace *everyone* with some other quantifier, we see that the alleged contrast between EPI's and quantifiers illustrated in the pair (3) / (4) ceases to exist. Consider examples (5), (6) and (7), below. Coreference is fine in these examples. Yet, they manifest the WCO configuration.

(5) That he$_i$ might be laughed at could well worry [each student of mine]$_i$.

(6) That they$_i$ were laughed at did not bother [some students of mine]$_i$.

(7) That they$_i$ might be laughed at bothers everyone$_i$.

The apparent contrast between EPI's and operators illustrated in (3) vs. (4) is the result of some property of *everyone* . It has been noted that there is a difference in the interpretation of *everyone* depending on whether it is a subject or not. In subject position *everyone* is interpreted as 'each one' while in non-subject position it is interpreted as 'all'. I think that this difference is crucial for the present discussion. In (4) *everyone* is in object position. It is, therefore, interpreted as 'all'. I believe that (4) is out with the intended meaning because the pronoun and the quantifier do not agree in phi-features. Alternatively, the contrast in (3) / (4) is due to some other factor altogether. N. Smith (p.c.) informs me that coreference is fine in (7'). This being so the argument in Aoun et al based on WCO disappears.

(7') That he$_i$ might be laughed at bothers everyone$_i$.

In other WCO contexts, as well, EPI's and quantifiers again pattern identically. Consider examples (8)[1] and (9).

(8) *His$_i$ mother likes someone$_i$.

(9) *His$_i$ mother doesn't like anyone$_i$.

Aoun et al only mention this fact in a footnote but offer no account for it. I will not try to account for the split (3) and (5) versus (8) and (9). Both are WCO configurations. A violation arises in (8) and (9) but not in (3) and (5)[2]. What I will keep, and what is crucial for the current discussion, is that EPI's and quantifiers in English pattern identically with respect to WCO.

I continue with point 1(c). Aoun et al contrast EPI's and quantifiers in English in terms of a further property. EPI's may bind a pronoun without c-

---

[1] In my theory (see chapters III and IV) where quantifiers do not raise at LF I cannot maintain that (37) is out as a WCO violation. I must find another way of accounting for the ungrammaticality of (37). The question remains open.

[2] On Weakest Crossover, the lack sometimes of ungrammaticality in WCO configurations see Lasnik and Stowell 1991.

commanding it while quantifiers cannot do so. The bound variable interpretation of pronouns is generally assumed to obtain only when the pronoun is c-commanded by its binder. In order to illustrate argument 1(c) Aoun et al offer the contrast in examples (10) and (11), below.

(10) Mary will not give [any man]$_i$ money if she hates him$_i$.

(11) *Mary will not give [every man]$_i$ money if she hates him$_i$.

Again, it is crucial for their argument that the quantifier *every* in object position is used, as opposed to any other quantifier. The course of the argumentation here will be reminiscent of the discussion of argument 1(b). If we construct examples with different quantifiers than *every*, we realise that the situation is, mutatis mutandis, no different than what was going on with argument 1(b). We should keep in mind the contrast in interpretation between *every* in subject position versus every in object position. In subject position *every* means 'each one', while in object position it means 'all'. The problem with (11) seems to be the difference in number features between *every man* in object position and *him*. So substituting *them* for *him* is OK in (11) (cf. (11'). If we use a different quantifier than *every*, we see that quantifiers can bind a pronoun without c-commanding it. Consider example (12). It seems, therefore, that there is no difference between EPI's and quantifiers in English as far as the conditions under which coreference with a pronoun becomes possible.

(11') *Mary will not give [every man]$_i$ money if she hates them$_i$.

(12) Mary will not give someone$_i$ money if she hates him$_i$.

I have shown that argument 1(a) is neither here nor there given that Romance and MG EPI's, which can be independently argued to be operators, do not give rise to LF *that*-trace effects either. Regarding arguments 1(b) and (c), we see that, once we make sure that quantifiers and potential antecedents agree in phi-features, EPI's and quantifiers in English pattern identically. Both EPI's and quantifiers can give rise to Weak Crossover or Weakest Crossover effects when the WCO configuration arises. Also both may bind a pronoun without c-commanding it. Consequently, EPI's are as much operator-like as quantifiers are. It was

important to show that EPI's in English are operators, as are EPI's in other languages (e.g. MG) because an optimal theory would be that there is no croosslinguistic parametrization with respect to the LF status (operator or nonoperator) of EPI's.

Chapter III

Foci

3.1 Introduction

In this chapter I will look at another Spec-head licensing mechanism, namely the licensing of foci. The aim of this chapter is to examine the syntax and aspects of the semantics of foci.

Languages may have phonetic foci (cf. (1)), i.e. constituents stressed in situ, syntactic foci (cf. (2)), i.e. constituents in a clause-peripheral position specific to foci, or both phonetic and syntactic foci.

(1) o Yánnis aghapái ti MARIA
    the Yannis loves the MARIA
    'Yannis loves MARIA.'

(2) ti MARIA aghapái o Yánnis[1]
    the MARIA loves the Yannis
    'Yannis loves MARIA.'

I follow Brody's (1990) theory of Focussing. There is a presentation of this theory in section 3.2. Brody (1990) posits a F(ocus)P(hrase), hosting, in its specifier position, syntactic foci as early as at S-structure and phonetic foci by LF^2,

---

[1]Example (2) becomes ungrammatical if the preposed object is not stressed (cf. (1). An unstressed preposed object cannot be interpreted as a focussed object, or as anything else for that matter.

(1) *ti María aghapái o Yánnis
     the Maria loves the Yannis

Example (1) becomes grammatical if a clitic matching the preposed object appears on the verb (cf. (2)). (2) is an example of the Clitic-Construction, to be discussed in chapter IV.

(2) ti María   tin aghapái o Yánnis
    the Maria her-cl loves the Yannis

[2]I am not assuming that LF can look into PF. The model of Grammar I follow is that assumed in the Principles and Parameters framework. D-structure is the input

and a corresponding F(ocus)-Criterion. The formulation of the F-Criterion under (3) is my own.

(3) F-Criterion
a. A focussed phrase must be in a Spec-head configuration with F.
b. F must be in a Spec-head configuration with a focussed phrase.

. In section 3.3 I look more closely at Focussing in MG. Syntactic Focussing involves local movement from an A-position to the Spec of an FP, as we see in section 3.2. I take any higher movement of foci in MG to be adjunction. This adunction can be VP-, IP-, FP- or CP-adjunction.

In section 3.4 claim (4) is put forward.

(4) The F-Criterion is distinct from the Wh-Criterion.

Brody (1990) suggests, on the basis of interrogative wh-phrases in Hungarian, that the Wh-Criterion is not distinct from the F-Criterion. He assumes that interrogative wh-phrases are necessarily focussed. The Wh-Criterion is, therefore, taken to be a subcase of the F-Criterion. I will argue that the Wh-Criterion is distinct from the F-Criterion. In fact, it will be suggested that the Wh-Criterion could be considered as a subcase of the P(olarity)I(tem)-Criterion[1].

In section 3.5 claim (5), below, is advanced.

(5) Foci have scope over Neg.

I argue against Jackendoff's (1972) 'Neg Association with Focus' Rule. Jackendoff claims that sentential negation and Focus can have either scope with respect to one another.

The importance of a theory of Focussing has to be stressed. In chapter II we saw some interactions between Focussing and Polarity Item Licensing. The

---

to S-structure. S-structure branches off / is the input to both PF and LF. PF has no access to LF and vice versa. Phonetic foci is the term standardly used in the literature to refer to foci in situ. Extra stress is in fact a phonetic correlate for both in situ and syntactic foci.

[1]The F-Criterion could not also be considered as a subcase of the PI-Criterion. If there is a set of properties (interpretational and other properties) that P(olarity)I(tem)s have we see that wh-phrases, but not foci, share these properties.

discussion of foci will prove particularly useful in the examination of another Spec-head licensing mechanism, namely the Clitic-Construction (cf. chapter IV).

In section 3.6, I present some evidence against Quantifier Raising (QR). According to May (1985), quantifiers raise and adjoin to IP at LF. I look at scope ambiguity cases between quantifiers, on the one hand, and between quantifiers and Neg, on the other hand. The reason why I discuss QR in a chapter on foci is because I suggest that some readings of the putative QR interact crucially with the F-Criterion. Showing that scope ambiguity between quantifiers, as well as between quantifiers and Neg is an epiphenomenon is taken to be an argument against QR. For arguments against QR from reconstruction facts see Brody (1992).

3.2 Brody (1990)

I follow Brody's (1990) theory of Focussing, which I will present in this section.

Languages may have phonetic foci, syntactic foci or both phonetic and syntactic foci. MG is a language with both phonetic and syntactic foci. Phonetic foci are constituents stressed in situ. Syntactic foci are constituents in a clause-peripheral position specific to foci.

According to Brody's (1990) theory of Focussing, F(ocus) is a functional category obeying X'-theory. There is a FocusPhrase, hosting, in its specifier position, syntactic foci as early as at S-structure and phonetic foci by LF. FP is present only in sentences that contain a focussed element. Laka's (1990) ΣP and Culicover's (1991) Pol(arity)Phrase are in the same spirit as Brody's (1990) FP.

A F(ocus)-Criterion is advanced along the following lines:

(6) F-Criterion

    a. The Spec of an FP must contain a +f-phrase.

    b. A +f-phrase must be in an FP.

The +f feature[1] indicates focushood. A +f-phrase is a focussed phrase.

We need to take the F-Criterion under (6) to be satisfied by a +f V raised to F by LF. We might appropriately relax the condition in 6(a), or we may arrange by

---

[1]The S-structure presence of the +f feature usually shows up as heavy stress at PF. The stressed +f-marked category is of course not necessarily the same as the focussed phrase, but the focussed phrase will always include a +f-marked element.

movement or coindexation between F and Spec of FP for the head to be able to satisfy the requirement on the Spec under certain circumstances. A +f V can satisfy the F-Criterion only if the Spec of FP is empty. If the Spec of FP is filled, the +f V must not be taken to satisfy the F-Criterion, otherwise nothing would force +f assignment to the Spec of FP in a structure with a focussed XP.

The +f feature is assigned freely in the domain of the propositional part of the sentence, i.e. VP or IP, depending on the language. This is phonetic focussing. In syntactic focussing it is the verb that assigns the +f feature to a category outside the propositional part of the sentence, i.e. in Spec of FP. The +f feature is assignable by the verb under the twin conditions of government and adjacency. This is why in syntactic focussing the verb raises to F by S-structure. Once the verb has moved into F it will govern the Spec of FP. Since adjacency is also satisfied, +f can be assigned.

Verb-raising to F in syntactic XP-focussing is explained differently in Tsimpli (1990). I follow her explanation. Tsimpli argues that F is a bound morpheme. Lasnik's Filter (cf.(7)) forces verb-raising to F.

(7) Lasnik's Filter:
An affix must be lexically supported at or prior to the S-structure level.

Consider reformulation (3) of the F-Criterion, that does not make reference to the +f feature.

(3) F-Criterion
a. A focussed phrase must be in a Spec-head configuration with F.
b. F must be in a Spec-head configuration with a focussed phrase.

The tree-diagrams for examples (1) and (2) are (1') and (2'), respectively.

(1')

CP
C'
C
IP
I'
I
VP
V'
V
DP

o Yánnis aghapái ti MARIA

(2')

CP
C'
C
FP
F'
F
IP
I'
I
VP
V'
V
DP

ti MARIA$_i$ aghapái o Yánnis t$_i$
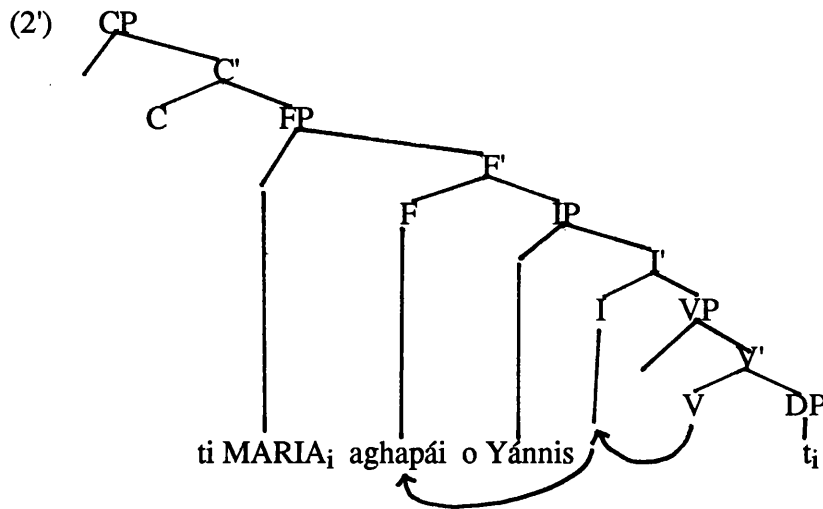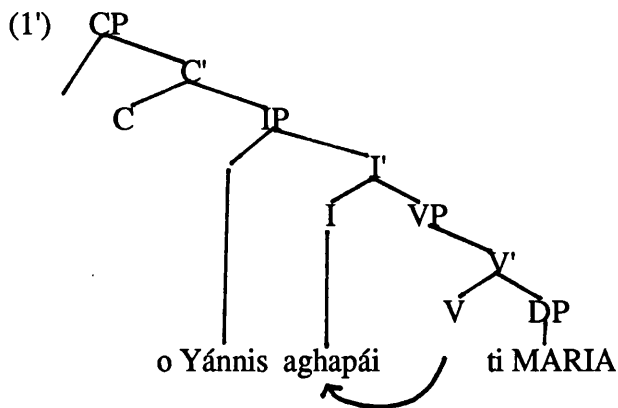
In (2') the focussed constituent is in Spec of FP. The verb raises first to I and then the V+I complex raises to F. In (1') the focussed constituent occupies the Spec of FP at LF. The F-Criterion is satisfied at S-structure in (2), whereas it is satisfied at LF in (1).

After presenting Brody's (1990) theory of Focussing, I will consider the X' status of focussed constituents. An analysis of Focussing as a Spec-head agreement phenomenon predicts that only XP's can be focussed, because only XP's can fill specifier positions. X's or parts of words are predicted not to be able to be focussed. When parts of words are stressed, I take this to be an example of what I call echo Focus in parallel with echo wh-questions and echo negation (cf. Rouveret (1992:267)).

Verb-focussing seems to be a counterexample to the assumption that only XP's can be focussed. Also, verb-focussing raises a problem in one more respect. Verbs are taken to be the only focussed constituents that fill the head and not the specifier of FP given that only XP's can fill specifier positions. I have no general answer to these problems.

However, If I limit my attention to MG, I can perhaps say something more on these problems. Verbs are taken to be an exception to the generalization that only XP's can be focussed. I want to suggest that they are only apparently an exception to this generalization and that only VP's, and not V's, can be focussed. The evidence cannot have to do with intransitive verbs. In the case of intransitive verbs V is the same as VP. The evidence must have to do with transitive verbs. I will next present some evidence that comes from Clitic-Doubling (CD) (cf. chapter IV). CD is a construction involving an object DP and a matching clitic on its left (cf.(1)).

(1) ta   éfere   ta   lulúdhia   o   Vassílis
     them-cl brought-he the flowers-Acc the Vassilis-Nom
     'Vassilis did bring the flowers.'

In chapter IV claim (2) is advanced.

(2) Clitic-Doubling generally involves verb-focussing.

Indeed, in (1) the verb is obligatorily interpreted as focussed.

Claim (2) bears some relation to an observation in the literature. Namely, it has been noted that in languages exhibiting CD (e.g. MG, Catalan), transitive verbs cannot be focussed unless a clitic coreferential with the object DP appears on the verb. This observation can be rephrased as follows: In languages exhibiting CD, transitive verbs cannot be focussed unless the object participates in CD. This formulation reminds one more of claim (2).

I will next illustrate how the fact that in languages exhibiting CD transitive verbs cannot be focussed unless a clitic coreferential with the object DP appears on the verb can be taken as evidence that there is no V-focussing and that in alleged cases of V-focussing what we really have is VP-focussing. As I argue in chapter IV, in CD the object moves out of VP and lands in the Spec of a CliticPhrase headed by the clitic. In CD the verb has raised and is under the head F of a Focus Phrase. FP is higher than the CliticPhrase. The obligatoriness of verb-focussing in CD can be explained only by assuming that the verb is under F. Constituents in their canonical positions can be optionally focussed as an instance of phonetic focussing. Constituents in Spec of FP are obligatorily interpreted as foci. If the verb in CD is necessarily focussed, this means that it is syntactically focussed. After the movement of the object DP out of the VP, the VP includes only V. As in

the case of intransitive verbs, here, as well, V-focussing equals VP-focussing. The obligatoriness of CD in V-focussing thus finds an explanation. (3) below is the tree-diagram of (1).

(3) CP

ta éfere · ta luludhia$_i$ o Vassílis   e$_i$
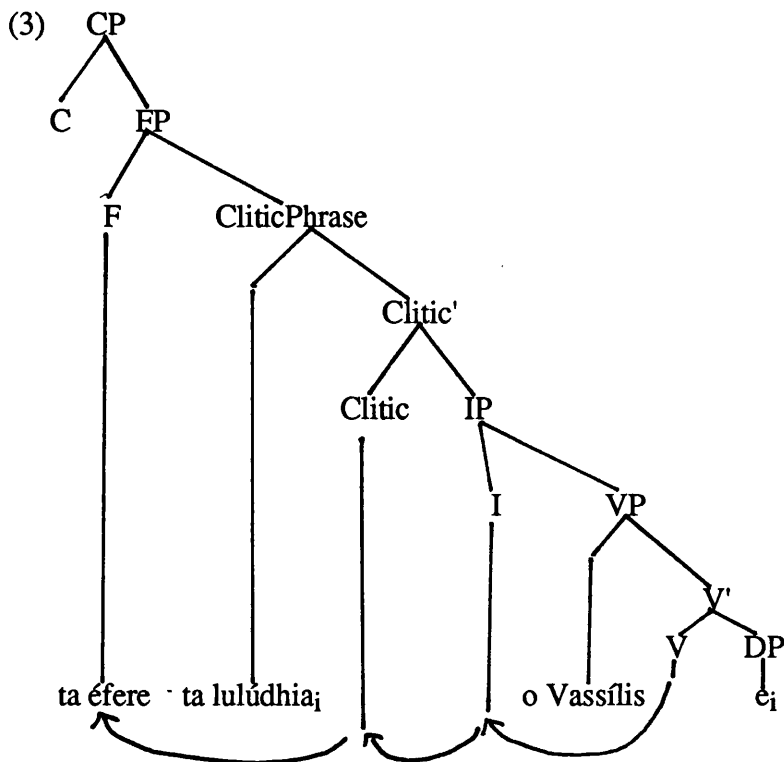
It could be that there is syntactic movement of the V+I+Cl+F to the Spec of FP or simply coindexation between this complex and the Spec of FP. This is how the second problem, namely the assumption that verbs are the only focussed constituents that fill the head and not the specifier of FP, ceases to exist. It has been shown that it is VP's and not V's that are focussed. Focussed VP's fill the Spec of FP.

3.3 Focussing in MG

I will adduce five types of evidence from MG for the reality of the FP projection at S-structure. Consider points 8(a) to (d), below. Of these points 8(a) and (b) will be discussed in this section. Points 8(c), (d) and (e) will be discussed in chapter IV, sections 4.4, 4.7.1 and the Appendix, respectively.

(8)

a. preposal of the focussed constituent

b. adjacency between preposed foci and the verb

c. In Clitic Doubling the verb is generally focussed.

d. Verb-focussing is only syntactic.

e. incompatibility between Focussing and CLC

Point 8(a) refers to syntactic focussing. In syntactic focussing in MG the verb obligatorily raises to F, as will be shown later on in this section. However, in syntactic focussing in Italian, for instance, the verb does not, in fact cannot, raise to F. Consider example (9) from Cinque (1990:91). I believe that we can say that languages with property 8(a) but not property 8(b), e.g. Italian, have a syntactic FP.

(9) IN UNA CITTA   DEL SUD   ognuno   di loro   è nato
    IN   A   CITY OF THE SOUTH every one of them was born

Properties 8(c) and (e) are evidence for a syntactic FP not only from MG but also from some Romance languages, as we will see in chapter IV.

I will next make specific points on Focussing in MG. Whether a language allows multiple focussing or not appears to be a matter of crosslinguistic variation. Hungarian (cf. Brody (1990)) and English (cf. Jackendoff (1972)) have been claimed to allow multiple focussing. In MG there can only be one focussed constituent per clause[1]. Consider examples (10), (11) and (12), below:

---

[1]There is, however, a sentence type that could be taken as an example of multiple focussing. I am referring to a very specific construction, which has a negative verb and the double foci in postverbal position. Consider (1), below:

(1) dhen píye [o YANNIS] [me ti VOULA] (alá [o YORGHOS] [me tin
     not went-he the YANNIS with the VOULA   but the YORGHOS with the

KETI])
KETI
'Not YANNIS went with VOULA, but YORGHOS with KETI.'

The sequence *alá o YORGHOS me tin KETI* is an elliptical clause. I believe that what we have in (1) is not multiple focussing but VP-focussing. The verb has raised out of VP and to I. What the VP contains is the subject DP *o YANNIS* and the PP *me ti VOULA* . In (1) it is the VP that is focussed in the first clause and not the subject DP plus the PP.

(10) *édhosa to VIVLIO sto PEDHI
     gave-I the BOOK to the CHILD
     'I gave the BOOK to the CHILD.'

(11) *to VIVLIO édhosa sto PEDHI
     the BOOK gave-I to the CHILD
     'I gave the BOOK to the CHILD.'

(12) *to VIVLIO sto PEDHI édhosa
     the BOOK to the CHILD gave-I

In (10) both foci are in situ. In (11) one focus is in Spec of FP while the other focus is in situ. Finally, in (12) both foci are in Spec of FP. Examples (10), (11) and (12) show that multiple Focussing is not possible in MG irrespective of the positions occupied by the foci. All three possibilities illustrated by (10), (11) and (12) had to be checked; because in Hungarian, for instance, a language allowing multiple Focussing, one focus must be in Spec of FP while any others must be in situ in multiple Focussing constructions (cf. Brody (1990)). In Hungarian, therefore, (11) would be grammatical, while (10) and (12) would be ungrammatical.

It could be that what appears as multiple focussing in other languages is in fact an association of foci that counts as one focus. The question will not be examined further.

Notice that (1) becomes ungrammatical, if we move, for instance, one of the putative foci, either the subject DP or the PP, to the Spec of FP at S-structure. Consider example (2), below:

(33)*[o YANNIS] dhen píye [me ti VOULA] alá [o YORGHOS] [me tin
     the YANNIS not went-he with the VOULA but the YORGHOS with the

KETI]
KETI

This can be regarded as evidence for the view that *o YANNIS me ti VOULA* in (1) is taken as a single constituent. Consider also Taglicht (1984 : 58-59), where it is claimed that, in English, cleft sentences with multiple foci (Cf. *It was three years ago, in London, that I first met him.*) 'what we have been considering as a sequence of constituents should rather be regarded as a simple constituent'.

Once foci are licensed in Spec of FP, they can move higher by adjunction. Consider examples 13(a) and (b).

(13)a. ípe   ti   MARIA óti tha   dhi
        said-he the MARIA that will see-he
        'He said that he will see MARIA.'

b. ti   MARIA ípe   óti tha   dhi
   the MARIA said-he that will see-he
   'It is Maria that he said he will see.'

In 13(a) the focus precedes the complementizer while in 13(b) the focus precedes the matrix verb. In 13(a) the focus has adjoined to the embedded CP while in 13(b) the focus has adjoined to the matrix IP or CP. Adjunction can take place only after satisfaction of the F-Criterion at S-structure. 13'(b) is the tree-diagram for 13(b).

(13')b.
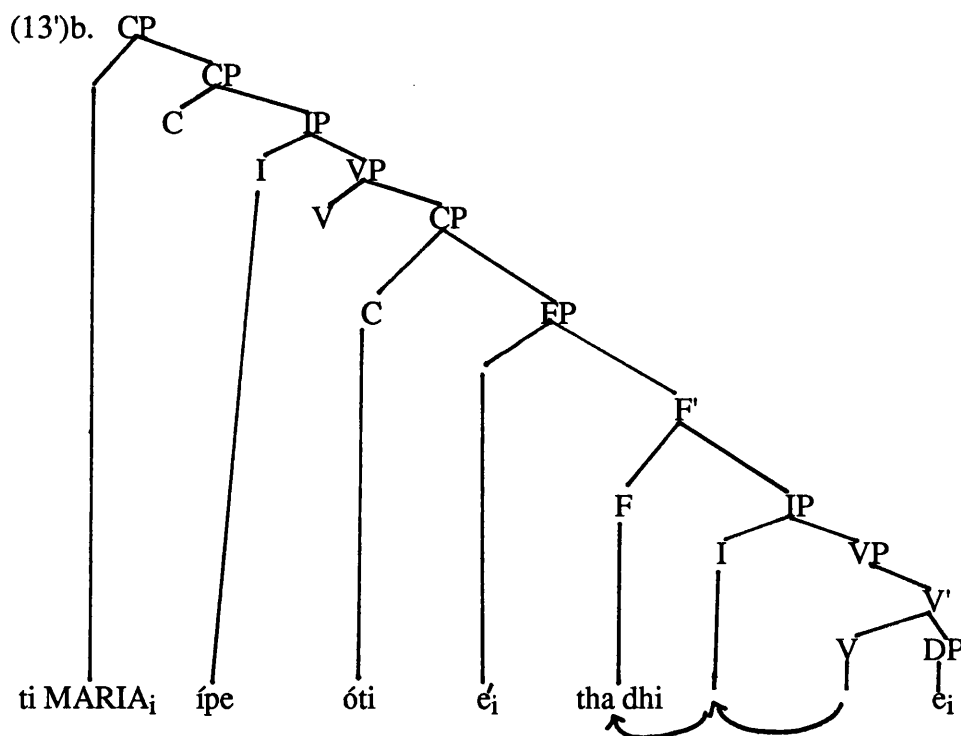
In 13'(b) *ti MARIA* moves first from the embedded object position to the Spec of the embedded FP. Once the F-Criterion is satisfied the focussed DP can move higher by adjunction. In this example, the focussed DP adjoins to CP.

3.4 The F-Criterion and the Wh-Criterion

Recent studies on Focus have advanced claims of affinity between interrogative wh-phrases and foci. Such claims can be divided into semantic and syntactic ones. The semantic claim states that foci and wh-phrases share the same interpretation, namely the focus interpretation. Syntactic claims can have various realizations. The syntactic claim that would be compatible with the theory of Focussing that has been presented in section 3.2 would be to argue that both foci and interrogative wh-phrases fill the same position, namely the Spec of FP. In the rest of this section I will argue against this syntactic claim[1] for MG. The claim is formulated in (14), below:

(14) The Wh-Criterion is distinct from the F-Criterion in MG.

Two more questions will be briefly addressed. In particular, whether the Wh-Criterion is or is not part of the F-Criterion universally. Also, whether the Wh-Criterion could be reduced to some well-formedness Criterion, other than the F-Criterion, or to some other principle of UG.

Before presenting arguments against taking the Wh-Criterion to reduce to the F-Criterion in MG, I will comment on a similarity between wh-phrases and foci. The similarity refers to the identity of positions occupied by wh-phrases and syntactic foci. Namely, both foci and wh-phrases occur either in situ or in immediately preverbal position, as examples (15) and (16) illustrate. However, it will be argued that this similarity is not conclusive evidencefor taking wh-phrases and foci to fill the same position, i.e. the Spec of FP position.

(15)a. o Yánnis tha fái   ta MILA
        the Yannis will eat-he the APPLES
        'Yannis will eat the APPLES.'

---

[1]I will not discuss the semantic claim. Concerning MG, the following can be said. In main interrogatives wh-phrases are in most cases interpreted as foci. In embedded interrogatives, on the other hand, wh-phrases do not have the focus interpretation. Wh-phrases and foci will have to be taken to be intersecting sets from the point of view of Semantics.

b. ta MILA tha fái o Yánnis
the APPLES will eat-he the Yannis
'Yannis will eat the APPLES.'

c. *ta MILA o Yánnis tha fái
the APPLES the Yannis will eat-he

Compare with:

(16)a. o Yánnis tha fái ti[1]
the Yannis will eat-he what
'Yannis will eat what?'

b. ti tha fái o Yánnis
what will eat-he the Yannis
'What will Yannis eat?'

c. *ti o Yánnis tha fái
what the Yannis will eat-he

In 15(a) and 16(a) the focussed phrase and the wh-phrase, respectively, appear in situ. In 15(b) and 16(b) the focussed phrase and the wh-phrase, respectively, appear in the immediately preverbal position. If the preverbal position occupied by the focus or the wh-phrase is not the immediately preverbal one, ungrammaticality results, as examples 15(c) and 16(c) show.

The fact that both foci and wh-phrases can appear in immediately preverbal positions does not necessarily entail that the syntactic position for foci and wh-phrases is one and the same, because there is verb-movement. What 15(b)-(c) and 16(b)-(c) show for sure is not that foci and wh-phrases fill the same syntactic position, but rather that they both fill immediately preverbal positions[2]. It remains

---

[1]This is an echo-question. Single wh-questions in MG are interpreted as echo-questions, if the wh-phrase is in situ.
[2]In Clitic-Left-Dislocation, for instance, the object DP also fills an immediately preverbal position. It has not been suggested, though, that it fills the same position as either wh-phrases or syntactic foci.

to be shown that the immediately preverbal position in these two cases is one and the same position.

A useful test may be to check the position of wh-phrases and syntactic foci with respect to complementizers. If wh-phrases and syntactic foci fill the same position, they should pattern identically with respect to complementizers. Consider examples (17) and (18), below:

(17)a. i María ípe pja tha féri o Yórghos
      the Maria said-she whom will bring-he the Yorghos
      'Maria said which girl Yorghos will bring.'

b. *i María ípe pja óti / an tha féri o Yórghos
      the Maria said-she whom that / if will bring-he the Yorghos

c. *i María ípe óti / an pja tha féri o Yórghos
      the Maria said-she that / if whom will bring-he the Yorghos

(18)a. *i María ípe ti NINA tha féri o Yórghos
      the Maria said-she the NINA will bring-he the Yorghos
      'Maria said that Yorghos will bring NINA.'

b. i María ípe óti ti NINA tha féri o Yórghos
      the Maria said-she that the NINA will bring-he the Yorghos
      'Maria said that Yorghos will bring NINA.'

c. i María ípe ti NINA óti tha féri o Yórghos
      the Maria said-she the NINA that will bring-he the Yorghos
      'Maria said that Yorghos will bring NINA.'

As 17(b) and (c) show, wh-phrases cannot cooccur with complementizers in MG. On the other hand, foci cooccur with complementizers, as 18(b) and (c) show. However, the incompatibility between wh-phrases and complementizers, while suggestive, is not necessarily evidence against the claim that wh-phrases and syntactic foci fill the same position. Examples 17(d) and (e) could, in principle, be taken as evidence against having distict CP and FP projections in MG. Examples 18(b) and (c) could be ruled out, respectively, by clashing subcategorisation frames

or redundancy in the satisfaction of the subcategorisation frame, as long as we assume that complementizers go under F. Syntactic foci would be predicted to be able to cooccur with complementizers, because foci do not interfere with subcategorisation requirements.

It seems that the position of wh-phrases and syntactic foci with respect to the verb and the complementizer is not a conclusive argument either for or against the syntactic claim of treating wh-phrases as syntactic foci.

I will next present arguments for claim (14).

(i) Argument from Multiple Focussing:

As was illustrated in section 3.3, MG does not allow multiple focussing. If there are grammatical sentences that have both a focus and a wh-phrase, this will mean that in MG wh-phrases are not foci. Indeed, there are such sentences. Consider examples (19) and (20), below:

(19) pios tha dhi ti MARIA
     who will see-he the MARIA
     'Who will see MARIA?'

(20)   ématha ti MARIA pios tha dhi
     found-I out the MARIA who will see-he
     'I have found out who will see MARIA.'

(ii) Argument from Verb-Focussing:

Further evidence that MG has distinct specifier positions for wh-phrases and foci is provided by examples like (21).

(21) pios THELI na pái
     who WANTS that goes
     'Who WANTS to go ?'

Sentences of this type, i.e wh-questions with a focussed verb, are ungrammatical in Hungarian (cf. Brody (1990)), even though Hungarian allows multiple focussing. Brody (1990) accounts for the ungrammaticality of sentences like (21) in Hungarian by saying that it cannot be that both the Spec of FP and F contain a focussed element. He has already shown that in Hungarian wh-phrases

fill the Spec of FP. But MG (21) is grammatical. This suggests that the wh-word and the focussed verb in (21) are not hosted in the same maximal projection. More generally, the grammaticality of (21) suggests that wh-phrases and focussed verbs in MG are not both hosted in the same maximal projection.In particular, (21) suggests that the wh-phrase is not in Spec of FP.

(iii) Argument from Multiple Wh-phrases:

MG allows multiple wh-phrases (cf. (22)), while, as we saw in section 3.3, it does not allow multiple foci.

(22) pios théli   pion
     who wants whom
     'Who wants whom?'

(v) Argument from the Clitic-Construction:

The Clitic-Construction[1] (CLC) is a construction involving an object DP and a matching clitic. The Clitic-Construction is incompatible with Focussing (cf. (23)). A DP which participates in CLC cannot be focussed. And vice versa. Namely, a focussed DP cannot participate in CLC.

(23) *ti MARIA   tin aghapái
     the MARIA her-cl loves
     'He loves MARIA.'

Interestingly, wh-phrases can participate in CLC. Consider (24), below:

(24) pio pedháki to édhire i mamá tu?
     which child it-cl beat-she the mum his
     'Which child is such that his mum beat him?'

On the basis of arguments (i) to (v) I have argued for claim (14), namely that the Wh-Criterion is distinct from the F-Criterion in MG. It will be briefly examined next whether a claim stronger than (14) could be advanced. The stronger claim considered is (25), below:

---

[1]For a discussion see chapter IV.

(25) The Wh-Criterion is distinct from the F-Criterion universally.

Claim (25) should be considered in the light of the following pieces of evidence:

(a) Wh-phrases in MG do not fill the same position as foci.

(b) Wh-phrases in Hungarian fill the same position as foci (cf. Brody (1990))

At first sight, it seems that, if we take into account point (b), we should not be able to advance claim (25). I believe, however that claim (25) can still go through despite the validity of point (b). The basic property of wh-phrases across languages is that they are licensed by the +WH feature under C. The point is well taken that there may be languages where wh-phrases are necessarily focussed. However, it is the basic property of wh-phrases that needs to be captured. The situation parallels that of Negative Polarity Items (NPI's). NPI's are necessarily focussed in some languages but not in others (cf. chapter II). Hungarian and MG belong to the first group, Italian to the second[1]. However, the basic property of NPI's is that they are licensed by Neg because that is their defining property, that therefore holds of them crosslinguistically. This is why the emphasis in the discussion of NPI's is on the fact that they are polarity items and not on the fact that they are inherently focussed in some languages. Inherently focussed wh-phrases are like inherently focussed NPI's. Whether wh-phrases are focussed or not is a language-particular property. If the Wh-Criterion is reduced to the F-Criterion, the licensing of wh-phrases by the feature +WH is not highlighted as the main property[2]. Wh-phrases are not necessarily foci; but all wh-phrases are licensed by the head WH.

I would like to suggest that the Wh-Criterion is a subpart of the PI-Criterion and can be reduced to the PI-Criterion. By reducing the Wh-Criterion to the PI-Criterion we do not play down the main property of wh-properties, namely licensing by the WH head. There was relevant discussion in chapter II. There we saw, for instance, that EPI's licensed by WH can be interpreted as wh-phrases. We also saw that in some languages, e.g. Chinese, there are no wh-phrases as such but

---

[1]The facts about Hungarian and Italian come from M. Brody (1990) and M.-R. Manzini (p.c.), respectively.

[2]See Tsimpli (1990), however. In her model the above problem would not be raised. For her Q, which is referred to here as WH, and F are the same feature.

EPI's play the role of wh-phrases. It seems to me that the Wh-Criterion is not a basic notion but one of the forms of the PI-Criterion, in the same way that we could have an EPI-Criterion and an NPI-Criterion.

3.5 Focus and Negation

The main claim of this section, namely that Focus always has scope over Neg, is presented and argued for in section 3.5.1. In section 3.5.2, I discuss Jackendoff (1972), who argues that there is scope ambiguity between Focus and Neg.

3.5.1 The Proposal

In this section I will defend claim (26), below:

(26) Focus always has scope over Neg[1].

By Neg I mean sentential negation. Sentential negation must be contrasted with constituent negation. Sentential negation is attached to the verb or the auxiliary. It should also be noted that sentential negation is morphologically distinct from constituent negation in some languages, e.g. MG, but not in others, e.g. English. Foci can be negated with constituent negation (cf. (27)) but not, I want to argue, with sentential negation.

(27) írthe   ókhi o YANNIS allá o SPIROS
      came-he not   the YANNIS but the SPIROS
      'There came not YANNIS, but SPIROS.'

First, I will present a theoretical argument for claim (26):

(i) Scope and the F-Criterion

(28), below, is one of the main principles of GB.

---

[1]The same view concerning the relation between Neg and focus is expressed in Cinque (1990:41), where it is claimed that 'the focus operators of the Cleft . . . constructions are semantically incapable of amalgamating with a negation'.

(28) Hierarchical relations determine[1] all aspects of the interpretation of the sentence[2].

I mean hierarchical relations as those are defined by c-command positively understood. Principle (28) together with the F-Criterion, repeated below, seem to entail that Focus always has scope over Neg, namely claim (26).

(3) F-Criterion
a. A focussed phrase must be in a Spec-head configuration with F.
b. F must be in a Spec-head configuration with a focussed phrase.

By LF a focussed phrase is in Spec of FP and hierarchically higher than Neg. Principle (28) would predict that the only possible reading between Focus and Neg is that in which Focus has scope over Neg. I believe that this is true. See, however, chapter V for a different generalization that does not have to do with LF hierarchical relations resulting from the application of Criteria.

I will next present empirical arguments for claim (26).

(ii) Focussed Quantifiers

It is well-known that a quantifier amalgamates with a c-commanding Neg. Contrast examples (29) and (30), below:

(29) dhen sibathó polús anthrópus
      not like-I many people
      'I do not like many people.'

(30) polí ánthropi dhen me   sibathún
      many people   not me-cl like-they
      'Many people do not like me.'

---

[1]'determine' in the sense of 'assign'

[2]The only counterexample to this principle seems to be scope ambiguity in the interaction of quantifiers. I will discuss these scope ambiguity facts in the final section of this chapter.

It is important that the quantified DP's in examples (29) and (30) are not stressed. In (29) Neg amalgamates at LF with the quantified DP. The resulting reading is 'I like few people.' In (30), Neg cannot amalgamate with Neg because Neg does not c-command the quantified DP. The reading of (30) is 'Many people are such that they do not like me.', hence with a possible non-contradictory continuation '...but many other people do like me.'

Interestingly, if we focus the quantified DP in (29), it acquires scope over the c-commanding Neg. Consider (31):

(31) POLUS anthrópus dhen sibathó
　　　 MANY　people　not　like-I
　　　 'I do not like MANY people.'

The only possible reading of (31) is 'MANY people are such that I do not like them.'

I do not assume a rule of Quantifier Raising (QR). I take it that in examples (29) and (30) the quantified DP's remain in situ at LF. In (31) the focussed quantified DP is in Spec of FP.

I have argued that a quantifier and a c-commanding Neg cannot have both scopes. The only possible reading is that on which Neg has scope over the quantifier, unless the quantifier is focussed. This view is similar to Reinhart's (1976, 1983) and diverges from May's (1985), who assumes the rule of QR, whereby at LF quantifiers get adjoined to IP. For those who assume QR, a quantifier and a c-commanding Neg can have either scope. If hierarchical order between a quantifier and Neg does not matter, with the result that a quantifier within VP can have either scope with respect to Neg, it remains to be explained why a quantifier in Spec of IP can only have scope over Neg.

Consider next examples (32) to (35). Example (32) has a VP-internal subject.

(32) dhen　éghrapsan　kalá　polí　mathités
　　　 not　did-they　well　many　students
　　　 'Few students did well in the exams . '

(33) dhen éghrapsan kalá POLI mathités
      not   did-they well MANY students
      'MANY students did not do well in the exams.'

(34) éghrapsan kalá   polí mathités
      did-they well   many students
      'Many students did well in the exams.'

(35) éghrapsan kalá   POLI   mathités
      did-they well   MANY students
      'MANY students did well in the exams.'

In (32) Neg has scope over the subject in Spec of VP. Sentential negation effectively becomes constituent negation. Amalgamation of meaning takes place between Neg and *polí mathités* , so that Neg+'many students' actually means 'few students'. In (33) the focussed subject has scope over Neg. This makes sense, if we think of the F-Criterion. According to the F-Criterion, at LF *POLI mathités* is in Spec of FP. At LF *POLI mathités* c-commands Neg; therefore the only possible reading is that on which the focussed quantified DP has scope over Neg. (34) and (35) are the affirmative counterparts of (32) and (33) respectively. Notably, not both (32) and (33) presuppose the falsity of their affirmative counterparts. Only (32) and (34) are mutually exclusive, while (33) and (35) can very well be compatible. This becomes apparent, if we use the conjunction test. Cf.

(36) *dhen éghrapsan kalá polí mathités alá éghrapsan kalá polí
       not did-they well many students but did-they well many

mathités
students
'Few students did well but many students did do well.'

101

(37) dhen éghrapsan kalá POLI mathités alá éghrapsan kalá polí
     not did-they well MANY students but did-they well many

mathités
students
'MANY students did not do well in the exams but many students did do
well.'

(36) is out. It expresses a contradiction since it asserts both a sentence and
its negation. (37), on the contrary, is OK.

The claim that Neg cannot have scope over Focus is easier to illustrate with
focussed quantifiers than other foci, the possibility of amalgamation between Neg
and the quantifier being the obvious test.

The behaviour of nonfocussed vs. focussed quantifiers with respect to a c-
commanding Neg could be taken as evidence against the rule of Quantifier Raising
(QR). If there was QR, the prediction would be that (nonfocussed) quantifiers
could have either scope with Neg. The incorrectness of the prediction casts doubts
on the rule of QR.

(iii) Negative Polarity Items (NPI's)

For this argument I rely on the discussion of MG NPI's in chapter II. It is
argued there that NPI's in MG are necessarily focussed. If I am right that Focus has
scope over Neg, we can explain why there is no cancellation of Neg, i.e. there is
negative harmony, in the case of NPI's in MG. If Neg had scope over NPI's,
Neg+NPI should equal an affirmation; but it does not.

The discussion in this section is a piece of evidence that focus affects truth
conditional meaning. The first piece of evidence that Focus affects truth conditional
meaning was presented in Chomsky (1977a), who observes that focussed DP's
behave similarly to quantified expressions with regard to the possibilities of
anaphora, in contrast with their nonfocussed counterparts. Consider examples 38(a)
and 39(a) as well as their LF representations 38(b) and 39(b), respectively:

(38)a. The woman he loved BETRAYED John .

   b. [BETRAYED$_i$ [the woman he loved t$_i$ John]]

102

(39)a. The woman he loved betrayed JOHN.

b. [JOHN$_i$ [the woman he loved betrayed e$_i$]]

3.5.2 Jackendoff's (1972) 'Negation Association with Focus' Rule

In section 3.5.1, it was argued that Focus has scope over Neg. In this section, I discuss Jackendoff's (1972) claim that Neg undergoes optional association with Focus.

Jackendoff's Rule of association between Neg and Focus states that association between the two can take place only when Focus is within the 'range' of Neg. The range of Negation is an S-structure notion referring to the entire sentence except for material before the subject. According to Jackendoff's rule of 'Negation Association with Focus', Neg can function as constituent negation for foci, with optional amalgamation with them. When there is association between Neg and Focus, the interpretation of the focussed constituent is contrastive and 'the focus is an incorrect value to satisfy a positive presupposition'[1]. When there is no association between Neg and focus, 'the focus is a correct value for a negative presupposition'.

Consider example (40)[2], below:

(40) FRED did not see John .

FRED in (40) is claimed to undergo optional association with Neg. Jackendoff (1972) embeds example (40) in contexts 41(a) and (b) in order to obtain presence versus absence of association between Neg and Focus.

(41)a. FRED didn't see John. (BILL did.)

b. (Which one of them didn't see John?)
FRED didn't see John.

---

[1] I use the term presupposition as Jackendoff(1972) used it, and only when discussing his positions.
[2] Example (40) is taken from Jackendoff (1972).

It seems to me that the contrastive interpretation in 41(a) is not derived at LF but at a semantic component post-LF; it is due to the juxtaposition of the two clauses in 41(a). This post-LF component could be taken to be equivalent to Chomsky's LF'.

Jackendoff (1972) matches absence versus presence of association between Neg and Focus with two intonation contours[1]. He follows Bolinger (1965b) in calling the intonation contours in question accents A and B. The two accents differ in that accent A ends in a fall while accent B ends in a rise[2]. Consider example (42). Jackendoff points out that stressed *MANY* in the range of negation amalgamates with negation in accent B, but not in accent A.

(42) Fred does not like MANY people.

I will next take an example from MG, namely (43), to illustrate the distinct readings associated with intonational patterns A and B.

(43)   dhen ídha   POLA   pedhiá
       not saw-I MANY   children
   a. 'MANY children are such that I did not see them.'
   b. 'I saw FEW children.'

In order to get reading 43(a) we must have accent A. On the other hand, only accent B gives rise to reading 43(b).

I have the following objections to Jackendoff's claim that Neg undergoes optional association with Focus:

(i) For syntactic foci it makes no difference whether we have accent A or B; syntactic foci never associate with Neg. I do not see why syntactic foci would have different properties from phonetic foci. Cf. (44).

---

[1] An intonation contour consists of the intonation of an emphatically stressed syllable plus the intonation following until the end of the sentence.

[2] It seems to me that more than a difference in pitch is crucial in the examples bearing accent B. The whole intonational phrase is affected and not just the intonation contour. The sentences with accent B also have a falling prenuclear. This would, in turn suggest that we have to do with a 'full intonational pattern'.

(44)   POLA   pedhiá   dhen   ídha
        MANY   children not   saw-I
        a. 'MANY children are such that I did not see them.'
        b. *'I saw FEW children.'

The only possible reading in (44) is that in which Focus has scope over Neg. And that is irrespective of which intonational pattern is used.

It should be said that the putative distinct behaviour of phonetic versus syntactic foci with respect to Neg is predicted by Jackendoff (1972). Syntactic foci come before the subject. Since syntactic foci are outside the range of Neg, it is predicted that there cannot be association between syntactic foci and Neg. Jackendoff (1972) predicts within his system that syntactic foci always have scope over Neg but does not explain why this should be so.

It seems to me that we would come up with a very weak system, if we were to claim that the properties of the operator Focus differ according to whether the latter is phonetically or syntactically realized. If foci behaved as other DP's and the crucial property was S-structure hierarchical relations, there would be no reason for us to talk about a property of foci and not about a property of DP's in general.

(ii) I do not see why there would be a link between LF properties and intonational patterns.

My position is that the reading where Neg has scope over Focus, namely the reading linked with accent B, does not involve focussing.

3.6 On Quantifier Raising[1]

What I will do in this appendix is present an argument against Quantifier Raising (QR) (cf. May (1985)). This discussion finds a place in a chapter on foci because QR will be shown to interact crucially with the F-Criterion.

When there is more than one quantifier, scope ambiguities are said to arise. This is known as Quantifier Ambiguity. Consider example (45), where we have a universal quantifier and a numerically quantified one.

---

[1]For arguments against Quantifier Raising from Reconstruction see Brody (1992).

(45) káthe pedhí stin táksi mu milái dhío ghlóses
      every child in the class my speaks two languages
      'Every child in my class speaks two languages.'

In example (45) the only reading I can get is the distributive one[1]. Accidental identity is possible but this is not of interest here.

Consider now example (46), which differs minimally from example (45) in that the numerically quantified DP is focussed[2]. In (46) the only possible reading is that in which the numerically quantified DP has scope over the universal quantifier.

(46) káthe pedhí stin táksi mu milái DHIO ghlóses
      every child in the class my speaks TWO languages
      'Every child in my class speaks TWO languages.'

The point I want to stress is that when there are two quantifiers, hierarchical relations determine interpretation unless the lower quantifier is focussed. It is focussing of the lower quantifier, and not the rule of QR, that gives us the other scope possibility.

The validity of the above hypothesis should be checked with more examples. Consider example (47), where we have a universal quantifier and an existential one.

(47) Everyone likes someone.

By QR example (47) should be ambiguous between readings 48(a) and (b), below:

---

[1] Neil Smith informs me that in the English translation of (45) he can get both readings.

[2] What I am interested in is focussing of the numerically quantified DP and not just contrastive stress on the numerical quantifier with no focussing of the numerically quantified DP. If what we have is just stress on the numeral with subsequent contrastive interpretation of the numeral but no focussing of the quantified DP, the reading is as in (45). Contrastive interpretation on the numeral should not qualify for focushood, in the same way that stress on / contrastive interpretation of the prefixes in (1), below, should not qualify to mark focushood.

(1) I said DEjected, not REjected.

(48)a. Paired Reading: x likes y, z likes w, and so on.

    b. There is someone x, such that everyone likes x.

It seems to me that only reading 48(a) is possible. Accidental identity is, again, possible but that should not be equated with reading 48(b).

Let us now focus *someone* in (47), as in (49) below, and see whether (49) patterns with (46).

(49) Everyone likes SOMEONE.

I would predict that (49) has the reading where *SOMEONE* has scope over *everyone* . This is correct. By LF the focussed quantifier is in Spec of FP, while the other quantifier remains in situ. Unfortunately for me, however, (49) can also have the reading of (47), while this was not the case with (45) and (46).

Reading 48(a) of example (49) is a problem for me. What I would like to claim is that it is an apparent problem only. In chapter II it was argued that *someone* can be an EPI when it is in the scope of a propositional operator. It was also argued that the reading of EPI's, as opposed to that of existential quantifiers, is a set reading. These two points can provide an account for the fact that example (49) can have the reading 48(a). When (49) has the reading 48(a), I would like to claim that *SOMEONE* is an EPI. The distributive reading is thus explained. The distributive reading is possible even though *SOMEONE* has scope over *everyone* because both *SOMEONE* and *everyone* have plural readings. *SOMEONE* has a plural reading as an EPI while *everyone* has a plural reading as a universal quantifier. The propositional operator in (49) is the necessity operator.

(49) is an example of scope ambiguity. The native speakers I have asked could all get the scope ambiguity for (49). Some commented, though, that the reading where *SOMEONE* has scope over *everyone* is much harder to get. This is expected. In chapter II I argued that *someone* as an existential quantifier cannot be focussed, while *someone* as an EPI can be focussed. The reading where *SOMEONE* has scope over *everyone* would easily arise, if *someone* as an existential quantifier could be focussed. But it usually cannot. That reading therefore arises when the EPI *SOMEONE* is a one-member set; it is an accidental reading.

I assume that quantifiers remain in situ at LF, unless they are focussed. In a sentence with more than one quantifier the hierarchically higher quantifier has wide

scope, unless the lower quantifier is focussed. In section 3.5.1, I argued that focussed VP-internal quantifiers necessarily have scope over Neg. Nonfocussed VP-internal quantifiers, on the other hand, are always in the scope of Neg. I take the behaviour of focussed quantifiers with respect to other quantifiers, on the one hand, and Neg, on the other hand, to be evidence against the rule of Quantifier Raising (QR). Putative scope ambiguity in the interaction of quantifiers or in the interaction of quantifiers with Neg has been argued to bear crucially on focussing the quantifier which has lower scope. One of the two readings in putative scope ambiguity cases is explained by the XP movement required by the F-Criterion. QR gives the wrong results; it predicts, contrary to facts, free ambiguity.

My claim has been that there is no ambiguity when there is more than one quantifier or when a quantifier is c-commanded by Neg. S-structure hierarchical relations define the only possible reading in each case. In the event of any other reading the quantifier is necessarily focussed. If there is no QR, as I have suggested, then all LF XP-movement is of the Spec-head agreement type. This would be a more resticted model of LF movement.

The discussion in this section is also further evidence that Focus affects truth conditional meaning.

Chapter IV

The Clitic-Construction

4.1 Introduction

In this chapter I look into the Clitic-Construction (CLC). The term Clitic-Construction refers to the cooccurrence of a DP and a matching clitic[1]. Instances of CLC where the DP precedes the clitic are known as Clitic-Left-Dislocation[2] (CLLD) (cf. example (1)) while instances of CLC where the DP follows the clitic are known as Clitic Doubling (CD) (cf. example (2)[3]). The terms CLLD and CD will be used in the discussion as purely descriptive terms. I will not discuss here alternative analyses of clitics[4].

(1) ta   lulúdhia   *(ta)   éfere   o   Vassílis
    the flowers-Acc them-cl brought-he the Vassilis-Nom
    'As for the flowers, Vassilis brought them.'

---

[1]I am primarily interested here in languages where the Clitic-Construction is optional, e.g. MG, Castellano Spanish. These are languages where a particular sentence exhibiting the Clitic-Construction can have a version without the Clitic-Construction. It should be noted that in these languages the Clitic-Construction becomes obligatory in certain circumstances, e.g. when a specific object precedes the verb. I will not comment, except in passing, on languages where the Clitic-Construction is obligatory in all circumstances, e.g. River Plate Spanish.

[2]The term Clitic-Left-Dislocation is Cinque's (1990).

[3]The translations of examples (1) and (2) are 'accurate' / narrow translations. At this stage they can be misleading and helpful at the same time. One should not think, for instance, on the basis of the translation in (1) that we have to do with a topicalization construction. The point behind the translation of the verb in (2) will become clear in the section on Clitic Doubling. If I can refer to these translations as 'narrow translations', I need to say that the translations given from now on will be mainly 'broad translations'.

[4]For a review of types of previous analyses see Sportiche (1992). Regarding the Clitic-Construction in MG, the following analyses have been proposed: Philippaki-Warburton (1987), Theophanopoulou (1988), Iatridou (1990) and Tsimpli (1990). For further information I refer the reader to the primary literature.

(2) *(ta)[1]   éfere   ta   lulúdhia   o   Vassílis
      them-cl brought-he the flowers-Acc the Vassilis-Nom
      'Vassilis did bring the flowers.'

There are three main ideas in this chapter, namely 3(a)-(c), below:

(3)

a. The Clitic-Construction is a Spec-head phenomenon.

b. The position occupied by the DP in CLC is a mixed position.

c. Clitic Doubling generally involves verb-focussing.

Points 3(a), (b) and (c) are developed in sections 4.2, 4.3 and 4.4, respectively.

In section 4.2, it is argued that the Clitic-Construction is a Spec-head agreement configuration involving movement. The object DP moves from its canonical position to the Specifier of a CliticPhrase (ClP). The clitic matching the object DP in phi-features is the head of the CliticPhrase. The CliticPhrase is quite high in the clausal tree, immediately below the FocusPhrase and above IP. (4), below, is the structure for CLC.

---

[1]Prima facie the clitic can be dropped in (2) and we can have (3), below:

(3)   éfere   ta   lulúdhia   o   Vassílis
      brought-he the flowers-Acc the Vassilis-Nom
      'Vassilis brought the flowers.'

It is argued below that examples (2) and (3) do not have the same structure. The different narrow translations assigned to them are, for the moment, an indication of the difference between (2) and (3), to be discussed in detail in section 4.4.

(4)

```
        CP
       /  \
      /    C"
     /    /  \
    C    FP
    /   /  \
       /    F'
      /    /   \
     F    CliticPhrase
         /          \
      DP^           Clitic'
       ↑           /
           · Clitic    .
              ↑       ·
                     VP
                    /  \
                   /    V'
                  /    /  \
                 V    DP*
```
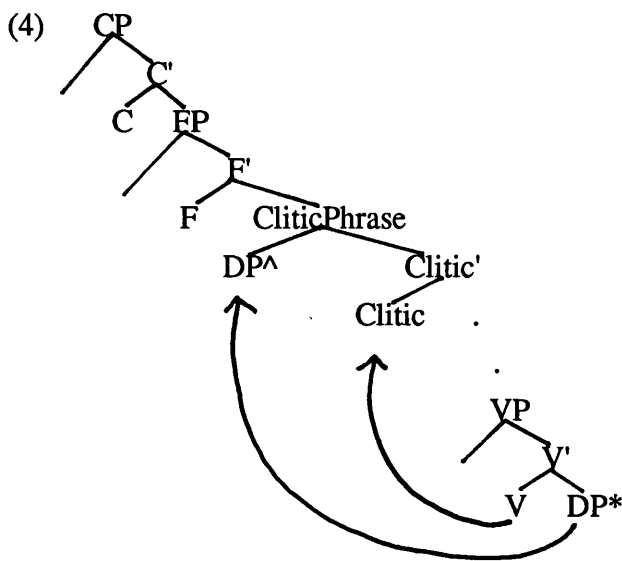
DP* is the root position of movement while DP^ is the target position of movement. Movement of the object DP to the Spec of the CliticPhrase is required by the Clitic-Criterion in (5).

(5) Clitic-Criterion:

A DP must be in a Spec/head relation with a matching clitic.

A clitic must be in a Spec/head configuration with a matching DP

In section 4.3, the nature of the Spec of the CliticPhrase is looked into. It is argued that the Spec of ClP is a mixed position with both A- and A'-properties (cf. claim 3(b), above). The standard tests of Binding, Reconstruction and Parasitic Gaps Licensing are used to identify the properties of that position. It is shown that DP's in the Spec of ClP can act as binders for pronouns, an A-property. DP's in the Spec of ClP are also shown to license Reconstruction and parasitic gaps, both A'-properties. Further tests for the A- and A'-status of [Spec,ClP] are used. It is shown that the Spec of ClP can be a theta-position, another A-property. Additional evidence for the claim that the Spec of ClP is an A-position comes from the fact that quirky subjects obligatorily participate in CLC. Moreover, DP's in Spec of ClP are shown to pattern with subjects in a number of properties. It is suggested that this can constitute a further, though not necessary, test for A-positions. Passivized and and raised DP's also have properties of subjects. This is not, however, the case with DP's in Spec of AGR-O". The properties of subjects that DP's in Spec of ClP share are the following: They can be the gap in pseudo-relatives. They can appear in the controlled position associated with control verbs. They can be modified by

111

subject-oriented adverbs. Also, the Spec of ClP can be the target position of raising. A further argument for the Spec of ClP being an A'-position is taken to be the fact that CLC is a licensing mechanism for nonlocal movement.

In section 4.4, it is argued that Clitic Doubling generally involves syntactic verb-focussing.

What CD amounts to is CLC plus verb-focussing. It is suggested, contrary to the general consensus according to which the object DP is hosted in two distinct positions in CLLD and CD, that the position of the object DP is the same in both CLLD and CD. In CD the object DP is in the Specifier of a CliticPhrase, while the verb has raised to the head F of FP. This syntactic movement of the verb captures the native speakers' intuition that in CD the verb is necessarily focussed. (6), below, is the structure for CD.

(6)

```
        CP
       /
      /  C'
     /  /
    C  FP
      /
     /  F'
    /  /
   F  CliticPhrase
   |  /
   | /      
  DP^     Clitic'
          Clitic
                .
               VP
              /
             /  V'
            /  /
           V  DP*
```
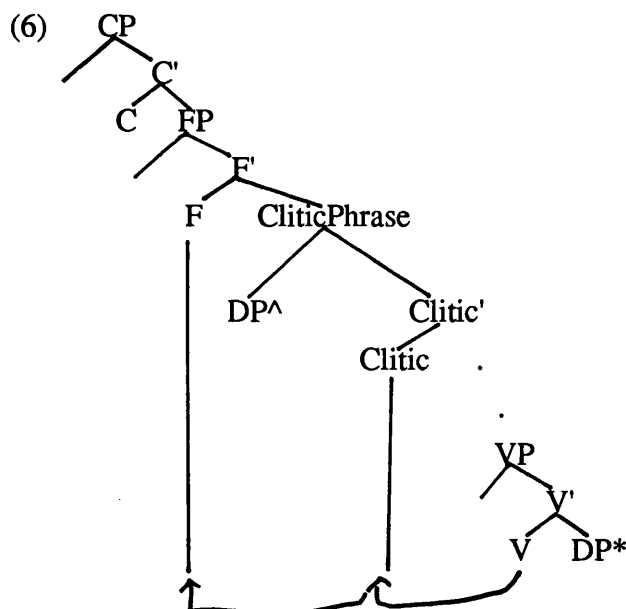
In section 4.5 Complex Inversion in French is analysed as subject CLC. There seem to be differences between subject CLC in French and object CLC in MG. For one thing, subject CLC in French is much more limited than object CLC in MG. Second, the motivation for subject CLC in French appears to be different than the motivation for object CLC in MG. Namely, in object CLC in MG it is movement of the DP that triggers the appearance of the clitic, CLC being a licensing mechanism for A'-movement. In subject CLC in French it seems that the reverse applies. In particular, it looks as if the clitic appears first and triggers movement of the matching DP to the Spec of ClP. I go back to these questions in section 4.7. Another question that needs to be answered is why Complex Inversion is obligatory

in French questions, again to be addressed in section 4.7. It will become clear there that the limited distribution of subject CLC in French and the difference in 'motivation' between subject CLC in French and object CLC in MG also reduce to the question why Complex Inversion is obligatory in French.

In section 4.6 the parametrization of the Clitic-Construction is discussed. MG has CLC with objects. MG has no subject clitics. French has subject CLC only. French does not have object CLC although it has object clitics. I suggest that the presence versus absence of object CLC in a language with object clitics correlates with the Class 1 / Class 2 distinction of languages proposed by Koopman and Sportiche (1991). In Class 1 languages, e.g. English, the subject obligatorily moves from a VP-internal position to the Spec of IP. In Class 2 languages, on the other hand, e.g. Italian, the subject need not move to the Spec of IP. I argue that the presence vs. absence of object CLC can be derived on the basis of the Class 1 / Class 2 distinction and the claim that the Spec of ClP is also an A-position.

In section 4.7, an argument for the CliticPhrase is constructed on the basis of Complex Inversion in French and verb-focussing in MG. In particular, syntactic verb-focussing in MG, i.e. movement of the verb to F, raises the following question. It seems to be impossible to focus the verb in a sentence with a specific object unless the object participates in the Clitic-Construction. Complex Inversion in French raises a similar question. It seems to be impossible to have the verb in C unless the subject participates in CLC. What V-to-I-to-F raising in MG and V in C in French show is that the ClP projection is there even when it is not overtly filled. My answer to the question why Complex Inversion is obligatory in French, which is raised in section 4.5, is that it is triggered by the verb being in C. Verb-focussing in MG and Complex Inversion in French are also revealing about the nature of the head and the specifier of the CliticPhrase. The obligatoriness of the projection ClP is taken to suggest that we have to do with an A-Spec and an A-head. This is a further argument, that could be added to those presented in section 4.3, for the claim that the Spec of ClP is also an A-position. It is only A-heads that are obligatorily projected. The distribution of the data follows from the application of the Head Movement Constraint. What the data show is that the Clitic-Criterion is triggered by movement either of a DP or of the verb. The data also show an interaction between the F-Criterion or the Wh-Criterion, on the one hand, and the Clitic-Criterion, on the other hand.

The present analysis of clitics does not seem to be compatible with Clitic Climbing. The Clitic Climbing facts are considered in section 4.8 and an alternative analysis is proposed, where Clitic Climbing is treated as a raising structure. The clitic is taken to be base-generated in its S-structure position.

Sportiche (1992) has also proposed a Spec-head agreement analysis for the Clitic-Construction. The affinities and differences between that theory and the one presented here are looked into in section 4.9.

The idea advanced in section 4.7, namely that when the verb is under some head higher than INFL and that verb has a specific object a clitic matching the object DP becomes obligatory, is partly contradicted by Focalization facts in MG. The problem is the following. I explained the obligatory appearance of the clitic on the verb in verb-focussing in MG and Complex Inversion in French by saying that the ClP is always there and whenever the verb moves to a head higher than INFL the clitic becomes overt by the Head Movement Constraint. However Focalization and CLC are in general incompatible in MG. A focussed DP cannot in general participate in CLC. If movement of the verb to a head higher than INFL makes the clitic visible, why doesn't a clitic coreferential with a specific object appear on the verb when the object is syntactically focussed? The real question is not just 'Why doesn't the clitic appear?' but 'Why can't the clitic appear?' In the Appendix I look into this problem. The picture is more complex than saying that Focalization and CLC are incompatible, as the two become compatible in certain circumstances. Crucially, the split is not between incompatibility vs. compatibility of Focalization and CLC but rather between incompatibility vs. obligatoriness of the two. Focussed DP's obligatorily participate in CLC in certain circumstances. I examine the incompatibility / obligatoriness split in the interaction between CLC and Focussing. It is shown that this split correlates with the split +/- A-position for the Spec of ClP. When the Spec of ClP is an A-position CLC is always obligatory and the facts do not change if we want to focus the object. When, on the other hand, the Spec of ClP is an A'-position Focussing and CLC are incompatible. The incompatibility is argued to follow from an Economy Principle against multiple A-bar Spec-head licensing. The same incompatibility vs. obligatoriness split is shown to exist in the interaction between CLC and Wh-movement. A problem for the posited Economy Principle is potentially raised by the obligatoriness of CLC in nonrestrictive relatives in MG. Prima facie this looks like an instance of multiple A-bar Spec-head licensing, first in [Spec,ClP] and then in [Spec,CP]. It will be argued that the Spec of ClP in nonrestrictive relatives is an A-position.

114

4.2 The Clitic-Construction

As we saw in the introductory section, there are two instances of the Clitic-Construction, one where the object DP precedes the matching clitic, namely Clitic-Left-Dislocation (CLLD), and another where the object DP follows the matching clitic, namely Clitic Doubling (CD). In section 4.2.1, CLLD is looked at. It is proposed that CLLD is a Spec-head agreement relation. In section 4.2.2, it is proposed that CLLD is the only instance of the Clitic-Construction. Then what is CD? The question is addressed in section 4.4. A Clitic-Criterion is finally advanced for the Clitic-Construction.

4.2.1 Clitic-Left-Dislocation

(7), (8) and (9) are examples of CLLD. In MG, the DP in CLLD can be a direct object (example (7)), an indirect object (example (8)) or a measure phrase (example (9)).

(7) ta   lulúdhia   *(ta)   éfere   o   Vassílis
    the flowers-Acc them-cl brought-he the Vassilis-Nom
    'Vassilis brought the flowers.'

(8) tis   Marías   *(tis)   stílane   lulúdhia
    the Maria-Gen her-cl sent-they flowers-Acc
    'They sent Maria flowers.'

(9) ekató   kilá   tha   (ta)   ziyízi
    a hundred kilos-Acc will them-cl weigh-he
    'He must weigh a hundred kilos.'

As the stars in examples (7) and (8) indicate, the sentences become ungrammatical, if the clitic is omitted. Interestingly, when the DP in CLLD is a measure phrase the clitic appears to be optional (cf. (9)). The generalization is that the clitic is obligatory when a specific object, whatever that means, precedes the verb. With respect to example (9), it seems that measure phrases can be read as either specific or nonspecific DP's.

Cinque (1990) has shown that the relation between the DP in CLLD and the thematic position it is associated with is sensitive to island constraints. This is illustrated below with examples from MG.

(10) *tu   Cósta   tha   su   milíso   ja [ta   vivlía [pu   tu
      the Costas-Gen will to you talk-I about the books that him-Gen

      arésun]
      please-they
      'Costas, I will only talk to you about the books that he likes.'

(11) *eséna   o Yórghos íne pio kalós mathitís apó óti   su
      you-Gen the Yorghos is   a better student than what you-cl-Gen

      fénete
      seems
      '*To you Yorghos is a better student than it seems.'

(12) *tu   Yánni   ton ídhame prin   na   tu   tilefonísume
     the Yannis-Gen him saw-we before that him-Gen phone-we
     '*Yannis we saw him before we phoned.'

Example (10) involves a complex NP island, example (11) a comparative clause island and example (12) an adverbial clause island.

The possible lines of analysis for CLLD considered in the literature are two. One advocates movement of the object DP while the other advocates base-generation of the object DP in a clause-peripheral position. In the first line of analysis there are again two possibilities. According to the first possibility, CLLD is an instantiation of Clitic Doubling, where what is 'doubled' is a moved phrase. An alternative would be to argue that what is 'doubled' is the wh-trace. According to the second possibility the clitic is the overt spelling out of the pronominal features left on the variable. In the base generation analysis of CLLD the clitic is resumptive and is there to receive the theta role.

We need to identify the position hosting the object DP in CLLD. The position under examination cannot be the canonical object position, as MG is a head-first language.

Another important point is that although indirect objects in MG can be either DP's or PP's, only DP indirect objects can participate in CLLD. Consider example (13), below:

(13) sti María *(tis) stílane lulúdhia
      to the Maria her-cl sent-they flowers-Acc

The fact that the position occupied by the CLLDed object is reserved for DP's suggests two things. First, that the position involved is unlikely to be an adjoined position. As far as I know, adjoined positions do not differentiate between DP's and non-DP's. And second, that the position occupied by the object DP does not seem to be one of the known Specifier positions, i.e. Spec of CP or Spec of FP, for the same reason that it could not be an adjoined position.

The matching in phi-features between the object DP and the clitic reminds one of licensing mechanisms in the form of Spec-head agreement configurations. I will next present an analysis of CLLD which is in that spirit. Consider claim (14),below, and the tree in (15).

(14) CLLD is a Spec-head phenomenon.

(15)   CliticPhrase

    DP^   Clitic'

           Clitic   .

                  .

              .

              DP*
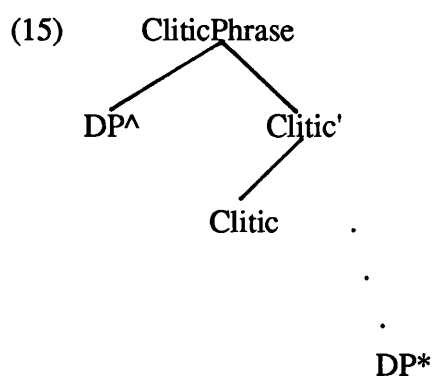
I argue that in CLLD the object DP is in the Spec of a functional maximal projection, a CliticPhrase, of which the clitic is the overt head. The term CliticPhrase is Sportiche's (1992) (GLOW talk). The object DP occupies the Specifier of that projection as an instance of A'-movement from the canonical object position. The Spec of the CliticPhrase is an A'-position, being a non-Theta-position.

(16),below, is the tree-diagram for (10).

(16)

CP
C CliticPhrase
Clitic'
Clitic IP
I'
I VP
V'
V DP
ta lulúdhia$_i$ ta éfere o Vassílis   e$_i$
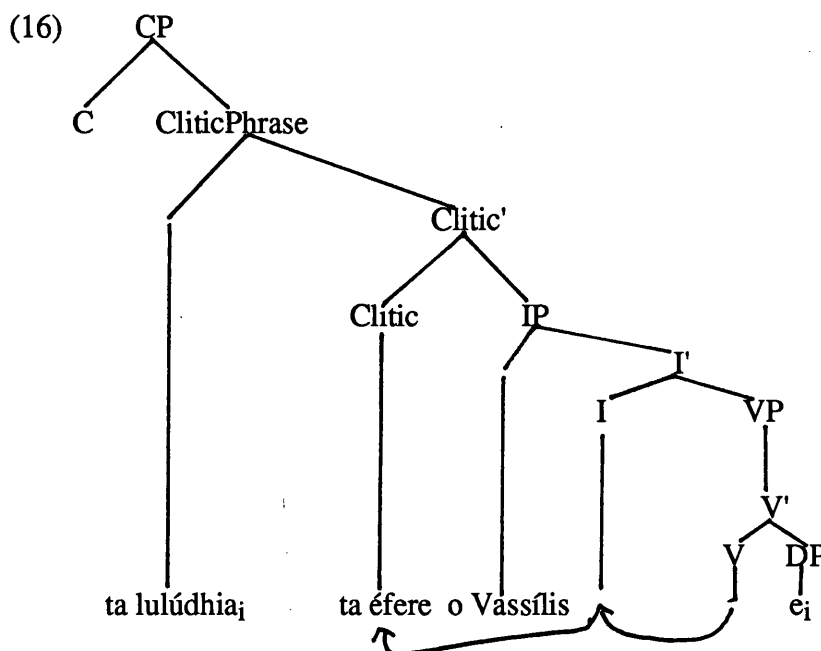
4.2.2 The Proposal

In section 4.2.1, claim (14) was advanced. Next I would like to generalise this claim to (17), below:

(17) CLC is a Spec-head phenomenon.

The change from (14) to (17) is not trivial because CLC also includes CD, where the object DP follows the matching clitic. I assume that the position of the DP in CD is still in the Spec of ClP, as in CLLD, and that there is an additional movement of the verb. See section 4.4.1 for a discussion of CD.

The reason why there is movement of the object DP to the Specifier of a CliticPhrase is to satisfy a Spec-head agreement configuration. The Spec-head agreement between an object DP and a matching clitic is a literal case of Spec-head agreement, given that the Spec and the head are identically marked for phi-features[1]. The Clitic-Criterion in (18) forces movement of the object DP from its canonical position to the Spec of a CliticPhrase headed by a clitic matching the object DP in phi-features. I take the Clitic Criterion to have S-structure status only.

---

[1] In other Spec-head agreement configurations (Rizzi's WH-Criterion, syntactic focussing as a Spec-head agreement configuration) what we usually have is a Spec-head configuration and agreement with respect to some abstract feature.

(18) By S-structure: Clitic-Criterion

In CLC:

A DP must be in a Spec-head configuration with a matching clitic.

A clitic must be in a Spec-head configuration with a matching DP.

I say that the Clitic-Criterion applies by S-structure and not at S-structure because I take it that the Clitic-Criterion sometimes applies as early as D-structure. This occurs where the Spec of ClP is a theta position (See section 4.3.2.2 for data and a summary of potential theoretical problems.). If D-structure is a true representation of thematic structure, then we will have to say that when the Spec of ClP is a theta position the Theta Criterion is satisfied at D-structure by a chain. Or, alternatively, we drop the assumption that D-structure is a pure representation of thematic structure and we have the Clitic-Criterion applying at S-structure uniformly.

The question is raised what is the nature of the DP* when it is silent. Saying that it is pro would perhaps be all right for MG but would be too easy a way out for object clitics in French, for instance; as in French object clitics and object DP's are in complementary distribution. If I claimed that the silent DP* is pro in French, I would need either to answer the question why can't DP* be overt in French, or beg the question and assume that whether or not DP* can be overt is not of theoretical relevance. Both possibilities seem unpromising to me. The reader is referred to section 4.6 for an answer to the question why French does not have object CLC.

4.2.3 Enclisis vs. Proclisis

In Standard[1] Modern Greek (SMG) clitics follow imperatives and gerunds but precede all other verb forms. MG has no infinitives. The proclisis / enclisis split in MG correlates with the +/-Tns split. Consider examples (19) to (21) below:

(19) dhos   tu   to vivlío
     give-you him   the book
     'Give him the book.'

---

[1] I say Standard Modern Greek because the enclisis / proclisis distinction of pronominal clitics cuts across differently in other dialects of MG, e.g. Cretan Greek or Cypriot Greek.

(20) dhínodas tu   to vivlío dhen ton   voithás
       giving him   the book   not him help-you
      'By giving him the book you do not help him.'

(21) tu   édhose to vivlío
      him   gave-she the book
      'She gave him the book.'

The way I account for enclisis vs. proclisis of pronominal clitics in SMG is the following. I assume no movement of the clitic, either adjunction or head-movement. I assume that the verb and the clitic come together at S-structure by head-movement of the verb. Enclisis implies verb-lowering[1] while proclisis implies verb-raising. More specifically, in enclisis the verb is under a head X which is higher than the clitic and lowers to incorporate the clitic. The question then arises why the verb does not pick up the clitic on its way to the head X, where X could be C or F. The clitic is an intermediate head. There seems to be a violation of Chomsky's (1986b) Head Movement (cf. (22)), originally proposed in Travis (1984).

(22) The Head Movement Constraint
Movement of a zero-level category β is restricted to the position of a head α that governs the maximal projection γ of β, where α θ-governs or L-marks γ if $\alpha \neq C$.

I want to argue precisely that the present account of enclisis is not in violation of the Head Movement Constraint for the reason that the verb does not move from V to C or F but is base-generated in C or F. For that claim I adopt the spirit but not the whole letter of a proposal advanced by Laka (1990). Laka has a projection ΣP[2], with Neg and F(ocus) as different values of Σ in Basque. This is how she derives the incompatibility between these elements. The elements under Σ vary crosslinguistically. In particular, she claims that Imperative is generated under Σ in Spanish but not in French and that this explains why negative imperatives are

---

[1]See Brody (1993c), who argues that lowering rules are not a problem and should be allowed. For the opposite view see Chomsky (1992).
[2]Laka (1990) does not have a CP.

possible in French but not in Spanish. What I will keep from Laka's proposal is the claim that a verb form is not necessarily generated under V. I said above that I adopt the spirit but not the whole letter of her proposal because I apply the proposal to different data and also I do not have the same array of functional projections as she does. For instance, I do not have ΣP, but CP, FP and NegP. Also, in French affirmative imperatives, but not in negative imperatives, I would base-generate the verb under C, contra Laka (1990).

Coming back to the earlier alleged problem concerning the Head-Movement Constraint, I do not think it is really a problem if the verb is base-generated in C. Following Laka (1990) I have head-chains[1] as early as D-structure. Possibly, imperatives are base-generated under F. The verb in C or F would have to lower by S-structure to pick up the clitic; otherwise Lasnik's Filter in (23) would be violated. It seems that in SMG the verb is generated in C or F when there is no Tns feature for it to pick up. The condition for when the verb is generated in C or F is clear, i.e. -Tns specification of the verb proviso C is empty[2], and there can be no overgeneration.

(23) Lasnik's Filter:
An affix must be lexically supported at or prior to the S-structure level.

Various tests have been applied (e.g. position of VP-adjoined adverbs with respect to the verb) to establish movement of the verb. I want to claim that the occurrence of the verb under a higher functional head, C, for instance, does not necessarily imply that the verb has moved up there. It could equally well be that the verb is base-generated there. So in some cases the so-called verb-movement tests are simply tests about the position the verb occupies and do not show whether the verb moved to that position or was base-generated there. It seems to me that the proclisis / enclisis of clitics is a test which patterns identically with these tests and additionally shows whether a higher position occupied by the verb involves base-generation or movement.

I will not make claims as to whether this account of the enclisis / proclisis split holds for other languages with clitics. It would appear that it could account for the enclisis / proclisis split in French and Italian, for instance. I will not go into this

---

[1]See Brody (1992, 1993b) for a one-level theory with insertion of chains from the Lexicon. See also Brody (1993a) for a reinterpretation of the Projection Principle.
[2]The proviso applies to *na* -clauses.

issue here but simply summarize the facts. In French we have enclisis[1] with affirmative imperatives and proclisis with all other verb forms. In Italian, on the other hand, we have enclisis with imperatives[2] and infinitives and proclisis with all other verb forms. If we take into account Pollock (1989) and Belletti (1990) we see that the proclisis / enclisis split of infinitives in the two languages correlates with the asssumed position of the infinitive in the two languages. The infinitive in French is shown to remain in situ while the infinitive in Italian is shown to raise to I. For me all the position of adverbs with respect to infinitives in French and Italian shows is that infinitives are lower than I in French but higher than V in Italian. I reinterpret this observation as follows: Infinitives are base-generated in V in French and remain there, while infinitives in Italian are base-generated in C.

4.3 The Nature of [Spec, Cl(itic)P(hrase)]

In this section I will look into the nature of the [Spec, ClP] position. Spec-head relations have been posited in order to account for both A- and A'-movement. Regarding A-movement, the Spec-head relation is clear with subjects and perhaps also with objects (cf. Chomsky 1989, 1992). Regarding A'-movement, consider the Wh-Criterion (May 1985) and the Focus-Criterion (Brody 1990). We need to establish whether the Spec of ClP is an A- or an A'-position.

4.3.1 [Spec, ClP]: a Mixed Position

It will be argued that the Spec of the ClP is a mixed position in MG, an A- and an A'-position. Webelhuth (1989), Chomsky (1989), Déprez (1989) and Mahajan (1990) have done work on positions with mixed properties and have put forward various proposals. I will not discuss their work here. In sections 4.3.2 and 4.3.3, I provide evidence for the claim that the Spec of ClP is an A- and an A'-position, respectively. The nature of [Spec, ClP] is not necessarily the same across languages. Sportiche (1992) claims that in French the Spec of a Genitive, an Accusative or a Locative ClP is an A'-position, while that of a Dative ClP is an A-

---

[1]See section 4.5 for the claim that Complex Inversion in French is another instance of enclisis.

[2]Imperatives in Italian can only be affirmative. The negative subjunctive can have the force a negative imperative has in other languages.

position. Haegeman (1992c) claims that the Spec of a CIP in West Flemish is an A-position.

In the Government and Binding framework (Chomsky 1981) an important distinction is drawn between A-positions and A'-positions. The distinction is maintained in the Principles and Parameters framework, although further distinctions are introduced (cf., for instance, the L-related / non-L-related positions distinction). An A-position can be either a root position or a target position. An A'-position, on the other hand, is necessarily the result of movement. Elements in A- and A'-positions have distinct syntactic properties. In particular, elements in A-positions can serve as antecedents for binding and do not license reconstruction or parasitic gaps. A-positions are taken to be potential theta-positions. It is also assumed that the specifiers of Agreement phrases, for instance ARG-S" or AGR-O", are A-positions. Elements in A'-positions, on the other hand, cannot serve as antecedents for binding but license both reconstruction and parasitic gaps.

Binding, Reconstruction and Parasitic Gaps are the three tests standardly used to identify the properties of a movement site. Whether or not the position is a potential theta-position is taken not to be an applicable test given that theta-positions are generally assumed to be root positions[1]. The landing site of a movement is by definition not a root position. In an A-chain the root position is the theta-position while the head position is the Case-position. I will show that whether or not a position is a potential theta-position can be a test for a movement site and that the theta-position in a chain is not necessarily the root position (cf. section 4.3.2.2).

Two types of movement are subsumed under A-movement: Passivization and Raising, on the one hand, vs. movement of the subject to the Spec of AGR-S" or movement of the object to the Spec of AGR-O", on the other. Properties that are specific to either type of A-movement should be taken as possible but not necessary properties of A-movement and be therefore made into possible additional tests for A-movement, just as being a potential theta-position was a possible but not necessary property of / test for an A-position. The three properties standardly used as tests for A- versus A'-movement are neutral as to the type of A-movement involved. Presumably there are other tests that would differentiate the two types of movement. CLC in MG, if A-movement at all, cannot be of the second type for the simple reason that CLC is not obligatory in the language. What about particular

---

[1]And that is irrespective of whether we assume the VP-internal subject hypothesis or not.

characteristics of the first type of A-movement? The first type of A-movement involves derived subjects. There are certain properties that subjects, D-structure or derived[1], share. We could perhaps claim that positions with properties of subjects should be taken to be A-positions and use this as a further test for A-positions. In fact, this is what I do. On the other hand, lack of properties of subjects does not necessarily mean that a movement site is an A'-position.

The positive tests for A-movement that will be used in section 4.3.2 are the following: Binding, the potential of being a theta-position, and properties of subjects. DP's participating in CLC can serve as binders for pronouns. The Spec of ClP can be a theta-position, as Subject+Verb idioms and discontinuous idioms show. Also it will be shown that the Spec of ClP has properties standardly associated with subjects. DP's in CLC pattern with derived subjects. In particular, the Spec of ClP can be the target position of raising[2] and the controlled position of control verbs. The gap in pseudo-relatives can be a DP participating in CLC. Subject-oriented adverbs can express a property of a DP participating in CLC. Finally, quirky subjects obligatorily participate in CLC. It seems, therefore, that the Spec of ClP is an A-position.

It is next shown that the Spec of ClP is also an A'-position. DP's in CLC can license reconstruction and parasitic gaps. A further test I use is the following: CLC is a licensing mechanism for non-local movement. This is a property of movement involving A'-Specs.

4.3.2 A-Properties

I will now present evidence that the Spec of ClP is an A-position. The first test is Binding of pronominals. The second piece of evidence is that the Spec of ClP can be a theta position. The third type of evidence is that the Spec of ClP has properties of subjects. I also take three types of derived subjects, namely passivized DP's, raised DP's and quirky subjects and examine whether there is a link or parallelism between them and DP's participating in CLC. Quirky subjects and CLC are inextricably linked in the sense that all quirky subjects in MG obligatorily

---

[1]There are also properties that distinguish D-structure subjects from derived subjects (cf. Burzio 1981, Belletti and Rizzi 1988) but these are not relevant here.
[2]I refer here to raising as a property and not to the construction Raising, which takes an infinitival subject and moves it to a c-commanding non-thematic subject position.

participate in CLC. 'Raising' as a property holds of both the Spec of IP and the Spec of ClP. The Spec of ClP is a possible raising site. An exact parallelism cannot be established between CLC and Passivization. It is shown, however that the two constructions have similar properties.

Interestingly, the Spec of ClP is an A-position that lacks the motivation for A-movement standardly assumed. Movement to the Spec of ClP does not take place because of lack of Case. The Spec of ClP in MG is not a position in which Case is assigned. Maybe we could say that this is not a real problem given that it is a mixed position.

4.3.2.1 Binding

MG has the following asymmetry: while a possessive clitic inside an object can be coreferential with the subject of the clause (cf. (24)), a possessive clitic inside a subject cannot be coreferential with the object of the clause (cf. (25)).

(24) o Yánnis$_i$ aghapái ti mitéra tu$_i$
     the Yannis-Nom loves the mother-Acc his
     'Yannis$_i$ loves his$_i$ mother.'

(25)* i mitéra tu$_i$ aghapái to Yánni$_i$
     the mother-Nom his loves the Yannis-Acc
     'His$_i$ mother loves Yannis$_i$.'

The Clitic-Construction has an interesting property, that of cancelling the asymmetry between examples (24) and (25). Namely, a possessive clitic inside a subject DP can be coreferential with the object of the clause, if the object participates in the Clitic-Construction. Consider (26):

(26) i mitéra tu$_i$ ton$_i$ aghapái to Yánni$_i$
     the mother-Nom his him-cl loves the Yannis-Acc
     'His$_i$ mother loves Yannis$_i$.'

At this point it is important to compare CLC with Scrambling in German. The equivalent of example (25) is ungrammatical in German, as well. It becomes grammatical, though, if we scramble the object DP to the front of the sentence. The

MG data do not lend themselves to a similar account. A major difference between Scrambling and the Clitic-Construction is the following: while in Scrambling the relative order between the subject and the object is crucial for binding possibilities, in the Clitic-Construction the relative order of the object DP and the subject does not seem to be relevant (note that in (25) the subject precedes the verb as in (26)). For coreference to become possible in (25) what is required is that the object participates in the Clitic-Construction.

In MG either order of the two objects in the double object construction is permitted but there are asymmetries in the behaviour of the two objects, suggesting that the first object c-commands the second, but not vice versa. Again the Spec of ClP is shown to be able to act as a binder. Let us consider first the bound variable interpretation of pronouns. We know that a pronoun can have a bound variable interpretation when c-commanded by a quantifier at S-structure. Consider 27(a) vs. 27(b). Interestingly, in 27(c) the bound variable interpretation of the pronoun is again possible. In 27(c) the quantifier is in Spec of ClP, the verb is in F^1 while the DP *tis mamás tu* is adjoined to ClP. In 27(c) the quantifier in the Spec of ClP, an A-position, binds the pronoun. The DP containing the pronoun, being in an A'-position is reconstructed to its canonical position.

(27)a. édhosa [káthe mamás]$_i$ to   pedhí   tis$_i$
      gave-I every mum-Gen the child-Acc her
      'I have given [every mum]$_i$ her$_i$ child.'

    b. *édhosa tis   mamás   tu$_i$ [káthe pedhí]$_i$
      gave-I the mum-Gen his every child-Acc
      '*I gave his$_i$ mum [every child]$_i$.'

    c. to édhosa tis   mamás   tu$_i$ [káthe pedhí]$_i$
      him gave-I the mum-Gen his every child-Acc
      '*I gave his$_i$ mum [every child]$_i$.'

The point that DP's in Spec of ClP can act as binders is also made if we look at the binding of pronominals in the double object construction. Consider examples 28(a) to (c). The DP *tu Yánni* acts as a binder in 28(c).

---

[1]See section 4.4, where it is claimed that in Clitic Doubling the verb is in F.

(28)a. édhosa tu Yánni$_i$ to stiló tu$_i$
     gave-I the Yannis-Gen the biro-Acc his
     'I have given Yannis$_i$ his$_i$ biro.'

  b. *édhosa to stiló tu$_i$ tu Yánni$_i$
     gave-I the biro-Acc his the Yannis-Gen
     'I have given Yannis$_i$ his$_i$ biro.'

  c. tu édhosa to stiló tu$_i$ tu Yánni$_i$
     him-Gen gave-I the biro-Acc his the Yannis-Gen
     'I have given Yannis$_i$ his$_i$ biro.'

Examples (24) to (28) show that CLC creates binding relations that do not obtain on the basis of the canonical word order.

Moreover, CLC not only creates but also destroys binding relations[1]. Consider example (29), below:

(29) *to vivlío tu$_i$ tu to dhósame tu Yánni$_i$
     the book his him it gave-we the Yannis
     '*We have given Yannis$_i$ his$_i$ book.'

Coreference is not possible in (29). A possible[2] D-structure for (29) is (30), below. Coreference is possible in (30). I follow standard assumptions that Binding Theory applies at S-structure.

(30) tu dhósame tu Yánni$_i$ to vivlío tu$_i$
     him gave-we the Yannis the book his
     'We have given Yannis$_i$ his$_i$ book.'

---

[1]This is also a property of Raising and Passivization.
[2]I say *a possible D-structure* and not *the only D-structure* because objects in the double object construction in MG can have either order.

4.3.2.2 A Theta-Position

In this section I show that the Spec of ClP can be a theta-position. The data come from Subject+Verb idioms and discontinuous idioms. The argument in the open position of those idioms obligatorily participates in CLC. My account of the phenomenon is that movement to the Spec of ClP here takes place for reasons that have to do with Theta Theory and the assignment of theta-roles.

4.3.2.2.1 Subject+Verb Idioms

It is generally the case that the open position of idioms can only be the subject position. This makes sense given that the theta role of the subject is assigned by the VP (cf. Marantz 1984), that is the verb and the object form a constituent that can assign a theta role to the subject. The subject and the verb, on the contrary, do not form a unit to the exclusion of the object. Therefore, the open position of an idiom could not be the object position because it could not have been assigned a theta role.

Interestingly, MG has Subject+V idioms, namely idioms where the open position is the object position. In Subject+V idioms the subject in conjunction with the verb determines the theta role of the object. What is equally interesting is that in all Subject+V idioms the object obligatorily participates in CLC. Consider examples (31) and (32), below:

(31)*(ton) pjáni i kardhiá tu ton Cósta ótan tu zitáo
    him-cl gets the chest-Nom his the Costas-Acc when him-cl ask-I

    leftá
    money-Acc
    'Costas suffers when I ask him for money.'

(32) *(tu) tin édhose tu Yánni
    him-cl her-cl gave-it the Yannis-Gen
    'Yannis went berserk'

The obligatoriness of CLC in Subject+Verb idioms can be explained in the following way. When the object moves to Spec of ClP, the subject and the verb

form a constituent, to the exclusion of the object, namely VP. Thus, VP can assign a theta-role to the object in Spec of CIP.

4.3.2.2.2 Discontinuous Idioms

I am referring here to idioms with two open positions, the subject position and an / the object position. These idioms are called discontinuous because in English idioms of this type the verb and its outmost complements seem to form a single thematic complex. MG discontinuous idioms are not necessarily discontinuous linearly speaking.

The open position of discontinuous idioms I am interested in is an object position. The theta-role of the DP originating in that position is assigned by the verb in conjuction with the second object and / or a PP. CLC is obligatory for the open object position. Consider examples (33) and (34), below:

(33) ton   Yórgho   *(ton)   ékane   tu   alatiú
     the Yórghos-Acc   him   made-she the   salt-Gen
     'She shouted at Yorghos.'

(34) tu   Yórghu   tu   édhose   ta papútsia sto khéri
     the Yorghos-Gen   him   gave-she   the   shoes   in the hand
     'She dumped Yorghos.'

In (33), for instance, káno in consort with the complement phrase tu alatiú assigns a theta-role to the object in Spec of CIP. The possibility of such idioms in English is straightforward under Larson's (1988) analysis of the double object construction; the 'discontinuous' parts of the idiom form an underlying constituent. In MG the 'discontinuous' parts of the idiom form an S-structure constituent.

4.3.2.2.3 A Problem

It is generally assumed that an A-position can be a theta position. However, this has never been used as a test to establish the nature of a position which is the target of movement because theta positions are standardly taken to be exclusively the root positions of chains. In this section the property of being a theta position is used as a test for establishing the nature of the Spec of CIP. I have shown on the

basis of Subject+Verb idioms and discontinuous idioms that the Spec of ClP is a potential theta position.

If this is right, it means that a theta position can no longer be defined as a position in which an argument may appear at D-structure. The obligatoriness of CLC in Subject+Verb idioms and discontinuous idioms seems to be evidence against the assumption that D-structure is a pure representation of thematic structure. It would rather seem that D-structure is a pure representation of categorial structure and not necessarily of thematic structure. The same data could also be taken as evidence against the assumption that the Theta-Criterion applies at D-structure. Both pieces of evidence argue against the level of D-structure. This is not problematic given that the validity of this level has been questioned independently (cf. Brody 1993b and Chomsky 1992). More seriously, the same pieces of evidence pose a problem for the Main Thematic Condition (MTC) in (35), one of the primitives of the Principles and Parameters framework.

(35) The Main Thematic Condition
No movement to theta position.

A possible analysis would be to base-generate these DP's in the Spec of ClP. Such an analysis gains motivation from the fact that CLC is obligatory in these idioms. The question still arises how these DP's would be assigned Case. The Spec of ClP is not a Case position in MG. Another concern should be satisfaction of the subcategorization requirements of the verb. This analysis does not seem to me to be viable for MG.

An alternative analysis in which we have a chain as early as D-structure would enable us to maintain the assumption that D-structure is a pure representation of thematic structure. We would, furthermore, specify that the Clitic-Criterion can apply as early as D-structure. But we would still have problems with the D-structure Theta-Criterion and MTC.

Another analysis would be simply to state what seems to be happening, namely that there can be movement to a theta position as long as the root position is nonthematic. The Clitic-Criterion would still apply at S-structure. The next task is to work on a reformulation of MTC that would exclude the bad cases of movement from a nonthematic to a thematic position. Maybe the bad cases of movement from a nonthematic to a thematic position are excluded independently by some notion of Recoverability. If so, only a trivial revision of the MTC is required to account for

the idiom data. Probably saying something like: No movement can involve two theta positions.

It seems that A-movement occurs not just for Case reasons[1]. It could be for Theta Theory reasons, as Subject+Verb idioms and discontinuous idioms show.

4.3.2.3 Properties of Subjects

I will next present data which show that DP's in the Spec of ClP have properties of subjects. This is evidence for the Spec of ClP being an A-position. The target position of movement in Passivization and Raising, standard instances of A-movement, also has properties of subjects.

4.3.2.3.1 Raising

It is shown in this section that the Spec of ClP can be the target position of raising.

Properties 36(a) and (b), among others[2], are generally assumed to hold of Raising:

---

[1]For additional evidence that A-movement does not necessarily occur for Case reasons see the discussion on raising in section 4.3.2.4.1.

[2]Another property of raising generally assumed is that raising can only take place out of an infinitival clause, which is an IP. Raising in the principles-and-parameters model is derived through an interaction of Theta Theory, Case Theory and ECP. MG does not have infinitival clauses. The motivation for raising, namely lack of Case, does not exist. Therefore the theory would predict that there is no raising in MG. Yet MG has raising constructions. Interestingly, raising always takes place out of *na* -clauses, the clauses used where infinitivals would be used in other languages.

The MG data, therefore, challenge the assumption that the motivation for raising is lack of Case and the assumption that raising is out of an IP. It is not of relevance here to discuss the possibility of raising out of a tensed clause and the implications for the principles-and-parameters analysis of raising. With respect to other languages, the possibility of raising out of a tensed clause has been noted by Grosu and Horvath (1984) and Rivero (1992). In the discussion of raising in this section I will abstract away from the fact that raising is out of tensed clauses.

The fact that there is raising from finite clauses is problematic for all current theories of movement. For one thing, the question of barriers and how many of them are crossed in raising out of a tensed clause is central to the problem. Maybe in Relativized Minimality there is nothing that would prevent raising out of a tensed clause.

The question of the motivation of raising turns out to be equally problematic. The conditions on A-chains, as far as Case Theory is concerned, is a related problem. It

131

(36)

a. The target position of Raising is a subject position.

b. The root position of Raising is a subject position.

I will be first concerned with property 36(a). Property 36(b) will be addressed next but also in section 4.8, where I discuss Clitic Climbing.

Property 36(a) reflects a subject-object asymmetry. Although there are nonthematic object positions, they do not constitute landing sites for raising.

What I will show next is that there can be raising to the specifier of a CliticPhrase. Consider examples 39(a) to (c), below:

(39)a. dhen fénete na ksérun i fíli su apó ghlosoloyía

     not seems that know-they the friends your about linguistics

     'It does not seem that your friends know much about linguistics.'

b. i fíli su dhen fénode na ksérun apó ghlosoloyía

   the friends your not seem-they that know-they about linguistics

   'Your friends do not seem to know much about linguistics.'

c. ton fílon su dhen *(tus) fénete na ksérun apó

   the friends-Gen your not them-Gen seems that know-they about

ghlosoloyía

linguistics

'Your friends do not seem to know much about linguistics.'

Examples 39(a), (b) and (c) involve the raising verb fénete 'it seems'. In 39(b) there is raising from the embedded subject position to the matrix subject position. I will concentrate on example 39(c) which appears to involve raising from the embedded subject position to the Spec of a CliticPhrase in the matrix clause. I will then show that 39(c) is indeed an instance of raising. The arguments are the following:

---

is generally assumed that the root position in a chain is Caseless while the target position has Case.

I will not concern myself with these problems here.

(a) *fénete* imposes no selectional restrictions on the object DP in Spec of the CliticPhrase.

The object DP in Spec of the CliticPhrase gets its theta role from the verb of the embedded clause.

(b) *fénete* takes no object.

(c) *fénete* allows in the Spec of the CliticPhrase any subject DP licensed by the predicate of the clause embedded under it, as is shown by idiom chunks (cf. (40)).

(40) dhen *(tu)   fénete tu   Yánni   na   káni tu kefaliú tu
     not him-Gen shows the Yannis-Gen that makes of his head
     'Yannis does not seem to go his own way.'

The idiom is (41) below:

(41) káno   tu kefaliú mu
     make   of my head
     'to go my own way'

(d) *fénete* does not assign an external theta role.

(e) Example (42), below, is ungrammatical. This excludes the possibility that *fénete* be a verb of the type of *look like* , which allows (43).

(42) *tu   Yánni   tu   fénete   na íne plúsios o patéras tu
     the Yannis-Gen him-cl shows that is   rich the father his
     'Yannis looks like his father is rich.'

(43) John looks like his father is rich.

(a) to (e) are diagnostic properties of raising elements. It seems therefore reasonable to conclude that *fénete* is a raising verb and that raising can be to the Spec of a CliticPhrase. fénete is a verb which allows raising to either Spec of IP or Spec of the CliticPhrase. 39(c) is not subject-to-object raising but subject-to-[Spec, ClP] raising.

In the light of examples like (39), I want to suggest that 36(a), repeated below, be replaced with (44).

(36)a. The target position of Raising is a subject position.

(44) The target position of raising can be either [Spec, IP] or [Spec, ClP].

After discussing property 36(a) of Raising, I move now to property 36(b), repeated below:

(36)b. The root position of Raising is a subject position.

I will show that 36(b) is not quite right, either. In particular, I will show that the root position of raising can also be the Spec of a CliticPhrase. I will illustrate this with the raising predicate *fénete* , as before. Given (44), we expect movement from the Spec of a CliticPhrase to land in either the Spec of IP or the Spec of a CliticPhrase. The prediction is borne out. Consider 45(a) and (b), respectively.

(45)a. to   pedhí   fénete na to ékhun sta ópa ópa
         the child-Nom seems that it   pamper-they
         'The child seems to be pampered.'

b. tu   pedhiú *(tu) fénete na   to ékhun sta ópa ópa
         the child-Gen it-Gen seems that it-Acc pamper-they
         'The child seems to be pampered.'

In 45(a) and (b), the clitic *to* in the embedded clause shows that raising cannot originate from the object position of the embedded clause. A D-structure object cannot undergo raising unless it first moves to the Spec of a CliticPhrase. It is only then that raising can take place to either the Spec of IP or the Spec of a CliticPhrase of a raising predicate.

It seems that we need to replace 36(b) with (46), below:

(46) The root position of raising can be either [Spec, IP] or [Spec, ClP].

(44) and (46) can be reduced to the generalisation in (47).

(47) raising can only involve either [Spec, IP] or [Spec, ClP]

The discussion has abstracted away from the fact that raising takes place out of tensed clauses. I think it is a legitimate abstraction for current purposes.

The obligatoriness of the clitic on the raising predicate in examples 39(c), 40 and 45(b) shows that the DP participating in CLC is part of the categorial structure projected by the raising predicate. The obligatoriness of the clitic on the embedded verb in examples 45(a) and (b) shows that the DPs *to pedhí* and *tu pedhiú* , respectively, belong to the argument structure of the embedded verb. Notice the difference in Case between the clitic on the raising verb and the embedded clitic in 45(b) and the ungrammaticality of 45(b'), below, where the clitic on the raising verb matches the clitic in the embedded clause. It seems that only a Genitive ClP, and never an Accusative ClP, can host a raised DP.

(45)b'. *to   pedhí   to   fénete   na   to ékhun sta ópa ópa
         the child-Gen it-Acc seems   that   it-Acc   pamper-they
         'The child seems to be pampered.'

The difference in Case in 45(b) is no more problematic than the difference in Case in 45(a), where the root of the chain is marked Accusative while the head of the chain is marked Nominative. You expect Case mismatch if you can have raising out of tensed clauses. The question of the motivation for raising comes up, but I do not address this issue here (see however the earlier footnote on this question).

The ungrammaticality of 45(b''), where the clitic in the embedded clause is changed to match the clitic on the raising verb shows that the DP *tu pedhiú* in 45(b) forms part of the argument structure of the embedded verb and, therefore, that movement of that DP from the embeded clause to the matrix clause has taken place.

(45)b''. *tu   pedhiú   tu   fénete   na   tu ékhun sta ópa ópa
          the child-Gen it-Gen seems   that   it-Gen   pamper-they
          'The child seems to be pampered.'

According to the above discussion, there are the following instantiations of raising:

(48) raising:

    i. Spec(IP)-to-Spec(IP)[1]

    ii. Spec(IP)-to-Spec(ClP)[2]

    iii. Spec(ClP)-to-Spec(IP)

    iv. Spec(ClP)-to-Spec(ClP)

The pattern in (48) is no more than an expansion of the generalisation formulated in (47). The verb I chose to illustrate that there can be raising to the Spec of a CliticPhrase, namely possibilities 48(ii) and (iv), also allowed raising to its Spec of IP, namely possibilities 48(i) and (iii). I do not necessarily want to imply with this that all the verbs that allow raising to their Spec of IP also allow raising to the Spec of a CliticPhrase, although I could find no counterexamples from MG.

It should be stressed that there is no raising from the object position as such but only from the Spec of a CliticPhrase. So if we want to raise the object of an embedded clause we have to move it first to the Spec of a CliticPhrase headed by a clitic matching the object in phi-features and raise it from that position.

The main point to keep from the above discussion is that there is raising to the Spec of a CliticPhrase. 'raising' is a property so far associated with the Spec of IP.

4.3.2.3.2 Pseudo-Relatives

Pseudo-relatives exhibit a subject-object asymmetry. Consider the contrast between (49) and (50), below.

---

[1]This is the standard case of raising discussed in the literature.

[2]McCloskey (1983) argues that there is raising to prepositional object positions in Modern Irish. He shows that in Irish the prepositional object position is a non-thematic position. Consider also McCloskey (1992, Celtic Syntax Conference handout):
Non-theta subject positions must be null when associated with a PP-argument.
Non-theta subject positions may be either null or filled with the pronoun sé when linked with a CP-complement.
McCloskey (1983:481):'...*do* and *le* are standardly used to mark those arguments that correspond to indirect objects in other languages.' Significantly, in the MG raising cases Genitive Case, the Case of indirect objects, is used.

(49) ton   ídha   pu   évghene   apó to sinemá
     him-cl saw-I   that was-he coming out of the movies
     'I saw him (that was) leaving the movies.

(50) *ton   ídha   pu   filúse   i   María
     him-cl saw-I   that was-she kissing the Maria-Nom
     'I saw him that Maria was kissing.'

Interestingly, objects in the Clitic-Construction pattern like subjects as far as pseudo-relatives are concerned. Consider example (51), below[1]:

(51) ton   ídha   pu   ton   filúse   i   María
     him-cl saw-I   that him-cl   was-she kissing the Maria-Nom
     'I saw him that Maria was kissing.'

4.3.2.3.3 Subject-Oriented Adverbs

As is well-known, adverbs are divided into various classes. One of these is subject-oriented adverbs. The defining characteristic of subject-oriented adverbs is that they express a property of the subject. Examples of subject-oriented adverbs are the following: *apróthima* 'reluctantly', *adhéksia* 'clumsily', *éksipna* 'cleverly', *ilithíos* 'stupidly' etc. Consider example (52), below:

(52) Cleverly John dropped his cup of coffee.

Notably, subject-oriented adverbs can express a property of objects in CLC. Consider example (53):

(53) ilithíos tu   Yánni tu   pésane   ta   klidhiá mésa sto aftokínito
     stupidly the Yannis-Gen him fell-they the keys-Nom   in the car
     'Stupidly Yannis dropped the keys in the car.'

---

[1]The observation that in MG pseudo-relatives the gap can be an object comes from A. Roussou (p.c.).

Interestingly, there are ambiguous sentences where a subject-oriented adverb can modify either the grammatical subject or an object in CLC. (54), below, is an example of such ambiguity.

(54) ilithíos ton Yánni   ton   piásane   na   klévi   méra mesiméri
     stupidly the Yannis-Acc him caught-they that steals in broad daylight
     'Stupidly they caught Yannis stealing in broad daylight.'
     or
     'Stupidly, Yannis was caught stealing in broad daylight.'

4.3.2.3.4 Control Verbs

The subject position in the complement clause of control verbs is obligatorily controlled by either the subject or the object of the control verb. In the first case we have a subject control verb while in the second case we have an object control verb. Interestingly, the controlled position in MG can be the Spec of ClP. Consider (55), below, which involves a subject control verb, namely *riskáro* 'risk'.

(55) me   ti dhimosíefsi psemáton riskárun   na tus   epidhikastí próstimo
     with the publication   of lies risk-they that them is imposed   fine
     'Publishing lies they risk getting a fine.'

In (55) the Spec of the ClP headed by tus is controlled by the subject of *riskárun* . That *riskáro* 'risk' is a control verb is shown by the ungrammaticality of example (56), below:

(56) *riskári na   bi   próstimo
     risks that is imposed fine-Nom

What (55) shows is that the Spec of ClP can be the controlled position of control verbs. I will next illustrate the same point with an object control verb, namely *pítho* 'persuade'. Consider example (57):

(57) ton   épisa   na   tu   páme   emís ta   vivlía
     him persuaded-I that him take-we we the books
     'I have persuaded him to let us take the books to him.'

But not:

(58) *épisa   to   Yánni   na   érthi   i   María
     persuaded-I the Yannis-Acc that comes the Maria-Nom

In (57) the controlled position is the Spec of ClP.

4.3.2.3.5 Quirky subjects

The data presented in sections 4.3.2.3.1 to 4.3.2.3.4 showed that the Spec of ClP has subject properties. This has been taken as evidence that movement to the Spec of ClP is A-movement given that the target position of standard instances of A-movement, namely Passivization and Raising, also has subject properties. The Spec of ClP has properties of a subject position. The evidence presented in this section for the claim that the Spec of ClP has subject properties is of a different type. Quirky subjects are non-nominative internal arguments with subject properties, hence their name. Thráinsson (1979) and Maling (1990) argue that preverbal quirky subjects in Icelandic occupy the subject position. This is in fact the general assumption about quirky subjects crosslinguistically. Interestingly, in MG quirky subjects obligatorily participate in the Clitic-Construction. (59) to (62), below, are examples of quirky subjects.

(59) tu   Yanni   *(tu)   lípun   dhéka   vivlía
     the Yannis-Gen him-Gen miss-they ten books-Nom
     'John is missing ten books.'

(60) tis Yoryías   *(tis)   arkún   dhio   spítia
     the Yoryia-Gen her-Gen suffice-they two houses-Nom
     'Yoryia is content with two houses.'

(61) tis   Annas   *(tis)   arési   to   dhiávasma
      the Anna-Gen her-Gen pleases the studying-Nom
      'Anna likes studying.'

(62) to   Yánni   *(ton)   ponái   to   kefáli   tu
      the Yannis-Acc him-cl hurts the head-Nom his
      'Yannis has a headache.'

Belletti and Rizzi (1988) have shown that in the **preoccupare** and **piacere** classes of psych verbs the experiencer is higher than the theme. With respect to the **piacere** class they advance the claim that the Experiencer occupies the subject position in the order Experiencer V Theme, i.e. it is a quirky subject. Interestingly, in these two classes of psych verbs in MG the experiencer obligatorily participates in the Clitic-Construction. Consider examples (63) and (64), below:

(63)[1] aftó dhen *(ton)   aforá   ton   Yánni
        this not   him concerns the Yánnis-Acc
        'This does not concern Yannis.'

(64) *(tu)   arésun   tu   Yánni   ta   frúta
      him please-they the Yánnis-Gen the fruit
      'Yannis likes fruit.'

4.3.2.3.6 Specificity

Another subject-object asymmetry is that, by and large, subjects are specific while objects are not. Specificity seems to be a subject property. It has been observed that DP's in the Clitic-Construction have a specific reading. Objects in Spec of a CliticPhrase are specific in a sense that objects as sisters of V, i.e. objects

---

[1]When the verbs in the **preoccupare** class are used as causatives the experiencer does not obligatorily participate in the Clitic-Construction, as example (1), below, shows.

(1) i María stenokhórise ti Stélla   me   ti siberiforá tis
     the Maria upset-she the Stella with the behaviour her
     'Maria has upset Stella with her behaviour.'

in their canonical position, are not. This is the general picture concerning subjects and objects. I will now look at that picture in more detail.

Only subjects in Spec of IP are specific. VP-internal subjects are not. Passivized DP's and raised DP's are also specific. Passivized DP's and raised DP's are subjects that did not move from Spec of VP to Spec of IP. But this is precisely the point I have been making all along. Specificity makes it clear that we are referring rather to Spec of IP properties than to subject properties. Subjects in the Spec of IP tend to be specific in the same way that DP's in the Spec of a CliticPhrase are claimed to be. We see therefore that distinction (65), below, correlates with two more distinctions, namely (66) and (67).

(65)
+/-Specificity

(66)
Subjects in Spec of IP / VP-internal subjects

(67)
Objects in +/-Clitic-Construction

On the basis of the correlation between (65), on the one hand, and (66) and (67), on the other, I put forward claim (68) (to be refined below):

(68)
Specificity is a result of predication.

I take specificity in CLC to be a property of the construction. Specificity is one of the properties of predication.

In discussions of clitics the question of the specificity of objects in the Clitic-Construction and how it can be accounted for has often been addressed. The usual answer has been that specificity of DPs in CLC is a condition on DP's participating in CLC rather than a property of CLC[1]. My treatment links the specificity of DP's in CLC with the specificity of subjects in Spec of IP. The

---

[1]But see Sportiche (1992) for an account of specificity in CLC as a property of CLC.

interpretation of the object in the Clitic-Construction, is, in my model, a property of the specifier of the CliticPhrase. Specificity is derivative on the construction, not a precondition on it. Theories which take the interpretation of the object in the Clitic-Construction as a precondition for DP's participating in that construction have the problem of stating the precondition. This is not at all trivial. In fact, this is the point where the notion of specificity starts being questionable. Consider, for instance, examples (69), (70) and (71). It seems to me that it is not possible to fit the object DPs in (69), (70) and (71) under any notion of specificity, no matter how loose it is.

(69) dhío thémata tha   ta   kséro,   pu tha pái?
     two questions must them-cl know-I it can't be otherwise
     'I must know two questions, it can't be otherwise.'

(70) éna kafedháki   tha to épina efharístos
     a cup of coffee would it drink-I gladly
     'I'd love a cup of coffee.'

(71) ekató   kilá   tha   ta   ziyízi
      a hundred kilos must them-cl weigh-he
      'He must weigh a hundred kilos.'

Examples (69) to (71) also undermine the generalisation in (68). I suggest that (68) be replaced with (72), below:

(72) The reading of DPs in CLC is the characteristic reading of predication.

In other words the crucial property is not specificity but predication. It is not (65) that correlates with (66) and (67) but (73).

(73)
+/-Predication

It has been noted for Spanish and Romanian (see Suñer (1992) and Dobrovie-Sorin (1990), respectively, that indirect objects in the Clitic-Construction are not bijectively linked to specificity. This behaviour of indirect objects is difficult

to accommodate within a theory where specificity is a precondition on the Clitic-Construction. It raises no problem for (73), however[1].

4.3.2.4 The Clitic-Construction and Passivization

I have made the point that CLC is A-movement, like Passivization and Raising are. The moved DP in all three can act as a binder and has subject properties. It has been my aim in section 4.3.2 to build a parallel between CLC, Passivization and Raising. The parallel between CLC and Raising appears to be easier to demonstrate that the parallel between CLC and Passivization. The reason is that apart from all the properties that the three constructions share, raising as a property characterises both CLC and Raising (as a construction). In this section I will try to illustrate better the parallel between CLC and Passivization.

I repeat briefly the similarities between CLC and Passivization. Passivization and CLC have the same effects as far as Binding Facts and Quantifier Binding are concerned. DP's in CLC and passivized DP's can be modified by subject-oriented adverbs, can be the gap in pseudo-relatives and the controlled position of control verbs. Finally, both DP's in CLC and passivized DP's are interpreted as specific.

I will next discuss certain differences between Passivization and CLC and argue that they do not bear crucially on the parallelism between the two constructions I have put forward[2].

(a) Morphology

In passives the verb is marked with overt participial morphology, whereas in CLC the verb appears in its usual active form except for the clitic on the verb. In both Passivization and CLC the object is promoted. We have obligatoriness of some morphology in both constructions. In Passivization morphology is related to the subject while in CLC morphology is related to the object. There are other cases

---

[1]Subjects in Spec of IP are not bijectively linked to specificity, either. Consider (1) and (2), below:

(1) Noone likes apples.

(2) Who read the article yesterday?

It could be argued that at S-structure *who* in (2) occupies the Spec of IP.
[2]See also the discussion in Larson (1988) on apparent differences between passive and dative shift.

where morphology is related to the promoted argument. In the applicative construction, for instance (cf. Larson 1988), the verbal inflection is not associated with the demoted argument but records the theta-role that the promoted argument bears. The clitic can be seen as passive morphology, which is usually seen in place of an overt subject. This is by no means a necessary assumption.

(b) Suppression of Subject Theta-Role

In passives the demoted adjunct phrase (the logical subject) may be suppressed. So may the demoted (logical) subject in CLC. MG is a pro-drop language, as are all languages with object CLC I can think of. It may be significant that the only language with clitics but no CLC for objects is French, a non pro-drop language. The possibility of a relation between the pro-drop parameter and CLC with objects has already been noted (cf. Kayne 1989). But see section 4.6, where I present an independent account for the lack of CLC with objects in French.

One could still say that having pro as a subject in a sentence with object CLC does not amount to complete suppression of the logical subject because its phi-features appear on pro. Here I could make use of the account offered in Jaeggli (1986) and see possible extensions to CLC. Jaeggli (1986) proposes that in a passive the subject theta-role is assigned to the passive morpheme -en . This theta-assignment possibility arises from the special status of the subject theta-role in lexical representation. Since the IP subject position is not a subcategorized one, a theta-role assigned to this position cannot be linked in lexical representation to any particular set of categorial features. As a result, the IP subject theta-role is free to be assigned to various phrases, including full nominal phrases, and also to morphological elements like -en . Other thematic roles do not have this categorially 'unlinked' character and so must be assigned to full nominal arguments[1]. In order to account for the difference between Passivization and CLC with respect to supression of the demoted subject theta role, I could use Jaeggli's account of passives and say that while passives involve a demoted IP subject, CLC involves a demoted VP subject. Since the Spec of VP is a subcategorised position, the subject theta-role must be assigned to a full nominal argument and the VP subject has to appear. The subject theta-role cannot be assigned to a bound morpheme equivalent to -en .

---

[1]I do not know if Jaeggli's account would work in the light of the VP-internal subject hypothesis.

(c) Case Assignment

Passivization is Case-driven while CLC is not. In passives the adjunct phrase must appear with a Case-assigning preposition (by), whereas in CLC both the subject DP and the object DP participating in CLC have Case. The Spec of ClP is not a Case position while the Spec of IP is. I return to the Case Theory difference between Passivization and CLC in the discussion of point (d) below.

(d) Modular Analysis

Standardly passives are derived through an interaction of Theta Theory and Case Theory; but CLC does not seem prima facie to have a modular analysis.

Passive morphology is supposed to suppress the subject theta-role and Accusative Case. The object needs Case but can get no Case in the complement position of a passive verb because Case-assigning properties of passive verbs are suppressed. The fact that in passives the subject theta-role is suppressed makes it possible for the object to move to Spec of IP and be assigned Nominative Case in that position. A modular analysis of CLC will involve neither Theta Theory nor Case Theory (see section 4.6), but I do not take the fact that a modular analysis of CLC does not involve these two modules to be a problem. A central role in the modular analysis of CLC I will present is played by Koopman and Sportiche's (1991) Class 1/Class 2 dichotomy of languages.

If Jaeggli is right that the subject theta role in passives is taken by the morpheme - en , perhaps we should not say that the subject is demoted in passives. In both Passivization and CLC the object is syntactically promoted. I would like to say that the main component of any analysis is Theta Theory. Some languages can achieve this by moving the object either to the Spec of IP or the Spec of ClP. Other languages only have the first option.

An interesting difference between Passivization and CLC is the following. CLC encapsulates[1] both Passivization and Dative Shift. Passivization can involve only D-structure subjects and objects. CLC can involve either D-structure subjects and objects or D-structure direct and indirect objects.

4.3.3   A'-Properties

A problem for the A- / A'-distinction and the distict syntactic properties associated with each of these two types of position is posed by what is known as

---

[1]As argued earlier on, CLC also encapsulates Raising.

'Webelhuth's paradox', which is based on the observation that scrambled phrases in German can simultaneously serve as binders and license parasitic gaps, thus exhibiting supposedly incompatible syntactic properties. In this section we see that Webelhuth's paradox is extended to MG CLC. DP's in Spec of ClP can simultaneously serve as binders and license parasitic gaps.

4.3.3.1 Parasitic Gaps

At first appearance parasitic gaps do not seem to be licensed in CLC. Consider example (74), below:

(74) *to   vivlío   to parusíase t [khorís na ékhi dhiavási e   prin]
     the book-Acc it presented-he without having read   in advance

The sentence becomes grammatical if a clitic is introduced in the embedded clause (cf. (75)). The clitic in the adjunct clause is standardly taken to be resumptive.

(75) to   vivlío   to parusíase t [khorís na to ékhi dhiavási prin]
    the book-Acc it presented-he   without it having read in advance
    'He presented the book without having read it in advance.'

I want to suggest that (75) could be analysed as a parasitic gap structure, which incidentally in CLC is indistinguishable from a structure involving a resumptive clitic. For the same proposal, but a different instantiation of it, see Sportiche (1992) and section 4.9 of this chapter. The structure of (75) when involving a parasitic gap is as in (75') below:

(75')to   vivlío   to parusíase t [khorís na e to ékhi dhiavási t   prin]
    the book-Acc it presented-he without   it having read in advance

The question arises whether the analysis in (75') is independently motivated. I will claim that it is, if I adopt Brody's (1992, 1993) analysis of parasitic gaps. Parasitic gaps are problematic in a derivational theory. In a parasitic gap structure the parasitic and the primary gap cannot be related through move-a: both gaps are thematic and neither can c-command the other in the strict sense

146

necessary for move-a. However, it is generally assumed that the parasitic and the primary gaps are members of the same (extended) chain. Brody convincingly and independently argues that parasitic gaps involve 'forking' chains, chain-trees in effect. Thus, the parasitic gap structure in 76(a) is taken to involve the chain-tree in 76(b).

(76)a. Which book did you criticize t without e [PRO reading t]?

b.   t]
   [which book
            e t]

Having a forking chain means that the relation between the phrase in A'-position and the parasitic gap is the same as the relation between the phrase in A'-position and the primary gap. It is valid to assume that the main gap and the parasitic gap are left behind by the same type of movement. I take this requirement on parasitic gap structures to be as fundamental as the anti-c-command requirement. If the first part of the forking chain involves wh-movement (i.e. movement falling under the Wh-Criterion), the second part of the forking chain must also involve wh-movement. Similarly, if the first part of the forking chain satisfies the F-Criterion, the second part of the forking chain must also satisfy the F-Criterion. Finally, and crucially for present purposes, if the first part of the forking chain satisfies the Clitic-Criterion, the second part of the forking chain must also satisfy the Clitic-Criterion. Hence, (75) can be analysed as a parasitic gap structure, as in (75'). The forking chain involved in (75') is (77), below:

(77)   t]
   to vivlío
            e t]

4.3.3.2 Reconstruction

In the discussion of A-properties of the Spec of ClP we saw that the DP in Spec of ClP can act as a binder for pronouns, in that it can create or destroy binding possibilities. What we will see in this section is that DP's in Spec of ClP can also trigger reconstruction to their underlying position with respect to Binding Theory.

Namely, disjoint reference is also possible in (78), below. In section 4.3.2.1 we saw that coreference is also possible.

(78) to   Yánni$_i$ ton aghapái i   mitéra   tu$_k$
     the Yannis-Acc him-cl loves the mother-Nom his
     'His$_k$ mother loves Yannis$_i$.'

Similarly in (79). Reconstruction is possible but not necessary.

(79) tu   Yánni$_i$ tu dhósame to   vivlío   tu$_k$
     the Yánnis-Gen him gave-we the book-Acc his
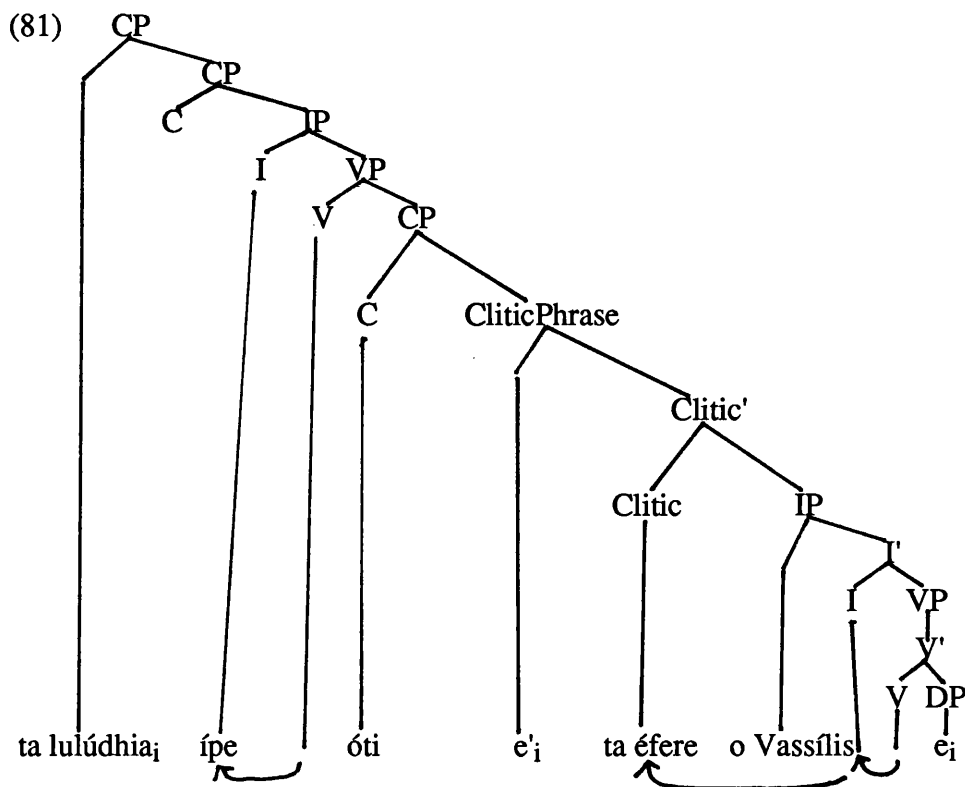   'We gave Yannis$_i$ his$_k$ book.'

CLC does not necessarily destroy existing binding relations. It allows reconstruction, which is an A'-property.

4.3.3.3 Licensing Mechanism For Extraction

CLC is a mechanism for long extraction. This seems to be a property of A'-movement constructions (cf. (80)). The principle advanced here is not the same as Chomsky's (1992) principle that all A'-movement must be licensed in a Spec-head relation. Chomsky's principle does not differentiate A'-movement from A-movement. A-movement must also be licensed in a Spec-head relation.

(80) ta   lulúdhia   ípe óti *(ta)   éfere   o   Vassílis
     the flowers-Acc said-he that them-cl brought-he the Vassilis-Nom
     'As for the flowers, he said that Vassilis brought them.'

The Clitic-Construction involves local movement from an A-position to the Spec of a CliticPhrase. I take any higher movement that follows to be adjunction. This adjunction can be VP-, IP-, FP- or CP-adjunction. (81), below, is the tree-diagram for (80). In (80) *ta lulúdhia* moves first from the embedded object position to the Spec of the CliticPhrase. Once the Spec-head agreement configuration is satisfied the object DP can move higher by adjunction. I take the object DP to adjoin to CP in (80).

(81)

CP
- CP
  - C'
  - IP
    - I'
    - VP
      - V'
      - CP
        - C'
        - CliticPhrase
          - Clitic'
          - Clitic
          - IP
            - I'
            - I
            - VP
              - V'
              - V
              - DP

ta lulúdhiaᵢ   ípe   óti   e'ᵢ   ta éfere   o Vassílis   eᵢ

4.4. The Clitic-Construction and Focalization

I will now discuss claim 3(c) of the Introduction, repeated below:

(3)c. Clitic Doubling generally involves verb-focussing.

I will argue that in CD the DP is in Spec of a ClP, as in CLLD, while the verb is syntactically focussed. For the purposes of the discussion in section 4.4.1 we need to remind ourselves of the F-Criterion, discussed in chapter III and repeated below:

(82) F-Criterion

a. A focussed phrase must be in a Spec-head configuration with F.

b. F must be in a Spec-head configuration with a focussed phrase.

Focussed XPs move to the Spec of FP; focussed verbs go under F. Concerning the respective positions of FP and ClP in the clausal tree, I claim that FP immediately dominates ClP.

4.4.1 Clitic-Doubling

Apart from CLLD there is another construction involving an object DP and a matching clitic, namely Clitic Doubling (CD). CD differs minimally from CLLD in that the object DP is to the right of the verb. CD seems, therefore, to be the mirror image of CLLD. In this section I present an analysis of CD that relates this construction to CLLD. I argue that in CD the DP is still in Spec of ClP, as in CLLD, while the verb is syntactically focussed and is under the head F of a FocusPhrase dominating the CliticPhrase.

(83), (84) and (85), below, are examples of CD.

(83) ta éfere ta lulúdhia o Vassílis
      them-cl brought-he the flowers-Acc the Vassilis-Nom
      'Vassilis did bring the flowers.'

(84) tis stílane tis Marías lulúdhia
      her-cl sent-they the Maria-Gen flowers-Acc
      'They did send Maria flowers.'

(85) tha ta ziyízi ekató kilá
     will them weigh-he a hundred kilos-Acc
     'He must weigh a hundred kilos.'

Three ways of analysing CD have been proposed in the literature, two involving base generation and one involving movement. So in CD the object DP could be in its canonical position or it could be base-generated on the right periphery of the clause. Another analysis takes the object to undergo rightward movement (i.e. adjunction). Kayne argued in his 1992 GLOW talk for there being universally only leftward movement. If he is right, then the third possibility should be eliminated.

The fact that only DPs can undergo CD suggests that the position occupied by the object DP in CD is not the canonical object position. By the same reasoning as that I followed in discussing CLLD, the position under examination cannot be an adjoined position, the Spec of CP or the Spec of FP.

Despite their common properties, CLLD and CD are treated separately in the literature. It is generally assumed and occasionally argued (cf. Cinque (1990) and

Iatridou (1990), among others) that there is no relation between the two constructions. I will present a unification of the two[1].

If one examines whether there is a link between CLLD and CD, two possibilities exist:

(a) that CLLD is an instance of CD
(b) that CD is an instance of CLLD

Cinque (1990) argues against the first possibility. As far as I know, only Sportiche (1992) has explored the second possibility (see section 4.9). I will also explore the second possibility, at the same time doing away with the quite general assumption that in CD the object is in its base-generated position. I will argue that in CD, as in CLLD, the object DP is in Spec of a Clitic Phrase. I have yet to explain the relative order between the object DP and the verb in CD. Why does the object DP follow the verb in CD, if the object DP is in Spec of Clitic Phrase? Examining this issue will provide the link between CLLD and CD.
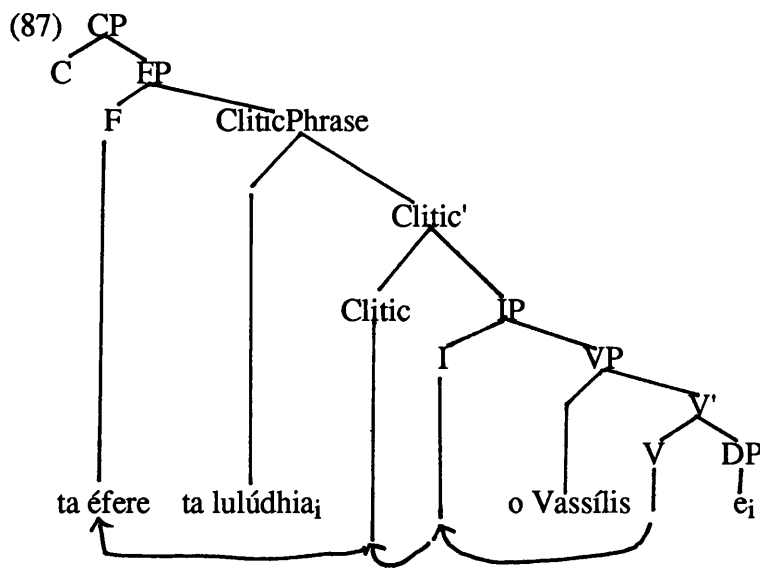
There is a crucial interpretational difference between CD and CLLD. In CD the verb is obligatorily interpreted as focussed, unless some other constituent is focussed in the sentence. There is a restriction in MG to having a single focussed item per clause, as we saw in chapter III. If I choose to focus some other constituent in the sentence, I can do so. If I do not choose to do so, however, the verb is necessarily focussed. This is not the case with MG sentences not involving CD. There is no principle in the language saying that each sentence must have a focussed constituent. Also, there is no principle stating that in each sentence the verb is necessarily focussed. (86)a contrasts with (86)b as far as the interpretation of the verb is concerned. In (86)a the verb is necessarily focussed. In (86)b the verb is not focussed.

(86)a. ta   éfere   ta lulúdhia o Vassílis
       them-cl brought-he the flowers the Vassilis
       'Vassilis did bring the flowers.'

---

[1] As we will see in section 4.9, Sportiche (1992) also argues for a unification of CD and CLLD. He claims that in CD the object DP is in its canonical VP-internal position and that it moves to the Spec of the CliticPhrase by LF. My approach is different.

b. éfere   ta lulúdhia o Vassílis

brought-he the flowers the Vassilis

'Vassilis brought the flowers.'

I will argue that the difference between CD and CLLD concerning the interpretation of the verb correlates fully with a structural difference, namely the fact that in CD the verb precedes the object while in CLLD the verb follows the object. In CD the verb has raised and is under the head F of a Focus Phrase. FP is higher than the CliticPhrase. The obligatoriness of verb-focussing in CD can be explained only by assuming that the verb is under F^1. Constituents in their canonical positions can be optionally focussed as an instance of phonetic focussing. Constituents in Spec of FP are obligatorily interpreted as foci. If the verb in CD is necessarily focussed, this means that it is syntactically focussed. (87), below, is the tree-diagram for example (83).

(87)

Coming back to examples (83) to (85), it should have been noted that omission of the clitic is not permissible, as it was in the examples of CLLD, i.e. examples (7) to (9). Below, I repeat examples (83) to (85), as they should have been notated.

(83') *(ta)   éfere   ta   lulúdhia   o   Vassílis
       them-cl brought-he the flowers-Acc the Vassilis-Nom
       'Vassilis did bring the flowers.'

(84') *(tis) stílane   tis   Marías   lulúdhia
       her-cl sent-they the   Maria-Gen   flowers-Acc
       'They did send Maria flowers.'

(85') tha *(ta) ziyízi   ekató   kilá
      will them weigh-he a hundred kilos-Acc
      'He must weigh a hundred kilos.'

The reason why I did not give (83'), (84') and (85') is because superficially the clitic in (83), (84) and (85) can be dropped. Consider examples (88) to (90) in that respect. But in examples (88) to (90) the DP's that were in CLC in examples (83') to (85') now occupy their canonical positions. The reading of the verb and the reading of the DP have nothing in common in the two sets of examples.

(88)   éfere   ta   lulúdhia   o   Vassílis
       brought-he the flowers-Acc the Vassilis-Nom
       'Vassilis brought the flowers.'

(89)   stílane   tis   Marías   lulúdhia
       sent-they the   Maria-Gen   flowers-Acc
       'They sent Maria flowers.'

(90) tha   ziyízi   ekató   kilá
      will weigh-he a hundred kilos-Acc
      'He must weigh a hundred kilos.'

I would like to briefly compare my analysis of the construction involving an object DP on the right of the verb and a matching clitic with other possible analyses, namely (i) and (ii) below, as far as the interpretation of the verb is concerned.

(i) CD

(ii) Right Dislocation

In my analysis the interpretation of the verb in this construction is accounted for in terms of the position the verb occupies, while in the other analyses there is no link between the position of the verb and its interpretation. In fact, more often than not the alternative analyses do not even note that the verb is necessarily focussed in this construction. Or, when they notice this fact, they do not account for it. Vallduví (1990) in his Right Detachment analysis of this construction in Catalan observes this fact but offers it as a descriptive statement without explaining it.

The present analysis of CD permits a unification of CLLD and CD. A prediction of my theory is that there are no languages with CD but no CLLD. The prediction is borne out as far as I know.

I have argued that in Clitic-Doubling the verb is syntactically focussed, i.e. is under F. This is how I explain the ordering V+DP. I need to add a point of clarification here. There are two cases of CD where the verb is not under F but under C. This is the case in yes-no questions, wh-questions[1] and embedded interrogatives, for instance. In MG embedded interrogatives there is obligatory V-to-C raising.

(91) to   ídhes   to   pedhí?
     it-cl saw-you the child-Acc
     'Have you seen the child?'

(92) pios   to   ídhe   to   pedhí?
     who-Nom it-cl saw-he the child-Acc
     'Who has seen the child?'

---

[1] In wh-questions, where the wh-phrase is interpreted as a focus it could be argued that the verb is actually under F, the wh-phrase occupying the Spec of FP.

(93) rótisa   pios   to   ídhe   to   pedhí
     asked-I who-Nom it-cl saw-he the child-Acc
     'I asked who had seen the child.'

Also, if for some other reason than the ones mentioned above, namely in yes-no questions, wh-questions and embedded interrogatives, there is V-to-C raising, the order in CLC between the verb and the DP will be verb+DP. In these cases the verb is under C while the object DP is in the Spec of the CliticPhrase. We can conclude that in CD the DP is in Spec of the ClP, while the verb raises to the head of some higher functional projection, namely FP or CP.

4.5 Complex Inversion in French

In this section I will discuss Complex Inversion in French. It will be analysed as subject CLC. Finally, I will discuss the Rizzi and Roberts (1988) analysis of this construction. The examination of Complex Inversion in this section will not be conclusive, I will come back to it in section 4.7.1.

The main environment for Complex Inversion in French is root interrogatives[1]:

(a) wh-questions

(1) Où   Jean est-*(il) allé?
     where Jean has he gone
     'Where has John gone?'

---

[1]There are other instances where you can have cooccurrence of a subject and a matching clitic in French, e.g. (3), below:

(3) Jean (il) n' a   rien   dit
    John he not has anything said
    'John did not say anything.'

I am not sure whether the structure in (3) would be rightly characterised as subject CLC. Probably not. There are some important differences between (3), above, and examples (1) and (2) in the main text. A comma intonation can follow the subject DP in (3) but not in either (1) or (2). Also, the construction in (3) is optional while the construction in (1) and (2) is not. Another indication that (3), on the one hand, and (1) and (2), on the other, do not share the same structure could come from the fact that the order between the clitic and the auxiliary verb is not the same.

(b) yes-no questions

(2) Jean est-*(il) allé?
    John has he gone
    'Has John gone?'

I want to address two questions about Complex Inversion, namely 3(a) and (b), below:

(3)a. How is Complex Inversion analysed?
   b. Why does Complex Inversion exist?

In the rest of the section I will consider question 3(a). It consists in identifying the position of the subject DP, the clitic and the verb. Question 3(b) will be looked into in section 4.7.1. The motivation for Complex Inversion will be shown to be a further argument for the CLC analysis of Complex Inversion and also an argument for the existence of the ClP projection.

Let us look at question 3(a) now. The simultaneous presence of a DP and a matching clitic reminds one of CLC and can constitute the first piece of evidence for a CLC analysis of Complex Inversion in French. A second piece of evidence comes from the obligatoriness of the construction. Both CLC and Complex Inversion are obligatory constructions. A third piece of evidence for reducing Complex Inversion to CLC has to do with the order of constituents. Namely, example (1) shows that the subject DP in Complex Inversion occupies a position which is lower than the Spec of CP, filled by the wh-word *où* . In section 4.4 I argued, precisely on the basis of Clitic Doubling facts, that CP dominates FP, which immediately dominates ClP. We would therefore expect a wh-phrase to precede a DP participating in CLC. On the basis of these pieces of evidence I propose that Complex Inversion is subject CLC.

Rizzi and Roberts (1988) discuss and dismiss the possibility of analysing Complex Inversion in French as Clitic Doubling (CLC, in my terms). They compare Complex Inversion to obligatory object CLC in River Plate Spanish and obligatory subject CLC in Northern Italian dialects. To put it slightly differently, they compare a putatively optional CLC structure, with obligatory CLC. I will consider their arguments next. They say that two fundamental properties distinguish

Complex Inversion from CLC in River Plate Spanish and Northern Italian dialects. In their own words (Rizzi and Roberts 1988:2): 'First, the French construction is highly selective in that it is restricted to direct questions and other environments featuring fronting of the inflected verb. No such construction specific restriction is found with the ordinary cases of clitic doubling.' This is not really a problem. The difference Rizzi and Roberts refer to is not a difference between CLC and other constructions, but in this case a CLC-internal difference; namely the difference between optional CLC vs. obligatory CLC. We have seen that optional CLC is CLC that is not obligatory in the language as such but becomes obligatory in certain circumstances. In the case of optional CLC in MG the construction becomes obligatory when the object moves to a preverbal position other than the Spec of CP or the Spec of IP. Similarly, in the case of Complex Inversion we have the following situation: CLC becomes obligatory when the subject does not occupy its canonical position, i.e. Spec of IP, but moves higher to a position which is neither the Spec of FP nor the Spec of CP. This is a way in which the construction specific restriction of Complex Inversion can be stated.

The second property Rizzi and Roberts (1988:2) take to distinguish Complex Inversion from CLC is the following: object pronouns in object CLC in River Plate Spanish and subject pronouns in subject CLC of Northern Italian dialects 'have clear properties of syntactic clitics, which occur attached to the verb or under Infl, and do not occupy an NP position in the syntax; on the other hand, it appears to be the case that French unstressed subject pronouns are in an NP position in the syntax, and are cliticised to the inflected verb in the phonology (for relevant evidence cf. Couquaux (1986), Kayne (1983), Rizzi (1986). The contrast with Northern Italian dialects is revealing; while subject clitics and full subject NP's can, and in some cases must, cooccur in many dialects, the two elements are in full complementary distribution in Standard French.' So, the second argument against a CLC analysis of Complex Inversion advanced by Rizzi and Roberts consists of drawing a distinction between syntactic clitics, which are attached to the verb or are under Infl, and phonetic clitics, which cliticize to the verb at PF. Subject pronouns in French are treated like subject pronouns in English, except that the former also cliticize at PF. They support this distinction by comparing French with River Plate Spanish and Northern Italian dialects. The evidence[1] from a comparison between

---

[1] I will comment on two more pieces of alleged evidence that subject clitics in French occupy the Spec of IP position and cliticize to the verb at PF presented in Rizzi (1986).

French, on the one hand, and River Plate Spanish / Northern Italian dialects, on the other, is not conclusive. The complementary distribution between subject clitics and full subject NP's in most cases does not necessarily imply that the two fill the same position. The complementary distribution between subject pronouns and subject DP's in most environments could be taken to be due to the optional[1] nature of subject CLC in French, as I assume. If we compared object CLC in MG with object CLC in River Plate Spanish we would note exactly the same difference Rizzi and Roberts note between French and River Plate Spanish / Northern Italian dialects. Given that Rizzi and Roberts have qualified subject pronouns in French as phonetic clitics occupying the Spec of IP, they have to say that Complex Inversion involves two NP positions.

I return now to question 3(a). As I have already said I analyse Complex Inversion as subject CLC. In (1) *où* is in Spec of CP and *Jean* is in Spec of CIP. Similarly, in (2) *Jean* is in Spec of CIP. A problem seems to be created with respect to the position occupied by the verb in Complex Inversion. It would appear

---

First, in most Northern Italian dialects, contrary to French, there are gaps in the paradigm of subject clitics. This piece of evidence cannot be taken to be conclusive. In some Northern Italian dialects there are no gaps in the paradigm of subject clitics either. Also, I do not see how the observation that most Northern Italian dialects have gaps in the paradigm of subject clitics proves anything with respect to subject pronouns in French. It is equally difficult to see how a correlation with feature specification (in particular, person and number specification) can show anything about the status of subject clitics in a language.

Second, in French a conjunction of VP's can be predicated of a subject clitic; in the Northern Italian dialects, on the other hand, the subject clitic must be repeated in such structures. Again, this is a difference between optional vs. obligatory CLC. In an example like (1), below, mentioned by Rizzi, the configuration for CLC does not arise in French. We therefore expect that VP-conjunction will not involve repetition of the subject pronoun.

(1) Elle chante et   dance
    she sings and dances
    'She sings and dances.'

Crucially, I would predict that in Complex Inversion cases, when precisely CLC becomes obligatory, repetition of the subject pronoun it obligatory in VP-prediction. The prediction is borne out (cf. (2).

(2) Marie a-t-elle chanté et   a-t-elle dancé?
    Marie has she sung and has-she danced
    'Has Marie sung and danced?'

[1]Optional, in the specific sense of the term used so far. Namely, CLC is optional in a language if it becomes obligatory in specific environments only. The optional / obligatory distinction of CLC used so far could be recast as the environment-sensitive / general distinction of CLC.

that we cannot take the verb to be under C given that the verb cannot come between the wh-phrase in Spec of CP and the subject DP in Spec of ClP in (3) or precede the subject DP in Spec of ClP in (2). Consider the ungrammaticality of (4) and (5), below:

(4) *Où   est-il Jean allé?
    where has he John gone

(5) *Est-il Jean allé?
    has he John gone

One way out of the problem posed by the post-subject position of the verb in (1) and (2) would be to say that the verb need not be under C and in fact it is not. We could take the verb to be under Cl. The Wh-Criterion would then be satisfied at LF.

However I will maintain that in (1) and (2) the verb is in fact under C despite appearances to the contrary. I want to propose that the contrasts in (1) vs. (4) and (2) vs. (5) only give the impression but do not actually show that the verb in (1) and (2) is not under C. I must first resolve the problem of how it can be that the verb is under C if it follows the DP in Spec of ClP. I want to suggest that this question is related to enclisis in Complex Inversion.

In section 4.2 I presented an account of the enclisis / proclisis split in MG according to which the clitic does not move at all. It was claimed that the movements of the verb give rise to the split concerned. I went on to suggest that this account of the enclisis / proclisis split could hold for more languages with clitics. Arguably it could account for the enclisis / proclisis split in French and Italian. French has enclisis with affirmative imperatives and proclisis with all other verb forms. Italian, on the other hand, has enclisis with imperatives and infinitives and proclisis with all other verb forms. Pollock (1989) has shown that the infinitive in French remains in situ. Belletti (1990), on the other hand, has shown that the infinitive in Italian raises to Infl. I observed that the proclisis / enclisis split of infinitives in the two languages correlates with their assumed position. For me all the position of adverbs with respect to infinitives in French and Italian shows is that infinitives are lower than I in French but higher than V in Italian. Infinitives in Italian could, for that matter, occupy any position higher than V, namely either I or C. Pending further evidence we cannot in principle establish whether the position

filled by Italian infinitives is I or C. I accounted for the proclisis / enclisis split in Italian vs. French as follows: Infinitives are base-generated in V in French and remain there, while infinitives in Italian are base-generated in C.

I also hinted at that stage that Complex Inversion in French will be treated as another instance of enclisis. I will now make this proposal more concrete. I propose that in Complex Inversion the verb is base-generated under C. For the verb and the subject clitic to come together there is verb-lowering to Cl by S-structure. This is how the order 'wh-phrase+subject+(verb+clitic) is derived. 6(a) and (b), below, are the D-structure and S-structure tree-diagrams of example (1):
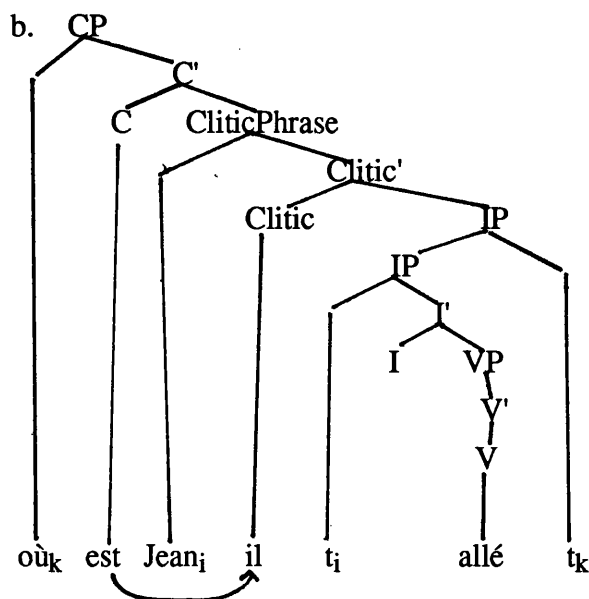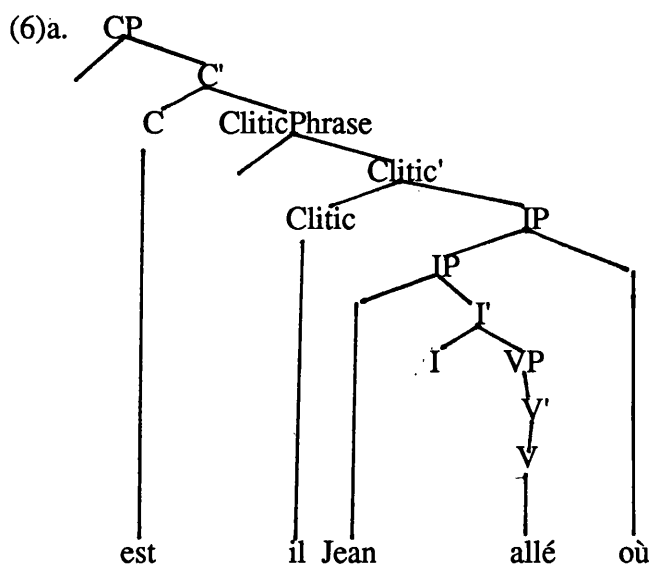
The restriction of Complex Inversion to root sentences (cf. (7)) can be straightforwardly accounted for. In embedded interrogatives the verb has been shown to be under I. There is no I-to-C or base-generation of the verb under C in embedded interrogatives.

(7) *Je me demande où   Jean est-il   allé
    I wonder-I where John has-he gone
    'I wonder where John has gone.'

I will next briefly present Rizzi and Roberts's (1988) analysis of Complex Inversion. The subject DP occupies the Spec of VP position . Nominative Case assignment cannot take place to the right. For this the subject DP is left-adjoined to C'. The complete structure is as in (8) below:

(8) [CP wh [C' DP [C' [C I-cl] IP]]]

Rizzi and Roberts have to account for the contrast in 9(a) / (b), below. They develop a suggestion by Szabolcsi (1983) and propose that 9(a) is ruled out by Case Theory. The motivation for Complex Inversion is to be found in Case Theory. In particular, I-to-C raising in French is taken to destroy the configuration for Nominative Case assignment in French, the assumption being that Nominative Case can only be assigned leftward. In (8) the subject DP is governed by I and is to the left of it. Therefore it is assigned Nominative Case from right to left as in declarative clauses. The pronoun occupies the Spec of IP and incorporates with the inflected verb after the latter has moved to C. 9(b) is saved because subject pronouns can incorporate into the verb and satisfy the Case Filter in that way. In my theory subject-aux inversion is not restricted to pronominal clitics in French because example (2) is also analysed as an instance of subject-aux inversion. The contrast between 9(a) and (2) is derived independently in my theory.

(9)a. *Est Jean allé?
       has John gone

   b. Est-il allé?
      has-he gone

Complex Inversion can only arise when I moves to C, because the environment in which the two subjects are both able to satisfy the requirements of Case Theory depends on the presence of the inflected verb in C.

What this theory does not explain is why the expletive subject pronoun is needed in Complex Inversion. If the configuration in Complex Inversion is one in which Nominative Case can be assigned to the subject DP, why do we need an expletive subject pronoun at the same time.

Rizzi and Roberts derive the restriction of Complex Inversion to root clauses through an adaptation of Baker's (1988) theory of head-to-head movement in conjunction with a strict interpretation of the Projection Principle. Rizzi and Roberts (1988:4) claim that their 'approach immediately explains why inversion is impossible if C is filled'; but note that 'inversion' in embedded interrogatives is also impossible when the Spec of CP and not C is filled (cf. (7)). I do not see how example (7) would be ruled out in the Rizzi and Roberts account.

In their Appendix II (p. 33-35) Rizzi and Roberts replace C' adjunction of the subject DP with a different system. The result of inversion is a clause headed by C and by I. Two specifier positions are licensed: the typical specifier of C, the landing site for wh-movement, and the typical specifier of I, a subject position. Both positions are used in Complex Inversion.

Another undesirable aspect of the Rizzi and Roberts analysis and all analyses advocating that subject pronouns in French fill the Spec of IP position (e.g. Kayne 1983) is the following. Subject-aux inversion is restricted to pronominal subjects in French. Consider again the contrast between 9(a) and (b).

Rizzi and Roberts do not explain why the clitic is needed in Complex Inversion. Couldn't we have just the DP and adjoin it at some stage to C' for Case to be assigned? I can see the point behind Rizzi and Roberts' account of the subject-clitic inversion; but I do not see how their theory can explain the obligatoriness of the clitic in Complex Inversion. My account, on the other hand, is interested in the derivation, not just representation. This analysis keeps the intuition in Rizzi and Roberts about the two specifier positions and at the same time gives a reason for the obligatory appearance of the clitic in Complex Inversion.

I have presented a CLC analysis of Complex Inversion in French, and contrasted the situation in Northern Italian dialects and French by reference to the obligatory vs. optional subject CLC distinction. In the discussion of optional object CLC in section 4.2 it was argued that one of the differences between obligatory vs. optional object CLC is that the second only becomes obligatory in certain

circumstances. In particular, movement of the object DP needs to be licensed in a Spec-head relation, where licensing in the Spec of ClP is one possibility. If Complex Inversion is analysed as optional subject CLC, the question arises as to the environment that forces its appearance. Establishing a parallel with object CLC would amount to saying that the subject is licensed in the Spec of ClP. Descriptively speaking, this is acceptable, but there is the problem of motivation, namely question 3(b). Why does question formation in French require movement of the subject? Question 3(b) will be addressed in section 4.7. The issue needs to be discussed for the additional reason that a difference in the motivation between optional object and subject CLC appears to undermine the CLC analysis of Complex Inversion. It will be shown in section 4.7, however, that there is no difference in motivation; only that licensing of a moved DP is not the reason why you can have CLC for either objects or subjects.

4.6 The Clitic-Construction and Parametrization

Not all languages with clitics exhibit the Clitic-Construction[1]. Interestingly, it is not the case that a language with clitics simply either has CLC or not. The patterning I want to look at is the one that French shows. In particular, French only has subject but not object CLC although it has both subject and object clitics. Another relevant distinction I wish to consider is that between French and other Romance languages and MG, which exhibit object CLC. In this section, I will look into the French-internal split as well as into the split between French and other Romance languages and MG and I will try to account for them. The two splits will be shown to correlate. The question to be asked is (10), below:

(10) Why does French only exhibit subject CLC?

I provide an answer to question (10) which makes use both of the proposal that the Spec of ClP is a mixed position and of Koopman and Sportiche's (1991) theory of subjects. I claim that the presence vs. absence of object CLC in a language with object clitics is explained once one has an understanding of the properties of the Spec of ClP position.

---

[1]As I have already said, in this chapter I am only interested in optional CLC.

I follow Koopman and Sportiche (1991), who argue that languages fall into two classes. In both classes the subject is generated in a VP-adjoined position[1]. In Class 1 languages the subject must move to the Spec of IP position. In Class 2 languages the subject does not have to raise to the Spec of IP. Interestingly, French is a Class 1 language while MG is a Class 2 language. So we see that in French the Spec of IP must be filled and it is the subject that must move there.

In section 4.3 it was argued that the Spec of ClP is a mixed A- and A'-position. It was shown that the Spec of ClP has properties which are characteristic of subjects. I would predict, then, that languages with obligatory externalisation of the subject to the Spec of IP will not have object CLC. I know of no counterexamples, French being the obvious candidate. French has obligatory movement of the subject to the Spec of IP and does not have object CLC.

For Kayne[2] the division between French and the other Romance languages relates crucially to Case Theory. According to Kayne's generalization the possibility or not of CD in languages with clitics is reduced to the availability of prepositional Case markers for the object DP. So in Spanish, where the dummy Case-marker a is available, CD is possible. Consider (11):

(11) Lo   vi   a Juan.
     him-cl saw-I   John
     'I saw John.'

It should be noted that the preposition a does not have any meaning when accompanying direct objects. The standard account of (11) in terms of Kayne's generalisation is that a is a dummy Case-marker that is inserted to satisfy the Case Filter now that the Case assigned by the verb is absorbed by the clitic. My view, on the other hand, is that Case Theory has nothing to do with CLC and that there is no question of attributing to elements such as a in Spanish and pe in Romanian the property of satisfying the Case Filter. Significantly, in the non-CLC version of example (11) the preposition a is also obligatory. Consider (12):

---

[1]I differ from Koopman and Sportiche (1991) in assuming that the subject is not base-generated as a sister of VP and a daughter of Vmax, as they claim, but in the Spec of VP. This difference does not bear crucially on the issues discussed.
[2]Jaeggli (1982) and Borer (1983) have also given accounts of the presence vs. absence of CD in languages with clitics.

(12) Vi *(a) Juan

      saw-I   John

      'I saw John.'

There are two further problems for Kayne's analysis. First, why could not French *à* function as a dummy Case-marker in CLLD, as it can in causative constructions? It is significant that Spanish does not allow the Clitic-Construction with indirect objects, also introduced by *a* , *a* having meaning in this case (cf. (13)). A second problem for Kayne's analysis is raised by subject CLC in French, where no dummy Case-marker is required. The above facts cast suspicion on Kayne's generalization. *pe* and *a* are not really Case-markers[1].

(13) *Se   lo   doy   a Juan

      to him it-cl give-I to John

I project a ClP for all clitics irrespective of whether they can participate in CLC or not. I suggest that the Spec of ClP is not available for DP's to move into with respect to those clitics that do not participate in CLC. Saying that the Spec of a ClP is not always available does not seem to me to be a problem. Some specs of functional projections are systematically nonavailable (cf. the Spec of AspectPhrase, for instance). When there is a clitic and no matching DP I propose that the theta role is borne by a pro in situ, which is identified by the Cl.

French has object clitics but no object CLC.

4.7 Another Argument for CliticPhrase

In section 4.7.1 I look at a property of verb-focussing in MG. Namely, when the verb is focussed and happens to have a specific object, a clitic matching the specific object obligatorily appears on it. The verb-focussing facts in MG show that either movement of a specific DP or movement of the verb can invoke the Clitic-Criterion[2]. Up to this point the assumption has been that only movement of a

---

[1] They are rather animateness markers.

[2] In the discussion of the facts I use a movement framework rather than a representational one. This is only done for reasons of convenience. I do not wish to commit myself here to either model. In a representational model the observation that either movement of a specific DP or movement of the verb can invoke the Clitic-Criterion will have to be stated differently, that is if it can be stated. Also the

DP causes the Clitic-Criterion to apply. The verb-focussing facts discussed here are shown to constitute another argument for the existence of the CliticPhrase projection.

In section 4.7.2 Complex Inversion in French is reexamined in the light of the earlier proposal that movement of the verb can trigger the Clitic-Criterion. In the discussion in section 4.5 it was argued that in Complex Inversion the verb is base-generated under C and lowers by S-structure to pick up the subject clitic. I propose that base-generation of the verb under C makes all the intermediate A-heads visible. It is then suggested that this provides the answer to question 3(b), raised earlier on, about the motivation for Complex Inversion. Base-generation of the verb in C makes the subject clitic appear. The appearance of the clitic in turn causes the Clitic-Criterion to apply. The subject DP has to move to the Spec of ClP. Complex Inversion is seen as evidence of the same type as that presented in section 4.7.1 for the existence of the ClP projection.

To recapitulate, in section 4.7 discussion is centered on two facts, i.e. 14(a) and (b):

(14)
a. Verb-focussing in MG presupposes the Clitic-Construction.

b. Subject CLC is obligatory in French questions.

The verb-focussing facts in MG and Complex Inversion in French can be said to fall under the following generalization:

(15) When the verb is under C, either because it was base-generated there or moved to that position, all intermediate A-heads become visible.

It is claimed that the appearance of the clitic on the verb in verb-focussing in MG and Complex Inversion in French can be taken as an argument for the existence of the ClP projection. For the moment I can only offer (15) as a generalization without accounting for it.

---

account given would probably have to be in terms of interactions between head- and XP-chains.

4.7.1 Verb Focussing in MG

In this section I examine a property of verb-focussing in MG, which will turn out to be informative about the status of the Clitic-Criterion and will also constitute an argument for the need to project a ClP.

The property in question is the following: when the verb is focussed and happens to have a specific object, a clitic matching the specific object obligatorily appears on the verb. Consider example (16) in this respect.

(16) *(ta) éfaye   ta míla   to pedhí
      them ate-he the apples-Acc the child-Nom
      'The child did eat the apples.'

Given that in (16) the verb is obligatorily interpreted as focussed, irrespective of whether it bears focal stress, I assume that (16) is an example of syntactic verb-focussing, the verb being under F[1].

Notice that (16) is ambiguous in its derivation. Examples like (16) are generally quoted as instances of Clitic Doubling. I argued in section 4.4 that Clitic Doubling should be analysed as CLC plus verb-focussing. Namely, the Clitic-Criterion is satisfied first and then the verb moves to F. If this is the derivation of (16) then the step immediately preceding (16) is represented by (17) below. In (17) the Clitic-Criterion has applied but movement of the verb to F has not yet taken place.

(17) ta   míla   ta éfaye to   pedhí
      the apples-Acc them ate-he the child-Nom
      'The apples, the child ate them.'

At present I am interested in the alternative derivation of (16). In that derivation the stage immediately preceding (16) is represented by (18) below. The verb is under F while the object DP has not yet moved to the Spec of the ClP. In this derivation what we have initially is a structure corresponding to sentence (19). If we wish to focus the verb, we have (18) as a first step and ultimately (16). Note

---

[1]Perhaps all verb-focussing in MG is syntactic and there is no phonetic verb-focussing. This question will not be looked into further here.

that if we wish to focus the verb in (19), for some reason (20) is not a possibility, contrary to what we would expect. We need to establish what this reason is.

(18)[1] *ta   éfaye to   pedhí   ta   míla
       them ate-he the   child-Nom the   apples

(19) to   pedhí   éfaye ta   míla
     the   child-Nom ate-he the   apples-Acc
     'The child ate the apples.'

(20) *EFAYE to   pedhí   ta   míla
     ATE-he the   child-Nom the apples

Both derivations have the steps (i) and (ii), below, but in the reverse order.

(i) satisfaction of the Clitic-Criterion
(ii) verb-raising to F

Step (i) results from an instance of XP-movement, in particular substitution, while step (ii) is an instance of head movement. In section 4.4 I presented an analysis of Clitic Doubling as an interaction between CLC and verb-focussing. The interaction of steps (i) and (ii) in Clitic Doubling simply meant that there was an ordering between steps (i) and (ii). This ordering and the interaction, in general, were not forced by any principle; they were just instances of move-α applying and in the end giving a particular outcome.

Saying, as I did above, that both derivations of example (16) have steps (i) and (ii) but in the reverse order is not enough. In the second derivation of example (16) it is not just that step (ii) precedes step (i). Rather step (ii) applies first and forces step (i) to apply. In the first ordering between steps (i) and (ii), namely in the ordering where step (i) precedes step (ii) we could have stopped at step (i). The result would have been CLC. In the second ordering between steps (i) and (ii), namely in the ordering where step (ii) precedes step (i) we are forced to proceed to step (i) after step (ii). I will now try to establish why this is necessary.

---

[1]Example (18) is grammatical if it is assumed that the object DP already occupies the Spec of ClP while the subject DP is adjoined to ClP.

I will need the Head Movement Constraint in (21), below, but this will not be enough.

(21) The Head Movement Constraint

Movement of a zero-level category β is restricted to the position of a head α that governs the maximal projection γ of β, where α θ-governs or L-marks γ if $\alpha \neq C$.

The Head Movement Constraint in (21) requires sucessive cyclic movement of the verb. I think that the constraint is a bit too strong, as all we would want it to do is force successive cyclic movement through all A-heads but not through A'-heads. This is a concept not different in essence from the main principle of Relativized Minimality (Rizzi 1990). Heads of the same type must be picked up by the verb. The difference could be crucial but I will not discuss any data that make this clear here[1]. Usually A'-heads are seen as targets of verb-movement. So, in movement of the verb to C, for instance, the verb is supposed to pick up Infl but not F, even though F comes in between. The way this is usually handled is by not projecting FP when there is no focussed constituent in the sentence. I take the obligatory presence of the clitic in verb-focussing in MG to mean that the clitic is an A-head. The head of the CliticPhrase becomes visible when the verb passes through it. The appearance of the object clitic makes it necessary for the Clitic-Criterion to apply next. The facts also suggest that ClP dominates IP. Given all this, (22), below, is the tree-diagram for (16).

(16)

---
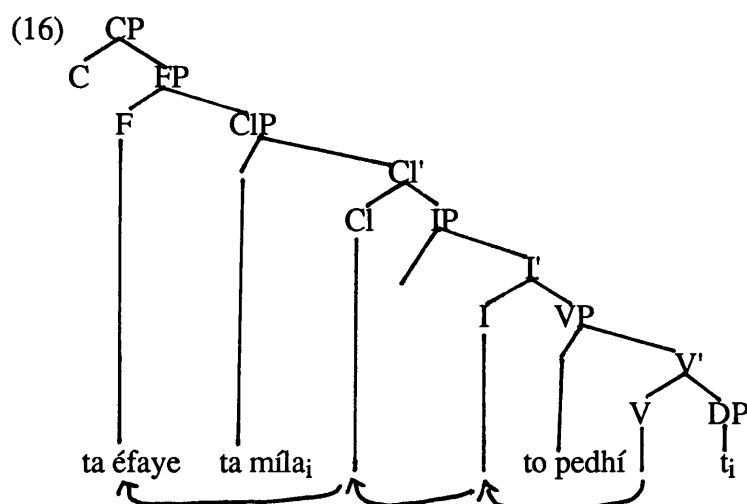
[1]For some relevant discussion see the Appendix.

It is not only verb-focussing that causes the clitic to appear on the verb. Suppose some constituent other than the verb is syntactically focussed in a sentence and the verb also has a specific object. A clitic matching the object DP obligatorily appears on the verb. Consider (23):

(23) FIDHI   ton íkhe dhagósi ton Cósta
     SNAKE him had-it bitten the Costas
     'It was a snake that had bitten Costas.'

Also, in questions, either yes-no or wh- questions, when the verb has a specific object a matching clitic on the verb is strongly preferred (cf. (24)). The strong preference as opposed to obligatoriness is explained by the fact that the verb in MG optionally moves to C in questions.

(24) (ton) ídhes   ton Yánni
     him   saw-you the Yannis
     'Have you seen Yannis?'

Next I wish to look at the Clitic-Criterion (cf. (25)) again in the light of the main point of this section, namely that movement of the verb to either F or C makes a clitic appear on the verb and thus triggers the Clitic-Criterion.

(25) By S-structure: Clitic-Criterion
In CLC:
a. A DP must be in a Spec-head configuration with a matching clitic.
b. A clitic must be in a Spec-head configuration with a matching DP.

Although from the point of view of representations clauses (a) and (b) of the Clitic-Criterion appear to describe the same well-formedness condition, from the point of view of derivations clause (a) more accurately describes movement of a DP while clause (b) more accurately describes movement of the verb.

To recapitulate, movement of the verb to some head higher than IP makes the clitic visible. I take this to mean that the CliticPhrase projection is always present in the clausal tree. Moreover I claim that this is an argument not just for the existence of the ClP as a projection but also for the position that Cl is an A-head (as

170

well). Movement of a DP triggering the Clitic-Criterion is compatible with the Cl being either an A-head (cf. subject agreement in Arabic) or an A'-head (cf. the Wh-Criterion). It seems that movement of the verb triggering the Clitic-Criterion is only compatible with the Cl being an A-head, either exclusively or additionally.

In the Appendix I will discuss some data that are potentially problematic for the proposal that when the verb is under some head higher than IP and there is a specific object in the sentence a clitic matching the specific object appears on the verb.

4.7.2 Complex Inversion in French

I will now return to Complex Inversion in French in the light of the observation discussed in the previous section, namely that movement of the verb to some head higher than IP triggers a clitic on the verb when the latter has a specific object.

I propose that Complex Inversion in French can be analysed in a similar way to verb-focussing in MG as will be made clear in what follows. Remember that in section 4.5 an analysis of Complex Inversion as subject CLC was presented but question 3(b), repeated below, about the motivation for Complex Inversion remained unanswered.

(3)b. Why does Complex Inversion exist?

At that point the only motivation for CLC in general was movement of a DP. It was therefore difficult to make sense of the fact that the subject had to move in questions. I suggest that the situation with Complex Inversion is in essence no different than what goes on in I-to-C movement of the verb in MG. Rather than trying to find why the subject has to move in Complex Inversion we should perhaps ask ourselves whether it is in fact clause (b) of the Clitic-Criterion that is more crucial here. In particular the question is raised whether it is the verb that triggers the Clitic-Criterion. I will argue that this is in fact where the answer to question 3(b) is to be found, even though the verb does not move in Complex Inversion. I claimed, however, in section 4.5 that the verb is base-generated under C in Complex Inversion, and I propose that this triggers the appearance of the subject clitic. The subject clitic forces the Clitic-Criterion to apply with the result that the subject moves to Spec of ClP. All intermediate A-heads between V and C

have to become visible. Base-generation under C or movement to C (cf. section 4.7.1) does not make any difference with respect to current purposes. A verb under C, the result of either movement or base-generation, makes the head Cl appear.

I take the obligatoriness of the subject clitic in Complex Inversion to be an argument, of the same type as that presented in the previous section, for the projection of a ClP. At the same time the parallelism between verb-focussing in MG and Complex Inversion in French as far as the clitics are concerned suggests that the CLC analysis of Complex Inversion is on the right track.

4.8 Clitic Climbing

I have argued that clitics head their own maximal projection and that they never undergo head-movement on their own. The Clitic Climbing construction appears to challenge the claim that clitics do not undergo head-movement. I will argue that this is not necessarily so and I will offer, instead, a raising analysis of Clitic Climbing. In this analysis the clitic is base-generated as a functional projection of the clitic climbing verb. When there is a DP matching the clitic, this DP must satisfy the Clitic-Criterion and therefore raises from its canonical position as sister of V to the Spec of ClP.

4.8.1 The Analysis

Consider examples of Clitic Climbing from Italian:

(26) Gianni li vuole vedere
     Gianni them wants to see
     'Gianni wants to see them.'

(27) Gianni ve li vuole mostrare
     Gianni you-Dat. them wants to show
     'Gianni wants to show them to you.'

(28) Piero ti verra a parlare di parapsicologia
     Piero you-Dat will come to speak about parapsychology
     'Piero will come to speak to you about parapsychology.'

(29) to (31) are examples of Clitic Climbing from Spanish:

(29) Paco   te   las   quiere   dar
      Paco you-Dat. them wants to give
      'Paco wants to give them to you.'

(30) Lo   voy   a enviar
      it   am going to send
      'I am going to send it.'

(31) Lo   tengo   que hacer
      it   have-I that to do
      'I have to do it.'

Kayne (1989) analyses Clitic Climbing as adjunction of the clitic to matrix I that passes through C, with movement of the clitic taken to be head movement. It seems to me that Kayne's analysis raises the problem of motivation for the adjunctions posited. I wish to repeat a point I made in the discussion of Complex Inversion in French. Namely, I think that the optimal analysis of a construction is not just one that can provide positions for the constituents under examination, but one in which the positions suggested are motivated outside the offered analysis. So if it is the case that the verb adjoins to the matrix I in Clitic Climbing a reason should be given not just for why it can do so but also why it would opt to do so. Also, while I can see the interpretive import for XP-adjunction (possibly topicalization) it is difficult for me to see the interpretive import of head adjunction, especially in the case of a functional head, if I am right in the analysis I give of clitics. Moreover, if Clitic Climbing is successive cyclic head movement obeying the relevant constraints, I do not see how we could explain the fact that it is lexically restricted. The fact that Clitic Climbing is possible with certain verbs only, indicates that the property involved cannot be simply that of head-movement. Why would the main verb have anything to do with Clitic Climbing if we only had to do with head movement? How will Kayne's analysis of Clitic Climbing stop Clitic Climbing from taking place with all verbs? Another problem for Kayne's analysis of Clitic Climbing is posed by the Principle of Economy. This would be an instance of head movement not motivated by the Principle of Economy because there is a closer I for the clitic to attach to.

The main characteristic of my analysis of clitics is that clitics head a distinct functional projection. They do not raise to attach to a verb; on the contrary, it is the verb that moves in order to pick up the clitics. Clitics do not move by themselves but can only move along with the verb, if the verb moves higher than the CliticPhrase. This analysis of clitics is not incompatible with Kayne's analysis of Clitic Climbing. I do not adopt Kayne's analysis because of the problems I think it has, which I enumerated in the previous paragraph. I will propose instead an analysis of the Clitic Climbing construction that does not make use of clitic-raising but relates Clitic Climbing to raising of DP's. I argue that the clitic in Clitic Climbing is a functional head of the verb it appears attached to. The clitic projects a ClP and the Clitic-Criterion must be satisfied. The Spec of the CliticPhrase is an available argument position (a non-theta external argument position) that can be filled by either pro or an overt DP. The tree for (26) is then (32), below:
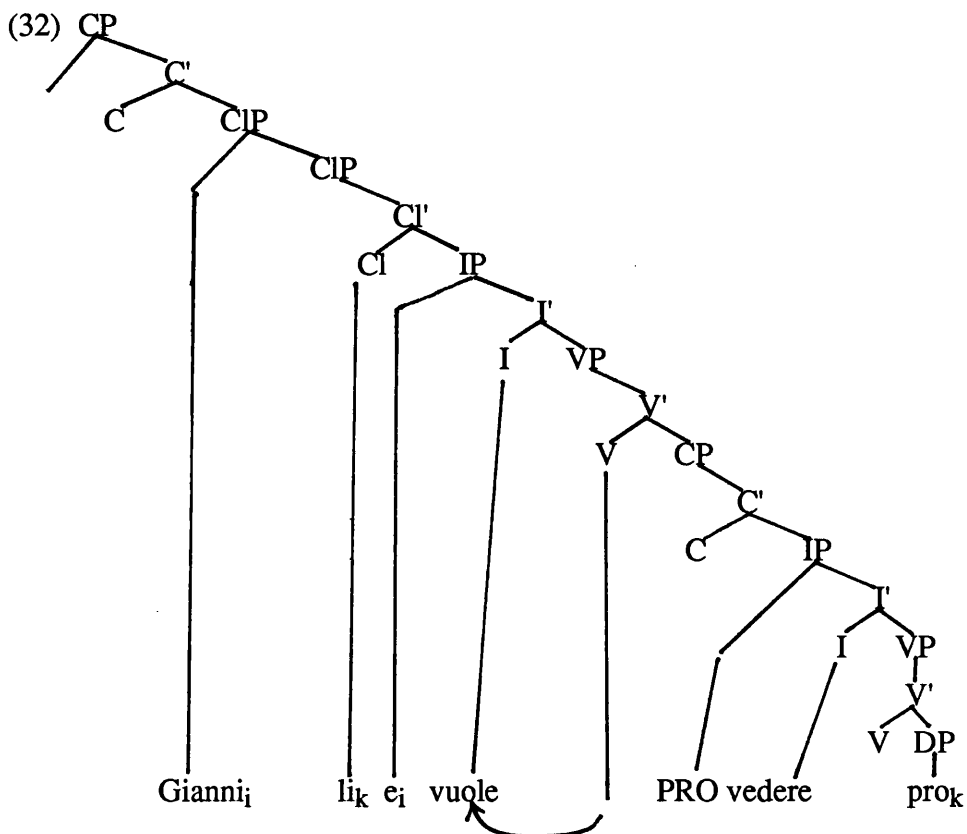
Given the raising analysis of Clitic Climbing it is perhaps more accurate to say that the embedded clause in (32) is an IP, like in all raising cases, and not a CP as it is marked in the tree-diagram.

In section 4.3.2 it was shown that the Spec of ClP can be the target position of raising. Clitic Climbing differs minimally from those examples of raising in that the 'raising' verb here is a personal verb[1]. In both cases raising is not to the object position but to an A-position that is independently shown to have properties similar to those of subjects. I will next show systematically that Clitic Climbing shares properties with raising:

(33)

i. Both raising and Clitic Climbing are lexically specified processes. There are clitic climbing verbs just as there are raising verbs.

ii. There is no super Clitic Climbing just as there is no super raising.

iii. In each language, the type of sentences out of which Clitic Climbing is allowed is the same as the type of sentences out of which raising is allowed.

iv. *seem* imposes no selectional restrictions on its subject. Nor does *volere* on the object DP.

v. *seem* can take expletive it as its subject or non expletive subjects. What forces the presence of it is the EPP. *volere* can be a Clitic Climbing verb or not.

vi. *seem* allows as subject an NP licensed by the predicate of the clause embedded under it. So does *volere* with respect to the object.

Properties 33(iv), (v) and (vi) have as a necessary (but not sufficient) precondition the fact that a raising verb does not assign an external theta role. This also applies to Clitic Climbing verbs with one proviso. Clitic Climbing verbs have assigned all their theta-roles but still have some empty syntactic slot. The verb *volere* , for instance, has assigned both its theta roles.

vii. As Koopman and Sportiche (1991) have shown, modals are raising verbs. Some Clitic Climbing verbs are also modals. Spanish modals, for

---

[1]According to Kayne (1989), Clitic Climbing in Italian and Spanish is prohibited if the matrix verb is impersonal. Verbs like *sembrare* 'seem' allow clitic climbing for some speakers (Burzio 1986, 392). The fact that Clitic Climbing is prohibited with impersonal verbs is not a problem for the raising analysis of Clitic Climbing. It seems that the possibility of projecting a ClP relies crucially on the Case-assigning properties of the clitic climbing verb.

instance, are Clitic Climbing verbs and should, therefore, be taken to be raising categories. Spanish *ir a* and *tener que* have become modals, as their meaning shows.

In relating Clitic Climbing to raising, the steps in the argument are the following:

(a) There are more cases of raising than is generally assumed. In fact, there are the following possibilities of raising, as was shown in section 4.3.2:

(i) Spec[IP]-to-Spec[IP]

(ii) Spec[IP]-to-Spec[CliticPhrase]

(iii) Spec[CliticPhrase]-to-Spec[CliticPhrase]

(iv) Spec[CliticPhrase]-to-Spec[IP]

(b) If raising to the Spec of a ClP is possible, then raising verbs need not be impersonal verbs. I take it that this possibility is in fact realised. It is the Clitic Climbing construction.

So far I have illustrated the claim that Clitic Climbing and raising have common properties (cf. 33(i) to (vii) and shown the steps in the argument that Clitic Climbing should be analysed not as raising of the clitic but as raising of the matching DP, either overt or pro. I will next present another argument for this claim. It was argued earlier on that the raising analysis of Clitic Climbing is not undermined by the fact that impersonal verbs do not allow Clitic Climbing. With respect to clitic climbing verbs, it seems that the possibility of projecting a ClP relies crucially on the Case-assigning properties of the clitic climbing verb[1]. Impersonal verbs have no Case to assign; hence the impossibility of Clitic Climbing with impersonal verbs. I would predict, however, that clitic climbing verbs[2] should allow standard Raising. The prediction is borne out. What I have in mind is the Italian construction referred to as Long Object Preposing (LOP). In LOP the object of the embedded verb moves into matrix subject position. Consider the following example of LOP from Burzio (1986:322).

---

[1]The generalization seems to hold only for clitic climbing verbs that are not modals. Consider (30), for instance. *ir* , as a lexical verb does not have any Case to assign.
[2]Again with the proviso that they are not modals.

(34) Questi libri si   volevano proprio leggere
    these books SI wanted-they really to read
    'We really wanted to read these books.'

Note that, as Rizzi (1978a) observes, the same verbs that allow Clitic-Climbing also allow LOP. This patterning of facts is explained by the present analysis of Clitic Climbing but it is not obvious how this correlation of facts could be explained if we adopted Kayne's analysis of Clitic Climbing.

A further argument for a raising analysis of Clitic Climbing bears on another observation by Rizzi (1982). He notes that in the Italian *easy to please* construction the gap can be two infinitives distant as long as the higher infinitive is of the class that allows Clitic Climbing. For example, *cominciare* 'begin' is of this class but *promettere* 'promise' is not, and there is the following contrast:

(35)a. Questa canzone e facile da cominciare a cantare...
       'This song is easy to begin to sing...'

    b. *Questo lavoro e facile da promettere di finire per domani.
       'This work is easy to promise to finish by tomorrow.'

For me 35(a) involves successive applications of NP-movement, in particular successive raising. In 35(a) there is an intermediate trace of *questa canzone* in the Spec of a ClP projected by *cominciare* . Again, it is difficult to see how this apparent instance of Super-raising can be explained otherwise.

Additional evidence for the present analysis of Clitic Climbing comes from the fact that it can explain the noted absence of Clitic Climbing object control verbs. According to Rizzi (1982) and Kayne (1989) all the standard cases of clitic climbing verbs are cases of subject control verbs or raising modals. What is absent is object control verbs. The theory I have presented has an explanation for this. If there was an object, the Spec of the CliticPhrase could not be used as a nontheta position to which raising would be possible.

Consider the contrast in 36(a) and (b).

(36)a. ?Mario, non lo$_i$ saprei [a chi affidare t$_i$]
       'Mario, I would not know to whom to entrust him.'

b. *Su questo problema, non lo_i saprei [se consigliare t_i]

'On this problem, I would not know whether to advise him.'

It seems that Clitic Climbing is marginally possible when the [Spec, CP] of the lower clause is filled (cf. 36(a)) but not when C of the lower clause is filled (cf. 36(b)). The contrast in 36(a)/(b) is taken by Kayne (1989) as an argument that clitic placement in Clitic Climbing is head-movement. However, Rizzi (1982) has shown that the above contrast also appears in Long Object Preposing (LOP) in Italian. But LOP has been shown to involve XP-movement. Therefore, Sportiche (1992) concludes, the contrast in 36(a) and (b) cannot be taken as an argument for head-movement. Sportiche (1992) sides with Kayne (1989) in assuming that movement is involved in Clitic Climbing but takes that movement to be phrasal movement. Sportiche, presumably, has the clitic moving as well, but the contrast in 36(a) and (b) is for him due to phrasal movement. The question is how the following contrast can be derived in my system. An important difference between Sportiche's (1992) system and mine is that in my theory the ClP is a functional projection of the higher verb. If this is a raising mechanism, the CP projection must be somehow nullified. This can be achieved in a number of ways: either the projection is not there at all (cf. standard cases of Raising) or the verb is in C (cf. raising in MG, which is always out of a *na* -clause). If the C position is filled, the verb cannot be there, unless the element in C causes the verb to raise. I take the data in (36) to be an argument for XP-movement, but for a different reason than that assumed in Sportiche (1992).

Finally, the absence of Clitic Climbing in French follows naturally from the absence of object CLC in that language.

4.8.2 Clitic Climbing in MG

MG has the Clitic Climbing construction. However, there is a difference between Clitic Climbing in MG and Clitic Climbing in Italian, for instance. Consider example (26), repeated below, and its MG counterpart in (37).

(26) Gianni   li   vuole vedere
     Gianni them wants to see
     'Gianni wants to see them.'

(37) o Yánnis   tus   théli   na *(tus) dhi
     the Yannis them   wants   that them   sees
     'Yannis wants to see them.'

In MG, but not in Italian, it is required that a clitic matching the clitic on the clitic climbing verb appear on the embedded verb. Interestingly, raising imposes the same restriction (cf. section 4.3.2.3.1) as example (38) shows. I take this further parallelism between Clitic Climbing and raising in MG data to suggest that the raising analysis of Clitic Climbing is on the right track. As in the discussion of raising in section 4.3.2.3.1, I propose that the need for the clitic in the embedded clause can be seen as a result of the fact that raising is out of CP's in MG.

(38)a. to   pedhí   fénete na   to ékhun sta ópa ópa
       the child-Nom seems   that it   pamper-they
       'The child seems to be pampered.'

   b. tu   pedhiú   tu   fénete   na   to ékhun sta ópa ópa
      the child-Gen it-Gen seems   that it-Acc pamper-they
      'The child seems to be pampered.'

The MG data in (37) are also interesting in another respect. They show that an analysis of Clitic Climbing as movement / adjunction of the clitic cannot be right because it cannot explain the need for two clitics in MG.

The Clitic Climbing example in (39), below, where there is a Case difference between the climbing clitic and the embedded clitic constitutes further evidence for the claim that Clitic Climbing verbs have a nonthematic argument position. The same example can also be taken as evidence for the earlier explanation of the absence of object control verbs as clitic climbing verbs.

(39) ton lipáme   ton Cósta   na   tu   páro   tsighára
     him am sorry the Costas-Acc that him-Gen take-I cigarettes
     'I would not take cigarettes from Costas.'

4.8.3 Raising and +/-Tensed Clauses

The possibility of raising out of tensed clauses, which is illustrated in MG, has caused the motivation for standard Raising to disappear. Two basic assumptions of the standard theory are being challenged:

(40)

    i. that raising is not possible across a tensed clause.

    ii. that an A-chain cannot have two Case-marked positions.

The MG data convincingly disprove assumption 40(ii). We see that we can have chains not only with identically Case-marked positions but also with differently Case-marked positions. But we know of other chains, as well, with multiple Case assignment. For instance, if we adopt Brody's (1993) analysis of the *easy to please* construction, we have one chain with two Case positions. Long Object Preposing is another example of a chain with more than one Case.

The question of barriers and how they can be voided is central to assumption 40(i). I wish to argue that the problem with barriers still remains and that MG has some way of voiding it. I will show this through a comparison of Clitic Climbing in the Romance languages and MG. We have the creation of three-member chains in MG where the Romance languages have just two-member chains.

In the case of MG where raising takes place out of a tensed clause, movement of the argument DP in raising must first be licensed inside its containing CP. The licensing position will be the Spec of IP, if it is a subject, or in the Spec of a CliticPhrase, if it is an object.

4.9 Sportiche 1992

Sportiche (1992) puts forward an analysis of Romance clitic constructions that is similar to the one proposed here. What I will do in this section is summarise Sportiche's theory, concentrating on the differences with the theory I have advanced in the previous sections.

For Sportiche, too, clitics head their own projection, which is called Clitic Voice[1]. The following instantiations of the Clitic Voice are possible: Nominative Voice, Accusative Voice and Dative Voice. Consider schema (41), below:

(41)
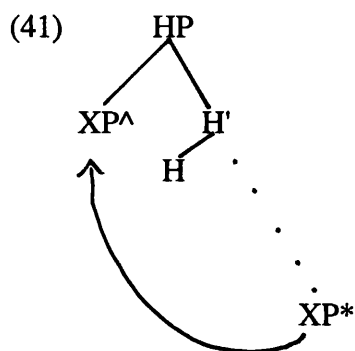
where H is a clitic head, XP* is the position in which the XP that participates in the Clitic-Construction is base-generated and XP^ is the position XP occupies by LF. The Clitic-Criterion in (42) forces movement.

(42) At LF: Clitic Criterion

A +F xp must be in a spec/head configuration with a +F Xzero.

A +F Xzero must be in a spec/head configuration with a +F XP.

+F accusative/dative: Accusative/Dative Voice

F here stands for feature and has nothing to do with the head F of FP.
The following Clitic Constructions parameters are proposed:

(43) Clitic Constructions Parameters

i. Movement of XP* to XP^ occurs overtly or covertly

ii. H is overt or covert

iii. XP* is overt or covert

Combinations of the values of these parameters give rise to various possibilities. A covert XP* moving overtly or covertly to XP^ with H overt gives rise to undoubled clitic constructions. An overt XP* moving covertly with an overt

---

[1]According to Sportiche (1992) there is a reference in Spanish grammars to clitic constructions as Accusative voice.

H gives rise to Clitic Doubling. An overt XP* moving overtly with an overt H gives rise to Clitic-Left-Dislocation.

I will comment briefly on parameter 43(i). Sportiche analyses Clitic Doubling as postponement of the necessary movement of XP* to XP^ until LF. He raises the question of inter- and intra-linguistic distribution of Clitic Doubling but only addresses the first half of it. The idea is that certain clitic heads cannot be filled simultaneously with their specifier if the property they license is overtly realized on this specifier, a sort of principle of economy minimizing use of unnecessary phonological material. Clitic Doubling arises in a language precisely when XP* movement may be delayed until LF, since this is the only way of preventing a violation of the above principle with an overt XP* in the presence of an overt clitic. This seems to me to be a strange principle of economy, one that says that two bits of phonological material are redundant if they are next to one another but not otherwise. Also, if specificity is realized on the DP anyway, why would the clitic be needed at all? Moreover, what about the intralinguistic distribution of Clitic Doubling, in French for instance. We are to assume that the same DP is specific when it is a subject but not when it is an object; we cannot be talking about specificity independently realized. Moreover, it is not easy to reconcile this idea with the claim that specificity is an operator-like property that needs to be licensed. I do not think it is particularly plausible to assume that the same language has the Doubly filled Voice Filter with respect to some clitic heads but not others. Further Sportiche neither notes nor offers an account of the difference between CLLD and CD with respect to the interpretation of the verb.

I believe an important difference between Sportiche's theory and the theory presented in this chapter is the following: Sportiche assumes, while I do not, that XP* in the Clitic-Construction can be nonovert. Thus, in his theory there is no significant difference between French and the other Romance languages with respect to object CLC. The impossibility of an overt XP* in object CLC in French need not be accounted for. I quote from Sportiche (1992, 27): 'In fact, there is nothing in the analysis...that really bears on the overt/covert character of XP*: whether overt or covert, XP* will have to raise by LF to the right specifier so that the Clitic Criterion is met. Clitic Doubling constructions and non doubled clitic constructions are analyzed in exactly the same way: the problem is not to account for the possibility of clitic doubling. This central dilemma earlier accounts faced

disappears.[1]' Contrary to Sportiche, I think that one of the questions that needs to be answered is why not all languages with clitics exhibit the Clitic-Construction. The Clitic Constructions parameters Sportiche (1992) posits describe the facts of various languages but do not explain the split between French and the other Romance languages, for instance. It seems to me that the dilemma Sportiche refers to cannot be easily dismissed. Moreover, there are language-internal splits of the following sort: standard French has the Clitic Construction with subjects (i.e. Complex Inversion[2]) but not with objects. The presence vs. absence of the Clitic-Construction language-internally but also across languages with clitics is taken to be an accidental distributional property. While Sportiche (1992) explains the difference between French and the other Romance languages by means of parameter 43(iii) I suggest that the difference reduces to another independently needed parameter, namely the class 1 / class 2 parameter proposed by Koopman and Sportiche (1991).

Sportiche further claims that clitics are distinguished into two types. The first type of clitics, for instance French *en* or *le* , are linked to specificity, i.e. the DP in their specifier position is interpreted as specific. The second type of clitics, for instance French *lui* , are not linked to specificity. The latter clitics are analysed as pure agreement with no interpretive import. The account of specificity Sportiche offers is the following: The first type of clitics assimilate to such functional heads as [+wh] complementizers or [+negative] heads licensing certain operator-like properties (e.g. wh or negative quantifiers). In particular, the first type of clitics license in their specifier the operator-like property of specificity: clitics license specificity in DP's and vice versa. Specificity of some DP's must be licensed by clitics, which, therefore, have interpretive import. That is, clitics are bare operators, whereas specific DP's are non bare operators.

I would also like to comment on Sportiche's discussion of the Definiteness Effect and how it relates to specificity in CLC. The Definiteness Effect is analysed as another facet of the specificity requirement imposed by the clitic *le* in Accusative CLC and is thus linked to absence of Accusative Case in the relevant construction. Sportiche attempts to explain the following data on the basis of specificity in CLC.

(44)a. Il est arrivé trois hommes / *ces hommes

---

[1]The underlining is mine.

[2]Sportiche himself analyses Complex Inversion as an instance of CLC.

b. Trois hommes / ces hommes sont arrivés

Also, Sportiche argues that Accusative clitics in French license parasitic gaps and that the clitic in the clause with the parasitic gap is not resumptive. I have also argued that the movement in CLC licenses parasitic gaps and I have offered an account of why the clitic in the clause with the parasitic gap is not resumptive. Sportiche's story is that the real gap and the parasitic gap need to agree in an extra feature, namely Specificity.

4.10 Concluding Remarks

Let me now recapitulate what has been said so far about the Clitic-Construction. I have advanced the following main points:

(45)

a. The Clitic-Construction is a Spec-head phenomenon.

b. The Spec of ClP is a mixed position.

c. Clitic-Doubling generally involves verb-focussing.

A brief comment is in order with respect to point 45(b). In being an A-position, the Spec of ClP was shown to exhibit potentially effects of Passivization and the Double Object Construction. In being an A'-position, the Spec of ClP was shown to be a position through which extraction of an argument can be licensed. In section 4.3 additional tests were proposed for the A- / A' distinction.

It was also argued that the presence vs. absence of object CLC in languages with clitics correlates with the Class 1 / class 2 distinction of languages proposed by Koopman and Sportiche (1991).

It is assumed that clitics do not move at all. The proclisis vs.enclisis split is derived through movement of the verb. If clitics do not move at all, it follows that they are always clause-bound. A new analysis of Clitic Climbing is offered.

Appendix
The Clitic-Construction and Focalization

The idea advanced in section 4.7, namely that when the verb is under some head higher than INFL and happens to have a specific object a clitic matching the specific object becomes obligatory, is partly contradicted by Focalization facts. Focalization and CLC are in general incompatible[1]. A focussed DP cannot participate in CLC. The problem is the following. I explained the obligatory appearance of the clitic on the verb in verb-focussing in MG and Complex Inversion in French by saying that ClP is always present and whenever the verb moves to a head higher than INFL the clitic becomes overt by the Head Movement Constraint. If this is so, when a specific DP is syntactically focussed why doesn't a clitic coreferential with that DP appear on the verb? The verb in syntactic focussing moves to F, which is higher than INFL. The real question is not just 'Why doesn't the clitic appear?' but 'Why can't the clitic appear?'

The facts are more complicated than saying that the Clitic-Construction and Focalisation are in general incompatible. The two constructions are sometimes incompatible and sometimes compatible. Consider sentences (1) to (7), below:

(1) ta LULUDHIA (*ta) éfere o Vassílis
    the FLOWERS-Acc them-cl brought-he the Vassilis-Nom
    'Vassilis brought the FLOWERS.'

(2) tis MARIAS (*tis) stílane lulúdhia
    the MARIA-Gen her-cl sent-they flowers-Acc
    'They sent MARIA flowers.'

(3)a. ton YANNI$_i$ *(ton) aghapái i mitéra tu$_i$
    the YANNIS-Acc him-cl loves the mother his
    '*His$_i$ mother loves YANNIS$_i$.'

---

[1]Cinque (1990:63) makes the same observation about Italian (cf. (1)).

(1) *GIANNI, l' ho cercato, non Piero.
    GIANNI him looked-I for not Piero

b. ton   YANNI$_i$ (*ton) aghapái i mitéra tu$_k$
   the YANNIS-Acc him-cl loves the mother his
   'His$_k$ mother loves YANNIS$_i$.'

(4) tu   YANNI   *(tu) tin édhose
    the YANNIS-Gen him-cl her gave-it
    'YANNIS went beserk.'

(5) ton   YORGHO   *(ton) ékane tu alatiú
    the YORGHOS-Acc him-cl made-she the salt-Gen
    'She shouted at YORGHOS.'

(6) ton FILON   su dhen *(tus) fénete na ksérun apó
    the friends-Gen your not them-Gen seems that know-they about

ghlosoloyía
linguistics
    'Your FRIENDS do not seem to know much about linguistics.'

(7) to   YANNI   *(ton) ponái to   kefáli   tu
    the YANNIS-Acc him-cl hurts the head-Nom his-cl
    'YANNIS has a headache.'

I will propose an account of the incompatibility / compatibility split illustrated in examples (1), (2) and 3(b), on the one hand, vs. examples 3(a), (4), (5) (6) and (7), on the other hand. More close attention to the data in (1) to (7) shows that we do not really have an incompatibility / compatibility split but rather an incompatibility / obligatoriness split. In examples 3(a), (4), (5) (6) and (7) CLC is not just compatible with Focalisation; it is obligatory. In fact, CLC in examples 3(a), (4), (5) (6) and (7) is obligatory irrespective of whether the DP in CLC is focalised or not. What we observe is that examples 3(a), (4), (5) (6) and (7) involve cases which were used in section 4.3 to show that the Spec of ClP is also an A-position. In particular, 3(a) is an example where the DP in Spec of ClP acts as a binder. Examples (4) and (5) involve a Subject+Verb idiom and a discontinuous idiom, respectively. (6) is a raising example. Finally, (7) involves a quirky subject. There are really no cases where Focalisation and CLC are compatible and CLC is

not obligatory. What I maintain so far is that the split we have to account for is precisely an incompatibility / obligatoriness split and not an incompatibility / compatibility one. This is the first piece of evidence I will use for the solution to the puzzle in (1) to (7). I turn next to a different observation, which will constitute the second piece of evidence for the solution to this puzzle.

The general incompatibility between CLC and Focalisation, illustrated with examples (1), (2) and 3(b), is problematic for the conclusions drawn in section 4.7. There an argument was advanced for the existence of the ClP and in particular for the A-nature of the clitic head. Namely, it was shown that when the verb is under some head higher than IP and the sentence has a specific object, a matching clitic has to appear on the verb. The projection ClP becomes visible when the verb occupies some position higher than I. For MG this was mainly shown with verb-focussing. The observation was also shown to hold when some XP is syntactically focussed. Remember that in syntactic focussing the focussed DP is in Spec of FP while the verb obligatorily raises to F. Crucially, I chose examples where some XP other than a 'specific' object is focussed. If we take examples where a specific object is focussed (cf. examples (1), (2) and 3(b)) we see that a clitic matching the focussed DP is not possible, contrary to what we would predict. If, as I said above, movement of the verb to a head higher than F triggered a clitic on the verb we would predict that the presence of the clitic would be not only possible but in fact obligatory in examples (1), (2) and 3(b), as well. The claim of section 4.7 is not contradicted by the data in (1), (2) and 3(b), if it is carefully read. It was also suggested that this is an argument that Cl is an A-head, which implies that the Spec of ClP is an A-position. Assuming the correctness of the conclusions in 4.7, one reading of the data in (1), (2) and 3(b) is the following: It would seem that the Spec of ClP is not always an A-position. I will now suggest an account for the incompatibility / obligatoriness split that relies crucially on this assumption.

In section 4.3 it was argued that the Spec of ClP is a mixed position. Some points need to be clarified with respect to this claim, but possibly in general with respect to mixed positions. What is meant by saying that the Spec of ClP is a mixed position? Does that mean that the position in question can be either an A- or an A'-position, that it is simultaneously an A- and an A'-position or something else? I want to claim that the Spec of ClP is sometimes an A-position only, and sometimes an A'-position, and at yet other times both an A- and an A'-position simultaneously. The earlier claim would predict that the clitic appears on the verb when Cl is an A-head or both an A- and an A'-head but not when Cl is an A'-head

only. But how can we determine when Cl is an A-head, when it is an A'-head and when it is both an A- and an A'-head. I believe that the specification must make reference to each particular case. For instance, if in a particular sentence the Spec of ClP acts as a binder, it is an A-position. On the other hand, if it licenses parasitic gaps, it is an A'-position. As a final example, if the Spec of ClP simultaneously acts as a binder and licenses parasitic gaps, it is both an A- and an A'-position. In section 4.3 we saw that the Spec of ClP is taken to be an A-position when it can act as a binder, when it is a theta-position or when it has one of the properties of subjects. In the following cases the Spec of ClP is taken to be an A'-position: when it licenses parasitic gaps / Reconstruction or when it is a licensing mechanism for extraction. In the absence of tests, the Spec of ClP is by default an A-position. It seems that the default case for a position is that it is an A-position unless we have some positive evidence that it is an A'-position. What we are really interested in for the purposes of the present discussion is the nature of the Cl head, which is easy to determine. If the Spec of ClP is an A-position, Cl is an A-head. If, on the other hand, the Spec of ClP is an A'-position, Cl is an A'-head.

I propose to explain the split in examples (1) to (7) in terms of the nature of the Cl head plus the Economy Principle in (8), below:

(8) *Multiple A-bar Spec-Head Licensing

Principle (8) excludes multiple A-bar Spec-head licensing. The data in (1) to (7) can now be accounted for straightforwardly. Crucially, we see that in all the cases when Focussing and CLC become compatible Cl is an A-head.

I think it is important to bear in mind that the split is not between incompatibility vs. compatibility.

Principle (8) is not a problem for successive cyclic movement, as in that case there is only one A-bar Spec-head licensing mechanism involved.

I have referred to (8) as an Economy Principle, but it is not just that.

The account of the incompatibility / obligatoriness distinction between CLC and Focalisation does not make reference to the two mechanisms in the sense of giving them special status. This seems to be right, as an examination of the interaction between CLC and Wh-movement confirms. The same patterning emerges as in the interaction between CLC and Focalisation. The split again is one of incompatibility vs. obligatoriness. Consider examples (9) to (10), below:

(9) pion (*ton)   ídhes
who him-cl saw-you
'Who did you see?'

(10) pio pedháki$_i$ *(to) édhire i   mamá   tu$_i$?
which child-Acc him-cl beat-she the mum-Nom his
'Which child is such that his mum beat him?'

In example (9) CLC and Wh-movement are incompatible because the Spec of ClP is an A'-position only. In example (10), on the other hand, CLC is obligatory, if the intended reading is coreference between the possessive pronoun inside the subject DP and the object DP.

Finally, nonrestrictive relatives in MG seem to raise a problem for the Economy Principle in (8). The Clitic-Construction is obligatory in nonrestrictive relatives in MG.

(11) o Yánnis tu opíu *(tu) édhosa ta klidhiá dhen fánike akóma
the Yannis to whom him-cl gave-I the keys   not came-he yet
'Yannis, to whom I gave the keys, has not come yet.'

(12) i María tin opía (*tin) ghnórisa khtes   íne dhaskála
the Maria whom her-cl met-I yesterday is a teacher
'Maria, whom I met yesterday, is a teacher.'

If the gap in a nonrestrictive relative is an object at some stage the relative operator is in Spec of ClP. The standard assumption about relatives in general is that the relative operator is in Spec of CP. This means that in nonrestrictive relatives there is movement from the Spec of ClP to the Spec of CP. The question is whether this movement violates the Economy Principle in (8). I will argue that it does not. The obligatoriness, rather than the optionality, of CLC in nonrestrictive relatives suggests that we have to do with the familiar incompatibility / obligatoriness split exhibited in the relation between CLC and Focalisation but also in the relation between CLC and Wh-movement. The incompatibility value in the present case is instantiated by restrictive relatives.

With respect to the obligatoriness of CLC in nonrestrictive relatives, I wish to advance the following proposal. Nonrestictive relatives, just like pseudorelatives

(cf. section 4.3.2) exhibit a subject-object asymmetry, which is cancelled when the object participates in the Clitic-Construction. Therefore, the Spec of ClP in restrictive relatives is an A-position. The relative operator in nonrestrictive relatives is not A'-licensed in more than one way. If I am right about nonrestrictive relatives exhibiting a subject-object asymmetry, the discussion of nonrestrictive relatives should also be included in section 4.3.2, where I talk about properties of subjects.

I have presented an account for the incompatibility / obligatoriness split illustrated in the interaction between CLC, on the one hand, and Focussing or Wh-movement, on the other. In two words, the split comes from the application of a principle against multiple A-bar Spec-head Licensing. In both Focussing and Wh-movement CLC is obligatory when the Spec of ClP is an A-position. I also argued that the obligatoriness of CLC in nonrestrictive relatives in MG finds a similar explanation.

Chapter V

Spec/Head Licensing - Concluding Remarks

5.1 Introduction

What I have done so far is look at three Spec-head licensing mechanisms, namely PI-Licensing, Focussing and the Clitic-Construction. In this final chapter I intend to draw together some of the conclusions reached in the discussion of individual Spec-head licensing mechanisms in view of possible generalizations. I will capitalize on what I take to be the basic properties of Spec-head Licensing involving mainly A'-heads. The properties I am referring to are the following three:

(1)
a. Licensing of extraction
b. Licensing of A-properties
c. Licensing of operators

Property 1(a) is discussed in section 5.2.1, property 1(b) in section 5.2.2 and, finally, property 1(c) in section 5.3. In response to question (2) below, properties 1(a) and (b) are seen to pattern together, while the status of property 1(c) is subject to parametric variation.

(2) How does Spec-head Licensing relate to XP-movement both at S-structure and LF?

Namely, Spec-head agreement configurations with property 1(a) and / or property 1(b) apply at S-structure. On the other hand, Spec-head agreement configurations with property 1(c) apply either at S-structure or at LF, subject to parametric variation.

Examples of 1(a) are overt Wh-movement, Syntactic Focussing and CLC. 1(a) can only be relevant for S-structure A'-movement. A difference between Wh-movement, on the one hand, and Focussing and CLC, on the other, is that in Wh-movement Spec-head licensing needs to take place in both the source position and the target position of long movement, while in Focussing and CLC Spec-head licensing seems to take place in the source position of long movement only.

Property 1(b) is illustrated by CLC in MG. It seems that a Spec-head agreement configuration exhibiting property 1(b) would also have to apply at S-structure, as do Spec-head relations illustrating property 1(a).

Wh-movement, Focussing and PI-Licensing instantiate property 1(c). The operator property of foci is only licensed when foci are in a Spec-head configuration with the head F. Similarly, the operator property of Polarity Items (PI's) is only licensed when they are in a Spec-head configuration with some propositional operator[1].

The next question to be asked is how the three types of Spec-head licensing interact. It has become obvious that Spec-head agreement mechanisms do not necessarily exhibit all three properties under (1). Focussing has properties 1(a) and (c). PI Licensing in MG has only property 1(c). Finally, CLC has properties 1(a) and (b).

In section 5.3.1 claim (3) is put forward.

(3)

All LF movement results from the satisfaction of well-formedness Criteria.

I argue that the interpretation of a sentence is determined by its S-structure plus the satisfaction of Criteria that apply at or by LF. Except for movement forced by well-formedness Criteria three other major types of LF movement are standardly assumed in the literature: Quantifier Raising (QR), LF Head Raising (LFHR) and Expletive Replacement (ER). The latter two do not affect the interpretation of the sentence and will not be discussed here. With respect to QR I draw on the discusion in section 3.6, where it was argued that there are no scope ambiguities in multiple quantification structures and that S-structure determines the scope of quantifiers. Quantifier ambiguity was claimed to be an epiphenomenon having to do with Focussing. It was proposed that in multiple quantification structures the reading where the hierarchically lower quantifier has higher scope is really a case where that quantifier has been focussed. The existence of scope ambiguities has been one of the arguments produced for having a QR rule. I suggest following Williams (1986, 1988) that there is no QR rule. It seems to be

---

[1]As discussed in chapter II the set of propositional operators is the following:{Neg, WH, F, the Necessity and the Possibility Operators}. These operators are called propositional because they modify the proposition, in the philosopher's sense of the word.

true, therefore, that the only type of LF movement rule bearing on the interpretation of the sentence is movement forced by well-formedness Criteria.

In section 5.3.2 further evidence for the claim in (3), but also against QR, is adduced. The scope relations between sentential negation (Neg) and operators are examined. The discussion here draws on section 3.5. In section 3.5 it was argued that foci always have scope over Neg. It was also argued that S-structure determines the scope of Neg and quantifiers unless the latter are focussed. The scope of Neg and Polarity Items is also examined. In considering scope possibilities between XP's satisfying Criteria and Neg two types of relations must be looked into. Namely 4(a) and (b), below:

(4)

a. the scope between these XP's and Neg in general

b. the scope between these XP's and Neg in the specific case where the two are in a Spec-head agreement configuration

Claim (3) presents us with a restricted model of LF and arguably constitutes a minimal hypothesis concerning LF properties and interpretations. Constituents in Spec-Head agreement configurations have wide-scope interpretation and disallow scope interactions. In future work I intend to argue more systematically for the proposal in (3).

Another property of Spec-head agreement configurations briefly discussed in chapter II is the following. In each Spec-head agreement configuration the Spec and the head seem to also agree in terms of the property +/-operator. Thus, in Wh-movement, PI-Licensing and Focus-movement both the Spec and the head are +operator. In the Clitic-Construction, on the other hand, both the Spec and the head are -operator.

We have seen that properties 1(a), (b) and (c) are not related. Any one of them justifies the existence of a Spec-head agreement configuration. In section 5.4 I look again at these properties but from another perspective. The interaction between the various Spec-head agreement configurations bears on the properties in (1) in virtue of a ban against multiple licensing of A'-movement (cf. (5)), as was discussed in the Appendix to chapter IV.

(5) *Multiple Licensing of A'-Movement

I suggested there that the incompatibility between Focussing and CLC when the Spec of the CliticPhrase is an A'-position can be explained as a violation of the constraint in (5).

In section 5.5 Spec-head Licensing is considered with respect to parametrization. The relation between word order and wellformedness Criteria is discussed first. The level of satisfaction of some Criterion across languages gives rise to different word order facts. The availability of a Criterion in a particular language is also significant, and not only for word order facts as we will see. Moreover, other parameters are shown to interact with Spec-head agreement mechanisms.

5.2 Spec-Head Licensing and S-structure

In this section I am interested in Criteria that either must or may apply as early as S-structure. In the first category belong the Wh-Criterion in English and MG and the Clitic-Criterion in MG. The Focus-Criterion in MG is an example of the second category.

The question of the interaction between the three different types of licensing performed by Spec-head agreement mechanisms becomes relevant here. Spec-head relations in general have at least one of the functions in (1) above. But they do not necessarily exhibit all three properties. Sometimes a Spec-head relation can perform two of the above functions. For instance, Wh-movement and Focussing in MG are characterised by properties 1(a) and (c). CLC in MG is characterised by properties 1(a) and (b).

The question also arises whether any of these properies can be associated with only one level of application of Criteria but not with another. In particular, whether any of the properties under (1) can be associated only with S-structure application or only with LF application of some Criterion? It seems to me that properties 1(a) and (b) can only be associated with S-structure application of a Criterion. On the other hand, it seems that property 1(c) could be associated with either S-structure or LF application of a Criterion and is subject to parametric variation.

5.2.1 Spec-Head Licensing and A'-Movement

Claim 1(a) is different from Chomsky's (1992) claim in (6), below:

(6) A'-movement must be licensed in a Spec-head relation.

It seems to me that claim (6) is both stronger and weaker than claim 1(a). Chomsky's claim is stronger than claim 1(a) in that it assumes that all A'-movement is licensed in a Spec-head relation. And it is weaker than claim 1(a) in that it does not distinguish between A-movement and A'-movement, as I explained in section 4.3.3.3. Both A- and A'-movement involve Spec-head agreement configurations. On the basis of Wh-movement, Focussing and CLC in MG it is argued here that for an argument DP[1] to undergo either local or long movement it must be licensed in one of the following specifier positions: Spec of CP, Spec of FP or Spec of ClP.

Property 1(a) characterises overt Wh-movement, Syntactic Focussing and CLC. Examples 7(a) to (e) illustrate property 1(a).

(7)a. ídhe   to   yatró
       saw-she the doctor-Acc
       'She saw the doctor.'

   b. pion   ídhe
      whom saw-she
      'Whom did she see?'

   c. to   YATRO   ídhe
      the DOCTOR-Acc saw-she
      'She saw the DOCTOR.'

   d. to   yatró   ton   ídhe
      the doctor-Acc him-cl saw-she
      'She saw the doctor.'

---

[1] I limit the discussion to argument DP's because only those can satisfy the Clitic-Criterion.

e. *to   yatró   ídhe
   the doctor-Acc saw-she

Suppose we want to A'-move the object DP in 7(a). The object DP must be licensed in one of three specifier positions. Namely, Spec of CP (cf. 7(b)), Spec of FP (cf. 7(c)) or Spec of ClP (cf. 7(d)). Otherwise, A'-movement results in ungrammaticality as example 7(e) shows. It is also clear that 1(a) can only be relevant for S-structure A'-movement. Remember that in the previous chapter (section 4.3.3) 1(a) was one of the tests used for establishing whether movement to the Spec of ClP is A'-movement or not.

I turn next to a difference between Wh-movement, on the one hand, and Focussing and CLC, on the other. We have seen that A'-movement presupposes the satisfaction of some well-formedness Criterion. With respect to long movement, the following question is raised: Is the well-formedness Criterion satisfied in the clause from which movement starts or in the clause in which movement ends. Let us take first an example involving Wh-movement.

(8)a. pion   ípe   i   María   óti   ídhe
       whom said-she the Maria-Nom that saw-she
       'Whom did Maria say that she saw?'

   b. *pion   i   María   ípe   óti   ídhe
       whom the Maria-Nom said-she that saw-she

The ungrammaticality of 8(b) suggests that the WH feature is in the matrix C. This, in turn, shows that the Spec-head relation holds in the target clause. Consider next examples (9) and (10), involving nonlocal movement of foci and DP's participating in CLC.

(9) ípe   ti MARIA óti tha   dhi
     said-he the MARIA that will see-he
     'He said that he will see MARIA.'

(10) ta   lulúdhia   ípe   óti ta   éfere   o   Vassílis
     the flowers-Acc said-he that them-cl brought-he the Vassilis-Nom
     'As for the flowers, he said that Vassilis brought them.'

Examples (9) and (10) show that the Spec-head relation in long Focussing and CLC must be satisfied in the clause from which movement originated, as in local movement. This is in contrast with the situation in Wh-movement. In (9) the focussed DP cannot be in Spec of FP because FP is lower than CP. In (9) the focussed DP precedes the complementizer. This suggests that the focussed DP is adjoined to CP. In (10) the object DP which is theta-marked by the embedded verb appears in the matrix clause. We cannot, therefore, assume that at S-structure the object DP is in a Spec-head relation with its matching clitic, the latter being still in the embedded clause.

It seems plausible to assume that in long Focussing and CLC, licensing of the moved XP takes place in the clause from which movement originated and that any subsequent movement of the XP, i.e. movement after the satisfaction of the Focus-Criterion or the Clitic-Criterion, is adjunction. Maybe this difference between the Wh-Criterion, on the one hand, and the Focus-Criterion / the Clitic-Criterion, on the other, is related to another difference between them: namely, to the fact that only the Wh-Criterion relates to subcategorisation / selectional requirements. Note that in the cases where the Spec of the CliticPhrase is an A-position, namely cases where the Clitic-Criterion relates to selectional requirements, licensing of the moved DP in the target position as well is imperative. For instance, in raising from the Spec of IP to the Spec of a ClP, licensing is in the target clause. Clitic Climbing with simultaneous presence in the clause with the clitic climbing verb of a DP matching the clitic is another case of CLC that patterns like Wh-movement with respect to nonlocal movement. The licensing of the moved DP in Romance Clitic Climbing takes place in the target clause. In Clitic Climbing in MG licensing of the moved DP, if there is one, takes place in both the source and the target clause.

5.2.2 Spec-Head Licensing and A-Movement

Property 1(b) is illustrated by CLC in MG. A Spec-head agreement configuration exhibiting property 1(b) also has to apply at S-structure, as in the case of property 1(a). This is indeed what happens with CLC.

5.3 Spec-Head Licensing and LF

Spec-head relations applying at LF can have only one function, that of licensing operators (1c). Thus, the Clitic-Criterion has no LF status, contrary to the Wh-Criterion, the PI-Criterion and the F-Criterion. Wh-movement, Focussing and PI-Licensing are examples of property 1(c). Thus, the operator status of foci is licensed only when foci are in a Spec-head configuration with the head F. Similarly, the operator status of Polarity Items is licensed only when they are in a Spec-head configuration with some propositional operator. If some operator needs to be licensed, the licensing configuration must arise by LF.

5.3.1 A Proposal

We have seen that well-formedness Criteria can have LF status only if they involve operators. Hence I put forward the claim in (3). Further, quantifier ambiguity was claimed to be an epiphenomenon having to do with Focussing. I have argued that a quantified object can have scope over a quantified subject only when the former is focussed. In example (11), below, I have assumed that the only possible reading is one where the universal quantifier has scope over the existential one. The existential quantifier can have scope over the universal quantifier, only if the former is focussed. In fact in the event that the existential quantifier is focussed, the reading in which it has higher scope is the only possible reading.

(11) Everyone likes someone in this room.

The patterning of readings is easily accounted for in my model but not in a QR model, where adjunction of the two quantifiers to IP can take place in either order, thus giving rise to either reading. The reading of the sentence arising when the existential quantifier is focussed is expected since at LF the focussed quantifier is in Spec of FP, while the universal quantifier is in Spec of IP.

E-Kiss (1987) has shown that in Hungarian S-structure determines the scope of quantifiers. My point is that the same holds of MG and perhaps in general. Given that I do not discuss here all the arguments put forward for QR the model of Grammar where the only type of LF rule that counts for interpretation is more of a proposal than systematically accounted for. See also Brody (1993) for a discussion of QR.

The conceptual reasons for arguing against QR were of the following sort. A minimal hypothesis is always preferable. In section 3.6 I showed that the available interpretations in multiple quantification cases can be accounted for without QR and, moreover, that QR gives rise to an overgeneration of interpretations. The available readings can be accounted for within the system of Spec-head licensing mechanisms without additional assumptions. QR was shown to partly reduce to other types of operator movement, namely Spec-head licensing, so we need nothing more than the S-structure configurations plus LF Focus-Raising. Significantly, only the attested scope interactions are derived. The present system is more economical and makes the right predictions. For me there is no QR as such. Quantifiers can only raise to the Spec of FP.

QR was proposed (cf. May, 1985) at a stage of the theory in which Spec-head agreement configurations were not fully developed but were limited to wh-phrases having by LF to be in the Spec of a CP headed by +wh.

5.3.2 Further Evidence

In this section further evidence for the claim in (3), but also against QR, is adduced. If claim (3) is on the right track, I make the following predictions. That XP's that need to satisfy Criteria always have scope above Neg. Also, that when Neg is the head of some Spec-head relation, the XP in the specifier position always has scope above Neg which is under the head position. (12), below, is one of the main principles of GB.

(12) Hierarchical relations determine the interpretation of the sentence.

Principle (12) together with Criteria seem to entail that XP's in Spec-head relations always have scope over Neg. By LF an XP in a specifier position is hierarchically higher than Neg.

There seems to be no scope ambiguity in the interaction between Neg and operators. An LF that differs from S-structure only in that satisfaction of Criteria has been completed will determine the only possible interpretation in each case. In the case of quantifiers LF is no different than S-structure. With respect to XP's satisfying Criteria, we see that there is no interaction between them and Neg. Constituents in Spec-head agreement configurations always have scope above Neg.

This is predicted by the LF representation. The specifier positions in the Spec-head relations under examination are hierarchically higher than Neg.

Let us examine the scope between quantifiers and Neg first. The scope between Negation and quantified expressions seems to be determined by S-structure. It is well known, for instance, that Neg cannot have scope over quantified subjects in English (cf. example (13)). Quantified objects, on the other hand are within the scope of Neg (cf. example (14)).

(13) Many people have not come to see me.

(14) I do not know many people in this room.

I think that the only interpretation in (14) is one where Neg has higher scope, leading to an association of meaning between Neg and the quantifier that will eventually yield the reading 'I know few people in this room.'. The reading where the quantifier has scope over the Negation is only possible in (14), in fact the only possible reading, when the quantifier is focussed. In that reading at LF the quantifier is in Spec of FP while Neg is the head of NegP. Again hierarchical relations determine possible readings.

Under 4(a) we may distinguish two subcases. In the first case there is raising of the verb to the head of the Spec-head relation (cf. the Wh-Criterion in English main interrogatives). In the second case raising of the verb to the head position does not take place (cf. the Wh-Criterion in English embedded interrogatives). The Wh-Criterion in English is the same in main and embedded interrogatives. What happens is that for some reason the Head Movement Constraint applies with respect to the wh feature in main but not in embedded interrogatives. The second case under 4(a) also captures LF application of some Criterion.

The scope between foci and Neg is an instantiation of 4(a). In syntactic Focussing in MG the focussed constituent is in Spec of FP while Neg is together with the verb under F at S-structure and also LF. In phonetic focussing at LF the focussed constituent is in Spec of FP, while Neg is under its own head together with the verb. For the discussion of scope possibilities between Neg and foci, I draw on section 3.5, where it was argued that foci always have scope over Negation.

The scope of PI's and Negation falls under 4(b). PI's have scope over their licenser Neg. This is why, for instance, NPIs licensed by Neg do not give rise to an affirmation and there is no cancellation of Neg in the case of NPI's in MG. If Neg had scope over NPI's, Neg+NPI should equal an affirmation; but it does not.

Operators aside, a problem for the claim that S-structure determines interpretation if all Criteria have been satisfied by then seems to be posed by Clitic Doubling (CD) facts. Let us take Clitic-Left-Dislocation (CLC) first. In CLC the object DP is in Spec of ClP while the verb has raised and is under Cl. It we have a negative verb, as in (15), I would predict that the object DP has scope over Neg. The prediction is borne out. Contrast with (16), where Neg has scope over the object DP.

(15) polús   fílus   mu dhen tus   ídha
     many friends-Acc my not them-cl saw-I
     'Many of my friends, I have not seen them.'

(16) dhen ídha polús   fílus   mu
      not saw-I many friends-Acc my
     'I did not see many of my friends.'

I would also predict that in CD (cf. (17), where the verb is under F, Neg has scope over the object DP.

(17) dhen tus   ídha polús   fílus   mu
      not them-cl saw-I many friends-Acc my
     'Many of my friends, I have not see them.'

That prediction is not borne out. In (17) the object DP still has scope over Neg. This appears to be a problem for me. My explanation for the reading in (17) relies on the notion of specificity. Specificity, as we saw in chapter IV, is a property of DP's participating in CLC. I believe that quantifiers in CLC stop behaving like quantifiers and can have only referential readings. It would seen that the claim that S-structure determines interpretation if all Criteria are satisfied by S-structure is not relevant for CLLD (or the data in (15)) either.

Claim (3) presents us with a restricted model of LF and arguably constitutes a minimal hypothesis concerning LF properties and interpretations. Constituents in

Spec-head agreement configurations have wide-scope interpretation and disallow scope interactions. In future work I intend to argue more systematically for the proposal in (3).

5.4 On the Interaction Between Spec-Head Agreement Configurations

As we saw, properties 1(a), (b) and (c) are not related. Any one of them justifies the existence of a Spec-head agreement configuration. It is another aspect of these properties that concerns me in this section. The interaction between the various Spec-head agreement configurations bears on the properties in (1) in a way to be made specific. I am referring here to the ban against multiple licensing of A'-movement (cf. (18)), discussed in the Appendix to chapter IV.

(18) *Multiple Licensing of A'-Movement

I suggested that the incompatibility between Focussing and CLC when the Spec of the CliticPhrase is an A'-position can be explained as a violation of the constraint in (18).

I correctly predict the compatibility between PI Licensing and the Clitic-Construction, as seen in example (19), below. The compatibility does not rely on having compatible properties (for instance PI's are operators while DP's in CLC are not) but on assigning the same property once.

(19) kanéna pedhí   mu dhen tha   to   áfina na pái ekdhromí
     no child-Acc my not would him-cl let-I that goes on a trip
     'I would not let my children go on a trip.'

5.5 Spec-Head Licensing and Parametrization

One of the implicit questions in every discussion of Criteria concerns the quintessence of Criteria. Are Criteria devoted to facts of word order? Not really or, to put it more accurately, not exclusively. The primary function of Criteria is that they are scope-assigning mechanisms: specifically, they assign IP-scope. The relation between word order and wellformedness Criteria is discussed in this section.

It must have become apparent through the discussion of the PI-Criterion, the Focus-Criterion and the Clitic-Criterion that a large part of word order facts and differences among languages is now handled by Spec-head relations. Two points are relevant, namely 20(a) and (b), below:

(20)a. Level of Application of the Various Criteria (S-structure vs. LF)
     b. Availability of Some Criteria (cf. ClP)

Regarding 20(a), whether the level of satisfaction of some Criterion in a particular language is S-structure or LF will give different word order facts. S-structure movement of wh-phrases and syntactic Focussing are cases in point. In chapter IV I have illustrated the claim that the ordering between the verb and the object DP in Clitic-Left-Dislocation and Clitic Doubling can be explained by a Spec-head licensing analysis of these constructions plus the F-Criterion.

Regarding 20(b), we know why, for instance, it is impossible to prepose the object in French but not in MG. The discussion of Spec-head Criteria and parametrization does not stop at word order facts. Other differences between languages reduce to whether the projection is available or not. We can explain, for instance, the impossibility of preposing the object in French while that is possible in MG. Also, the fact that objects in MG can have properties of subjects depends crucially on the existence of the projection ClP and in particular on the potential A-status of the Spec of ClP.

Finally, we see that other parameters, e.g. the distinction between class A and class B languages (cf. Koopman and Sportiche 1991), interact with Spec-head agreement mechanisms (cf. the case of CLC and my account of the lack of object CLC in French).

Bibliography

Abraham, W. and S. d. Meij, eds., (1986) *Topic, focus and Configurationality* , John Benjamins.

Agouraki, G. (1990) On the Projection of Maximal Categories: the Case of CP and FP in Modern Greek, *UCL Working Papers in Linguistics* 2:183-200.

Agouraki, G. (1991) A Modern Greek Complementizer and its Significance for UG, *UCL Working Papers in Linguistics* 3:1-24.

Agouraki, Y. (1992) Clitic-Left-Dislocation and Clitic Doubling: A Unification, *UCL Working Papers in Linguistics* 4:47-72.

Aoun, J. (1985) *A Grammar of Anaphora* , MIT Press.

Aoun, J., Hornstein, N. and D. Sportiche (1981) Some aspects of wide scope quantification, *Journal of Linguistic Research* 1:69-95.

Aoun and D. Sportiche (1981) The Domain of Weak Cross-over Restrictions, *MIT Working Papers in Linguistics* 3:43-52.

Aoun, J. and A. Li (1989) Scope and Constituency, *Linguistic Inquiry* 20:141-172.

Authier, J.-M. (1989) Arbitrary Null Objects and Unselective Binding, in O. Jaeggli and K. Safir, eds., *The Null Subject Parameter* , 45-67, Kluwer Academic Publishers.

Barwise, J. and R. Cooper (1981) Generalized Quantifiers and Natural Language, *Linguistics and Philosophy* 4:159-219.

Belleti, A. (1988) The Case of Unaccusatives, *Linguistic Inquiry* 19:1-34.

Belletti, A. (1990) *Generalized Verb Movement* , Rosenberg and Sellier, Turin.

Belleti, A. and L. Rizzi (1988) Psych-verbs and Theta-Theory, *Natural Language and Linguistic Theory* 6:291-352.

Bolinger, D. (1965b) *Forms of English: Accent, Morpheme, Order* , Harvard University Press, Cambridge.

Borer, H. (1983) *Parametric Syntax* , Foris, Dordrecht.

Borer, H. (1984) Restrictive Relatives in Modern Hebrew, *Natural Language and Linguistic Theory* 2: 219-260.

Borer, H. (1986a) I-Subjects, *Linguistic Inquiry* 17:375-416.

Borer, H. (1986b), eds.,*The Syntax of Pronominal Clitics: Syntax and Semantics* 19, Academic Press, New York.

Borer, H. (1989) Anaphoric Agr, in O. Jaeggli and K. Safir, eds.,*The Null Subject Parameter* , Kluwer, Dordrecht.

Brandi, L. and P. Cordin (1989) Two Italian Dialects and the Null Subject Parameter, in O. Jaeggli and K. Safir, eds.,*The Null Subject Parameter* , Kluwer, Dordrecht.

Brody, M. (1984a) On Contextual Definitions and the Role of Chains, *Linguistic Inquiry* 15:355-380.

Brody, M. (1984b) *Conditions and NP-types* , PhD dissertation, UCL.

Brody, M. (1985) On the Complementary Distribution of Empty Categories, *Linguistic Inquiry* 16:505-546.

Brody, M (1987) On Chomsky's *Knowledge of Language* , *Mind and Language* 2:165-177.

Brody, M. (1989a) Old English Impersonals and the Theory of Grammar, *UCL Working Papers in Linguistics* 1:262-294.

Brody, M. (1990) Some remarks on the Focus Field in Hungarian, *UCL Working Papers in Linguistics* 2:201-225.

Brody, M. (1991) Economy, Earliness and LF-Based Syntax, *UCL Working Papers in Linguistics* 3:25-32.

Brody, M (1993a) Θ-Theory and Arguments, *Linguistic Inquiry* 24:1-23.

Brody, M (1993b) *Lexico-Logical Form* , ms. UCL.

Brody, M. and M. R. Manzini (1988) On Implicit Arguments, in R. Kempson, eds., *Mental Representations* , CUP.

Burzio, L. (1986) *Italian Syntax* , Dordrecht: Reidel.

Chierchia, G. and S. McConnell-Ginet (1990) *Meaning and Grammar* , The MIT Press.

Chomsky, N. (1977a) On wh-movement, in P. Culicover, T. Wasow and A. Akmajian eds., *Formal Syntax* , New York: Academic Press.

Chomsky, N. (1981) *Lectures on Government and Binding* , Dordrecht, Foris.

Chomsky, N. (1982) *Some Concepts and Consequences of the Theory of Government and Binding* , MIT Press.

Chomsky, N. (1986a) *Knowledge of Language: Its Nature, Origin and Use* , New York: Praeger.

Chomsky, N. (1986b) *Barriers* , MIT Press, Cambridge, Massachusetts.

Chomsky, N. (1989) Some Notes on Economy of Derivation and Representation, *MIT Working Papers in Linguistics* 10: 43-74.

Chomsky, N. (1992) A Minimalist Program for Linguistic Theory, ms. MIT.

Chung, S. and A. Timberlake (1985) Tense, Aspect and Mood, in T. Shopen, eds., *Language Typology and Syntactic Description*, Vol. 3, 202-258, CUP.

Cinque, G. (1977) The Movement Nature of Left Dislocation, *Linguistic Inquiry* 8:397-411.

Cinque, G. (1990)*Types of A'-Dependencies* , MIT Press, Cambridge, Massachusetts.

Cinque, G. (1991) The Pseudo-Relative and Acc-ing Constructions, ms. University of Venice.

Clark, B. (1992) Relevance and "Pseudo-Impersatives", ms. Goldsmith's College.

Culicover, P. (1991) Topicalization, Inversion, and Complementizers in English, ms., The Ohio State University.

Culicover, P. and M. Rochemont (1983) Stress and Focus in English, *Language* 59:123-165.

Diesing, M. (1992) *Indefinites* , MIT Press.

Dobrovie-Sorin, C. (1990) Clitic Doubling, Wh-Movement, and Quantification in Romanian, *Linguistic Inquiry* 21: 351-397.

E-Kiss, K. (1987) *Configurationality in Hungarian* , Dordrecht, Reidel.

Enç, M. (1991) The Semantics of Specificity, *Linguistic Inquiry* 22:1-25.

Epstein, S.D. (1992) Derivational Constraints on A'-Chain Formation, *Linguistic Inquiry* 23:235-259.

Grimshaw, J. (1992) *Argument Structure* , MIT Press.

Grosu, A. and J. Horvath (1984) The GB Theory and Raising in Rumanian, *Linguistic Inquiry* 15:348-353.

Guéron, J. and T. Hoekstra (1988) T-Chains and the Constituent Structure of Auxiliaries, in A. Cardinaletti, G. Cinque and G. Giusti, eds., *Constituent Structure* , Editoriale Programma.

Haegeman, L. (1992a) *Theory and Description in Generative Syntax- A Case Study in West Flemish* , CUP.

Haegeman, L. (1992b) Negative Heads and Negative Operators: The NEG Criterion, ms., University of Geneva.

Haegeman, L. (1992c) Scrambling, Weak Object Pronouns and Functional Heads in West Flemish, ms., University of Geneva.

Haegeman, L. and R. Zanuttini (1990) Negative Concord in West Flemish, ms., University of Geneva.

Haegeman, L. and R. Zanuttini (1991) Negative Heads and the NEG Criterion, The *Linguistic Review* 8:233-252.

Haider, H. and M. Prinzhorn, eds. (1986)*Verb Second Phenomena in Germanic Languages, Publications in Language Sciences* 21, Foris, Dordrecht.

Heim, I. (1982) *The Semantics of Definite and Indefinite Noun Phrases* , PhD dissertation, University of Massachusets, Amherst.

Higginbotham, J. (1985) On Semantics, *Linguistic Inquiry* 16:547-593.

Hornstein, N. (1984) *Logic as Grammar* , MIT Press.

Horrocks, G. (1983) The Order of Constituents in Modern Greek, in G. Gazdar, E. Klein and G. Pullum, eds., *Order, Concord and Constituency* , Dordrecht, Foris.

Horrocks, G. (1992) Subjects, wh-questions and Foci: A / A' Positions and the Configurationality of Modern Greek Clause Structure, ms., St. John's College, Cambridge.

Horrocks, G. and M. Stavrou (1989) 'Clitics' in Modern Greek: Against a Head-Movement Analysis of Morphology-Syntax Interaction, ms. St. John's College, Cambridge.

Horvath, J. (1986) *FOCUS in the Theory of Grammar and the Syntax of Hungarian*, Foris, Dordrecht.

Huang, C.-T.J. (1982) *Logical Relations in Chinese and the Theory of Grammar* , PhD dissertation, MIT.

Huang, J. and R. May, eds. (1991) *Logical Structure and Linguistic Structure* , Kluwer, Dordrecht.

Iatridou, S. (1990) Clitics and Island Effects, ms. MIT.

Ingria, R. (1981) *Sentential Complementation in Modern Greek* , PhD dissertation, MIT.

Ioup, G. (1977) Specificity and the Interpretation of Quantifiers, *Linguistics and Philosophy* 2:233-245.

Jackendoff, R. (1972) *Semantic Interpretation in Generative Grammar* , Cambridge, MIT Press.

Jaeggli, O. (1982)*Topics in Romance Syntax* , Dordrecht, Foris.

Johnson, K. (1991) Object Positions, *Natural Language and Linguistic Theory* 9:577-636.

Kamp,H. (1981) A Theory of Truth and Semantic Representation, in Groendijk, Janssen and Stockhof, eds., *Formal Methods in the Study of Language* , Amsterdam: Mathematical Centre Tracts, no.s 135 and 136.

Karttunen, L. (1976) "Discourse Referents", in J. McCawley, ed., *Syntax and Semantics* 7:363-385, New York: Academic Press.

Kayne, R. (1989) *Connectedness and Binary Branching* , Foris, Dordrecht.

Kayne, R. (1989) Null Subjects and Clitic Climbing, in O. Jaeggli and K. Safir, eds.,*The Null Subject Parameter* , Kluwer, Dordrecht.

Kayne, R. (1989) Facets of Romance Past Participle Agreement in P. Benincá, eds., *Dialect Variation and the Theory of Grammar* , Foris, Dordrecht.

Kayne, R. (1991a) Romance Clitics, Verb Movement and PRO, *Linguistic Inquiry* 22:647-687.

Kayne, R. (1991b) Italian Negative Infinitival Imperatives and Clitic Climbing, ms., CUNY.

Kempson, R. and A. Cormack (1981) Ambiguity and Quantification, *Linguistics and Philosophy* 4:259-309.

Kiss, K. (1987) *Configurationality in Hungarian* , Reidel, Dordrecht.

Klima, E. (1964) Negation in English, in J. Fodor and J. Katz, eds., *The Structure of Language* , Prentice-Hall, Inc., Englewood Cliffs, New Jersey.

Koopman, H. and D. Sportiche (1991) The Position of Subjects, *Lingua* 85.2/3.

Kratzer, A. (1981) The Notional Category of Modality, in H. Eikmeyer and H. Rieser, eds., *Words, Worlds and Contexts* , Berlin: de Gruyter.

Ladusaw, W. (1979) *Polarity Sensitivity as Inherent Scope Relations* , PhD dissertation, MIT.

Ladusaw, W. (1981) On the Notion Affective in the Analysis of Negative Polarity Items, *Journal of Linguistic Research* 1:1-16.

Laka, I. (1990) *Negation in Syntax: On the Nature of Functional Categories and Projections* , PhD dissertation, MIT.

Larson, R. (1988) On the Double Object Construction, Linguistic Inquiry 19:335-391.

Larson, R. and M. Luján (1990) Focussed Pronouns, ms., MIT.

Lasnik, H. and T. Stowell (1991) Weakest Crossover, *Linguistic Inquiry* 22:687-720.

Lasnik, H. and M. Saito (1992) *Move a* , MIT Press.

Lebeaux, D. (1984) Anaphoric Binding and the Definition of PRO, in the Proceedings of NELS 14, University of Massachusets, Amherst.

Lee, Y.-S. and B. Santorini (1991) Towards Resolving Webelhuth's Paradox: Evidence from German and Korean, ms., University of Pennsylvania.

Lewis, D. (1975) Adverbs of Quantification, in E. L. Keenan, ed., *Formal Semantics of Natural Language* , CUP.

Linebarger, M. (1987) Negative Polarity and Grammatical Representation, *Linguistics and Philosophy* 10:325-387.

Lyons, J. (1977) *Semantics* , CUP.

Madeira, A. M. (1992) On Clitic Placement in European Portuguese, *UCL Working Papers in Linguistics* 4:97-124.

Mahajan, A. (1990)*The A / A-bar Distinction and Movement Theory* , PhD dissertation, MIT.

Maling, J. (1990) Inversion in Embedded Clauses in Modern Icelandic, *Modern Icelandic Syntax: Syntax and Semantics* 24:71-91, Academic Press, New York.

Manzini, R. (1991) Rigid and Relativized Minimality,*UCL Working Papers in Linguistics* 3:65-76.

Manzini, R. (1992a) *Locality* , MIT Press.

Manzini, R. (1992b) Second Position Dependencies, ms., UCL.

Marantz, A. (1984) *On the Nature of Grammatical Relations* , MIT Press.

May, R. (1985) *Logical Form: Its Structure and Derivation* , MIT Press.

May, R. (1988) Ambiguities of Quantification and Wh: A Reply to Williams, *Linguistic Inquiry* 19:118-135.

McCawley, J. (1981) *Everything that Linguists have Always Wanted to Know about Logic but were ashamed to ask* , Blackwell.

McCloskey, J. (1990) Resumptive Pronouns, A'-Binding and Levels of Representation in Irish, in R. Hendrick, eds., *Syntax and Semantics* 23:199-248, Academic Press, New York.

McCloskey (1992) Celtic Syntax Conference handout, Bangor, Wales.

Nishigauchi, T. (1990) *Quantification in the Theory of Grammar* , Kluwer, Dordrecht.

Pesetsky, D. (1987) Wh-in-situ, Movement, and Unselected Binding in E. Reuland and A. ter Meulen, eds.,*The Representation of (In)definiteness* , MIT Press.

Pesetsky, D. (1989) Language-particular Processes and the Earliness Principle, ms., MIT.

Philippaki-Warburton, I. (1979) O Metashimatistikos Kanonas tis Anipsosis sta Nea Elinika, *Epistimoniki Epetiris Philosophikis Sholis Panepistimiu Thessalonikis* 18:489-526.

Philippaki-Warburton, I. (1985) Word Order in Modern Greek, *Transactions of the Philological Society* , 113-143.

Philippaki-Warburton, I. (1987) The Theory of Empty Categories and the pro-drop Parameter in Modern Greek, *Journal of Linguistics* 23:289-318.

Pollock, J.-Y. (1989) Verb Movement, UG, and the Structure of IP, *Linguistic Inquiry* 20: 325-424.

Progovac, L. (1991) *Negative and Positive Polarity: a Binding Approach* , PhD dissertation, Indiana University

Rivero, M. L. (1987) Barriers and Rumanian, in J. DeCesaris and C. Kirschner, eds., *Proceedings of the Linguistic Symposium on Romance Languages XVII* , Amsterdam: Benjamins.

Rivero, M. L. (1988) Exceptional Case Marking Effects in Rumanian Subjunctive Complements, in D. Kibbee and D. Wanner, eds., *Proceedings of the Linguistic Symposium on Romance Languages XVIII* , Amsterdam: Benjamins.

Rizzi, L. (1986) On the Status of Subject Clitics in Romance, in O. Jaeggli and C. Silva-Corvalán, eds. *Studies in Romance Linguistics* , Foris, Dordrecht.

Rizzi, L. (1990) *Relativized Minimality* , MIT Press.

Rizzi, L. (1991a) Residual Verb Second and the Wh-Criterion, ms., University of Geneva.

Rizzi, L. (1991b) Argument / Adjunct (A)symmetries, ms., University of Geneva.

Rizzi, L. and I. Roberts (1989) Complex Inversion in French, *Probus* 1, no. 1:1-30.

Roberts, C. (1987) *Modal Subordination, Anaphora and Distributivity* ,
    PhD dissertation, University of Massachusetts, Amherst.

Rochemont, M. (1986) *Focus in Generative Grammar* , Benjamins,
    Amsterdam.

Rochemont, M. and P. Culicover (1990) *English Focus Constructions and
    the Theory of Grammar* , CUP.

Rooth, M. (1985) *Association with Focus* , PhD dissertation, University of
    Massachusetts, Amherst.

Rouveret, A. (1990) X-Bar Theory, Minimality, and Barrierhood in Welsh,
    in R. Hendrick, eds., *Syntax and Semantics* 23: 27-79, Academic
    Press, New York.

Rouveret, A. (1991) La nature des prépositions conjuguées, ms.,
    Université Paris-8.

Rouveret, A. (1991) Functional Categories and Agreement, *The Linguistic
    Review* 8:353-388.

Rouveret, A. (1992a) Presentation and Commentary in the French
    translation of Chomsky's *Some Concepts and Consequences of
    the Theory of Government and Binding* .

Rouveret, A. (1992b) Clitic Placement, Focus and the Wackernagel
    Position in European Portuguese, ms., Université Paris-8.

Smith, N. V. (1981) Grammaticality, Time and Tense, Philological
    Transactions R. Society London B 295:253-265.

Sportiche, D. (1992), Clitic Constructions, ms., UCLA.

Sportiche, D. and H. Koopman (1990) The Position of Subjects, ms.,
    UCLA.

Stavrou, M. (1985b) I Klitiki Adonimia stis Perioristikes Anaforikes
    Protasis me Eksartisi Amesou Adikimenou pu Isagode me to 'pu',
    Studies in Greek Linguistics .

Stowell and Lasnik (1991) Weakest Crossover, *Linguistic Inquiry* 22:687-
    720.

Suñer, M. (1988) The Role of Agreement in Clitic-Doubled Constructions,
    Natural Language and Linguistic Theory 6:391-434.

Suñer, M. (1992) Two properties of Clitics in Clitic Doubled
    Constructions, in J. Huang, eds., *Logical Structure and Linguistic
    Structure: Cross Linguistic Perspectives* , Reidel.

211

Szabolcsi, A. (1983) On the Non-Unitary Nature of Verb Second, ms., the
    Max Plank Institute, Nijmegen.

Szabolcsi, A. (1991) Islands, Monotonicity, Composition and Heads,
    GLOW Newsletter 26.

Szabolcsi, A. and F. Zwarts (1990) Semantic Properties of Composed
    Functions and the Distribution of wh-phrases, ms., UCLA.

Taglicht, J. (1984) *Message and Emphasis* , Longman, London.

Tamrazian, A. (1991) Focus and Wh-Movement in Armenian, *UCL
    Working Papers in Linguistics* 3:101-122.

Theophanopoulou-Kontou, D. (1988) Kenes Katigories ke Klitika stin NE:
    I Periptosi tu Amesu Antikimenou, *Glossologia* 5/6:41-68.

Thráinsson, H. (1979) *On Complementation in Icelandic* , Garland, New
    York.

Travis, L. (1984) *Parameters and Effects of Word Order Variation* , PhD
    dissertation, MIT.

Tsimpli, I. M. (1990) The Clause Structure and Word Order in Modern
    Greek, *UCL Working Papers in Linguistics* 2:226-255.

Tsimpli, I. M. (to appear) Focussing in Modern Greek, in K. Kiss, ed.,
    Discourse Configurational Languages , CUP.

Tsimpli, I. M. and A. Roussou (1993) On Negation in Modern Greek, ms.,
    UCL.

Uriagereka, J. (1990) Head Movement and Transparency, ms., University
    of Maryland.

Vallduví, E. (1990) *The Informational Component* , PhD dissertation,
    University of Pennsylvania.

Veloudis, I. (1982) *Negation in MG* , PhD dissertation, University of
    Reading.

Williams, E. (1977) Discourse and Logical Form, *Linguistic Inquiry*
    8:101-139.

Williams, E. (1978) Across-the-Board Rule Application, *Linguistic Inquiry*
    9:31-43.

Williams, E. (1980) Predication, *Linguistic Inquiry* 11:203-238.

Williams, E. (1986) A Reassignment of the Functions of LF, *Linguistic
    Inquiry* 17:265-299.

Williams, E. (1988) Is LF distinct from S-structure? A Reply to May,
    Linguistic Inquiry 19:135-146.

Wyngaerd, V. (1990) *PRO-legomena*, PhD dissertation, University of Antwerpen.

Zanuttini, R. (1988) Two Strategies for Negation: Evidence from Romance, Proceedings of ESCOL V, 535-546.

Zanuttini, R. (1989) The Structure of Negative Clauses in Romance, ms., University of Pennsylvania.

Zanuttini, R. (1990) On the Relevance of Tense for Sentential Negation, ms., University of Pennsylvania and University of Geneva.

Zanuttini, R. (1991) *Syntactic Properties of Sentential Negation: A Comparative Study of Romance Languages* , PhD dissertation, University of Pennsylvania

Zubizarreta, M. L. (1982)*On the Relationship of the Lexicon to Syntax* , PhD dissertation, MIT.

Zubizarreta, M. L. (1987) *Levels of Representation in the Lexicon and in the Syntax* , Foris, Dordrecht.

Zwicky, A. (1985) Clitics and Particles, *Language* 61:283-305.