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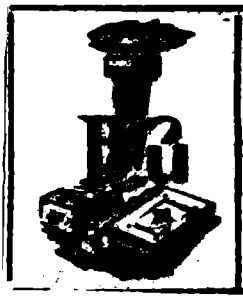
EDITURA UNIVERSITĂȚII DIN BUCUREȘTI



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Directorul colecției: Iancu FICHER

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Abbreviations

The following abbreviations have been used in this dissertation:

A : adjective
AP: adjective phrase
Acc: Accusative
Adv: adverb
AdvP:adverb phrase
AE: American English
Agr/AGR: agreement
Agro: agreement object
Agrs:agreement subject
AgrP: agreement phrase
AgroP: agreement object phrase
AgrsP: agreement subject phrase
Asp: aspect
AspP: aspect phrase
Aux/AUX: auxiliary
BI: bare infinitive
CliticP: clitic phrase
C/Comp: complementizer
CP/CompP: complementizer phrase
D: determiner
DP: determiner phrase
e: event
e-role : event role
ET: event time
FinP: finiteness phrase
FocusP: focus phrase
GB: government and binding
I/Infl/INFL : inflection
IP/InflP: inflection phrase
LF: logical form
MG: Modern Greek
MoodP: mood phrase

MP: Minimalist Program
Neg/NEG: negation
Neg-Operator: negation operator
NegP: negation phrase
Nom: nominative
NP: noun phrase
PF: phonological form
pers : person
pl: plural
Pr/Pred: predicate
PrP/PredP: predicate phrase
RT: reference time
SAI: subject-auxiliary inversion
SC. small clause
sg: singular
Su: subject
Spec: specifier
ST: speech time
t: trace
T: tense
T-chain: tense chian
T-Operator: tense operator
TP :tense phrase
V: verb
VP: verb phrase
UG: Universal Grammar
1st,2nd,3rd : first, second, third (grammatical person)

Expectations is the place you must always go to before you get to where you're going. Of course, some people never go beyond Expectations...

(Norton Juster - *The Phantom Tollbooth*)

INTRODUCTION

This study will address the so-called "auxiliary puzzle", trying to find an answer to the following questions: (i) what is the status and function of auxiliaries or auxiliary verbs? (ii) what can they tell us about the structure of language in general? (iii) are they verbs or functional elements? (iv) are they verbal elements inserted in the functional domain of a clause? (v) are they inserted inside or outside the VP constituent? (vi) is the position which they occupy relevant in any way? (vii) are auxiliary configurations mono- or biclausal? (viii) do auxiliaries occupy the same structural position in a language or across languages? (ix) can we provide a crosslinguistic definition of auxiliaries?

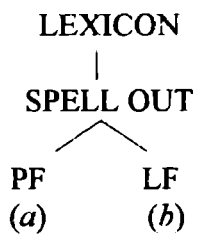
The main idea on which the present analysis builds is simple. It starts from an attempt at "relaxing" the analysis of auxiliaries in the sense that it tries to do away with the search for *the* structural position which they occupy. What *cross-linguistic* empirical data actually show is a great variety in terms of structural position(s) and properties. What we should look for instead is a unifying mechanism responsible for the behavior of auxiliaries. Given the fact that they are associated with the functional domain and that functional categories are responsible for variation across languages, this seems to be a reasonable line of investigation.

The analysis focuses on phenomena in English and Romanian, but it also looks at data from other Romance or Germanic languages.

The theoretical framework adopted throughout is the one provided by the Minimalist Program (MP) (Chomsky 1995) in its standard version. It will be assumed that syntactic trees or representations are built up out of lexical items via a process of derivation which begins with a Numeration, i.e. an ordered set of elements picked up from the Lexicon and which will

be linked together into a sentence via the operations *Merge* and *Move*, until all the elements in the Numeration are used in the process. *Merge* (α is defined as a binary operation which takes a pair of syntactic objects and combines them into a complex item which, in its turn, can further Merge with another syntactic object to create more complex items. *Move* (α is driven by the need to check a feature. Strong features have to be checked overtly, before Spell Out, whereas checking of weak features must *Procrastinate* (i.e. weak features are checked in covert syntax, after Spell Out) until the level of logical form (LF). Movement in covert syntax (at LF) will be assumed to consist of feature-movement only (Chomsky 1995). Each linguistic expression will contain instructions for the articulatory-perceptual (A-P) and conceptual-intentional (C-I) systems: A-P has been associated with PF (the level of phonological form) and C-I with LF (the level of logical form, whose status has been more controversial). Each linguistic expression is a pair (a,b) drawn from these two levels (a from PF and b from LF):

(1)



These two levels actually represent *the only levels.*[1]

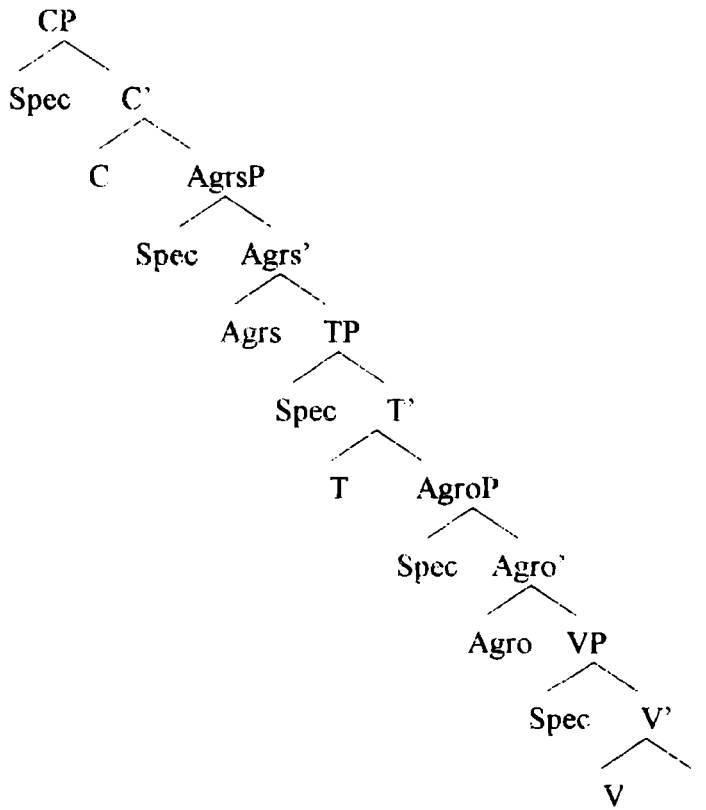
In the Minimalist Program the distinction between substantive (or contentful, lexical) elements and functional elements assumed in previous models of analysis such as the Principles and Parameters Model (PPM) (Chomsky 1981) is maintained. However, beginning with Chomsky (1993) a vocabulary item is assumed to be drawn from the lexicon fully inflected and it will merely check its features against the relevant functional nodes. This difference is far from trivial. Affixes are no longer seen as discrete items, inserted at different terminal nodes, as in the PPM. Thus, the link between overt morphology and syntactic structure is less obvious than before. A functional head no longer obligatorily consists of an overt

[1] D-Structure is eliminated.

morphological marker; it can consist of features associated with inflectional morphology. These features are relevant only for syntax and they play a crucial part in the licensing of inflected elements. They drive movement. The features of functional categories are also responsible for cross-linguistic variation.

The basic clause structure, in which inflected elements are licensed outside the lexical domain, is assumed to be the one in (2) (Chomsky 1993):

(2)



An idea borrowed from Rizzi (1995) and an idea borrowed from Speas (1993) will play an important role in the analysis.

A full clause will be assumed to consist of three layers or three domains:

(i) the lexical layer/ domain, where theta-assignment takes place
(ii) the functional layer/domain, i.e. the area of morphological specifications
(iii) the complementizer layer/domain which Rizzi (1995) defines as "hosting topics and various operator-like elements such as interrogative and relative pronouns, focalized elements, etc" (p 1).

The functional layer will be assumed to contain, besides Tense and Agreement (the "standard" projections) at least a Mood projection and an Aspect projection. Actually, one of the claims of the analysis is that Universal Grammar (UG) has two Mood projections: one in the functional domain (and which would roughly correspond to the one Ouhalla 1991 adopts for the English modals) and one at the borderline between the functional and the complementizer domains, the area which hosts invariant elements (and which corresponds to the one Rivero 1994 proposes for some languages of the Balkans).

Adopting the representation of clausal structure put forth in Rizzi (1995), the Complementizer Phrase (CP) will be represented as split into the following projections:

(3) ForceP.... (TopicP)(FocusP) FinitenessP IP

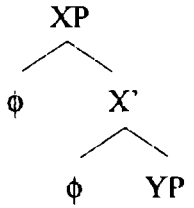
The Force projection hosts complementizers or any other free functional morphemes which provide information about the clausal type (i.e. whether it is declarative, interrogative, comparative, etc.). The Topic projection is the domain of preposed elements which express old information, i.e. information available in previous discourse, whereas the Focus projection is the landing site of those preposed elements which introduce new information and which bear focal stress. The Finiteness *(Fin) projection hosts elements which express* "a specification of finiteness", such as special subjunctive complementizers in Polish, subject agreement, etc. and it is subject to wide language variation.

From Speas (1993) I borrow the idea of economy of representation, idea which has been in the literature for quite a while and which does not differ in a crucial way from the Multiple-Spec hypothesis in minimalist studies. The main claim is that empty projections are disallowed:

(4) Project XP only if X has content. (Speas 1993:186)

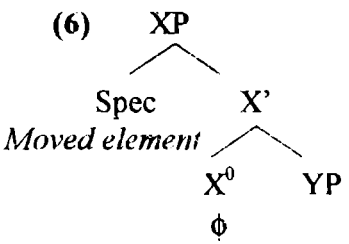
For example, XP in (5) has no content because its head does not contain a distinct phonological matrix :

(5)



XP is disallowed because its head is phonologically empty and because nothing has moved to its Specifier position (Spec XP). But, if an element moves to Spec XP to check the features of the head in a Spec-head configuration the projection will get content and it will no longer be disallowed:

(6)



The notion of "chain" as defined in Gueron and Hoekstra (1988, 1995) proved extremely helpful in the analysis, especially for the temporal interpretation of auxiliary configurations. However, the analysis led to both a reformulation of the definition of Tense-chains and an extension of the notion of chain to Negation-chains and Mood-chains. Thus, chains were defined as including a link in the lexical domain, one in the functional domain and one in the complementizer domain (or at the borderline between the functional and the complementizer domains). The abstract feature which is associated with each chain can only be overtly realized, along the chain, only once. The other links will only contain an abstract, non-overt feature. This condition on chains can explain why a Mood chain cannot contain two modals or why Negation can be overtly marked only once in English. Importantly, the elements which represent the link in the complementizer (or operator) domain are assumed to behavae differently

with respect to the Principle of Economy. Nodes in this domain can be projected even when the head is empty but semantically contentful and when nothing has moved to the Spec of the projection .

The book is organized as follows:

In Chapter 1 I outline the problem and I briefly consider some solutions to the auxiliary paradox. All can be shown to be unsatisfactory in some respects. In the second part of the chapter I suggest a possible line of investigation. The main claim is that auxiliaries are verbal elements which merge with a small clause (SC) in the derivation. The different degrees of complexity of the SC will force the auxiliary to be inserted under different nodes. The more complex the SC the higher in the structure the auxiliary will be pushed. The value it acquires will reflect the features of the core (i.e. of the lexical entry) and those of the functional node which represents a context for its insertion .

Chapter 2 examines in this vein the Romanian *a avea* ('to have'). *A avea* is analyzed as having one single lexical entry which enters different derivations and hence occupies different structural positions. In particular, it is argued that *a avea* can be inserted : (i) inside the VP constituent, (ii) inside the Tense projection (TP) and (iii) inside a Mood projection (MoodP). I also examine the correlation between the three distinct morphological paradigms of *a avea* and their properties and I advance the hypothesis that syntax can act as a filter on morphology. Each position under which *a avea* is inserted in the derivation is associated with one particular paradigm. Syntax can be shown to allow certain morphological forms to spell out while disallowing others.

The analysis of the perfect auxiliary *fi* ('to be') points to the fact that Romanian evinces a systematic *a avea* ('to have') / *a fi* alternation which is, however, different from the alternation in other Romance or Germanic languages.

In Chapter 3 I explore the system of the English modals. The different meanings associated with the modals are shown to be triggered by differences at the syntactic level. The main hypothesis which is put forward is that the core meaning of the English modals extends according to the structural context in which the modal is placed. I propose that there are three positions which they can occupy: (i) under VP, (ii) in a Mood projection under Tense (Mood1P) and (iii) in a second Mood projection (Mood2P) at the borderline between the functional and the complementizer layers.

In Chapter 4 it is argued that the Romanian modals do not represent a syntactic class. The analysis focuses only on *a putea* ('can', 'be able to','manage') and *a trebui* ('must', 'to have to') . The main claim is that the Romanian modals are lexical verbs associated with two parallel structures: a VP-complex and a biclausal one. The examination of *a putea* ('can') and *a trebui* ('must') offers arguments against the view that there is a mapping from deontic modals onto control structures or from epistemic modals onto raising structures. The analysis of *a putea* ('can') leads to some remarks on the difference between semantic and syntactic complex predicates.

In *Instead of Conclusions* I raise some questions which, because of limitations of various sorts, could not be answered in the present study and which will hopefully make the subject of further research.

'The whole entirely depends', added my father, in a low voice, 'upon the ***auxiliary verbs****, Mr Yorick. [...] Now the use of the* ***Auxiliaries*** *is, at once to set the soul a-going by herself upon the materials as they are brought her; and by the versability of this great engine, round which they are twisted, to open new tracks of enquiry...'*

(Laurence Sterne - *Tristram Shandy*)

Chapter 1

THE AUXILIARY PARADOX

1.1 The Paradox

The definitions of auxiliaries or auxiliary verbs are hardly uniform; they range from "strong" ones, which treat auxiliaries as a clearly distinct syntactic class associated with a unique structural position (crosslinguistically) to more sceptical views which doubt the possibility of providing a general definition which could encompass the crosslinguistic empirical data, or from more "narrow" approaches, which focus on the idiosyncratic properties of auxiliaries in one particular language to attempts at finding a universal principle which could account for the features which auxiliaries share.

In what follows I will briefly consider some of the solutions provided by generative linguistics to the so-called "auxiliary puzzle". All the solutions can be shown to solve one or several problems but also to be unsatisfactory in some respect(s). To my mind, this is due to a paradoxical property of auxiliaries: on the one hand, they are associated with the same notional categories (Tense, Modality or Aspect) and hence we would expect the auxiliary phenomenon to be the same cross-linguistically[2] but, on the other hand, they belong to morphology, the locus of language variation. What we seem to be faced with is a set of elements which :

[2] Actually, in Chapter 4 I will provide further evidence that similar semantic notions do not result in similar syntactic configurations.

(i) behave like lexical verbs in some respects but also evince properties which differentiate them from their lexical counterparts

(ii) express the same notional concepts across languages though not all these notional concepts are necessarily expressed by auxiliaries

(iii) behave uniformly across languages in some respects but may differ (sometimes even within one and the same language) in others

(iv) sometimes have a lexical meaning but their role is mainly functional.

No wonder there is lack of consensus on how to define auxiliaries and auxiliary-related phenomena or that linguists like Pullum (1981), Reuland (1983) or Dobrovie-Sorin (1993) clearly point out that the category auxiliary (AUX) cannot be analyzed as a unified, universal phenomenon.

In the second part of this chapter I propose a possible way of tackling the auxiliary paradox, pointing out the advantages such an approach might have but also the problems it raises and the questions it leaves unsolved. Most of the ideas on which the present proposal relies are not really novel (what is?!) but I will try to revisit old goodies from a minimalist perspective in an attempt at explaining the mechanism which hides behind the auxiliary phenomenon.

1.2 Inside or outside the VP constituent?

The core of the debate over the status of auxiliaries in early generative linguistics reduces to the structural position in which they are assumed to be base-generated: inside or outside the VP constituent. The hypothesis that auxiliaries (i.e. the English modals, the English *have* and *be*) occupy a position outside the VP constituent, i.e. a position different from the one of lexical or main verbs, goes back to Chomsky's *Syntactic Structures*, where the AUX constituent was structurally defined as being outside VP (as in (1)) and was expanded as in (2) :

(1) PredPhrase ---- AUX VP

(2) AUX---- Tense (Modal) (*have -en*) (*be -ing*) (*be -en*)

One of the most important insights of such an analysis, when revisited from a contemporary stance, is that it associates different auxiliaries with different fixed structural positions, i.e. they are all treated

as base-generated under the constituent labelled AUX but, within this constituent, they observe a clear order constraint. Also, affixes like *-en* or *-ing* are analyzed as being base-generated under the same constituent as *have* or *be*, but their affixal nature is captured by their property of adjoining to the lexical verb to the right by affix-hopping[3] This property distinguishes between the two types of elements which occupy a position under AUX. The rule in (2) also captures the intuition that modals behave differently from the other AUX elements in that they are the only ones which do not co-occur with an affix or affix-like element, i.e. they are not treated as discontinuous elements[4] But, in spite of these differences, all the elements under AUX share one important feature: they are outside the VP with which they define the predicate domain of the clause.

Still, there are (at least) two problems with such an approach. Firstly, it relies exclusively on the auxiliary phenomenon in English (in other Germanic languages or in Romance the so-called auxiliary verbs do not uniformly evince the properties associated with the English auxiliaries) and it cannot account for the fact that *have* and *be* can behave like main verbs (at least) with respect to VP-deletion. This aspect was one of the most important arguments Ross (1967) used in favour of treating all the auxiliaries as main verbs, i.e. as base-generated in the structural configurations in which lexical verbs are. However, even Ross and his followers (Huddleston 1974, McCawley 1971, Newmeyer 1975 among many others) had to admit that auxiliaries differed from main verbs in some respect: a syntactic feature "aux" distinguished between the two types of verbs. The advantage of their analysis is that it reduces the inventory of syntactic categories; but, at the same time, it adds a syntactic feature, [aux], which - they argue - might be language specific.

So far, it is obvious that no matter which position one may adopt, auxiliaries differ from main verbs; they evince features which distinguish them as a special class or sub-class[5] of verbs. Assuming that auxiliaries are generated under the VP constituent does not mean that they occupy the same structural position which lexical verbs occupy. Thus, the *inside VP-hypothesis*

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[3] For arguments against the affix-hopping account see, for example, Gazdar, Pullum and Sag (1982).

[4] However, the analysis cannot account for the different syntactic behaviour of deontic and epistemic modals.

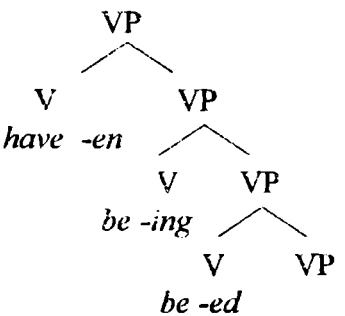
[5] Evidence from language acquisition studies point towards the same conclusion: children use the semantic and syntactic properties of auxiliaries to distinguish them from main verbs (Stromswold 1990).

does not really do away with a distinct class, it only states that the members of this class (!) occupy a position inside the VP-constituent. That captures the empirical fact that auxiliaries are verbs (or verbal elements) which evince a [+aux] feature.

Emonds (1976), in an attempt to solve the problems raised by the previous two lines of investigation, defines auxiliaries as [+V, +Aux] elements, and main verbs as [+V, -Aux] and places only the English modals and *do* under the AUX constituent, as in (3), treating *have* and *be* as base-generated under the VP constituent,as in (4), from where they can raise to AUX.

(3) AUX--- Tense (*DO*)
Modals
to

(4)

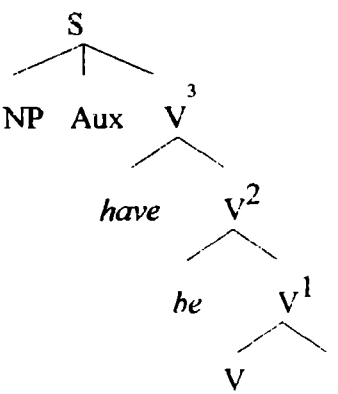


Such an analysis tries to account for the differences between lexical and auxiliary verbs, since only the latter can raise to AUX, on the one hand, and for the differences between modals and auxiliaries like *have* and *be*, on the other hand. Still, it is not without problems. Firstly, it is difficult to see in what way *do* and the modals can be base-generated in the same way. Secondly, the analysis (again) sweeps under the rug the problem of auxiliaries in other languages which behave (very much) like main verbs with respect to movement. Within the Principles and Parameters model, Verb movement, an instance of *Move* α, was taken as a parameter that distinguishes between languages like English, for example, where verbs cannot move to Infl(ection), and languages like French or Romanian, where verbs do move to Infl. The fact that auxiliaries are allowed to move to Infl differentiates auxiliaries from main verbs in English, but not in other languages, where lexical verbs move as well.

Emonds's proposal still agrees with the previous analyses which claim that auxiliaries differ from main verbs. The next question then is whether they differ from lexical verbs cross-linguistically, i.e. whether they are members of a universal constituent, AUX.

In their seminal paper, Akmajian, Steele and Wasow (1979) (ASW) argue in favour of the universality of AUX. This time, the arguments come from empirical data from Luiseno, a Uto-Aztecan language, which has a constituent that contains tense and modality elements and which is different from all the other constituents. ASW identify this constituent with AUX in English and draw the conclusion that AUX represents a universally distinct syntactic category associated with the notional categories of Tense and/or Modality [6]. But what I believe to be of crucial importance in their analysis is the hypothesis that the position which auxiliaries can occupy is determined by the type of complement they take. Both Emonds (1970, 1976) (see (4) above)) and ASW (1979) (5), propose a "stacked" representation for auxiliary configurations which is, to a certain extent, the predecessor of the "blown up" Infl in many PPM analyses:

(5)



As Scholten (1988) correctly points out, such an analysis cannot distinguish auxiliaries from main verbs in a principled way. Also, it assumes a universal constituent, AUX, while placing, at the same time, *have* and *be* under a split VP constituent. That amounts to saying that some auxiliaries are generated under AUX and others under VP (where they have to occupy different "stacked" positions); but what exactly distinguishes those VP auxiliaries from lexical verbs? Jackendoff (1972)

[6] For arguments against their analysis see Pullum (1981).

had already advanced the hypothesis (taken over by Zagona 1982[7]) that *have* and *be* are specifier-like elements, behaving more like determiners or degree modifiers than like lexical verbs with respect to their selectional features.

One conclusion is obvious: it is important to see what position auxiliaries occupy in the structure of a clause, but one cannot really account for the features of this class only in terms of position, i.e. one cannot associate the property of being an auxiliary only with a particular structural position. It might be the case that the property called "auxiliary" is composite and that it has to be defined in wider terms.

1.3. Lexical or functional ?

Emonds (1985) was the first one to distinguish between lexical and functional categories ("grammatical formatives"). Lexical categories belong to the "open categories" which have "indefinitely many members in the dictionary of a language" whereas functional elements belong to the set of closed categories, with a limited number of members. Later on, functional categories were identified with "the locus of grammatical information which determines the structural representation of given constructions, as well as the various grammatical processes they may undergo." (Ouhalla 1991:8). Within the Principles and Parameters framework, parametric variation is assumed to affect only functional categories. Parameters are thus associated with individual items as part of the information specified by their lexicon entries. The set of functional categories includes Tense, Aspect, Mood, Determination, Complementizer, Degree. We are thus confronted with the first legitimate question with respect to the status of auxiliaries: are they members of the open class categories (since they are verbs) or are they a grammatical formative (since they are associated with Tense, Mood, etc.)? The paradoxical set of features of auxiliaries seems to represent a threat to the neatly divided compartments of the lexicon: the conceptual and the grammatical ones. But I will return to this issue immediately. Meanwhile, I would like to briefly look at other properties which distinguish between lexical and functional elements and see in what way they represent properties which auxiliaries have/do not have.

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[7] Zagona (1982) argues that *have* and *be* are specifiers and relates this property to their occurring in isolation, after VP-ellipsis.

One of the most interesting differences which have been discussed and which also explains, at a semantic level, other differences, is linked to the property of having a referential argument[8]. Lexical categories have a referential argument whereas functional elements are dependent on their lexical complements for this referential specification. This might explain why a particular functional head always selects the same complement. It is obvious that the relationship between a functional head and its lexical complement is a very selective one [9]. Another property, linked to the lack of semantic content associated with functional categories, regards the possibility of assigning thematic roles: functional categories have been defined as lacking this property. Auxiliaries have been defined (Dobrovie-Sorin 1993, Cornilescu 1995) as verbs which cannot assign a theta-role and which subcategorize for projections of V. If such a definition is adopted, the distinction lexical-functional is again questioned. Or, if we still want to retain the distinction, we should either adopt a different definition or somehow weaken the difference which is at stake. Also notice that adopting the view that functional categories lack semantic content is at odds with the view that functional categories, such as Tense or Determiner, for example, have features which are interpretable (Chomsky 1995). Let us say, at this point, that lexical categories can lose their property of assigning theta-roles and hence of subcategorizing for those arguments which correspond to the relevant theta-roles. The question is under what circumstances they can lose this property.

Some functional categories may have an affixal nature, they behave like bound morphemes. Obviously, not all functional categories are realized as bound morphemes. In English, for example, determiners are

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[8] The referential argument corresponds to the reference of that category in an intuitive sense.

[9] Zwarts (1992) defines this relationship as a theta-binding relation:

A functional head theta-binds a lexical projection iff (i) the head of the complement and the complement are sisters and (ii) the head is coindexed with the referential argument of the lexical projection. Theta-binding obtains between an operator and the argument position it binds: determiners theta-bind a position in nouns, INFL a position in verbs, a.s.o. However, under a split-IP representation, functional heads seem to select other functional heads as their complement which questions the appropriateness of the view that a functional head selects one particular lexical complement. It might be the case that a particular cluster of functional elements identify the referential argument of a lexical element.

free morphemes, whereas in Romanian some determiners are non-affixal (the indefinite article [10]) and some are affixal (the definite article). On the other hand, some functional elements can be non-affixal but behave as if they were bound morphemes. That led to the analysis of auxiliaries as affix-like elements in languages like Romanian (Guțu 1962, Avram 1988) or Catalan (Llinas 1993) or as clitic-like elements (Dobrovie-Sorin 1993 for Romanian). Such an approach can account for the properties evinced by the periphrastic temporal-aspectual forms in these languages but it fails to explain the difference between auxiliaries and bound morphemes which express the same notional concepts.[11] The affix-like analysis (just like the VP-complex one, though partially supported by empirical facts, seems to rely primarily on the intuition that periphrastic and simple configurations are interpreted in a similar way, i.e. it relies primarily on interpretive facts.[12] The approach proposed in this study tries to capture this intuition in a different way. It exploits the idea in Roberts (1993) that heads can project "negatively", i.e. that there are X^{-1} elements. Auxiliaries will be defined as X^{-1} elements at LF.

Let us assume at this point that auxiliaries evince features which qualify them as functional elements. Given this assumption, can we say that they are "universal" or that they behave in a similar way cross-linguistically? With Ouhalla (1991) for example, functional categories may vary, being subject to variation Their order may also vary from one language to another. With Thrainsson (1994), the order of functional

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[10] To the extent to which what has been analyzed as an article - *o /un* ('a') - is indeed an article.

[11] Zubizaretta (1985) examines in the same vein the behaviour of Romance causatives and perception verbs which she analyzes as functioning as affixes from a morphosyntactic point of view, in spite of being words from the morphophonological point of view. That led her to the generalizing observation that "although it is probably true that the cases in which there is one-to-one correspondence between phonological categories and syntactic categories constitute the core cases, this is not a grammatical necessity. The grammar does allow for mismatches between morphology and syntax "(p.286). However, I do not believe that the affix-like analysis can be generalized to languages in which the possibility of lexical elements to intervene between the affix-like word and its complement is an empirical fact.

[12] From a minimalist perspective, adopting this view would imply that the lexical verb and the auxiliary come "together" from the lexicon on a par with the fully inflected lexical verb! I believe that it is relevant for the *Merge* process whether the verb comes fully or incompletely inflected from the lexicon .

categories is always the same ; it is only their presence/absence which may vary. Within MP, functional categories play a crucial role in the process of feature-checking; it is their set of features which drives *Move* or *Attract*, leading to different derivations. They are associated with variation with respect to their formal properties[13] but with the same semantic properties: D is treated as the locus of "referentiality", C as an indicator of mood or force, T as linked to event structure, a.s.o. Recall that one of the main differences between lexical and functional categories is linked to the presence/absence of "substantive content"[14]. We are faced with a contradiction. But this can be solved if we do not take "semantic properties" to be the same as "substantive content" To my mind, the semantic properties of a functional category are derivative of the process of "identification" of the referential argument of a lexical category.

Let us return to auxiliaries and examine them from this perspective. They seem to be associated with the same semantic notions cross-linguistically . Also, the skeleton of the clause is universal, i.e. the available inventory of functional categories and the order in which they build up the structure of language. The rest is...variation.

1.4. A solution

Does this mean that we should adopt the skeptical view that there is no general explanation for the behaviour of auxiliaries? In what follows I

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[13] In this, MP follows Jespersen who held that "no one ever dreamed of a universal morphology, to any far reaching degree, morphology being a primary repository of exceptional aspects of particular languages." (Chomsky 1995:241).

[14] Chomsky (1988) goes so far as to say : "Suppose that what we call knowledge of language is not a unitary phenomenon, but must be resolved into several interacting but distinct components. One involves the "computational aspects" of language |...|. A second component involves the system of object-reference and also such relations as "agent", "goal", "instrument" and the like; what are sometimes called thematic relations |...|. For want of a better term let us call the latter a 'conceptual system'. We might discover that the computational aspect of language and the conceptual system are quite differently represented in the mind and the brain, and perhaps that the latter should not strictly speaking be assigned to the language faculty at all...". Uriagereka (1996) goes even further and speculates that it is an accident that we use the same "material" to express functional and lexical elements. (Actually, there is at least one language which uses two different "materials" in writing: Japanese uses *kanji*-s for the lexical items (or *katakana* for borrowings) but *hiragana* for grammatical formatives.

will try to suggest that such an explanation exists. It will build on the intuition that all auxiliaries are verbs and that some elements may become "functional' in the derivation. The hypothesis is simple: it assumes that auxiliaries are verbs which Merge in the derivation with SCs of different complexity.[15] When inserted under a functional node, the auxiliary will lose some of its substantive content but it will acquire the semantic and syntactic properties associated with the particular node. The kind of SC with which the auxiliary merges will force it to be inserted under one functional projection or other. It follows that auxiliaries can occupy more than one position. They are inserted under different nodes, whose order is universal. The discontinuous representation of auxiliary configurations (Chomsky 1957) is now captured in the matching process between the categorial status of the SC (AspP, TP, etc.) and the auxiliary which fills a particular functional head. Recall that one of the main objections to the 1957 analysis was that the position only could not provide a principled way of accounting for the difference between auxiliaries and main verbs. The present approach assumes that when inserted under a functional node, the auxiliary acquires the semantic and formal properties associated with that particular node. The lexical verb which heads the SC is the only one which has a referential argument and hence the only one which can select arguments. The auxiliary loses these properties and hence it will no longer be a theta-role assigner. Adopting such a view implicitly means that auxiliary structures will be interpreted as monoclausal, i.e. as different from the so-called complex predicates, such as the Romance causatives, which are biclausal Analytical auxiliary structures do not represent the result of the merger of two independent argument structures (as Rosen 1990, for example, defines causatives in Romance) . Compound temporal-aspectual forms are the result of the merging of the auxiliary (which is devoid of any argument structure) with a SC. The resulting configuration has one single argument structure, the one of the lexical verb, and one single event argument. In this way, we can capture the intuition that periphrastic forms are interpreted on a par with simple ones[16] . Meanings

[15] If we look back at *Syntactic Structures* or at ASW (1979) we will see that the core of this proposal borrows ideas which were already present in those analyses.

[16] Treating auxiliaries as inserted under functional nodes may also account for the fact that children do not use auxiliaries during the very early stages in language acquisition. If we adopt the view that language acquisition is "language growth" where "language growth" could be defined as a gradual building of projections, with the

are assumed to be built up from smaller components which combine in a constrained way.

The fact that auxiliaries can be inserted under different nodes in the derivation can account both for crosslinguistic differences and for variation within one and the same language

One advantage of this approach is that it takes off some of the burden we have been placing on the lexicon, i.e. computation is assumed to play a more important part than storage. The various properties of auxiliaries are seen as the result of derivation, in particular of the position under which they are inserted. The value of the bundle of features carried by the auxiliary is seen as partly coming from the lexicon and partly as acquired in the derivation.

Such a position departs from the strong lexicalist hypothesis of the MP, which assumes that all the elements come from the lexicon fully inflected, i.e. all the features in the bundle come from the lexicon and they are then checked against functional heads. But, at the same time, it also departs from a Distributed Morphology (Halle and Marantz 1993) approach according to which different vocabulary items, i.e the lexical verb, the tense marker, the aspect marker, etc., are inserted at different terminal nodes. As will be argued in the analysis, some features do come from the lexicon, but there are also features which are acquired or given "content" in syntax. Such a view can capture the intuition that Agr on VPs or Case are different from Tense, Aspect or Agr on DPs.

We can still retain the analysis in Emonds (1976), that auxiliaries are [+V, +Aux] elements while at the same time making the [aux] feature more specific in terms of the properties associated with functional projections.

It is not the case that auxiliaries move to Infl in some languages but not in others (as has been so often assumed in the literature), they are simply inserted under various nodes in the derivation via *Merge*, which is simpler and costless. Under the minimalist view that lexical items come from the lexicon fully inflected and then check their features under the

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lexical categories being the first ones acquired (Lebeaux 1988, Radford 1990, Vainikka 1994, among many others) and the functional ones joining in gradually, we have a possible explanation for a question like why do children use possessive *a avea* ('to have') first and the perfect auxiliary later? Such an explanation should be, however, taken with a grain of salt, as any acquisition story that is not based on solid experimental data.

relevant functional node it would be simply incoherent to adopt an analysis in which auxiliaries (in English, for example) move to a functional projection after having been inserted under a V node[17] unless we also adopt the view that auxiliaries are lexical verbs whose place of insertion in the structure of the clause is the lexical domain.

The present proposal does not have to rely on the assumption that auxiliaries differ from main verbs as early as the numeration,where the former are fully inflected whereas the latter must wait for the derivation, since they are inflected in the syntax by a version of the old affix hopping (as proposed in Lasnik 1994 for the English *have* and *be*). On the contrary, it assumes that auxiliaries (in the Numeration) do not differ from main verbs by any special morphological property (at least, not at this stage of the derivational process).

In Chapter 2 I analyze the Romanian *a avea* from this perspective and in Chapter 3 the English modals. If the analyses presented are on the right track, they are evidence in favour of the generality of the approach.

As we are dealing with a paradox, I do not claim that this approach is *the* solution, I take it to be *a* possible solution. And, like all possible solutions, it may raise more questions than the ones which it has (hopefully) answered. One question which immediately comes to mind concerns the definition of functional categories and the (too) neat distinction between the conceptual and the computational compartments of the lexicon.

Then, the problem of the English *do*, which I have not mentioned so far, remains unsolved. It may be the case, though, that it has properties which distinguish it from all the other auxiliaries, properties which could be language specific.

Also, in a way, the analysis I propose may seem (and may well be!) speculative about the interpretable features of the auxiliaries[18] analyzed in the following chapters. There are, for sure, lots of other questions. But there is always the excuse that we are dealing with a paradox...

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[17] For an analysis of the English *have* and *be* in which it is argued that these auxiliaries are bundles of features which raise to T before Spell Out, see Roberts (1998).

[18] Chomsky (1993) argues that auxiliaries have no interpretation and are deleted at LF. The present proposal builds precisely on the view that auxiliaries do have (some) interpretation and hence they are not deleted at LF .

'A Dodecahedron is a mathematical shape with twelve faces.' Just as he said it, eleven other faces appeared, one on each surface, and each one wore a different expression. 'I usually use one at a time', he confided, as all but the smiling one disappeared again. 'It saves wear and tear'
(Norton Juster - *The Phantom Tollbooth*)

Chapter 2

AUXILIARY CONFIGURATIONS IN ROMANIAN: AN ANALYSIS OF *A AVEA* ('TO HAVE') AND *A FI* ('TO BE')

2.1 Introduction

This chapter proposes a unified analysis of the Romanian *a avea* ('to have') (both the main verb and the auxiliary), advancing the hypothesis that its different values result from the different positions it occupies in the clausal structure. The features of *a avea* will be shown to reflect the features of the core and those of the functional node which represents a context for its insertion in the structure. The position which *a avea* occupies will be analysed as determined by the complexity of the small clause (SC) (defined as a "truncated" clause) with which it merges in the derivation. The more complex the SC the higher the position which the auxiliary occupies in the structure will be.

In particular I propose that *a avea* can be inserted under the following projections:

(i) under VP

(ii) under TenseP

(iii) under a projection which I shall call Mood1P, and which is higher than TenseP but lower than AgrsP.[19]

[19] I call this position Mood1P because, as will be seen in the analysis I shall put

The three positions are associated with different morphological paradigms. It will be claimed that there is a direct correlation between the position of *a avea* and its "deficiency" (both morphological and semantic).

The analysis of the Romanian participle in structures like (1) and (2) below will account for the fact that the participle which merges with *a avea* never agrees with the subject DP (nor with the direct object DP, as a matter of fact) but has to agree with the subject DP when it merges with *a fi* ('to be') in structures which are not passive constructions:

(1) *Maria a venit.*
Maria has come
'Maria has come.'

(2) *Maria e venită.*
Maria is come-fem.sg.
'Maria has come'.

It will be shown that (1) and (2) evince different clusters of properties which point to the fact that they are different structures, which result from different derivations. The subject DP in (1) attracts one single theta-feature, whereas the DP in (2) will be analysed as attracting two theta-features. In this respect, (2) behaves more like a control configuration (if control is defined as in Manzini and Roussou 1997). The participle in (1) lacks overt agreement markers, which will be interpreted to reflect the lack of any Agreement projection in the participle construction which merges with *a avea*.

The analysis of (1) and (2) raises interesting questions about the status of those temporal-aspectual forms which have been characterized as evincing a systematic HAVE/BE alternation. The perfect periphrastic forms with HAVE and BE in languages like French, Italian or Dutch, for example, could be analysed as two different structures.

Assuming two different structures and two different interpretations for (1) and (2) above might lead to the conclusion that in Romanian there is no systematic alternation of the auxiliaries *a avea* and *a fi* in the

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forth the hypothesis that there are two Mood projections in the functional architecture of the clause: Mood1P and one more position, Mood2P, at the borderline of the functional and the complementizer layers and whose head hosts an element which is invariable from a morphological point of view.

periphrastic perfect configuration. The present analysis will show that there is systematic alternation of "temporal" *a avea* and *a fi* (the former is used in realis clauses whereas the latter is used in irrealis ones) and will develop an account of the conditions under which the two readings arise.

Hopefully, the analysis developed in this chapter will provide evidence in favor of the view that auxiliary verbs are best analyzed as merging with SCs of different complexity and hence forced to occupy different positions in the structure of the clause. It will also be shown that semantically light constituents, like *have* and *be*, do not vanish by LF, nor do they behave like affixes in the derivation (as claimed in Avram 1994 for Romanian or in Llinas 1993 for Catalan). Auxiliaries behave like X^0 elements in the derivation by Spell Out, they are words, but they behave like affixes, i.e. like X^{-1} elements, at LF, where they need a host.

The chapter is organized as follows:

In section **2.2** I present the empirical data and examine those aspects which are relevant for subsequent discussion. I point out the properties which distinguish Romanian from other Romance languages as well as from English, and identify the problems raised by this cluster of properties. In section **2.3** I examine each configuration with *a avea*. I will outline a theory of the "deficiency" which *a avea* evinces when occupying a position in the functional layer or at its borderline and show in what way such a theory can accommodate the idea of one single lexicon entry and various morphological paradigms. Theoretically, this analysis will provide support in favor of the hypothesis that it is not the case that only morphology filters syntax (*in the sense that movement is feature driven*) but it is also the case that syntax filters morphology. Section **2.4** deals with the periphrastic forms with *a avea* and *a fi* (exemplified in 1 and 2 above) and advances the hypothesis that the structure with *a fi* is not a counterpart of the *perfect compus* (the Romanian equivalent of the French passe compose). I will also provide an explanation for the realis/irrealis condition on *a avea* and *a fi*. Section **2.5** will summarize the conclusions and present a few theoretical speculations on issues such as auxiliary selection and direction of Merge.

2.2 The Data

2.2.1 Preliminary remarks

In this section I will present the various configurations with *a avea* and compare them to similar configurations in other Romance languages as well as in English. The analysis is not what might be called a contrastive one. The cross-linguistic data will serve the purpose of a better understanding of the Romanian facts or of a better understanding of UG. Only the configurations which contain auxiliary *a avea* will be examined but as it will be assumed, following the spirit of the analysis of *have* in Benveniste (1966), that the auxiliary *a avea* is closely linked to its lexical counterpart, I will also briefly present the configurations which contain lexical *a avea*.

2.2.2 Am/ai/are/avem/aveți/au

The configurations in which this paradigm of *a avea* is instantiated are the ones in (3)-(8) below:

(3) *Maria are ochi căprui.*
Maria has eyes hazel-masc.pl. [inalienable possession]
'Maria has hazel eyes.'

(4) *Maria are o carte.*
'Maria has a book' [alienable possession]

(5) *Maria are examen azi.*
Maria has exam today ["nominal event"]
'Maria has an exam today.'

(6) *Maria are bagajele făcute.*
Maria has luggage-the made-fem.pl. ["experiencer"]
'Maria has her luggage packed.'

(7) *Maria are de citit o carte.*
Maria has *de* read ("supin") a book ["modal"]
'Maria has to read a book.'

(8) *Maria are să plece curînd.*
Maria has *să* leave -3rd pers.sg. soon ["future"]
'Maria is leaving soon.'

In the configurations illustrated in (3)-(7) above *a avea* can take any temporal-aspectual forms freely; in (8) it is restricted to only two forms: *prezent* (simple present) and *imperfect* (a form of past tense). In (3)-(7) a lexical element can be inserted between *a avea* and the structure which follows it; with (8) this results in ungrammaticality, as shown in (9):

(9) **a.** *****Maria are mereu să plece.*
Maria has always *să* leave-3rd.pers.sg.
b. *****Maria are îl să vadă.*
Maria has him (Acc clitic) *să* see-3rd pers.sg.
c. *****Maria are mai să plece.*
Maria has *mai să* leave-3rd pers.sg.
d. *****Are Maria să plece.*
has Maria *să* leave-3rd pers.sg.
e. ??*Maria are să nu plece.*
Maria has *să* not leave-3rd pers.sg.

But, in spite of these differences, *a avea* in (8) belongs to the same morphological paradigm as *a avea* in (3)-(7) and it is compatible with agreement and tense markers.

2.2.3 Am/ai/a/am/aţi/au

This morphological paradigm can only be found in the periphrastic *perfect compus* :

(10) *Maria a avut examen.*
Maria has had exam
'Maria has had/had an exam.'

Unlike the French *avoir* (which can be used both in the *passé composé* and the *plus-que-parfait* forms, as shown in 11a below) or the English *have* (which occurs both in the Present Perfect and in the Past Perfect, 11b) *a avea* can only be used in this configuration, being incompatible with any other temporal forms (12) [20]:

[20] For a possible explanation of this difference within a GB framework, see Dobrovie-Sorin (1993).

(11) **a.** *Maria a/ avait mangé la pomme.*
b.*Maria has /had eaten the apple.*

(12) * *Maria avea mîncat mărul.*
Maria had eaten apple-the

Romanian also differs from other varieties of Romance (French, for example) but behaves like Spanish, in that the participle in (10) never agrees with the direct object DP, not even when it precedes the participle:

(13) **Merele pe care le-a mîncate*
Apples-the *pe* which them (Acc cltic) eaten -fem.pl.

Rightward participial agreement with a DP object is not possible either:

(14) **Am mîncate merele.*
have eaten-fem. pl. apples-the

Unlike Italian, French, German or Dutch (Lois 1987), Romanian does not evince a regular alternation between *a avea* ('to have') and *a fi* ('to be') in periphrastic perfect forms[21], belonging to the group of languages which do not use two auxiliaries in compound "perfect" forms (behaving, in this respect, like Spanish, Portuguese or English).

VP-deletion facts do not hold in the Romanian *perfect compus* configurations. *A avea* ('to have') cannot appear independently, not even in short answers:

(15) **Ion a venit şi a [venit] şi Maria.*
Ion has come and has [come] and Maria

(16) *A venit?* **Da, a .*[22]
has come? Yes, has.

In this respect, Romanian differs from English, patterning with other Romance languages (French, Italian, Spanish or Catalan).

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[21] As will be shown in the present analysis, there is a restricted class of verbs which can occur with *a fi* in non-passive configurations, but their examination will show that *a fi* is not a temporal auxiliary in this case, and hence one cannot assume a regular *a avea* ('to have') - *a fi* ('to be') alternation in *perfect compus* configurations.

[22] However, such constructions may rarely occur in spoken Romanian, where they are highly marked.

One more property of the configuration illustrated in (10) regards the possibility of inserting lexical material between the auxiliary and the participle. This possibility is reduced to the so-called degree adverbs of the type *mai* ('again','still'), *tot* ('still') or *şi* ('and', 'also')[23]:

(17) **a.** *A tot cîntat.*
has *tot* sung
'He kept singing.'
b. *A şi băut.*
has *and* drunk
'He has also drunk.'

The insertion of any other element leads to ungrammaticality, as shown in (18)

(18) **a.****A ieri venit.*
has yesterday come
b.**A mere mîncat.*
has apples eaten
c. **Au toţi cîştigat.*
have all won

Romanian differs from French, for example, where floating quantifiers or adverbs like *bien* can intervene between *avoir* and the participle, or from English, where frequency adverbials of the type *never, often, always* are allowed in this position. Italian, Spanish and Modern Greek evince the same restriction as Romanian.

Moreover, in Romanian there is no Subject-Auxiliary inversion (SAI), i.e the sequence "*a avea* past participle" cannot be interrupted by the subject DP either:

(19) * *Au copiii înţeles problema?*
have children-the understood problem-the

One more important property of the Romanian *perfect compus* regards the possibility of inverting the auxiliary with the verb, as in (20) below:

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[23] For an analysis of compound forms in which adverbs are assumed not to "count" in the process of "morphological merger" see Bobaljik 1995

(20) **a.** *Plecat-am nouă din Vaslui...*
left-have-1st.pers.pl. nine from Vaslui
b. *Trecut-au anii ...*
passed-have-3rd pers pl. years-the

In contemporary Romanian such constructions are associated with a poetic, literary register, being perceived as outdated. Actually the construction existed in Old Romanian. Moreover, the same morphological forms of the auxiliary which "inverts" can be found as bound morphemes in the *imperfect* paradigm (which cannot be a mere accident as sometimes suggested in traditional analyses):

(21) ***mîncam, mîncai, mînca, mîncam, mîncați, mîncau***
('ate'/ was/were eating)

The analysis of the periphrastic perfect should provide an answer to the following questions:

(i) why can't *a avea* take past tense markings, as its French or English counterparts?

(ii) why doesn't the participle agree with the direct object DP, not even when it precedes the participle?

(iii) why can only degree adverbs be inserted between the auxiliary and the participle?

(iv) why can't the auxiliary appear independently?

(v) how can we explain the auxiliary-participle inversion?

2.2.4 Aș/ai/ar/am/ați/ar[24]

This paradigm is instantiated in the so-called *condițional-optativ* (conditional mood) forms, in which the auxiliary merges with a bare infinitive form, i.e. an infinitive form without *a*, a particle which precedes the infinitive form which will be called *infinitive with a* throughout:

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[24] The present analysis adopts the view that the *condițional-optativ* auxiliary is derived from a form of *habere*, following the line of Tiktin (1945) or Rosetti (1968). Other linguists adopt a different position, tracing this auxiliary back to a form of *volere*. Lombard (1955) points out that "cet auxiliaire reste encore une enigme de la morphologie roumaine" and that "la question du choix a faire entre *volebam* et une forme de *habere* demeure ouverte" (p. 963). This point of view, however, seems to be influenced by the semantics associated with this auxiliary and that of *vrea* as an auxiliary in the periphrastic future .

(22) *Aş merge la cinema.*
aux-1st pers.sg. go to cinema
"I would go to the cinema."

This configuration evinces many of the features which have already been identified in the case of the *perfect compus* . the auxiliary bears overt agreement markers (person and number), it cannot take tense marking, the sequence auxiliary-infinitive can be interrupted only by degree adverbs, the subject cannot invert with the auxiliary, the auxiliary cannot appear independently, i.e. the main verb cannot be deleted, and one can notice the possibility of auxiliary-verb inversion, as shown in (23):

(23) *Vedea-l-aş aici!*
see-him (clitic Acc.) aux-1st.pers.sg. here
'I wish I saw him here here.'

Another relevant property of the configuration under discussion is its possibility of taking a past infinitive as in (24):

(24) *Aş fi mers la cinema.*
aux-1st pers.sg. be gone to cinema
'I would have gone to the cinema.'

In this respect, it differs from the *perfect compus* configuration where the auxiliary can merge with one single form, the past participle, patterning like the periphrastic future with *a vrea* ('want', 'will'):

(25) **a.***Va veni mîine.*
will-3rd pers.sg. come tomorrow
'He will come tomorrow.'

b.*Va fi plecat pe cînd ajungi tu.*
will-3rd pers.sg. be left by the time arrive-2nd pers.sg. you
'He will have left by the time you get there.'

This points to the fact that *a avea* ('to have') (in *conditional-optativ* configurations) and *a vrea* ('want', 'will') (in the periphrastic future configuration) occupy the same position in the structure, position into which they are inserted because of the status of the SC with which they merge.

One should also notice that Romanian differs from French, for example, in which the Present conditional is not instantiated as a periphrastic form, but patterns like most Germanic languages, which express the conditional by resorting to periphrasis.

The analysis of the *conditional-optativ* should develop an account which could explain:

(i)why the sequence auxiliary-infinitive can be interrupted only by degree adverbs

(ii) the fact that the auxiliary can merge with a perfect infinitive

(iii) why *a avea* ('to have') is excluded from the perfect infinitive forms where *a fi* ('to be') is the only choice

(iv) the fact that auxiliary-verb inversion seems to be possible only when a clitic intervenes between the inverted verb and the auxiliary.

2.2.5 The case of *o*

In colloquial speech, there is a periphrastic construction which parallels the form in (8), repeated here for convenience under (26):

(26) *Maria are să plece curînd.*
Maria has *să* leave-3rd pers.sg. soon
'Maria will leave soon.'

In the colloquial future configuration, the inflected *a avea* ('to have') seems to be replaced by the invariant form *o*:

(27) *Maria o să plece curînd.*
Maria *o să* leave-3rd pers.sg. soon
'Maria is going to leave soon.'

Ştefănescu (1997) analyses *o* as a reduced auxiliary and argues that it behaves like its non-reduced *a avea* counterpart in many respects: both are followed by a Mood projection (28a), Negation attaches in front of the auxiliary (28b), clitics remain inside the Mood projection (28c), VP-deletion cannot apply (28d), SAI is impossible (28e) and so is the insertion of any lexical element between the axiliary and the *să* clause (28f):

(28) **a.** *Ion o / are să plece.*
Ion *o / has să* leave-3rd pers.sg.
b. *Ion nu o / are să plece.*
Ion not *o* /has *să* leave-3rd pers.sg.
c. *Ion o/ are să-i spună.*
Ion *o* / has *să* him (Acc clitic) say-3rd pers.sg.
d. *Ion o / are s\ plece ? * Da, o / are [...].*
Ion *o* /has *s* leave-3rd pers.sg.? Yes, *o* / has
e. **Are / o Ion să plece?*
has/ *o* Ion *să* leave-3rd pers.sg?
f. ** Are/ o azi să plece Ion.*
has/ *o* today *să* leave-3rd pers.sg. Ion

The conclusion which she reaches is that *o* is an instance of phonological reduction with no syntactic consequences and hence "in Romanian both the reduced and non-reduced AUX occupy the same structural position." (p.196)[25].

However, assuming this view means sweeping under the rug two important properties which differentiate the full from the reduced auxiliary: (i) the reduced *o* is invariable, it is not inflected for agreement and (ii) it cannot take temporal markers. While there is a reduced counterpart for (29a) there is no reduced counterpart for (29b).

(29) **a.** *Maria are /o să plece curînd.*
Maria has/*o să* leave-3rd pers sg. soon
b. Maria *avea să plece curînd.*
Maria had *să* leave-3rd pers.sg.
c. *Maria avea /* o să plece curînd.*
Maria *avea*-past.3rd.pers.sg./ *o să* leave-3rd pers.sg. soon

I will adopt the view that *o* is not an instance of *a avea* but a reduced form of the auxiliary *a vrea ('will', 'want')* which enters periphrastic future configurations as in (30) below:

(30) **a.** *Maria va pleca diseară.*
Maria will-3rd pers.sg. leave tonight

[25] The same conclusion seems to be implicit in Dobrovie-Sorin (1993).

b. *Vremea ce va să vină...*
time-the which will *să* come-3rd pers.sg

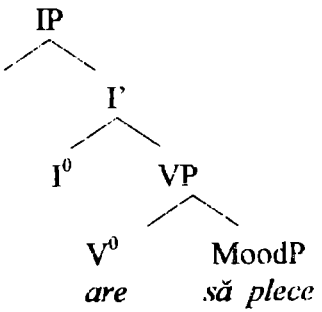
While the configuration in (30a) is still used in present-day Romanian, the one in (30b) is outdated, archaic. But the one in b parallels the configuration with *a avea.* The so-called *prezumtiv* (periphrastic forms which express possibility) can contain both the full auxiliary *a vrea* or its reduced counterpart *o* which differs, however, from the *o* used in the colloquial future periphrasis in that it takes overt agreement markers. Consider the following sentences:

(31) **a.** *Oi fi mirosind...am băut.*
aux-1s pers.sg. be smelling...have-1st pers.sg.drunk
'I may be smelling...I've been drinking.'
b. *O pleca mîine.*
aux-3rd pers.sg. leave tomorrow
'He may leave tomorrow.'
c. *Îți va fi fiind foame.*
to you (clitic Dat.) *vrea*-3rd pers.sg. be being hunger
'You might be hungry.'

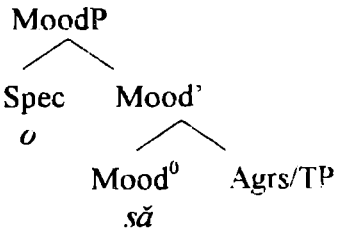
In (31a) and (31b) *oi* and *o* are analysed as reduced forms of *a vrea* ('to want', 'will'). It is a common fact that future forms represent highly modalized means of describing possible courses of affairs. By choosing one means of expressing futurity the speaker imposes a certain modality, a certain way of viewing the situation: certain, less certain, inevitable, etc. The speaker does not actually describe the world but creates a certain state of affairs into the future. The speaker is *molding* the world. The fact that mood elements intermingle with means of expressing futurity should thus come as no surprise. It might be the case that *o* is the reduced form of the already reduced *a vrea* ('to want', 'will') which intermingles with the periphrastic future form with *a avea* (' to have'). Speculative as it might seem, I think this is a possibility which should not be discarded when analysing the colloquial future with *o* . This analysis is in line with those Romanian linguists who have proposed that *o* is derived from *a vrea* (' to want'), not from *a avea* (' to have'). Analysing it as the reduced form of the already reduced *a vrea* (' to want') could account for its morphological deficiency.

In what follows I will try to provide evidence that the periphrastic future with *o* is a monoclausal configuration whereas the periphrastic future with *a avea* ('to have') is rather a biclausal configuration, with two Agrs projections. Briefly, what I propose is that the auxiliary in (32) is inserted under VP and merges with a Mood projection, whereas the auxiliary in (33), though merging with a Mood projection, is inserted under a functional node, higher than Tense and Agrs:

(32)



(33)



Such an analysis can account for the fact that *o* bears no tense or agreement markers (it is inserted above the projections where such features can be checked) as well as for the fact that *a avea* ('to have') has agreement and tense features to check. In this respect, *a avea* behaves like its "possessive" homophone.

At first sight, the representation in (33) can also lead to the conclusion that *a avea* behaves like other lexical verbs which take a *să* clause (i.e. a subjunctive clause) as a complement .

(34) **a.** *Ion urmează să plece.*
Ion is going *să* leave-3rd pers.sg.
b. *Ion vrea să plece.*
Ion wants *să* leave-3rd pers.sg.

But, as Dobrovie-Sorin (1993) convincingly shows, *a avea* ('to have') is not a raising verb like *a urma* (' to follow') in (35a). In both (35a) and (35b) the subject can occupy a pre-verbal position in the lower clause:

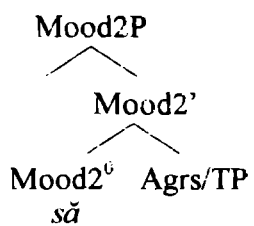
(35) **a.** *Urmează [ca Ion să plece]*
is going [that Ion *să* leave-3rd pers.sg.]
b. *Vrea [ca Ion să plece].*
pro wants [that Ion *să* leave-3rd pers.sg.]

This word order is impossible in the case of the future construction with *a avea* :

(36) * *Are [ca Ion să plece]*
has [that Ion *să* leave-3rd pers.sg.]

This difference can be related to the ambiguous status of the Romanian *să* clauses. Following the line of Motapanyane (1995) or Ştefănescu (1997), I will adopt the view that the Romanian *să* clauses are Mood Phrases, with *să* occupying M^0. The only difference is that I assume that there are two Mood projections in Romanian: Mood1P, in the functional layer, which hosts elements that are not invariant, and Mood2P, at the borderline between the functional and the complementizer layers, which hosts invariant elements, as shown in (37). *Să* is inserted under Mood2P.

(37)



In the case of the raising configuration with *a urma* ('to follow'), the complement clause is a CP, with the complementizer *ca* ('that') occupying a position under this projection. When the subject DP moves to the higher clause, the complementizer is deleted. One can notice the same phenomenon with transitive constructions whose direct object is a CP, as in (35b) above. When the subject DP does not raise to pre-verbal position in the lower clause, the presence of the complementizer leads to ungrammaticality [26] :

[26] This actually happens in substandard Romanian, where the complementizer is not deleted .

(38) **a.** *****_Urmează ca să plece Ion._
is going that *să* leave-3rd pers.sg. Ion
b. *****_Vrea ca să plece Ion._
pro wants that *să* leave-3rd pers.sg. Ion

Both *a urma* (' to follow') (a raising verb) and *a vrea* (' to want') (a transitive verb) merge with a CP (whose head is, under certain conditions, empty) whereas in the case of *a avea* (' to have') a full CP is excluded (see the ungrammaticality in 36). In this case, the subject DP cannot raise to preverbal position in the lower clause. The SC with which *a avea* (' to have') merges does not have a position which could serve as a possible landing site for the subject DP. It might be the case that it is a Mood projection [27], i.e.a truncated clause, in the sense that it lacks a phonologically full complementizer layer; the whole configuration is not a biclausal structure proper: it has two Agrs projections and two Tense projections, but one single complementizer layer (the one above the "auxiliary"). As will be discussed later in this book (mainly in Chapter 4), this might be one of the most important differences between the so-called complex predicates and biclausal constructions: complex predicates may have two functional layers, but only one complementizer domain, whereas biclausal constructions contain two full clausal projections, i.e. two CPs. The periphrastic future with *a avea* (' to have') differs from biclausal structures proper in that its CP is always null but it also differs from the periphrastic future with *o* which is monoclausal. The MoodP which merges with *o* has no semantically activated complementizer.

It is also important to notice that *o*, which is invariant, is not a head; it behaves almost like an adverb.

2.3 The Analysis

2.3.1 The Hypothesis

The present analysis is based on the assumption that the Romanian *a avea* (' to have'), has one single entry in the lexicon, with no label with regard to its "lexical" or "auxiliary" status. The only label it has in the lexicon is [+V], i.e. it is a verbal element, with all the intrinsic features that

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[27] For a more detailed analysis of the Romanian MoodPs see 4.4.3.1, 4.4.3.2 and 4.4.3.3.

derive from this formal one. Adopting the idea advanced in Benveniste (1966), *a avea* will be analysed as a verb of state, which expresses "the state of having, of that to which something is" (p.172) and, more importantly.

It is hard to see in particular, how a transitive verb could become an auxiliary. This is, however, an illusion. Avoir has the construction of a transitive, but it is not a transitive. It is a pseudo-transitive. There can be no transitive relation between the subject and object of avoir such that the notion might be assumed to pass over to the object and modify it. A "to have" verb does not state any process." (p 169).

What is a "pseudo-transitive"? I will advance the hypothesis that it actually means that *a avea* always merges with a small clause (SC) (which can range from DP in 3-5 to MoodP as in 8[28]) in the derivation[29]

The notion of small clause has been defined in the literature as strictly related to the idea of predication and to the claim that all theta-role assignment obtains within a local domain. If initially the label SC was confined to a restricted range of constructions, in more recent literature the label has been extended to a much wider range of constructions. If we assume the hypothesis that subjects are VP-internal we can only reach the conclusion that all sentences contain a SC, actually a VP small clause.

SCs have been defined either as a maximal projection of the category of their predicate: AP, VP, NP, IP or as categorially identical to full clauses. The latter view actually starts from the assumption that there is at least one functional category which dominates the SC core. Thus SCs have been analysed as morphologically less complex than full clauses, lacking at least a tense projection. The most radical view is that of Starke (1995): he claims that SCs have the same structure as full clauses, i.e.they are CPs. The difference between the two configurations would lie in the content of their functional projections, not in their absence or presence.

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[28] For an analysis of HAVE as a verb which takes a SC complement see Gueron (1988, 1995).

[29] Such an analysis somehow follows the hypothesis in Hoekstra and Mulder (1990) who define copular verbs as ergatives which take a SC as a complement. However, we have to distinguish between *a avea* and a copular verb like *a fi*, defined again in Benveniste's terms as denoting "the state of being, of that which is something." (p.172).

The view which will be assumed in the present analysis is that SCs are truncated or incomplete clauses which express a relation of predication and which can range from VP to Agrs/TP. I take the absence of a functional head to mean that it has no "content" and hence cannot project. Following this line, when I claim that *a avea* merges with a SC I actually mean that it merges with a SC from the range of possible constructions, not with one particular construction.[30]

The core meaning associated with *a avea* ('to have') will be that of "state of having, of that to which something is", i.e. possession in a very general sense, as the various contextual meanings illustrated in (3)-(6) clearly show. In this respect, the present analysis differs from the one proposed by Ritter and Rosen (1997) for the English *have*, where *have* is defined as lacking any independent semantic content. Its various interpretations are derived from the syntactic structure in which it occurs.

It will be the aim of the present analysis to prove that the higher in the structure *a avea* is inserted, the more "deficient" it gets, where deficiency is defined as both morphological and semantic. The reading associated with each instantiation of *a avea* will be compositional, in the sense that it will be analyzed as reflecting the core meaning as it intermingles with the features of the node under which *a avea* is inserted. The higher in the structure, the weaker the core meaning gets. Thus, the idea that the various interpretations of the auxiliary are derived from the syntactic structure is preserved, but it is somehow weakened, in allowing *a avea* to have a core meaning[31] which plays a part in the resulting reading.

Assuming such an analysis for the Romanian *a avea* ('have') is not a trivial matter; as already shown in **2.2** *a avea*, unlike *to have*, for example, is associated with three different morphological paradigms. Its theoretical implication is that syntax filters morphology. But this issue will be taken up in **2.3.5**.

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[30] The idea to analyze auxiliaries as selecting a SC goes back to Stowell (1981). Under his analysis, the complements of the English modals are analyzed as raising style VP small clauses as in (i):

(i) John$_i$ must [$_{VP}$ t$_i$ leave]

[31] This core meaning is strong enough to allow derived nouns and derived adjectives which preserve it: *avut* (n.) (wealth), *avut,-ă* (adj.) (rich, wealthy, who owns things), *avuție* (n.) (wealth).

2.3.2 The *perfect compus* configuration

2.3.2.1 Previous approaches

The complex VP hypothesis

Such configurations have been analyzed in the literature as a "complex verb phrase" (Emonds 1978, among others) formed of the auxiliary and a past participle. Guțu-Romalo (1962), analyzing the Romanian *perfect compus* proposes that it is a "form with a mobile affix"[32], on a par with the *condițional-optativ* configuration and with the periphrastic future with *a vrea* ('to want'). The periphrastic forms should all be analyzed on a par with the so-called "simple" temporal-aspectual forms. Though the present analysis does not assume the affix-like status in the syntax of *a avea* (or of any other auxiliaries) it will retain the intuition which was already exploited in previous studies about the similarity between simple and compound forms, i.e. I will assume that the *perfect compus* configuration is a monoclausal configuration, with one single event argument, and one single argument structure. This assumption is borne out by syntactic facts such as clitic placement (39) and negation placement (40):

(39) *I-am spus adevărul.*
him/her (clitic-Dative) have-1st pers.sg. told truth-the
'I have told him the truth.'

(40) *Nu a venit.*
not has come
'He has not come.'

(41) and (42) show that in this respect, the compound form behaves as if it were one single lexical verb:

(41) *Îi spun adevărul.*
him/her (clitic Dative) tell-1st pers.sg. truth-the
'I tell him the truth.'

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[32] Llinas (1993) adopts a similar line of investigation when analyzing periphrastic temporal forms in Catalan, asuming that the Catalan counterparts of *a avea have an X^1 status at the syntactic level, i.e. they behave like affixes.* For an analysis of auxiliaries in Romanian along the same line, see Avram (1994).

(42) *Nu vine.*
not come-3r pers.sg
'He is not coming '

The biclausal analysis

A different trend analyzes auxiliaries as lexical verbs which select a CP as their complement, i.e. complex tenses are analyzed as biclausal structures. Such an analysis would provide a unifying frame for the lexical and auxiliary *have* . Alexiadou (1994) claims that one empirical argument in favor of this approach comes from Modern Greek, where the postverbal subject cannot intervene between the auxiliary and the perfect formant:

(43) **ehi o Janis grapsi*
has the-John -NOM written

The only way to account for the ungrammaticality in (43) is to assume that the perfect formant moves out of its VP[33] which is taken as a proof that the auxiliary structure is biclausal. I do not believe that this is a solid argument in favor of a biclausal analysis in general. Though I fully agree that the lexical verb may move inside the clause (at least as high as an Asp projection) I do not think that this points to the structure being biclausal. What we would have to prove if we wanted to adopt this hypothesis is that the extended projection of the participle is closed below the auxiliary, i e. that we can find the same clausal architecture, the same functional projections, both above and below the auxiliary. As the analysis presented in this chapter will hopefully show, empirical data from Romanian lead to a different conclusion. The auxiliary and the perfect formant may both move within the same clause, checking different features precisely because they each contribute to the clause in different ways One cannot find the same functional projections above and below the auxiliary.

The functional heads approach

According to Ouhalla (1991), a.o., auxiliaries like *have* are functional categories which head their own functional projection. He argues that the English *have* in perfective configurations is generated under the node Aspect[34]

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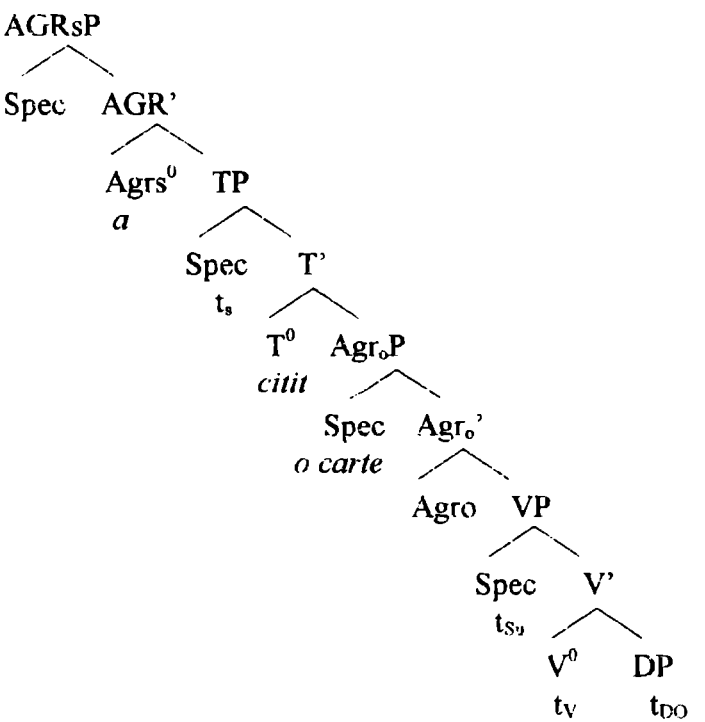
[33] "That is an empirical argument that the auxiliary structures are biclausal, since the verbal perfect formant does move, even in the presence of an auxiliary [...]. Since MG auxiliaries are marked for agreement, Tense and Aspect then I assume that they do move in their clause." (p.171).

[34] Aspect is considered a separate functional projection in Tenny (1987, 1992). Speas (1990), van Gelderen (1993), Borer (1993), Arad (1995), Egerland (1996), Belletti (1992), Uriagereka (1995) . The present analysis will also adopt this view.

from where it moves to Tense; the main verb remains in its position inside VP. The fact that *have* can move to Asp and Tense is explained as a result of its verbal character. I think this is very important, because *have* is treated as a functional category but, at the same time, its verbal character is not denied. This points to the fact that the debate on whether auxiliaries are main verbs or a special class called "auxiliary" actually reduces to the position auxiliaries occupy in the architecture of a clause, i.e. to their contribution to the structure of language.

In what follows, I will try to provide arguments that in Romanian *a avea* ('to have') (in *perfect compus* configurations) occupies a position in the functional domain, i.e. in the extended projection of the VP. Recall that the main hypothesis advanced in this chapter is that there is one single *a avea* in the lexicon, which means that wherever it is inserted in the structure it will bear [+V] features. Motapanyane (1995) and Ştefănescu (1997) also propose that Romanian auxiliaries are X^0 categories that originate in a functional head: Motapanyane argues that AUX originates in an AGR head, while the participle of the lexical verb raises to T as in (44).

(44)



With Ştefănescu (1997), who assumes a split Agr node for Romanian, *a avea* originates in the Number head and raises further to the Person head, while the participle of the lexical verb raises to the Number head where it is left-adjoined to the trace of the auxiliary. Both Motapanyane and Ştefănescu actually assume that the auxiliary is inserted under the Agreement projection whereas the lexical verb moves to Tense. My analysis will not crucially depart from theirs with regard to the position of the auxiliary, but it departs from it with regard to the position to which the main verb raises . I also assume the proposal in Dobrovie-Sorin (1993) that Tense and Agr should not represent two distinct projections in Romanian (in finite clauses), where they have the same index. This hypothesis is more in line with the minimalist framework assumed in this analysis and, as will be seen, it is also borne out by empirical data. Also, the analysis of the Romanian participle will prove that all the participle clauses lack Tense. Under minimalist assumptions, the participle verb does not have Tense features to check; hence, there is no motivation for its moving to the Tense projection.

2.3.2.2 The Analysis

The aim of this subsection is provide arguments in favor of the analysis of the "perfect" *a avea* as merging with a participial SC in the derivation:

(45) *avea* [Participle V]

The predication relation obtains inside the SC whose elements merge prior to the merging of the SC with *a avea* .Obviously, the first question with which we are confronted regards the status of the participial SC. In the analysis of Stowell (1981), a SC was defined as containing a predicate and a subject, but no functional projection. Other proposals (Rizzi 1994, among others) have "redefined" SCs as either "truncated" clauses or as full CPs (Starke 1995). In the present analysis, SCs are defined as truncated clauses which can contain functional projections.The participle has been analyzed as containing at least an Aspect projection (Belletti 1992, Egerland 1996). Other projections which have been suggested include Tense, Agreement, Modality, Quantifier (Kayne 1993, Cinque 1997).

The minimalist approach goes in the opposite direction, i.e. it tries to break with the Split Infl hypothesis. Aspect is not a functional category taken into consideration within (most) minimalist studies. In what follows, though, I will depart from this view with regard to Aspect[35]. I will also show in what way Aspect is important for the formation of Tense chains and in what way it is crucial for the temporal-aspectual interpretation of sentences. The occurrence of Asp is motivated both because of its semantic properties and for structural reasons: it is the projection where aspectual features are checked and, at least in some languages, its Spec provides a licensing position for overt nominals either raised or merged as well as for some adverbs (Alexiadou 1994).

In **2.2.3** we saw that the participle in *perfect compus* configurations *never agrees* with either the subject or the object DP, not even when the object is a pronominal clitic which occupies a pre-participial position. That leads to the conclusion that agreement is not realized within the participial clause in this case and, consequently, that there is no Agr projection. I will assume that the participle with which the "perfect" *a avea* merges is an AspP:

(46) *avea* [$_{AspP}$]

The participle has a [+perfective] feature which has to be checked; and it will be checked in Asp as shown in (47):

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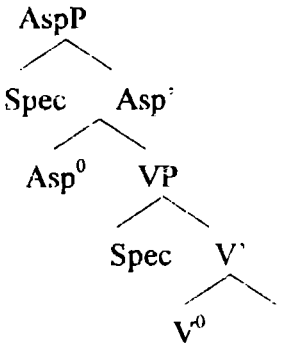
[35] Actually, "depart" is too strong a word. In Chomsky (1995) Tense is considered a functional category which has semantic features (along with D and C), being interpreted as [+/- finite], "with further subdivisions and implications about event structure and perhaps other properties."(p.240). In the present analysis, I assume that the implications about event structure are the result of all the links in the Tense-chain of a phrase, with the Tense-chain ending in the Aspect projection. It will be shown that Aspect is justified both by output conditions as well as by theory-internal arguments. If Agr lacks semantic properties (I refer here to Agr on verbs, not on DPs) and we have to exclude it from the phrase structure, it might be the case that we will need another projection for the "licensing" of the relation between the verb and its direct object DP.

(47)

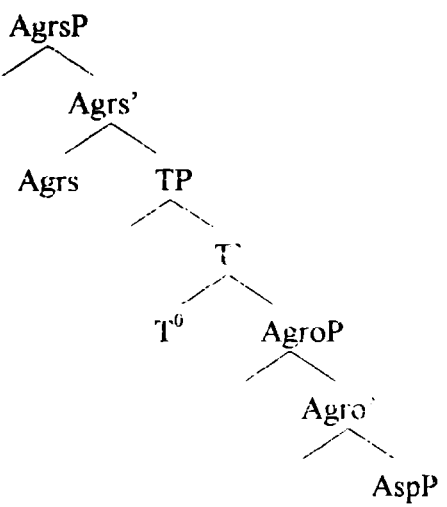


This analysis differs from that of Belletti (1992), Kayne (1993) or Egerland (1996) who assume that the participle hosts Agr, Tense and Aspect. Belletti (1992) actually discusses absolute participle configurations which seem to be a different type of truncated clauses in Romanian. The properties they evince are different precisely because their structure is different.[36]

What are the consequences of this claim? Well, the first immediate consequence of assuming that the auxiliary *a avea* merges with a SC whose status is that of an AspP is that *a avea* is inserted under a functional node which could be TenseP.

Belletti (1992), Uriagereka (1995), Egerland (1996) assume that within a participle, AgroP dominates AspP:

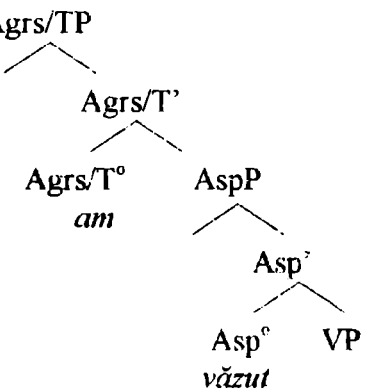
(48)



[36] Agreement of the participle with the subject DP within absolute participial constructions is compulsory in Romanian, just like in Italian or French, for example.

Assuming that the participle which merges with *a avea* is an AspP leaves the status of AgroP unclear: is it outside the SC (and hence, the auxiliary is inserted under it) or is it absent altogether? Recall that it has been assumed that in Romanian finite clauses Agr and T project together (either as a "fused" node, or as two adjacent nodes, with T projecting no Specifier position, which actually has the same word-order results). Within the general framework, Agrs and Agro are supposed to behave similarly. Now, if AgrsP fuses with TP, so could AgroP fuse with AspP. In this case, the next available functional node for the insertion of *a avea* is TenseP, actually the fused Tense/AgrsP :

(49)



As the auxiliary comes fully inflected from the lexicon, being inserted in this position means having its features checked and hence licensed by mere insertion. There is no movement involved in the process. The fact that *a avea* ('to have') is analyzed as inserted within the fused node which contains TenseP can nicely account for its somehow "present" value as well as for its incompatibility with other tense markers[37].

What other implications will such an analysis have for the interpretation of the *perfect compus* configuration?

The line of investigation adopted in this examination is the one provided by Giorgi and Pianesi (1989). According to them, in periphrastic constructions, the relation between ET and RT[38] (in the sense of Reichenbach 1947) is expressed by the past participle while the relation

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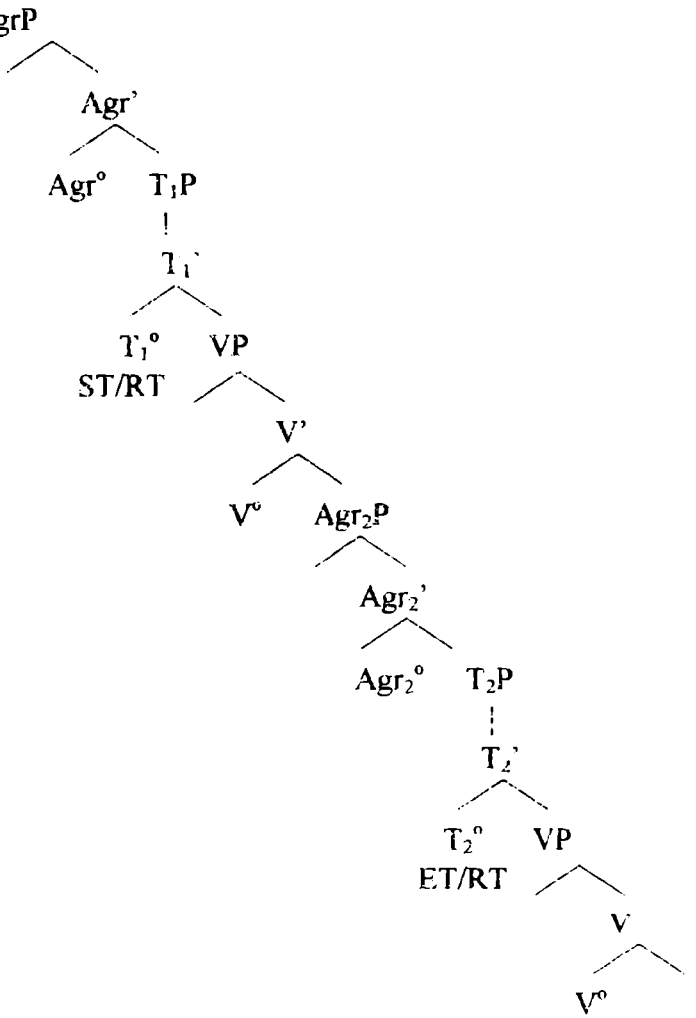
[37] Dobrovie-Sorin (1993) reaches a similar conclusion.

[38] ET= event time; RT= reference time; ST= speech time

between ST and RT is expressed by the auxiliary. Within their approach, there are two tense projections : T_1 and T_2 as in (50)

(50)



I will adopt the idea of two different nodes involved in the interpretation of the relationships ST-RT and ET-RT but, following the line of Johnson (1981) I will take the relation ET-RT as expressing aspect, not tense. Instead of having two Tense projections, there will be a Tense projection and an Aspect one, both involved in the temporal-aspectual interpretation of the configuration.

In Romanian, *a avea* ('to have') seems to be a mere carrier of tense; it is also fully inflected for agreement. It checks its [+Tense] and its agreement features at once, in a mixed node [Tense+ Agreement]. The idea is not new. Chomsky (1992) proposes a mixed node for English and Dobrovie-Sorin (1993) argues against a split Pollockian IP in Romanian. Under this analysis, there is one single functional projection Agr/T with one single Spec position. Secondly, there is one single Agr/T head position. The participle cannot move higher than Asp since the next position (where V features can be checked) is already occupied.[39] *A avea* is a tense marker, it is inserted under the node which is responsible for the relationship between RT-ST. The relation ET-RT is expressed by the participle, under the Asp projection.[40] The auxiliary and the participle check different features and they play different roles in the clause. Actually, they represent two of the "nodes" in a Tense chain (T-chain).

Gueron and Hoekstra (1988) propose that a minimal T-chain in a full clause consists of a Tense Operator, a Tense position and a verb, with the Tense Operator occupying Spec CP[41] and ranging over the discourse world. Verbs have an event role (e-role) bound by Tense such that:

(51) Each T-chain bears an e-role.

The tense feature and the e-role may be found in a single element or may be distributed over a verb and its complement in case the verb lacks the descriptive content necessary to supply an e-role. According to Gueron and Hoekstra a T-chain must have one single lexical element or one single element with lexical content. In our case, the lexical verb. As already shown, the lexical verb is marked as [+perfective] in the *perfect compus* configuration and it has to check this feature in Asp. *A avea* ('to have') is inserted under Tense and it checks the tense value of the configuration while the lexical verb moves to Asp to check its Asp feature. The auxiliary and the lexical verb "share" the feature-checking process. That will lead to a reformulation of the definition of T-chains as in (52):

---

[39] I am not discussing here the case in which the participle is fronted, which is a different story altogether.

[40] In the case of the *perfect compus* configuration,this relation will obviously be one in which ET is prior to RT; the participle has a [+perfective] value.

[41] Enc (1987) places the Tense Operator in C; adopting one position or the other is not relevant for the present analysis. The relevant idea is that this operator occupies a position higher in the clause, above IP.

(52) *A T-chain consists of a Tense Operator, a Tense position and an Asp projection.*

(53) Tense Operator
\
TenseP
\
AspP

The structure of a T-chain will thus provide a structural basis for the interpretation of temporal chains. tense and aspect cannot be interpreted separately. Adopting the proposals in Johnson (1981) and Giorgi and Pianesi (1989), the temporal-aspectual interpretation of a clause will be defined as taking into account the value of the three relations which obtain between three time intervals: (i) the relation which obtains between ST and RT, (ii) the relation which obtains between ST and ET and (iii) the relation which obtains between RT and ET. The relation ST-RT gives the tense value of the configuration, the relation ET-RT is responsible for the aspectual value while the relation between ST and ET is responsible for its "existential status". In the *perfect compus* configuration, the auxiliary checks the tense feature The lexical verb is responsible for the aspectual interpretation: ET is prior to RT, i.e [+perfective]. That amounts to saying that the temporal interpretation is distributed over *a avea* and the lexical verb, each with its own contribution. Along the chain, the auxiliary and the verb represent different links.

Such an analysis, in which the participle and the auxiliary are viewed as sharing the T-chain can prove, once again, that AspP is required in the structure. Also, adopting the view that *a avea* ('to have') merges in the derivation with a SC within which the relation of predication obtains is in line with the analysis advanced by Benveniste: the relation between the subject and the predicate is not mediated by *a avea* ('to have') in any way. What *a avea* ('to have') actually does is place the state expressed by the participle in time. It still preserves its [+V] features, since it is inflected for person and number and it is associated with the present tense, but it can still be analyzed as bearing the core meaning of the lexicon entry. Still in the spirit of Benveniste, we can analyze the *perfect compus* as a "form in which the notion of state, associated with that of possession, is ascribed to the author of the action; the perfect presents the author as the possessor of the accomplishment' (p.174).

I have asserted that *a avea* ('to have') places the state denoted by the participle in time. Does it actually mean that *a avea* ('to have') is specified to subcategorize for *event card files* (in the sense of Avrutin 1997) which must be placed in time? In what follows I will try to prove that it does not. *A avea* ('to have'), when inserted in the functional domain, no longer subcategorizes, it is no longer a selector.

The *event card file* of the lexical verb (the participle) is not fully "identified", it is "incomplete", in the sense that the event argument or the e-role of the verb has not been assigned any temporal index, the T-chain is incomplete. An incomplete event file, i.e. a truncated SC requires functional categories to "identify" its event argument. In this case, the identification of the referential argument, of the event, is done in cascades or in small steps. The SC merges to the left with *a avea* (' to have'), inserted under the Tense projection, which is also a carrier of phi-features. The event file is thus completely identified. It is the lexical verb which selects the functional element, not the other way round. When the verb comes fully inflected from the lexicon, it simply checks its features against the relevant functional nodes. When it comes from the lexicon "partially" inflected, as in the case of the participle, it selects an element which can check the other relevant features of a finite verb Merging is right to left.

Recall that in **2.2.3** it was shown that the only elements which can intervene between the participle and the auxiliary are the so-called degree adverbials. This fact could provide further proof that my analysis is correct. Degree adverbials refer to the constituency of a situation, they do not refer to a moment of time or to a time interval:

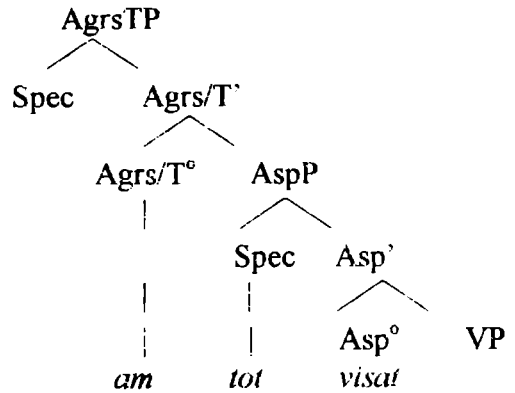
(54) *Am tot visat.*
have-1st pers.sg. continuously dreamt
'I kept dreaming'

(55) *A mai mîncat.*
has more eaten
'He has eaten again/before.'

Syntactically, degree adverbials are clitics, they show up in front of the inflected verb in simple tenses but between auxiliaries and the lexical verb in periphrastic forms. If we adopt the view advanced in Dobrovie-Sorin (1993) that these adverbs necessarily attach to an Infl node, we

could say that, within a split-IP hypothesis, these "clitics" occupy a position within the Asp node in Romanian periphrastic forms. Such an analysis is also in line with the one proposed by Alexiadou (1994) for aspect adverbs which are licensed in Spec Asp:

(56)



Time adverbials cannot occur between the auxiliary and the participle precisely because there is no functional projection where they could check their temporal value/feature:

(57) * *Am ieri visat.*
have-1st pers.sg. yesterday dreamt

The impossibility of the subject's intervening between the auxiliary and the participle in Romanian (see **2.2.3**) clearly points to the fact that the verb moves to a position higher than SpecVP and also to the fact that the subject DP cannot occupy the Spec Asp position which, as shown above, can be occupied by degree adverbs. Now, such an approach raises serious problems for transitive constructions Recall that it has been assumed in this section that there is no AgroP in Romanian and that, along the line according to which the Tense and the Agrs projections "fuse" in finite clauses, the Asp and the Agro projections also fuse. SpecAgro has been traditionally associated with Accusative case licensing (Chomsky 1992). As AgroP seems to be either absent or fused with AspP (in Romanian) we still have to account for Accusative case checking. Within a standard minimalist framework, Romanian DPs do not have to raise overtly to check their features. The subject DP can remain in situ unless it

has a strong feature to check, as for example [+topic], before Spell Out.[42] The object DP should behave in a similar way: it will raise covertly, at LF.[43] The lexical verb moves overtly to Asp. to check its [+perfect/+resultative] feature, leaving the subject and the object DP behind. In this respect, the verb behaves as if completely inflected. The question is where does the direct object DP move when it does. We have seen that the SpecAsp position is a position in which aspectual features, i.e. V features can be checked and which can be occcupied by degree adverbs. It seems that D features cannot be checked in this position. There are two ways in which we can tackle this problem. One possibility would be to assume that degree adverbs actually do not occupy the SpecAsp position: they simply "incorporate" into the lexical verb. That would leave the SpecAsp position empty for LF movement of the object DP which will not actually check its D features here, but its movement will have the purpose of "licensing" the verb-object relation. This solution does not have any theoretical consequences but it obviously resorts to an ad-hoc stipulation with regard to the "incorporation" of the clitic adverb. Another possible solution would be to assume that the fused node has two Spec positions: one that can be filled by Spell-Out and one that will be filled at LF by the direct object DP. This latter solution is in the spirit of the framework which has been assumed and it does not have to resort to any ad-hoc stipulations. It does have theoretical consequences which I will not discuss here though. For a view which adopts a multiple-spec analysis, see Chomsky (1995) or Ura (1996).

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[42] I am not adopting the view according to which Romanian could be a V-to-Comp language : the verb moves to Comp, leaving the subject DP behind, in SpecAgr. Though there might be some empirical arguments in favour of this analysis (see Ştefănescu 1997), within a feature-driven syntax it is quite difficult to find any reason for the verb to move to C.

[43] Notice that I have not tackled the problem of VOS configurations. To my mind, they do not represent instances of overt movement of the direct object DP, but instances of subject DP movement in sentence final position, for topic/focus reasons, a phenomenon which exists in other Romance languages as well (see, for example, Vallduvi 1992). I have also left unexplained Accusative clitic double constructions because I take clitic doubling of the direct object DP to be a case of feature movement associated with specificity (Uriagereka 1995), not with case; hence, when the clitic moves, it does so to check features other than case. The position to which it moves (so controversial in the literature) does not raise any problems for the present analysis.

Within a minimalist framework, auxiliaries like *a avea* ('to have') are assumed to vanish by LF. In what follows I would like to advance the hypothesis that they actually do not vanish; nothing vanishes in fact. *A avea* ('to have') is an X° element in the lexicon and it will behave accordingly in the syntax. But, once it has been inserted in the functional layer, it loses its referential argument. Referential arguments are associated with lexical elements, not with functional ones. At LF its status is that of an X^{-1} element (it lacks a referential argument, its interpretation depends on the interpretation associated with the lexical element) and it needs a host. The verb will move to the auxiliary under Enlightened Self-Interest (in the sense of Lasnik 1995), i.e. in order to satisfy the requirements of the position to which it moves, in a way similar to the one in which the bare infinitive moves in English to satisfy the properties of the modal with which it has merged in the derivation (see Chapter 3). That can account for the fact that the subject DP will check its features in a Spec-head configuration whose head is occupied by the auxiliary and the participle, and also for the fact that complex tenses are interpreted very much like simple temporal-aspectual forms: one single event variable, one single argument structure, one single T-chain.

2.3.2.4 Conclusions so far

A avea ('to have'), when used in *perfect compus* configurations, is an auxiliary, evincing the features associated with the functional projection under which it is inserted. The fact that it can take agreement markers and that it is associated with a present temporal value is a consequence of its verbal nature. Its properties as well as word order lead to the conclusion that *a avea* forms the T-chain with the participle of the verb which provides the argument structure and the event structure of the sentence. In this respect, the present analysis follows, for the Romanian data, the line of Guțu (1962): the periphrastic form plays the same part as a simple form. The main difference between a periphrastic and a simple form lies in the status of the tense carrier in the lexicon: X° or X^{-1}, difference which triggers word-order effects. At LF, they play, as expected, the same part, merging with the lexical verb which is not referentially defective.

2.3.3 *The conditional-optativ (conditional) configuration*

The narrow aim of this subsection is to analyze the so-called *conditional-optativ* configuration, illustrated in (22) and repeated for convenience under (58):

(58) *Aş merge la cinema.*
have-1st pers.sg. go to cinema
'I would go to the cinema.'

The auxiliary merges in the derivation with a bare infinitive (BI), i.e. an infinitival form without the particle *a*[44]. Thus, the first problem raised by the examination of this configuration regards the status of the Romanian BI.

Romanian BIs have been analyzed as VPs, i.e. as structures which lack functional projections (Dobrovie-Sorin 1993, Avram 1994b). Within a GB framework, with only Infl as a label for functional projections, or with Infl split into Tense and Agreement (a la Pollock 1989), such an account could explain why (some) clitics always occupy a pre-auxiliary position:

(59) **a.** *Le-aş citi.*
them (Acc clitic) have-1st pers.sg. read
'I would read them.'
b. **Aş le citi.*
have-1st pers.sg them (Acc clitic) read

Actually, it would be better to define the ungrammaticality in b above as the impossibility of a clitic to appear between the auxiliary and the BI, since the feminine clitic *o* ('her') appears in final position, attached to the verb (as in 60a) but never in between the auxiliary and the BI (60b):

(60) **a.** *Aş citi-o.*
have-1st pers.sg. read- it (Acc.clitic)
"I would read it."
b.**Aş o citi.*
have-1st.pers.sg.it (Acc.clitic) read

[44] The Romanian infinitive is preceded by the particle *a*: *a veni* ('to come'), *a pleca* ('to leave'), etc.

The ungrammaticality of (60b) was accounted for in the following way: clitics always raise to the first available inflectional node; the fact that the clitic cannot occupy a position between the auxiliary and the infinitive is indicative of the lack of functional projections within the infinitive. In more recent studies, we have witnessed the "blowing up" of Infl, with various functional projections: Agr_s P, Agr_o P, TenseP, AuxP, CliticP, AspP, MoodP, etc. Within such a framework, one should try and see which functional node is targeted by the movement of the clitic. That could certainly provide a more accurate description of such configurations. It is not the aim of this dissertation to solve the puzzling problem of the Romanian clitics. What I would like to point out is that whichever view of clitic placement one may adopt the results will be, for the status of the BI, broadly speaking, the same. Whether we assume that Romanian clitics occur in a special derived position (Cardinaletti and Starke 1994 or Cornilescu 1997 - CliticP) or whether we adopt the view that they raise to AgrsP (Avram 1994b), we still do not commit ourselves as to the status of the BI. All we can say is that it does not have a special node to host the clitic, or that it lacks an Agr projection, but we do not actually exclude the possibility that it may have other functional projections. While the intuition in previous studies was obviously correct, i.e. BIs cannot host clitics[45], such an analysis does not rule out associating BIs with other functional projections which are not involved in clitic placement.

On the other hand, there is a limited set of elements which can intervene between the auxiliary and the lexical verb. Just like in the case of the *perfect compus* configuration, degree adverbials can be inserted between the auxiliary and the lexical verb:

(61) *Le-aş mai citi.*
them (Acc. clitic) have-1st pers.sg. again read
"I would read them again."

This points to the fact that, just like in the case of the participial construction which merges with *a avea* ('to have'), there might be a functional projection in whose Spec position these adverbs may check their feature and thus get licensed. However, the conditional differs from the periphrastic perfect in that the BI may be either "indefinite" with respect to tense or it may refer to a situation prior to RT:

[45] The problem of the clitic *o* still awaits a solution.

(62) **a** *Le-aş cumpăra.*
them (Acc.clitic) have-1st.pers.sg. buy
"I would buy them."
b *Le-aş fi cumpărat.*
them (Acc.clitic) have-1st pers.sg. be bought
"I would have bought them."

The presence of the past participle in the SC with which *a avea* ('to have') has merged points to the fact that the SC cannot be a VP. The participle has to check its [+perfective] feature and, as already discussed in **2.3.2,** this feature can be checked in AspP. The presence of *fi* ('be') suggests that there should exist a projection which hosts it. From the point of view of the temporal-aspectual interpretation, one can notice that the SC can denote at least two types of situation: (i) prior to or (ii) future with respect to the time interval associated with the auxiliary. As already pointed out in **2.2.4**, the configuration with *aş/ai/ar...* patterns like the periphrastic future with *a vrea* ('will, want') in merging with a SC with *fi*.

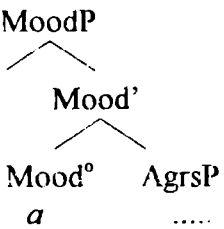
Semantically, the conditional seems closer to the periphrastic future than to the periphrastic perfect. How can we account for this fact? Recall that the main claim of the present analysis is that auxiliaries merge with SCs of various complexity and that the meaning of the configuration which obtains can be derived from the core meaning of the lexical entry and the features of the functional node under which the auxiliary is inserted in the derivation. The fact that *a avea* ('to have') and *a vrea* ('will, want') enter configurations which "share" meaning and structural properties is derived from the fact that they are inserted under the same node, MoodP. The status of the BI is that of TenseP :

(63) *a avea* [TenseP]

Infinitival clauses have been treated as Tense projections in French (see Pollock 1989) or English (Stowell 1983). The SC which is being analyzed here is a short infinitive, which distinguishes it from the English infinitival clauses which have been treated as TensePs, as their head is filled by the infinitive marker *to*, but not from the French infinitive which does not have a short/long distinction. For Romanian, it has been suggested that the long infinitive (i.e. the infinitive with *a*) occupies a

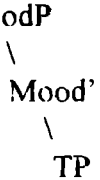
position under a Mood projection (Rivero 1994, Cornilescu 1997), with MoodP occupying a position at the borderline between the functional and the complementizer layers, more exactly higher than Tense and Agreement, as in (64):

(64)



It is obvious that the BI and the infinitive with *a* cannot have the same status. I will take the BI to occupy Tense with the auxiliary inserted in the next functional node, MoodP :

(65)



This could account for the temporal interpretation of the configuration.

Assuming that the auxiliary merges with a TP can nicely account for the fact that the auxiliary itself cannot carry any tense markings and, on the other hand, for the fact that the SC is somehow independent with respect to its temporal interpretation. The auxiliary represents the speaker's insertion in the discourse whereas the SC can refer to a situation which is past or future with respect to the time of the discourse[46]. How do we account for these different interpretations?

(68) **a.** *Aş pleca mîine.*
have-1st pers.sg. leave tomorrow
"I would leave tomorrow."

[46] The auxiliary behaves in this respect like the English epistemic modals though, as will be shown in Chapter 3, the so-called epistemics occupy a position higher in the structure.

b. *Aș fi plecat de ieri.*
have-1st pers.sg. be left yesterday
"I would have left yesterday."

Recall that it has been assumed that each sentence has a T-chain which contains a T-Operator, a Tense position and an Asp position. In the configuration which we are analyzing, the auxiliary is above Tense, i.e. it is tenseless and the SC is analyzed as a TenseP[47]. On the other hand, the infinitive does not have any tense markings, it is not morphologically marked for Tense. In (68b) the participle has checked its [+perfective] feature. It has merged with *fi*. *Fi plecat* is like *a plecat*. The only difference is that in the configuration with *fi* the agreement features are absent: the auxiliary with which the SC merges will bring in these features and the whole configuration will have a completely identified event argument.

Returning to the temporal interpretation of the SC, I will assume that when there is no overt tense marker, the head of TenseP and the Tense Operator have the same value:

(67)
T-Operator
RT=ST
\
T^0
RT=ST

The situation denoted by the SC will be interpreted as past/future with respect to this "present" RT. The reading will actually be linked to the aspectual value of the lexical verb: when [+perfective], ET is prior to RT; when [-perfective], RT is prior to ET or a relation of inclusion may obtain between RT and ET.

2.3.4 On the deficiency of *a avea*

One of the most interesting questions which the present analysis raises is linked to the fact that one and the same verb falls into three distinct paradigms:

[47] Ștefănescu (1997) also places *fi* inside the Tense projection.

A. *am/ai/are/avem/aveți/au*

B. *am/ai/a'am/ați/au*

C. *aș/ai/ar/am/ați/ar*

The three classes are both functionally and phonologically distinct though one might notice a clear phonetic overlapping: 1st pers.sg. is *am* in A and B, 2nd pers.sg. is *ai* in A,B and C, 1st pers.pl.is *am* in B and C, 2nd pers.pl. is *ați* in B and C and 3rd pers.pl. is *au* in A and B. The distinction between classes is linked to several interpretive properties which are nevertheless triggered by structural factors: the interpretation associated with one class or another reflects the core meaning of *a avea* ('to have') and the features of the functional projection within which it is inserted.

How can we account for the fact that *a avea* ('to have'), one and the same verb, evinces such an array of morphological, distributional and semantic instantiations?

A brief look at the three paradigms reveals that the morphological differences correlate with:

(i) different positions in the structure, i..e. for each paradigm, *a avea* ('to have') is inserted under a different projection, in different domains of the clause

(ii) different types of SCs with which it merges in the derivation

(iii) different interpretations

(iv) deficiency.

In what follows I will focus on the examination of the deficiency factor.

Class A can take tense, aspect and agreement markers, class B takes agreement markers and, idealizing, tense, whereas class C takes only agreement. This deficiency squish correlates, in its turn, with the structural position of the auxiliary: the leftmore position in the structure it occupies the more deficient it gets. While class A seems to be morphologically strong, class B seems to be morphologically weak, or, at least, weaker than the other two classes.

Another important difference regards the possibility of *a avea* ('to have') to occur independently:

(68) **a**.*Ai o carte? Da, am.*
have-2nd pers.sg. a book? Yes, have-1st pers.sg.

b. *Ai citit cartea? * Da, am.*
have-2nd pers.sg.read book-the? Yes, have-1st pers.sg.
c. *Ai citi cartea? *Da, aș.*
have-2nd pers.sg.read book-the? Yes, have-1st pers.sg.
d. *Are să citească romanul? *Da, are.*
has *să* read novel-the? Yes., has.

One can notice an unexpected fact: *a avea* ('to have') in class A can occur independently when it merges with a DP but it lacks this property when it merges with a MoodP (as the ungrammaticality of the short answer in (68d) shows. This property correlates with the possibility/impossibility of any lexical element to intervene in the sequence *a avea* + SC. When the verb can appear independently, the sequence verb+SC can be interrupted by various lexical elements:

(69) **a.** *Am de mult cartea asta.*
have-1st pers.sg. of long book-the this-fem.sg.
'I have had this book for a long time.'
b. *Am și cartea asta.*
have-1st pers.sg. also book-the this-fem.sg.
'I have this book as well.'

When the verb cannot appear independenly, the possibility of inserting lexical elements between the verb and the SC is reduced to degree adverbs.

The fact that members of classes B and C cannot occur in isolation could be the consequence of the position they occupy in the structure, i.e. a position in the functional layer, of the non-referential domain. Referential vacuity seems to lead to the impossibility of the vacuous elements to occur in isolation in this case.

This tripartition of *a avea* ('to have') (strong *a avea*, in the lexical domain, weak *a avea* and weaker *a avea* in the functional layer) reinforces the idea in Cardinaletti and Starke (1994) and extends it from pronominal systems to the auxiliary one. Just like the tripartite paradigm Cardinaletti and Starke argue for in the case of pronouns, the auxiliary paradigm also contains a "strong" class and two deficient ones. Class B shares properties with both class A and class B while evincing properties which differentiate it from both A and B.

As I have already pointed out, the higher in the structure, the more deficient the auxiliary gets. Deficiency seems to be closely linked to the SC with which *a avea* (' to have') merges in the derivation. The SC is deficient itself, it is a truncated clause. The event argument of the lexical verb which it contains does not have a "completely" identified event argument. The SC selects the auxiliary . The less deficient the SC, the more deficient the auxiliary with which it merges, i.e. the less functional projections the SC has, the more functional features the auxiliary will be required to bring in the structure. Generalizing, this amounts to saying that *a avea* ('to have') in class C, for example, brings in less features than the one in class B.

The most interesting theoretical implication of this fact is that it implicitly argues in favor of the view that *syntax filters morphology*. The position which *a avea* (' to have') occupies in the structure, as a result of the derivation process, will "dictate" which morphological paradigm is to be Spelled Out Such a view allows for both a feature-driven syntax, where morphology provides a rationale for movement, and a syntax-driven morphology, where syntax allows certain morphological forms to spell out while disallowing others. It might be the case that some morphological features are acquired in the derivation, i.e in syntax, and hence our model has to allow access to morphology as a last step in the derivation, prior to Spell Out.

An analysis along this line also brings further support in favor of the view that SCs are truncated clauses; they merge with the auxiliary precisely because they are structurally deficient. A lexical verb inserted in the lexical domain may be fully or partially inflected. When it is fully inflected, it simply moves to have its features checked. But, if it is only partially inflected, i.e *if it is structurally deficient, it will be forced to merge* with another deficient element which can provide the "missing" structure. With the lexical verb bringing along the referential argument, the so-called auxiliary will be pushed towards the non-referential domain. The fact that both the auxiliary and the SC are structurally deficient can be a possible explanation for the fact that the auxiliary cannot appear independently.

This story has its LF counterpart. If the SC which requires an auxiliary in the derivation is deficient, i.e. there are features which it misses, and if these features are recoverable via Merging before Spell Out, they might be interpretable at LF. The features which the auxiliary brings

along are interpretable (tense, mood). Which means that the auxiliary, which is an X° element in the derivation, does not vanish by LF. But it is referentially vacuous (it lacks an event argument) and it depends on the lexical verb in this respect. It needs a referential host. It seems to behave like an affix at LF. The head of the SC will raise to this affixal element in the spirit of Lasnik's Principle of Enlightened Self-Interest, as already pointed out in the analysis of the *perfect compus* What is really nice is that this raising process is somehow the reflex of the sharing process in the syntax. The head of the SC raises to satisfy the need of the LF affix for a host, but it will also have to raise to check its own features: it is a verb and verbs move (overtly or covertly) to have their V features checked. In a compound form, the verb does not move to Tense or Agreement overtly because that would violate the Principle of Economy; since the auxiliary checks these features, the lexical verb must remain in Asp or in situ[48] But at LF the verb can move to satisfy its features We thus relax a little the altruistic value of Enlightened Self-Interest allowing it to be more like "sharing" than like a violation of Greed.

2.4 TO HAVE or TO BE?

2.4.1 The issue

In this subsection I will focus on the examination of the configurations which contain *a fi* ('to be') followed by a past participle (which are not passive constructions), illustrated in (70)-(71) below:

(70) *Mama e plecată.*
Mother -the is left-fem.sg.
"Mother is gone."

(71) *Copiii sînt veniți de mult.*
Children-the are come-masc.pl. of long
"The children arrived a long time ago."

As already pointed out, there is no regular alternation between *a avea* ('to have') and *a fi* ('to be') in the *perfect compus* configuration. The

[48] It might be the case that in some languages the auxiliary can bring in aspectual features as well. I do not know of any such language, but this is a possibility which we should not discard.

Latin *esse+past participle* does not survive in modern Romanian as it does in other Romance languages (Italian and French, for example). Romanian seems to place itself outside the general Romance pattern by the early loss of the *esse* periphrasis.

The consequences of the loss of the *esse* periphrastic construction are, according to Vincent (1982) : (i) the widespread use of the so-called "reflexive passive" and (ii) the fact that verbs, regardless of their semantic features, always select *a avea* (the reflex of *habere*) as a perfect auxiliary, unlike Italian or French, for example, where certain configurational properties (Burzio 1981,1983) or certain lexical semantic properties (Centineo 1986) of the verb determine the selection of either *essere/être* ('to be') or *avere/avoir* ('to have') in the compound forms of the past. There are, however, a few cases where *a fi* ('to be') can be used instead of *a avea* ('to have'):

(72) **a**.*Mama a plecat.*
Mother-the has left
'Mother has left.'
b.*Mama e plecată.*
Mother-the is left-fem.sg.
'Mother has left./Mother is gone.'

(73) **a**.*Trenul a sosit.*
Train-the has arrived
b.*Trenul e sosit.*
Train-the is arrived

Still, Romanian differs from those Romance languages which allow a regular alternation the same verb can take either *a avea* ('to have') or *a fi* ('to be') as an auxiliary. As will be discussed later, Italian also has what has been called "variable behavior verbs", i.e. verbs which can take either *avere* ('to have') or *essere* ('to be') as a perfect auxiliary, but in Romanian *all* the verbs (a limited number) which can occur with *a fi* ('to be') can also take *a avea* ('to have') as an auxiliary. One should also point out from the very beginning that it is not straightforwardly clear that the *a fi* ('to be') configuration is to be interpreted as a counterpart of the one with *a avea* ('to have').

There are two immediate challenges to the view that the configuration with *a fi* ('to be') is a counterpart of the *a avea* ('to have') one. The first one comes from the domain of syntax: some mechanism is needed to account for the fact that the participle in the *a fi* configuration always agrees with the subject DP; lack of agreement results in ungrammaticality, as shown in (74):

(74) **Mama e plecat.*
Mother-the is left

When analyzing the Romanian periphrastic perfect with *a avea* ('to have'), we saw that no lexical element, with the exception of degree adverbs, can intervene between the auxiliary and the past participle, not even the subject DP. Compare the ungrammatical *a avea* constructions below with the grammatical *a fi* ones:

(75) **a**. **Au copiii venit în vizită.*
have children-the come in visit
b. *Sînt copiii veniți în vizită.*
are children-the come-masc.pl. in visit

(76) **a**. **Au de mult venit.*
have-3rd pers.pl. of long come
b. *Sînt de mult veniți.*
are-3rd pers.pl. of long come-masc.pl.

It is obvious that the restriction which applies in the case of the *perfect compus* with *a avea* ('to have') does not apply in the case of the configurations with *a fi* ('to be').

Another important difference is that *a avea* cannot take tenses, whereas *a fi* can (at least past tense):

(77) *Era venit de mult.*
was come of long

The second challenge is semantic: something needs to be said about the fact that the *a fi* ('to be') configuration is always interpreted as both resultative and continuous with respect to RT. Even though at first sight it might seem that the participle which merges with *a fi* behaves like an adjectival

phrase, a closer analysis will immediately reveal at least one fact: the individual denoted by the subject DP cannot be interpreted as having the property denoted by the participle in the same way in which the individual denoted by the subject DP could be interpreted as having the property denoted by an adjective, as in (78):

(78) *Maria este deşteaptă.*
Maria is clever-fem.sg.

Actually, it is not at all clear that the participle could denote a property in the first place. Thus, though the two constructions (*a fi* + *Adjectival Phrase* and *a fi* + *past participle*) share some important features (both the adjective and the participle must agree with the subject DP) still there is at least one important semantic difference which our analysis should account for: the puzzling fact that the interpretation of *a fi* + past participle seems to be somehow composite: the sentence is associated with a strong [+resultative] feature but, on the other hand, it describes an atelic situation which encompasses RT, i.e. which is continuous, or durative, as the co-occurrence with durative time adverbials clearly shows:

(79) **a.** *Sînt veniți de la 5.*
are-3rd pers.pl. come-masc.pl. since 5.00
b. *Mama e plecată de o săptămînă.*
mother-the is left--fem.sg. for a week

The *perfect compus* also allows such time adverbials with these verbs, though not with others (be they activity or accomplishment predicates):

(80) **a.** *?? A mîncat de la 5.*
has eaten since 5
b. *?? A construit casa de o săptămînă*
has built house-the for a week
c. *?? A băut vin de azi-dimineață.*
has drunk wine since this morning

On the other hand, there are some marginal cases in which a verb like *a bea* ('to drink') can be used with *a fi*

(81) *E băut de la amiază.*
is drunk since noon

In this case, there is a clear difference between the *a avea* and the *a fi* configurations.

Negation also reveals an important semantic difference. Consider the sentences below:

(82) **a**. *Nu a băut nimic de azi-dimineață.*
not has drunk nothing since this morning
b. *Nu e băut de azi-dimineață.*
not is drunk since this morning

(83) **a**. *Nu a fugit de acasă de săptămîna trecută.*
not has run from home since week-the last
b. *Nu e fugit de acasă de trei zile.*
not is run from home for three days

Somehow, we negate different things in a and b above. In (83a), for example, what we actually say is that no event of running away from home has occurred since last week[49]; this interpretation does not obtain in the case of (83b), where we say that he did run away but not for three days.

2.4.2 A semantic analysis

At this point I would like to speculate on a possible semantic interpretation of the configuration with *a fi* ('to be'). The "scenario" builds on an idea in Avrutin (1997) where it is argued that events have a discourse representation on a par with NPs. Just like (indefinite) NPs introduce file cards in the discourse representation (Heim 1982), events and states can also introduce such file cards. An event card file contains, in his analysis, a time interval during which the event holds, and individual

[49] Under certain circumstances, "de săptămîna trecută" (since last week) can be focused and in this case the reading can be different. But this does not change the present analysis in any way.

file cards representing the participant(s) in the event. Parsons (1990) distinguishes between *in-process events* (events which are going on at RT) and *culminated events* (events that are completed). Culminated events presuppose a [+perfective] predicate and they introduce a resultant state in the semantic representation. The logical form of a sentence like *John has drunk a beer* is :

(84) ∃e ∃x (drink (e) ^ Agent (e, John) ^ Theme (e,x) ^ beer (x)) ^ hold (CS (e) S))

CS is a function which assigns each event its resultant state.

Avrutin (1997) extends this analysis in terms of discourse representation. The main assumption is that in-process events introduce one single event card, while culminated events introduce two: an event file card which corresponds to the event itself and an event file card which corresponds to the resultant state. The former *projects* the latter.

Now, let us return to the Romanian compound forms with *a fi* ('to be') and *a avea* ('to have') and examine in what way an analysis in terms of file cards could help us grasp the difference in meaning between the two configurations.

The semantic representation of (85) will be very much along the line suggested by Parsons (1990) for culminated events:

(85) *Ion a plecat* .
Ion has left
∃e (pleca (e) ^ Agent (e,Ion) ^ hold (CS (e),S))

However, the resultant state is not derivative of the *perfect compus* configuration, it is derivative of the aspectual meaning of the predicate, i.e. the situation-type class the predicate belongs to plus the temporal-aspectual meaning associated with the *perfect compus.*

The semantic representation of a sentence like (86) below, whose predicate is atelic, does not contain any resultant state part:[50]

[50] We could speculate on the idea that any activity is, somehow, a change-of-state process and that it leads to a certain change which we may associate with the idea of a result. But what I mean by "resultant" here is simply something that has a natural endpoint.

(86) *Ion s-a plimbat.*
Ion se (clitic) has walked
∃e (plimba(e) ^ Agent (e,Ion)

That means that *a avea + past participle* does not always contain a "resultant" state or, in Avrutin's terms, it does not always project a second file card.

On the other hand, the configurations which contain *a fi* always contain a resultant state or they always represent two event file cards:

(87) *Ion e plecat.*
Ion is left
∃e (pleca (e) ^ Agent (e,Ion) ^ hold (CS (e),S))

Notice that this is the only possible interpretation of such configurations and that this is closely linked to the impossibility of atelic predicates to occur in such constructions[51].

(88) **Ion e plimbat.*
Ion is walked

I believe that this is exactly the intuition of how such sentences are understood: as a *state-of-affairs going on at RT* which is *the result* or the consequence of a *previous event*. The resultant state is crucial for the understanding of such configurations and, somehow, this interpretation is not triggered by the inherent semantic properties of the verb. Neither a non-resultative nor a non-holding interpretation seem possible. Hence, the composite nature of the configuration.

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[51] There are a few idiomatic constructions in which atelic predicates are compatible with *a fi* :

(i) *Maria e muncită.*
Maria is worked-fem.sg.

(ii) *Copilul e dormit.*
Child-the is slept

But such examples are marginal and their meaning is slighily different in that the focus is, in this case, on the resultant state only . Ştefan Oltean (p.c.) suggests that in this case the lexicon contains two entries *a munci* or *a minca.*

Notice also that, in spite of the holding interpretation, sentences like (87) cannot be interpreted as generic, i.e. they cannot be analyzed as containing individual-level predicates, unlike similar configurations with adjectival phrases which can though need not always be interpreted as carrying a "life time effect" (Musan 1996). Thus, just like the *perfect compus* configuration, the *a fi* ('to be') structure is associated with a culminated event; but, with *a fi* ('to be'), this culminated event must always presuppose a holding resultant state. In this respect, *a fi* + *past participle* resembles *a fi* + *Adjectival phrase*, which is also associated with a holding, durative state. However, *a fi* + *past participle*, unlike the AP configuration, cannot be interpreted as denoting a "life time effect", most probably because of the resultant part of its interpretation.

How can we account for this composite semantic interpretation of *a fi* + *past participle* constructions? One possible explanation would be to assume, in Avrutin's terms, that such a configuration introduces two event file cards in the discourse representation. But, unlike the *perfect compus*, which could also be interpreted, if such a framework is adopted, as a configuration which can (though need not necessarily) introduce two event file cards, the *a fi* ('to be') configuration does not only introduce two file cards : the projected file card, the resultant state one, is actually interpreted as an in-process event. That can nicely account for the composite reading of the whole structure:

(89) *Ion este venit.*
$\exists e_1$ (veni (e) ^ Agent (e,Ion)) ^ $\exists e_2$ (este venit (e) ^ Argument [52](e, Ion)

Recall that this configuration is always associated with a telic reading, i.e. with events which are closed, which have a right and a left boundary. But, on the other hand, it is also associated with a durative, holding state of affairs. That means that (at least) its right boundary is not specified. In other words, the first event file card has both its right and its left boundaries specified. But the right boundary automatically becomes

[52] At this point of the analysis I will leave the question of the thematic role associated with the subject DP in the second event file open.

the left boundary of the file card which it projects, the "holding" state one. Thus, the resulting interpretation will be the one we expected: the left boundary is closed, specified, but the right one is open, unspecified.[53]

Such an analysis also explains the composite role of the subject DP: in the first file card, the subject is associated with an Agent role, whereas in the second file card it is associated with a different theta-role, maybe that of (a prototypical) Theme. What is indeed relevant is that the same subject DP appears in two event file cards, but with different roles. The arguments in the two cards bear the same index, but different theta-roles. In this respect, the configuration with *a fi* ('to be') departs from the *perfect compus*, on the one hand, and from adjectival constructions, on the other hand. Still, it is not singular in displaying two theta-roles associated with two arguments which bear the same index. Recall that one of the consequences of the loss of the *esse* periphrastic construction in Romanian is, according to Vincent (1982), the widespread use of the reflexive passive. It should not be surprising to find out that the two constructions, i.e. the *a fi* periphrasis and the "reflexive passive" actually share the property of being associated with arguments which bear the same index but different semantic roles. Consider the following sentences:

(90) **a.** *Cămaşa se spală uşor.*
shirt-the *se* (reflexive) washes easily
b. *Cartea asta se vinde bine.*
book-the this-fem.sg. *se* (reflexive) sells well

The DP and the reflexive *se* bear the same index. But, while the DP in (90a) is the subject of the sentence, *se* could be analyzed as a phonetically realized object DP that needs to be case-licensed.[54, 55]

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[53] That fact could also account for the incompatibility of this configuration with transitive verbs.

[54] This view differs from that of Scholten (1988), for example, who assumes that in Italian, both reflexive and ergative *si* are base generated in a non-argument position adjoined to the verb and that *si*, on a par with the passive participle suffix, will absorb the theta-role of the subject.

[55] The two constructions are, of course, different in many respects. But my purpose here was to show that the configuration with *a fi* is not singular in assigning two different semantic roles to arguments which bear the same index.

2.4.3 A syntactic account

In what follows I will try to show what in the structure *a fi* + *past participle* leads to the semantic interpretation in **2.4.2**.

Two of the crucial differences between the *a fi* ('to be') configuration and the *perfect compus* with *a avea* ('to have') is linked to the absence/presence of obligatory agreement of the participle with the subject DP and the possibility/impossibility of inserting a lexical element (other than the restricted class of degree adverbials) between the auxiliary and the past participle. The former is a property evinced by the *have/be* configurations in those languages which have been analyzed as having a systematic *have/be* alternation and where auxiliary selection was considered a test for ergativity.

Burzio (1981,1983) provides a syntactic explanation for auxiliary selection. He adopts Perlmutter's (1978) unaccusative hypothesis on the basis of which he classifies Italian intransitive verbs in *ergative* and *unergative* (where Burzio's *ergatives* correspond to Perlmutter's *unaccusatives*). Semantically, ergative verbs take non-agentive subjects, whereas unergatives take agentive subjects. But there are verbs which take an agentive subject and yet behave as ergatives. Syntactically, the two classes of intransitives are associated with different argument structures: an unergative has an external argument but no direct object argument, as shown in (91) whereas an ergative (or unaccusative) verb has an internal argument but no external argument, as shown in (92):

(91) NP [VP V]

(92) -- [VP V NP]

Ergatives are hence unable to assign a theta-role to their subject. Burzio's generalization associates this property with the inability of such verbs to assign Accusative case to their object position (just like in the case of passives) and with the selection of the auxiliary *essere* ('to be'). Unergatives have a D-structure subject, they can assign a theta-role to their subject and they select the auxiliary *avere* ('to have').

If Romanian evinced a systematic *a avea* ('to have')/ *a fi* ('to be') alternation in *perfect compus* configurations we would expect unaccusatives to select only *a fi* and unergatives only *a avea*. But, what we are faced with is a very small group of verbs which can take either *a fi* or *a avea*: :

(93) **a**. *Ion e plecat.*
Ion is left
b. *Copiii sînt veniți în vizită.*
Children-the are come-masc pl. in visit
c. *Trenul e sosit în gară.*
Train-the is arrived in station
d. *E dusă la vecini.*
is gone-fem.sg. at neighbours
e. *Sînt fugiți de acasă.*
are run-masc.pl. from home
f. *Sînt ieșiți la plimbare.*
are gone-masc.pl.out at walk

The verbs in this group correspond to similar verbs in Italian or French, which have been analyzed as unaccusatives. But, since in Romanian they can also select *a avea* ('to have'), they have variable behavior. Again, that would not be exceptional, since there are such verbs in Italian as well[56] Such verbs do represent a challenge to the pattern of auxiliary selection. Levin and Rappaport Hovav (1995) argue that such verbs actually have two entries in the lexicon, each correlating with specific syntactic properties (and syntactic structures). Arad (1995) argues against the two lexical entries hypothesis, claiming that these verbs actually have one single entry; it is the structure in which they appear which assigns them unaccusative/unergative status. She adopts a split Asp projection as well as Borer's (1993) hypothesis that the VP has no internal hierarchical structure, i.e. arguments are not specified as external or internal. The argument of unaccusatives is assumed to check its aspectual features in AspEM (where EM= Event Measurer) whereas the argument of unergatives checks its aspectual features in AspOR (where OR=, originator). Variable behavior verbs may undergo either of the two derivations.

The present analysis will adopt Arad's proposal that variable behavior verbs have one single lexical entry which can enter different derivations and hence different structures, but I will not follow the split Asp analysis which she proposes. The main question which such an

[56] Centineo (1986) points out that auxiliary selection is not an appropriate syntactic test for unergativity in Italian since many verbs can take either *avere* or *essere*: *correre* (run), *saltare* (jump), *volare* (fly), *vivere* (live), *fiorire* (bloom).

approach raises is that of the non-variable behavior intransitives. If we adopt the view that dual auxiliary/variable behavior verbs have one single lexicon entry which enters two structures (with *have* or *be*) wouldn't that imply that the two structures are not real counterparts but the result of different numerations and different derivations? This question is far from trivial. If the implication is correct, that will lead to the generalizing conclusion that intransitive verbs are not labeled as unaccusative or unergative in the lexicon (which is in the spirit of the Minimalist program which tries to do away with the burden which has been loaded on the lexicon). They acquire an unaccusative or unergative "value" because they enter different structures[57] which evince different features, they do not "select" the auxiliary.

So far, we have seen that in Romanian there is a group of verbs which can occur with either *a avea* ('to have') or *a fi* ('to be'), and these verbs seem to be the Romanian equivalent of the class of unaccusatives in other languages.[58] The view that such verbs should be treated as having one single lexical entry has been hypothesized, together with the assumption that they actually enter different syntactic structures. In what follows, I will try to provide empirical evidence in favor of this view.

As has already been pointed out, in the configuration *a fi* + past participle agreement of the participle with the subject DP is always spelled-out, it is overt, which means that its realization is required for the derivation to converge. If the participle phrase carries overt agreement morphology (gender and number), we can assume that the corresponding features need a functional projection in which they could be checked. Though overt agreement morphology needs not be associated with strong features in all the cases, we have reasons to believe that in Romanian these features are strong and have to be checked overtly. Firstly, V moves overtly in Romanian[59]. The participle is a [+V] element, so it can and must

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[57] Scholten (1988), analyzing the *have/be* alternation in Romance and Germanic also proposes that what we should actually look for is a parameter of the categorial status of the participle. Thus she proposes that participles can be analyzed only as [+V] in some languages, but as either [+V,-N] or [+V] in others.

[58] However, we should not ignore the cases already presented in note 52 which, marginal as they might look, or idiomatic as they might be, still point to the fact that transitives can also occur with *a fi*.

[59] For arguments in favour of overt V movement in Romanian see Cornilescu (1997).

move to have its features checked. Secondly, if the participle comes fully inflected and has to have its features checked, we have to account for the difference between the participle which merges with *a avea* ('to have'), and which never bears agreement features. And thirdly, as we are going to see in the analysis which will be proposed in this section, the participle has to move and get its agreement features licensed in a Spec-head configuration. That means that a past participle which bears agreement features will check its aspectual feature [+perfective] first and its agreement features next (if we still want to retain Baker's Mirror Principle) or, if we find no reason for an Agr projection, it might be the case that Asp and Agr could be checked in a "fused" projection. While it seems clear that aspectual features are checked under an Asp projection, we still have to examine the mechanism of agreement feature checking, i.e. how and where the past participle can check its agreement features. The solution to this problem will also represent a solution to the question of the status of the SC with which *a fi* ('to be') merges in the derivation.

Subject position(s) in Romanian

Both traditional and generative studies have pointed out that in Romanian the subject DP can occupy a post-verbal position, Romanian behaving like all the other null subject languages in this respect. Under a GB framework, the subject DP was analyzed as remaing in situ, under VP (Dobrovie-Sorin 1993, Motapanyane 1995, Cornilescu 1997). Within such an approach, the verb moves to Infl and it case-marks the subject DP under government. The analysis could thus account for the difference between languages in which the subject has to move in pre-verbal position, like English, in which it was assumed that Case can only be assigned in a Spec-head configuration (via agreement) and languages like Italian or Romanian, in which the subject can remain in situ precisely because case can be assigned under government. Within a minimalist framework, case is assumed to be uniformly assigned in a Spec-head configuration [60] which raises several problems for the analysis of post-

[60] For a different point of view see Bobaljik (1995) who, though adopting a minimalist framework, allows case to be assigned under government. It is also important to notice that Bobaljik assumes that Case and Agr should not necessarily be checked in the same position. I think Bobaljik is right in retaining the idea of case assigned under government as well as in assuming that Case and Agreement should be

verbal subject of null subject languages. If the idea that the verb moves to the functional domain leaving the subject DP behind (the latter remains in situ) in a VP-internal position is retained, we shall also have to accept the implications of such an analysis, i.e. that verbs can agree to their right in these languages. The idea of a uniform Spec-head agreement is thus lost.

There are two possible ways of solving the problem: we either adopt a solution which can preserve the idea of a uniform Spec-head agreement or we depart from the MP and assume that Case can also be assigned under government. Note that such a solution would not necessarily do away with the unifying Spec-head configuration for agreement checking if we adopt the view that Case and Agreement are checked in different positions, in different configurations [61] or at different levels [62].

Let us consider the various lines of investigation. One possibility would be to adopt an analysis within which the subject DP is generated in the Spec of VP; the verb moves overtly to check its strong V features, but DPs have weak D features in Romanian, they can wait until LF. The subject DP will only move overtly if it has more than D features to check, as for example a strong [+topic] feature, in which case it will move to a position in the complementizer layer of the clause.[63]. Such an analysis is more in the spirit of Chomsky (1992). Assuming strong V features but weak D features in Romanian, it can account for the difference between languages like English (in which the D features seem to be strong and hence the subject DP must move before Spell Out, whereas the V features are assumed to be weak, verbs move covertly [64]) and languages like Romanian, in which the subject DP can procrastinate movement (for reasons already mentioned) and can occupy a post-verbal position. Such an analysis, though, is not without problems. If the verb moves overtly to have its strong features checked, it will raise to check both Tense and agreement. What does checking agreement features actually mean for a verb? The question is not trivial and I think that the foggy part of

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checked in different positions. But discussing this point here would lead us too far away from the purpose of the present analysis

[61] See Bobaljik (1995) for a similar point of view.

[62] See Burzio (1993) where case is assigned at LF

[63] For an analysis of subject positions in Romanian along this line, see Avram (1996).

[64] However, as will be argued in Chapter 3 of this dissertation, verbs seem to move overtly in English as well, at least as high as Asp.

this matter is the one which has led to the various points of view expressed in the literature, the more radical of which is the one expressed in Chomsky (1995), where Agr is no longer considered a possible functional projection because its features are not interpretable.[65] Though I fully agree that agreement features are not interpretable on the verb, I do believe that they are interpretable on the DP. It matters whether a DP is singular or plural, for example. Agreement on the verb is not interpretable in the same way. For the time being, I will simply assume, hoping that the analysis which follows will somehow support this view, though not in a straightforward manner, that when a verb moves to Agreement its features can only be checked if in the Spec position there is an element with which it can check these features. I take this process to be more a licensing process within which, in a Spec-head configuration, the predication relation which obtains between the subject DP and the verb is "checked". Now, if this is not a totally way out assumption, if the verb moves to AgrP or Agr/TP it means that it can check its agreement features only if the Spec position is "filled". That amounts to saying that an analysis along the line presented above will only make sense if we also assume either that the suject DP also moves overtly (which is not borne out by empirical facts) or that the Spec position hosts an empty element which bears agreement features. This empty element could be, in *pro*-drop languages, a null copy of the subject in post-verbal position. This null copy could be a *pro*, which occupies the Spec of Agr. The overt subject DP checks case through coindexation with *pro*, which behaves like an expletive in this case.[66] The advantage of such an approach is that it does not involve movement and it can still account for the difference between null subject and non null-subject languages in terms of whether they allow /do not allow empty expletives.

Another solution would be to analyze null-subject languages as languages in which the verb moves to Comp. Thus, the subject DP can move to the Spec of IP and still occupy a post-verbal position. Though this is not an entirely impossible solution for Romanian (see Ştefănescu

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[65] On the other hand, it has been argued in the literature that the Agr projection can be associated with semantic features such as specificity (Runner 1994) or as referentiality (De Hoop 1992). Even in Chomsky 1995, Chapter 4, Agr is, at a certain point, assumed to be motivated "only structurally".

[66] See Cornilescu (1997) for an analysis of subject positions in Romanian along this line. Also, my hypothesis should be understood with a focus on "like", as the comparison regards only the mechanism. Otherwise, *pro*, unlike expletives, does not lack phi-features.

1997), where word order phenomena in wh-questions might provide empirical evidence in favor of this view [67], it will have to be rejected on both empirical and theory-internal grounds.

Cornilescu (1997) argues that verbs never raise to Comp in Romanian. Her main argument is linked to the position of the members of a class of adverbs, like *abia* ('hardly'), which must always precede the finite verb, even in interrogative sentences, which points to the fact that the verb does not move to Comp:

(95) *Ion abia îl aşteaptă pe Petru.*
Ion hardly him (Accusative clitic) waits for Petru

(96) *Pe cine abia aşteaptă Ion?*
pe who hardly waits Ion (Cornilescu 1997)

One more argument against movement of the verb to Comp in Romanian is linked to subject position. If the verb did move to Comp, how would we account for preverbal subjects, which are allowed? Under the view that a clause is a CP, the subject DP should be analyzed as either raising out of the clause (?!) or as occupying the Spec CP position. As the subject moves to check a strong [+topic] or [+focus] feature, we should have to assume that CP is a functional projection in which such features can be checked. Recall that I have adopted the split-CP analysis of Rizzi, where [+topic] or [+focus] can be checked in different functional projections.

Another problem regards the motivation of movement of V to Comp: what drives this movement? In what follows, I will adopt the view that the subject DP can remain in its in situ position, under VP and that the Spec of Agreement will host, in this case, a *pro* element [68], co-indexed with the overt subject. When the overt subject raises to a pre-verbal position it does so in order to check other strong features (topic or focus, as has already been mentioned). This position is not SpecAgr, but one in the complementizer layer.

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[67] Preverbal subjects are not allowed in wh-questions (Baciu 1994).

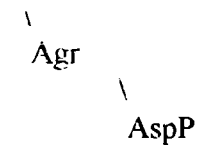
[68] I will not discuss here, as this is well beyond the goal of this dissertation, whether case and agreement are checked in the same position or in the same configuration. What is relevant for the analysis which follows is that agreement is checked, uniformly, in a Spec-head configuration.

Aspect, Agreement and the Status of the Participial Construction

One of the most striking differences between the configurations *a avea + past participle* and *a fi + past participle* regards the absence/presence of overt agreement morphology, in particular gender and number. That raises the obvious question of whether the SC which merges with *a avea* ('to have') has the same functional projections as the SC which merges with *a fi* ('to be'). In the case of the *perfect compus*, it was shown that the participle only hosts an AspP, as no agreement features need to be checked. But when the participle merges with *a fi* , agreement is obligatory. If we analyze the *a fi* configuration along the line of Mulder and Hoekstra (1990) or Avram (1994b) we get two similar constructions (as shown in 97) .

(97) **a**.avea [SC plecat mama]
b. fi [SC plecat(ă) mama]

However, such an analysis cannot account for the overt agreement marker in (97b). One should examine the status of the participial clause in (97a) and (97b) in order to see whether the two configurations are similar or not. As Kayne (1993) points out, the *have/ be* alternation can be understood in terms of the participial clause with which they merge. One possible solution (the obvious one) is to assume that the participial phrase in (97b), but not the one in (97a) hosts an Agreement projection which, if we follow Belletti (1992) or Uriagereka (1995), should be higher than AspP (to preserve Baker's Mirror Principle):

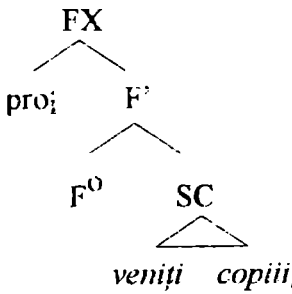
(98)


The question is whether this Agreement projection is AgrsP or AgroP. If it is AgroP, then we are faced with one single clause, just like with the *perfect compus* configuration. If it is AgrsP, we are faced with a structure in which Agrs is projected twice. Let us assume that the hypothesis that in null-subject languages the Nominative position hosts a

null copy of the overt post-verbal subject is correct and let us assume that this copy is *pro*. *Pro* and the overt subject DP make up a chain. What exactly do we want to capture when we say that *pro* is in a Spec-head relationship with the verb? We somehow want the licensing relation to be right. That will imply that whenever the subject is null, it is a *pro* which occupies the Nominative position. In (99) below the subject DP is overtly realized in post verbal position, which means that the Spec of Agr (which I will label F for the time being) hosts *pro* (100).

(99) *Copiii sînt veniți.*
children-the are come-masc.pl.

(100)



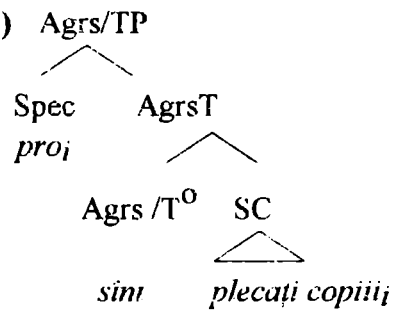
Pro and *copiii* bear the same index. *Fi* raises to Agr/T to check its features (the verb moves overtly in Romanian).

When analyzing the *perfect compus* configuration I argued that the participle phrase is not a VP; it hosts a functional projection, AspP. In what follows I will provide further support in favor of the view that participle constructions host inflectional structure. I will also try to provide an analysis which can account for the difference between the SC which merges with *a avea* ('to have') and the one which merges with *a fi* ('to be'). The main question which needs answering is linked to the mechanism of agreement checking within the participle phrase. I will follow Kayne (1989) in assuming that finite verb agreement and past participle agreement should be captured in a unified way. The participial construction has been analyzed as hosting AgroP (where AgroP is the functional node that corresponds to participial agreement) (Kayne 1989, Belletti 1992) or both TenseP and AgrsP (Kayne 1993) or as having an even richer structure (Cinque 1994). What about the SC which merges

with *a fi* ('to be')? Agreement of the participle is with the subject DP, so we expect a Spec-head configuration in which agreement features can be checked. Recall also that the word order *a fi* - DP- participle is grammatical, which means that whichever the landing site of the DP before Spell Out, it must be a possible landing site, i.e. there should exist a position to which DP movement should be legitimate and that position is between *a fi* and the participle.

Let us return to the structure in which the subject DP occupies a postverbal position, as in (99). According to the adopted framework, the subject DP can remain in situ because the specifier position of the Agr/TP hosts a phonologically null copy of the overt postverbal subject:

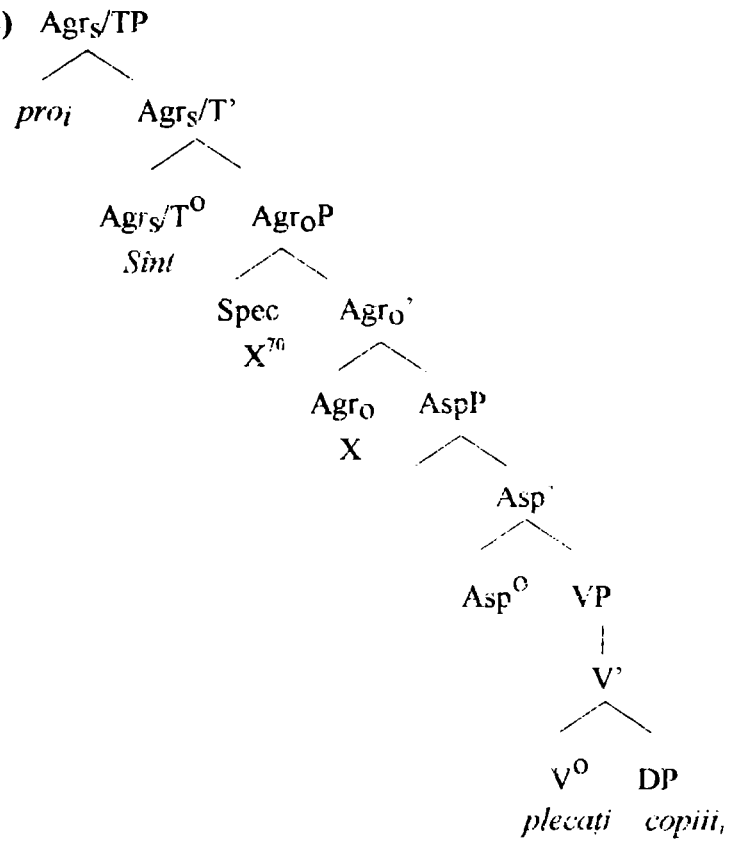
(101)



The subject DP has no reason to move overtly. But the participle is a [+V] element, it has to move. It will check its aspectual features in AspP but it still has tense and agreement features to check. We could assume that it moves to Agr_O, but with what element does it enter a Spec-head relation? Spec Agr_OP[69] is not a possible landing site for the subject DP with which the participle "agrees". Agr_S is already filled, *a fi* has moved there to check its agreement features in a Spec-head configuration whose Spec hosts *pro*, co-indexed with the overt subject DP. In this case, the following situation obtains:

[69] If such a projection is available in Romanian .

(102)

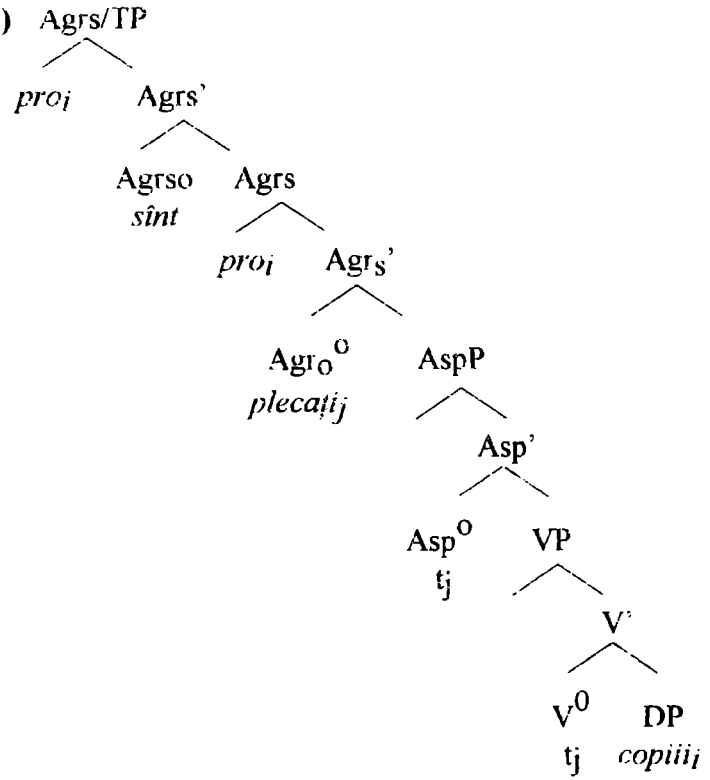


The agreement features of the participle cannot be checked and hence the derivation will not converge.

The only available solution is to assume that the participle verb actually moves to an Agr$_S$P, whose Spec can host the subject DP in those configurations in which it intervenes between *a fi* ('to be') and the participle. When the subject remains in situ, *pro* will be inserted, as in finite clauses:

[76] X means that the position is not a legitimate landing site for the subject DP.

(103)



Such an analysis can account for the agreement facts in the participle SC as well as for the two possible word-orders. Agreement is licensed in a Spec-head configuration, on a par with agreement in the upper clause It can also account for the interpretation of the *a fi* ('to be') construction: *pro*, in the upper clause, is in a Spec-head relation with *a fi* and it is associated with the resultant reading, the idea of a holding state of affairs. *Pro* in the lower clause receives a theta-role from the lexical verb *a pleca* ('to leave'). Hence the composite reading we associate with this configuration. Notice that the two *pros* and the overt DP bear the same index, but they enter Spec-head agreement with different elements and they receive theta-roles from two different elements.

The conclusion which has been reached is that the SC which merges with *a fi* ('to be') is an AgrsP:

(104) *fi* [AgrsP]

Notice that the SC lacks Tense[71]. How can we account for this fact if we still adopt the view that Agr_S and T are a fused node in Romanian? In non-finite clauses the node may check only one particular set of features: the participle checks Agr features, the long infinitive (i.e. the infinitive with *a*) checks Tense.

Now, we also have a syntactic explanation for the difference between the *perfect compus* and the *a fi* configuration. They both merge with a SC, but the SCs with which they merge host different functional projections:

(105) **a**.*avea* [AspP]
b.*fi* [AgrsP]

If the past participle is not inflected for more than Asp, it will have to merge in the derivation with an element which can "bring along" Tense and Agreement. *A avea* ('to have') can do that. The whole configuration is monoclausal, with one single T-chain and one single subject DP which attracts only one single theta-feature. *A avea* ('to have') is inserted in the functional domain. When the past participle needs to check agreement features, the configuration is no longer monoclausal in the same way: the Agrs projection is recurrent and the subject DP atracts two theta-features. *A fi* ('to be') is not inserted in the functional domain, but under VP. It will then move to check its Tense and agreement features.

Launching a question

We have seen that most of the verbs which can occur with *a fi* ('to be') in Romanian correspond to similar verbs in languages like Italian, for example. If the Romanian configuration with *a fi* ('to be') is syntactically and semantically different from the periphrastic perfect with *a avea* ('to be') the natural question which follows straightforwardly is whether the same difference does not exist in languages which have been said to evince a systematic auxiliary alternation and in which we have noticed the existence of the same agreement pattern. The question should be justified for at least the class of the so-called "dual auxiliary" or "variable behavior" verbs. Instead of assuming that there are two lexical entries in the lexicon,

[71] Belletti (1992) also points out that past participle clauses (at least when they contain an unaccusative) do not have full temporal specification.

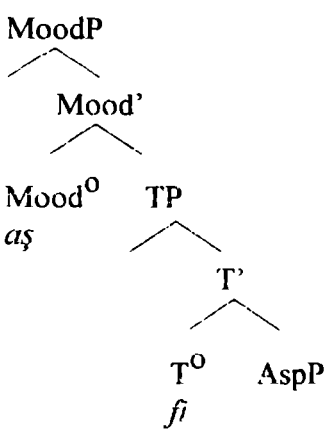
specified as [+/- unaccusative], we could simply say that there is one single lexical entry which enters different derivations. The [+/- unaccusative] status will be derivative from the structure and it will be closely connected to the property of the subject DP of attracting two theta-features. Whereas the structure with *have* is indeed a compound temporal-aspectual form, the one with *be* evinces some features associated with control configurations the most striking of which is the property of the subject DP of attracting two theta-features (Manzini and Roussou 1997).Obviously, this line of investigation requires further research.

2.4.4. FI as a perfect auxiliary

When examining the *condițional optativ* configuration, I pointed out that the auxiliary can merge with a perfect infinitive within which the auxiliary is not *a avea* ('to have'), as in the *perfect compus* of the indicative, but *a fi* ('to be'). *A avea* and *a fi* bring the same feature in the derivation, i..e. Tense. The obvious difference between them is that *fi* does not bear any agreement markers, it is invariable. This raises several questions: (i) do the two auxiliaries occupy the same position in the structure or different positions? (ii) can they appear in the same structures, or are they in complementary distribution? (iii) what triggers the selection of one or the other in perfective constructions? (iv) can we say that Romanian evinces a systematic *have/be* alternation? (v) if it does, how can we account for it? In what follows I will try to answer these questions

Recall that in the *condițional-optativ* configuration *a avea* is inserted under Mood1 and that the SC with which it merges is a TenseP. Thus, the only position *fi* can occupy is Tense, just like "perfect" *a avea* :

(105)



That is what we actually expected, since they both are perfect auxiliaries. [72]

The conclusion is obvious: Romanian has two distinct perfect auxiliaries *a avea* and *a fi* which occupy the same position in the structure and which merge with the same type of SC. However, it would be strange for a language to have two distinct auxiliaries which perform exactly the same function. Let us have a look at the contexts in which the two actually can occur:

(106) **a.** *Au citit o singură carte.*
have-3rd pers.pl. read one single book
b. **Fi citit /Sînt citit o singură carte.*
be read one single book

(107) **a.** *Aş fi citit cartea.*
have-1st pers.sg. be read book-the
"I would have read the book."
b. *O fi plecat.*
o- be left
'He may have left.'
c. *Va fi ajuns.*
will-3rd pers.sg. be arrived
'He may have arrived.'
d. *Să fi ştiut atunci...*
să be known then
'Had I known then...'

In all the sentences in (107) *a avea* is excluded as a perfect auxiliary just like *a fi* is excluded in (106). If we look at the semantics of the contexts provided by (106) and (107), we can notice that *a avea* can be used as a perfect auxiliary in the indicative, i.e. in a *realis* context, whereas *a fi* can be used only in conditional, subjunctive, future configurations, i.e in *irrealis* contexts. The two distinct perfect auxiliaries do not appear in the same contexts; they are invariably associated with a particular type of context. The alternation is systematic.

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[72] For a different point of view, see Dobrovie Sorin (1993) where the two auxiliaries are analyzed as occupying different positions: *a avea* adjoins to CP and *a fi* adjoins to Infl.

One can also easily notice two more striking differences: the lack of agreement features in the SC which contains the auxiliary *fi* as well as the fact that in irrealis constructions Tense and Agreement (when AgrP is not null and hence absent) seem to be split apart, unlike in realis constructions, where we saw that the two nodes are "fused" into one.

If we can find a possibility of importing the realis/irrealis distinction into syntax we shall be able to account for the systematic alternation between the two perfect auxiliaries in Romanian. Let us examine the sentences in (107). They all seem to consist of two parts: the speaker's insertion in the discourse and the proposition which is "evaluated". The SC does not refer to a particular event but to a set of possible events or states of affair. I believe that this interpretation depends crucially on a certain intuition we have concerning event individuation or situation individuation. What is a situation? We could define (abstract) situations as complexes constructed out of actual individuals, properties, relations and spatio-temporal locations. Both factual and non-factual situations have only actual individuals as constituents. What could the difference between realis/irrealis situations be then? I think the key word is the word *relations* and I will hypothesize that whenever we individuate a situation we actually identify a particular relation which obtains between actual individuals and a property (in a very general sense) in a particular spatio-temporal location. Non-factual situations differ from the factual ones in that the relation between the actual individual(s) and the property is not instantiated, it exists at a conceptual level, it is indefinite. It may or it may not obtain . That is why we interpret the SC as "indefinite", as denoting a set of (possible) situations. In syntax, the relation between the individuals and the property is achieved via predication, i.e. an "agreement" relation between the subject DP and the verb. It may be the case that Romanian is sensitive to agreement phenomena more than other languages and that whenever agreement markers are absent the relation between the subject DP and the verb is "indefinite". Hence the non-factual value.[73] The irrealis feature seems to be syntactically mapped as [-Agreement].

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[73] I am aware of the speculative nature of this explanation as well as of the problems it raises with respect to the present subjunctive (which has agreement features) or with respect to infinitival clauses which seem to individuate situations in a way similar to the way in which indicative clauses do. However, both the subjunctive and the infinitive are odd creatures in Romanian and a clear solution to their problem might also provide a solution to my present doubts.

Let us return to the two auxiliaries now. *A avea* ('to have') belongs to a paradigm which has agreement markers, hence it is incompatibé with irrealis clauses. *A fi* ('to be') could be analyzed as the deficient counterpart of the lexical verb *a fi* which bears no morphological markers, it is invariable and can occur in irrealis clauses.

2.5. Open questions

2.5.1 Auxiliary-Verb Inversion

One of the questions concerning the auxiliary configurations examined in this chapter has not been answered yet: how can we account for the Aux-Verb phenomenon, illustrated in (20) or (23)?

Both Dobrovie-Sorin (1993) and Ştefănescu (1997) follow the analysis proposed by Lema and Rivero (1990) and they analyze the so-called "inverted conjugations" in which the verb raises past the auxiliary, as an instance of V-to-C movement. In spite of the ingenuity of the analysis, one cannot ignore the questions it raises. Firstly, adopting this analysis also means adopting the view that there is V-to-C movement in Romanian declarative clauses. As already discussed in this chapter, there are empirical facts which question this view: place of adverbials, the impossibility of the subject DP to intervene between the auxiliary and the SC with which it merges, the impossibility of accounting for Subject-V order if the V is analyzed as having raised to C. If one adopts this line, i.e. if one rejects the possibility of V-to-C movement in Romanian declarative clauses, then one should either reject Lema and Rivero's (1990) proposal or try and provide evidence that the lexical verb can move to C under special circumstances. Secondly, one of the arguments in favor of V-to-C movement has been that this movement is only allowed in root clauses. But, as Ştefănescu (1997) points out, in Romanian inverted conjugations are not restricted to root contexts .When the verb in the main clause is a bridge verb, Aux-V inversion is allowed in the embedded clause:

(108) *Mi-a povestit că plecat-au zece dar s-au întors doi.*
me (Dat.clitic) has told that left-have-3rd pers.pl. ten but *s*
-have-3rd pers.pl. returned two
(Ştefănescu 1997 : 201)

Assuming the standard analysis of complementizers, *că* (that) already occupies C, which points to the fact that the lexical verb must land in a different position.

In what follows I will tentatively advance a solution to this phenomenon. It relies on the intuition in Lema and Rivero (1990), Dobrovie-Sorin (1993), Ştefănescu (1997), but it will "revisit" it from the perspective of the split-CP hypothesis of Rizzi (1995). Also, within the minimalist framework adopted, movement must be triggered by the satisfaction of feature-checking, i.e. if the verb sometimes moves higher than Infl, to the left periphery of the clause, then it does so because it has some "extra" feature to check

A look at the empirical data in Romanian points out that: (i) V-Aux inversion is grammatical (though unusual) in embedded contexts, which means that the lexical verb moves to a position lower than the one which hosts the overt complementizer; (ii) in most cases, the subject DP obligatorily remains in post-verbal position[74], i.e. in situ:

(109) ?? *Anii trecut-au...*
years-the passed-have-3rd pers.pl.

That means that the subject DP and the lexical verb may be competing for the same position, a topic position, in the complementizer layer. This idea is also supported by the fact that V-Aux inversion is not allowed in (direct or indirect) wh-questions (110) in which the subject cannot occupy a pre-verbal position in the lower clause (111) :

(110) **a.** ??*Când plecat-au ?*
when left-have-3rd pers.pl.
b. ?? *Nu ştiu când plecat-au.*
not know-1st pers.sg. when left-have-3rd pers.pl.

(111) * *Când mama a plecat ?*
when mother-the has left

[74] There might be cases in which the subject could move, but most probably only under contrastive focus.

One possible solution is to assume that the lexical verb moves to a topic position . We thus retain the idea of V-to-C movement, but we provide a reason for this movement. That can account for the grammaticality of V-Aux constructions in embedded contexts (the complementizer lands under the Force projection, higher than the topic) as well as for the restriction imposed on pre-verbal subjects in such constructions. In its movement, the lexical verb incorporates into the auxiliary, in a way similar to LF movement with non-inverted constructions. The lexical verb becomes a "host" for the auxiliary.

Two problems still remain unsolved: (i) how can we account for the fact that clitics can intervene between the lexical verb and the auxiliary in V-Aux structures, or, in different terms, how can we account for the fact that the clitic is also "pied piped" in this movement? and (ii) how can we explain the incompatibility of such inverted structures with negation (as in 112)?

(112) * *Nu plecat-au...*
not left-have-3rd pers.pl

I do not have an answer. Obviously, one can speculate that in Romanian Negation is a lexical element (an adverb) which blocks movement of the lexical verb. The clitic is a "weak" pronoun, a deficient element; thus, it may incorporate into the auxiliary before the raising of the lexical verb and hence it will be "pied piped" to the topic position. Or, anyway, being a deficient element, it may not block the movement of the lexical verb.

The explanation I have advanced is more a question than an answer. It may also be the case that a solid analysis of data from the history of Romanian can solve these problems. In Old Romanian, the auxiliary occupied a post-verbal position; so maybe Old Romanian was a V-to-C language but, due to a certain parametric change, it has turned into a V-to - I language. The inverted conjugations under discussion and the word order constrains in wh-questions may be residuals of V-to-C phenomena.

For the time being, I think that the hypothesis that the inverted verb moves to a topic position in Modern Romanian can account for some empirical facts and that it is a possibility which cannot be easily discarded.

Data from earlier stages of Romanian (17t^{h} c. and 18th c.) show that at this stage both Aux-V and V-Aux configurations were used . Comparing the use of inversion structures with Ion Neculce (18th c) and Miron Costin (17th c.) one can notice a greater number of inversion structures with the former, i.e. in the 18th c. such structures were used at least as often as (if not more often than) in the 17th c. It might also be the case that using one structure or the other had important stylistic effects at the time and hence using inversion structures was a device which some authors used more than others. One can also notice that there is at least one context which seems to favor the use of Participle-Aux inversion:the beginning of a paragraph:

(113) *Făcut- au bogată dobîndă Ţării Munteneşti Borăş*...(17th c.)
Purces-au Ghica vodă spre ţară cu agi. (17th c.)
Indemnatu-m-au mai multu lipsa de ştiinţă.... (17th c.)
Scris-au atunce viziriul la Dumitraşco-vodă. (18th c.)
Trimis-au Dumitraşco-vodă pe Panaitachii...(18th c.)
Vinit-au Dabije-vodă în scaonul domnescu în Iaşi. (18th c.)

However, it is not the case that the inverted structure is used every time a paragraph begins. The order Aux-V can be used in paragraph initial position.

(114) *Au plecatu fuga şi Ştefăniţă păharnicul*...(17th c.)

One can also notice that the inverted structure is preferred when a conclusion is reached or when contrastive focus seems to be involved. These empirical data seem to support the analysis which I have put forth in this section. However, one should look at corpora from more authors and from earlier stages as well before reaching a conclusion with respect to the evolution of inverted structures in Romanian.

2.5.2 Aux selection and direction of Merge

In this chapter I have analyzed the auxiliary *a avea* ('to have') as well as the perfect auxiliary *a fi* ('to be'). I showed that the auxiliary is "chosen" by the syntactic configuration in which it is inserted. Such an analysis has two theoretical implications. Firstly, it provides evidence that syntax may also act as a filter on morphology. At first sight, such a view

seems to contradict the framework adopted throughout this dissertation, in particular the hypothesis that a verb is drawn from the lexicon fully inflected and then checks its features against the relevant functional heads. But I believe there is no contradiction at stake. The only point where I differ from the standard minimalist assumption in this respect is that I assume that certain morphological paradigms can be chosen only after Merge and Move have applied, i.e. after syntax. Actually, such a view on the mechanism of language, within which morphology is a filter on syntax (features drive Movement) but within which (some) morphology is filtered by syntax, may lead to other interesting generalizing questions : what other aspects of morphology are filtered by syntax? What comes from the lexicon and what is achieved through derivation? Does Agr on verbs and Agr on DPs behave in a similar way? What about case?

Another question is directly linked to auxiliaries. If a certain paradigm is "chosen" in the derivation, before Spell Out but after syntax, it means that auxiliaries themselves do not "select" anything, they are "selected" by the SC which merges with them in the derivation. The lexical verb merges from right to left with the auxiliary, unlike in the case of Merge with the object DP, for example, which is left to right. The question is whether we can rush to the generalizing conclusion that Merge with a lexical element is left to right, whereas Merge with a functional element (or with an element inserted in the functional domain) is right to left? It may well be the case that direction of Merge could distinguish between functional and lexical elements .

The verbs auxiliary we are concerned in here, continued my father, are [...]shall; should; will; would, can; could;[...].Now, by the right use and application of these, continued my father, in which a child's memory should be exercised, there is no one idea can enter his brain, how barren soever, but a magazine of conceptions and conclusions may be drawn from it.

(L.Sterne – *The Life and Opinions of Tristram Shandy*)

Chapter 3

THE ENGLISH MODALS: A SYNTACTIC ACCOUNT

3.1. Introduction

3.1.1. This chapter is an attempt to explore the system of the English modals from a syntactic perspective with a view to providing a syntactic explanation for their semantics. In particular, I argue that the different meanings associated with the English modals are triggered by differences at the syntactic level, i.e. they have a structural basis. I assume a unitary meaning approach to their semantics and look for a theory of language structure which can explain how we can achieve the different interpretations of the modals trying to advance a hypothesis about the relation between the structural position a modal occupies and the interpretation of its meaning.

3.1.2. In this chapter I will actually try to provide a tentative answer to the following questions:

(i) Do modals always occupy the same position in the structure? Do they occupy different positions? If they occupy different positions, does their interpretation vary according to the position they occupy? If it does, how can we account for this fact?

(ii) What is the status of the English modals: full lexical verbs/light verbs/functional elements (i.e. auxiliaries)? Do all the members of the traditional class of "modals" evince the same properties and hence have the same status?

(iii)To what extent does the history of the English modals and data from language acquisition support their "synchronic" behavior?

3.1.3. The organization of the chapter is as follows:

Section 1 presented the aim of the chapter.

Section 2 will briefly review the main lines of investigation with a view to pointing out the necessity of a new approach which stems from valuable ideas already argued for in the literature.

In Section 3 the different "modal" configurations and their interpretation(s) will be analyzed. The main idea advanced is that the meaning of a modal is its core meaning (in the sense of for example Perkins 1983, Wertheimer 1972, Ştefănescu 1978, Groefsema 1995) and its scope potential which can be captured in terms of the small clause with which it merges in the derivation. What has so far been described as "extension of meaning" (from root to epistemic meanings) (Sweetser 1989,1993) will be argued to be a mere extension of the small clause, allowing the modal to have a wider or a narrower scope.

In Section 4 it will be argued that the history of the English modals and (to a certain extent) data from language acquisition are mirrored by the syntactic behavior of present- day modals.

3.2. *Main lines of investigation*

3.2.1. General remarks

The syntax of the English modals has received much attention in generative grammar, mainly because of the morpho-syntactic properties they evince and which clearly set them apart from other verbs.

The most striking characteristics of the English modals are the so-called NICE properties (Huddleston 1976), where NICE is the acronym of *negation, inversion, code, emphatic affirmation*:

(i) Negation can attach to the modal, without DO-support:

(1) **a.** *I cannot come.*
b.**I do not can come.*

(ii) Subject-Modal inversion is possible:

(2) **a.** *Must they leave?*
b. **Do they must leave?*

(iii) Modals can appear in the "code":

(3) **a.** *I can come and so can Bill.*
b.**I can come and so does Bill.*

(iv) Emphatic affirmation is possible, again without DO-support:

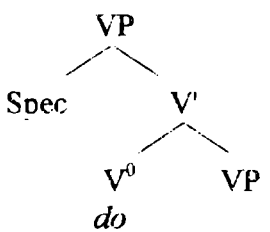
(4) **a.** *You shall have the money by tomorrow.*
b. **You do shall have the money by tomorrow.*

Such properties clearly distinguish the English modals from lexical verbs and fully qualify them for the class of auxiliaries which have the same set of properties.

We could call this set the "No DO-support" set of properties because (i)-(iv) can be reduced to one single property: unlike lexical verbs, modals do not need "DO-support", being allowed (in a GB framework) to move to Inflection overtly. As seen in (1b), (2b), (3b) and (4b) they are incompatible with the auxiliary *do*. The English modals and *do* seem to be in complementary distribution. If we follow the line of Wilder and Cavar (1994) and assume that there is always a silent *do* in each structure (available from the numeration),which stops being silent when "needed", we could say that *do* must always remain "silent" when there is a modal in the structure.

With *do* and the modals competing for a place in the structure, the following question presents itself: Do they compete for the same position? If they do, *do* should be reanalyzed as evincing a [-modality] feature. But the picture gets muddier because *do* is also absent or silent in the presence of the auxiliaries *have* and *be*. There is no configuration in which *do* is followed by these auxiliaries (unlike configurations with modals which can be followed by *have* and *be*).It seems to be in complementary distribution with all the other auxiliaries. An analysis of *do* is beyond my present purpose. For the moment, I shall assume that *do* and the modals do not compete for the same position(s); they are merely incompatible for reasons related to their properties. However, I would like to suggest that *do* seems to occupy a position under VP, as in (5):

(5)



As the present analysis will prove, modals can also occupy this position and, when they do, they share some properties with *do*

(a) they can move to Tense; in this case Inflection and the lexical verb are prevented from merging;

(b) there are varieties of English that have optional non-emphatic *do* in affirmative declaratives (Denison 1993)

Obviously, one important difference between *do* and the English modals is linked to their semantic content: *do* is a mere support, being devoid of any content whatsoever (it can disappear at LF) whereas the modals do have semantic content which carries weight at the level of interpretation.

The fact that the modals can invert with the subject may be taken as an indication that they are base-generated in Inflection, which would qualify them as functional elements, or that they are more readily able to move than main verbs (Roberts 1992), which would qualify them as a distinct class of verbs.

The modals also evince other properties which qualify them as a syntactically and morphologically definable class:

(v) they are incompatible with non-finite forms:

(6) **They are canning to do it now.*
(7) **To can or not to can, that is the question.*
(8) * *They have must(ed) do it for a long time.*

(vi) they are incompatible with agreement:

(9) **He mays do it.*

(vii) they always select a short infinitive as their complement:

(10) *They must (*to) leave immediately.*

(viii)they have no passive form
(ix) they have no imperative
(x) they cannot co-occur, with the exception of certain dialects:

(11) *You might would say that.* (Southern USA, Denison 1993)

(12) *I don't feel as if I should ought to leave.*(Southern USA, Denison 1993)

(xi) some modals have two tense forms (present and past)(13), some have a past tense form which can only be used in reported speech (14), while others have only one form (which can be used in past contexts as well but under certain conditions) (15):

(13) **a.** *They can play the piano.*
b. *They could play the piano when they were young.*

(14) **a.** *She may leave immediately.*
b. *The boss said she might leave immediately.*

(15) **a.** *They must leave immediately.*
b. *The boss said they must leave immediately.*

(xii) a modal is always the first verb in a finite verbal group, i.e. it cannot be selected by any other auxiliary.

(16) **a.** *They may have been punished for what they had done.*
b. *We might have gone about half a mile, and my pocket-handkerchief was quite wet through, when the carrier stopped short.*

The properties listed above clearly point out to the fact that modals have a "non-lexical" status, behaving in certain respects like functional categories. On the other hand, their content is very much like the semantic contour of any lexical category. Assuming that modals have been the subject of grammaticalization it seems obvious that the development of the English modals from lexical verbs into a functional class has not implied semantic bleaching, as is customary with the processes whereby a contentive lexical element develops over time into a grammatical element. That might explain their exceptional behavior.

The meaning of the English modals has been the main topic of many studies[75]. Even within the syntactic approach there have been attempts to

[75] For a semantic analysis of the English modals (in Romanian literature) see Bâră (1979),who gives a systematic account of modal expressions in general within an

prove that there is a one-to-one correspondence between the epistemic/deontic meaning of a modal and its syntactic properties (Ross 1969, Zubizaretta 1982, Huang 1993). On the other hand, many linguists have denied the role of the semantic properties of the English modals either in their history or in their syntactic behavior (van Kemenade 1993, Jenkins 1972, Roberts 1985,1992 among many others).

The two main lines of investigation in the field of the English modals are:

(i) the modals as lexical verbs analysis

(ii)the modals as auxiliary/ a distinct syntactic class analysis

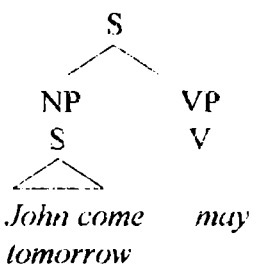
While (i) seems quite clear, the concept of main verb has not been the subject of linguistic debate (yet!)[76], (ii) seems quite ambiguous. We would expect a clear, uniform line of investigation under (i) but various possible approaches under (ii), all sharing the core idea that the English modals represent a syntactic class different from that of full lexical verbs.

3.2.2. *The modals as lexical verbs analysis*

This line of investigation goes back to Ross (1969), Newmeyer (1969) (the "modal from cognate verb analysis"), Perlmutter (1970), Huddleston (1978), to name just a few. It assumes that modals are derived from main verbs and that they occur in both intransitive and transitive structures.

With Ross (1969) intransitive configurations are associated with epistemic readings (as in 17) while transitive configurations are associated with deontic readings (as in 18):

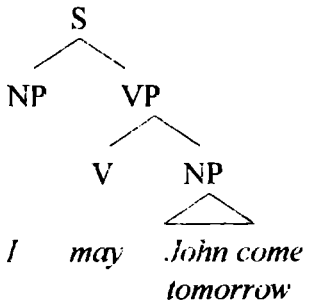
(17)



approach which integrates the speech act theory. Zdrenghea (1979,1982), Ştefănescu (1988), Duţescu-Coliban (1987).

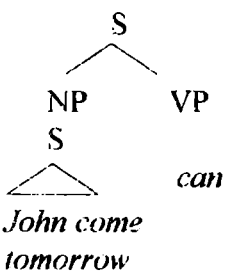
[76] However, Hoekstra (1994) defines the category verb as a "derivative category".

(18)

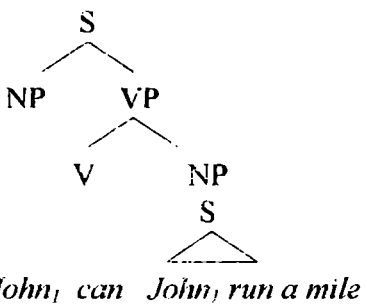


Palmer (1979), pointing out the difficulties of such an analysis (among others the probem of the *I* in (18)), argues that sometimes modals belonging to the same "semantic" class, that of "dynamic" modals,can enter either a transitive or an intransitive configuration. *Can*, for example, is to be analyzed as intransitive when it means *possible for...*, as in (19), but as transitive when its meaning is that of *ability* (defined as expressing "subject oriented" modality), as in (20):

(19)



(20)



Jenkins (1972) (who treats the English modals as a distinct syntactic category: Modal) convincingly argues that there is no syntactic evidence available that the distinction epistemic/deontic is reflected

syntactically at the deep structure level showing that even on semantic grounds one could postulate the same structure for epistemic and deontic readings.

I will not go into further details of their arguments or analyses. What is relevant for the present analysis is the fact that within such an approach modals are treated as lexical verbs and that there is an attempt (with certain linguists) to "map" each meaning into one particular configuration. The fact that the two analyses reach different results (Palmer's dynamic *can* appears to behave like Ross's epistemics) seems to suggest that there may not be a one-to-one mapping between deontic/epistemic readings and the syntactic properties of the modals.

In more recent studies (Zubizaretta 1982, for example and Picallo 1990 for the modals in Catalan), deontic modals are generated as VP-adjuncts and are associated with control structures while epistemic modals are generated under Inflection and are associated with raising structures[77]

(21) *She can play the piano.*
She$_i$ can [PRO$_i$ play the piano].
(22) *They may have arrived.*
They$_i$ may [e$_i$ have arrived]

In (21) the subject of the matrix controls the empty subject of the embedded clause while in (22) the subject of the embedded clause has raised to the subject position of the matrix.

Such an analysis focuses on the fact that in deontic readings the subject receives a theta-role (actually an "adjunct theta-role") from the modal verb whereas in epistemic readings the subject receives a theta-role from the VP selected as a complement. Epistemic modals are compatible with perfect infinitive (as in 23) or progressive complements (as in 24) and there is no selectional restriction on the subject, as the subject is assigned a theta-role by the verb in the complement, not by the modal.

(23) *We could easily have succeeded.*
(24) *It was not possible that such a tiny creature could be showing such strength.*

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[77] For an analysis which argues against this line of investigation for the English modals, see Boskovic (1994).

Deontic modals can only take a bare infinitive complement:

(25) **a** *The family could hear her swift heavy steps up there.*
b. *I need say nothing here [...]because nothing can show better than my history whether that prediction was verified or falsified by the results.*

They may impose certain selectional restrictions on the subject. For example, they cannot take expletive elements or idiom chunks as their subject.

Huang (1993) argues in favor of the lexical verb approach, suggesting that the modals are raising or control verbs and pointing out that under such a view Tense and Agreement alone constitute Inflection (as in Pollock 1989) while the phrases headed by the modals, raising or control categories, are complements to Inflection which is always a raising category.

One main problem with this line of investigation is the fact that there are cases of so-called "deontic" modals which have a perfect infinitive complement (26 below) or cases which are ambiguous between a deontic and an epistemic reading (27 below):

(26) *Candidates must have filled in an application form.*
(27) *She could have run faster.*

Modals which are treated as "deontic" within such an approach do not always evince the same properties. Compare (28) and (29) (where 29 is ambiguous between "permission" and "ability"):

(28) *They may leave as soon as the bus arrives.*
(29) *They can speak Chinese.*

The subject in (28) is assigned a theta-role by the verb in the complement (*leave*)rather than by *may*. The structure does not seem to be a control structure at all. In (29) (when the reading is that of "ability") the subject is assigned a theta-role by the complex " modal + lexical verb" (as will be argued in **3.3.3**.). Semantically, the two sentences differ in terms of the degree of "modality" involved: (29) simply describes a state of affairs,

a property, it is a description of the world as it is (there is almost no modality involved), whereas (28) tries to change the world, to cause a certain change in the present state of affairs.

Also, analyzing the modals as control/raising verbs cannot account for their syntactic behavior which clearly sets them apart from other lexical verbs which may enter the same type of configuration

Ouhalla (1991) argues against the main verb hypothesis pointing out that the modals do not enter into a thematic relation with the arguments of the main verb (the VP is seen as the exclusive domain of theta-assigning), which qualifies them as members of a functional, not a lexical category.

A more moderate line of investigation is the one suggested by Roberts (1993). He distinguishes between *functional* and *lexical auxiliaries*, where the former class consists of members of Inflection and the latter of verbal elements which cannot assign any theta-role but are members of V which move to Inflection. Within such an approach, the English modals could be analyzed as falling under the latter class. The problem with such an approach would be that one could reach the conclusion (which is not borne out by empirical data) that only those lexical verbs which cannot assign a theta-role move to Inflection.

3.2.3. The modals as a distinct class/auxiliaries analysis

This line of investigation goes back to Chomsky (1957) where the English modals are treated as being, structurally, outside the VP constituent, under the node AUX(iliary), i.e. they are defined as a syntactically distinct class. Within such an approach, modals are analyzed either as occupying a position under the AUX constituent, together with perfective *have* and progressive *be* (Chomsky 1957, Culicover 1976, Jackendoff 1977[78])or as distinct from these two auxiliaries. Emonds (1976) and Akmajian et al. (1979) argue in favor of a distinct category AUX but only the English modals are assigned to this distinct category, while *have* and *be* are identified as members of a subclass of verbs. AUX labels "a constituent that includes elements expressing the notional categories of Tense and/or Modality" (Akmajian et al. 1979:2). It is

[78] In Jackendoff (1977) modals are argued to fall together with HAVE and BE, and they are assigned the following lexical feature analysis: [+Subj, +Obj, -Comp], where [-Comp] is interpreted as the only feature which differentiates them from main verbs.

important to understand that placing the modals under the category AUX is different from the discussion whether there is a category of auxiliaries distinct from the category of verbs. As Reuland (1983: 104) points out:

> *As far as this issue is concerned it could very well be the case that all traditional auxiliaries are actually main verbs, and yet in the optimal grammar one must assume a position outside the VP (an S-daughter), which at the surface is always occupied by a verb, with properties different from those of the ordinary V-position within the VP."*

That would amount to saying that the main difference between the two approaches (main verb vs auxiliary) lies in the different structural position assumed for the English modals and not in a clearly defined difference of status. The main difference seems to consist in whether they are inside or outside the VP constituent.

Within a GB model, the modals are argued to be generated under the node INFL(ection)[79] while *have* and *be* are generated inside the VP constituent. In Chomsky (1981) it is tentatively asserted in a note that "perhaps the Modals also appear within INFL"(p. 140). The modals are thus once again seen as occupying a structural position shared by Tense as well. But the "Aux-V" structure is regarded as a verbal complex, analogous to causative and restructuring constructions in the Romance languages. Further studies, especially those within the Principles and Parameters model, are more definite in asserting that the English modals are generated under INFL. Van Kemenade (1993) clearly asserts that the modal verbs are not V in any sense, defining present-day English modals as base-generated under Infl. The most important difference between the modals and lexical verbs is that the former do not select what she calls a propositional element (VP/IP/CP). Unlike Chomsky (1981) she argues against treating the English modals as analogous to causative verbs because the latter can take a VP complement with the subject remaining in situ and receiving case from the matrix verb. "Thus, the modals are exceptional in that, though verbal, they have no selectional properties,

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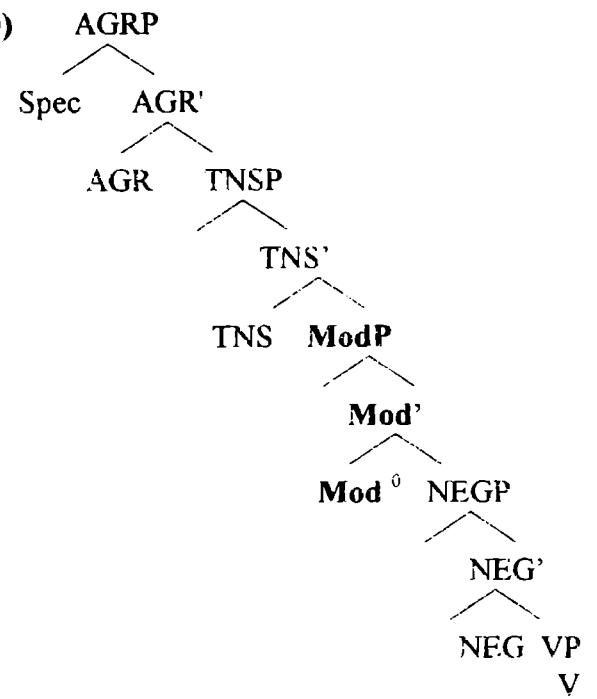
[79] I think there is a clear similarity between AGR and INFL, in the sense that they are linked to notions such as mood and tense and accommodate elements which behave differently from the lexical ones. For a different point of view, see Reuland (1983) who argues against identifying INFL and AGR.

which I take to reflect that they cannot assign a theta-role" (van Kemenade 1993:144). This property is also considered as essential in Roberts (1993) or Ouhalla (1991) : the modals cannot assign theta-roles, and a verb which is not a theta-role assigner will have a radically different distribution. The English modals can only appear in INFL. Ouhalla (1991), who assumes the split INFL hypothesis, argues that the modals represent a distinct syntactic category heading its own maximal projection (ModP) as in (30), which occupies the position between Tense and Negation:

(30)



This analysis can account for the fact that (some) modals can move to Tense and that they can precede Negation. Within such an approach the modals are clearly defined as "functional categories".

One problem with such a "unifying" analysis is that it cannot account for the fact that there are modals which do not move to tense (Fiengo 1971, apud Palmer 1979, explores the possibility that epistemic modals are tenseless elements whereas root modals are tensed elements) and it cannot capture the intuition that *can* in (31) and *can* in (32) might behave differently, i.e. they may occupy different positions in the structure.

(31) *David can make delicious cookies.*
(32) *David can't have made such delicious cookies.*

Nor can this analysis capture the intuition that the so-called deontic modals, or at least ability *can* and volition *will*, behave differently with respect to theta-role assignment. Roberts (1992) assumes that at least ability *can* and volition *will* can assign an adjunct theta-role in the sense of Zubizaretta (1982). Actually, root readings are associated with richer thematic structure than epistemic readings.

One more problem (already discussed when pointing out the problems the lexical verb approach raises) is caused by the fact that elements usually analyzed under the heading of deontic modality do not always evince the same set of properties (semantic or syntactic). For example, ability *can* is not always interpreted as expressing a modality imposed by the speaker, it simply describes a state of affairs, a property of the subject of the sentence. It has a past tense equivalent, which means that it can raise to Tense.

(33) *She raided the fridge when no one could see her.*

Obligation *must* or permission *can*, on the other hand, clearly express the speaker's (direct/indirect) wish of making the world fit his/her words, they do not describe a situation but they to create one.

(34) **a.** *You must leave immediately.*
b. *You can leave when you feel like.*

Under most analyses, ability *can*, permission *can* and obligation *must* are analyzed as expressing "deontic modality". It appears obvious that the meaning of the modal, be it deontic or epistemic, can play no part in its syntactic behavior. Less so if we assume an analysis according to which the modals have only one core meaning which acquires "contextual values", i.e. an analysis which argues against modal polysemy (Ehrman 1966, Kratzer 1977, Coates 1983, Perkins 1983, Ştefănescu 1988, Groefsema 1995) or an intermediate position, like that of Sweetser (1989, 1993), who assumes that the modals are ambiguous between a deontic

and an epistemic reading, but that there is a systematic relationship between the two in the sense that the deontic and dynamic readings, which are basic, are metaphorically mapped onto the epistemic domain.

In a recent study of the English modals, Hoey (1997), though assigning each modal a set of major meanings, points out that "the various senses described are not necessarily discrete and meanings may overlap" (p. 23).

It falls outside the scope of this analysis to evaluate these proposals in detail or to point out the differences between them. The present analysis will adopt the point of view that the modals have a core, unitary meaning. The main assumption is that we are faced with an "extension" of meaning : but this extention, as I have already said, will be analyzed in structural terms.

I will also assume the view which questions the autonomous conceptual existence of thematic roles (Chomsky 1995, Hale & Keyser 1993), assigning a more important part to the relations determined by the categories and their projections. Within such an approach, the idea that deontic modals can assign theta-roles while epistemic modals lack this ability should either be abandoned or at least reformulated. Such an analysis would also be problematic in that, in stipulating different thematic structures, it will also stipulate that deontic and epistemic modals are associated with different lexical entries, i.e. they do not have a unitary meaning.

On the other hand, this approach tries to account for the fact that the position a modal occupies in the structure can account for its interpretation, or, at least, it starts from the assumption that there must be *some link between the meaning of the modal and its syntactic behavior*.

What I would like to retain from this line of investigation is the idea that the modals may occupy different positions in the structure of English but I will try to prove that these positions are not the projection of different lexical entries. The modals will be analyzed as having one unitary lexical entry in the lexicon. Assuming this view I follow the spirit of the analysis proposed by Jenkins (1972), who argues against the position that there is any semantic or syntactic evidence for the existence of a fundamentally different deep structure for epistemic vs deontic modals

and advances the proposal that, with the modals, certain aspects of semantic interpretation are directly related to surface structure properties. Translated into more contemporary terms, that would amount to saying that we can account for the differences in interpretation in terms of the positions which the modals occupy in the structure.

3.3. A tentative approach to the English modals

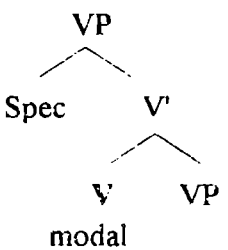
3.3.1.The hypothesis

The hypothesis I want to put forward is that the different readings of the English modals result from the different positions they occupy in the structure. In the mapping to LF there is a clear correspondence between the clausal structure and the logical representation. If this correspondence holds, the difference between the various readings of the English modals can be described in syntactic terms, i.e. we could say that English wears its modals' LF interpretation on its sleeve.

As I have already pointed out, the present analysis assumes a unitary meaning approach. This core meaning "extends" in the structure, according to the structural context in which the modal is placed. I propose that there are three positions the English modals can occupy:

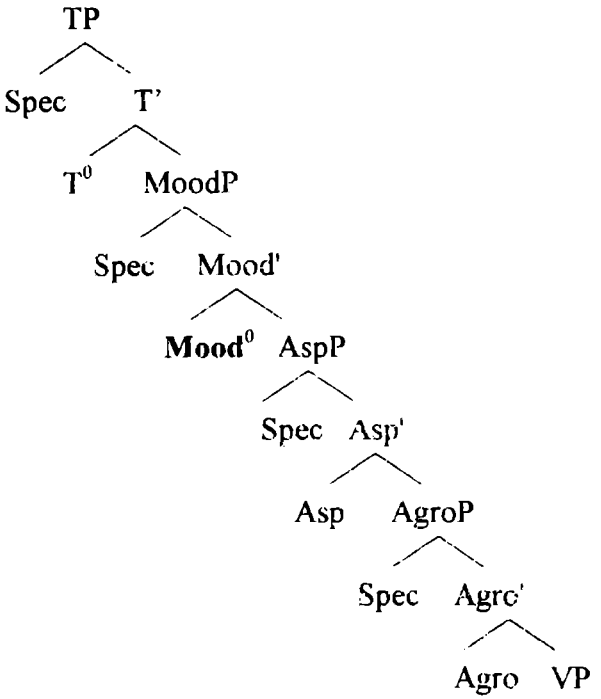
(i) under VP:

(35)



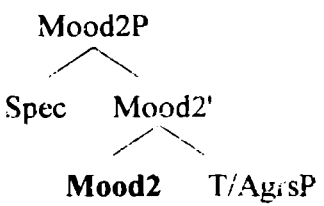
(ii) in a Mood projection under Tense (the position which Ouhalla 1991 proposes for all the English modals):

(36)



(iii) under a node I shall call **Mood2** and which would roughly correspond to the one proposed by Rivero (1994) for the languages of the Balkans (Albanian, Bulgarian, Modern Greek and Romanian) and by Tsimpli (1990) and Alexiadou (1994) for Modern Greek :

(37)



I assume a position in the lexical domain (35), a position in the "functional" domain (36) and a position at the borderline between the "operator" domain (or the "complementizer layer" Rizzi 1995) and the functional one (37). The obvious question is how we can accommodate the idea of one single lexical entry and its possibility of still occupying three different positions in the structure.

The proposal I would like to make is that the English modals can be analyzed, just like the Romanian *a avea* ('to have') (see Chapter 2), as always followed by a SC which does not always have the same structure. The different SCs derive from different numerations. The modal is always the same; what changes is the degree of complexity of the SC. It is precisely this degree of complexity which forces the modal to occupy a certain position in the structure: the more complex the small clause, the higher in the structure the position of the modal will be. The "extension" of meaning is thus interpreted as an extension of scope. The modal will take wider or narrower scope, according to how complex the SC with which it merges is. Its (lexical) meaning remains the same.

Scope will be defined in its traditional sense: an expression *a* is in the scope of an expression *b* iff *b* is higher in the structure than *a*, if it *commands* it.

The proposal builds, on the one hand, on the view that there is a clear, close relationship between epistemic and deontic meanings (Sweetser 1993) and, on the other hand, on the view that a linguistic expression is best described as a derivation, where derivation is seen as a step-by-step building of structures, by recursive operations (Chomsky 1995a,1995b,1996).

Assuming the view that the contextual meaning of a modal is determined by its scope, where its scope is the result of the derivational history of the linguistic expression containing the modal, we shall also assume the view that derivational history plays an important part in the interpretation of the derived linguistic expression.

An analysis of the modals occupying the three different positions will also point to the fact that the verbal nature of the modal, its [V] feature, seems to be subject to change. While the modal occupying the position under VP has (some) properties of a verb, maybe those of a "light" verb (Grimshaw and Burton 1988, Rosen 1990, Chomsky 1995b), the modal under Mood2 behaves more like an adverb. This is not a new idea, Roberts (1987) among others showed that adverbs can be analyzed like verbs which do not assign thematic roles but which have properties of predication, i.e. selection. As we are going to see, it is a common assumption in the literature that the English (epistemic) modals do not contribute to the thematic information of any configuration. Just like adverbs they are dependent on the element which they modify (i.e. they can be described to have a modifying function over propositions or events) but the modified element itself is only structurally dependent on the modal.

Jackendoff (1977) describes adverbs as evincing the features in (38) and modals as evincing the features in (39):

(38) [+N,+V][-Comp]
(39) [-N,+V] [-Comp]

It seems that it is only the nominal feature which differentiates between the two classes.

We can also notice that movement to the left of the structure is associated with a weakening of the [V] feature; the modal occupying the Mood2 position seems to be the "lightest" from the point of view of its verbal features but the "strongest" from the point of view of modality.[80]

Again, just like in the analysis of the Romanian *a avea* ('to have'), when I claim that the English modals merge with a SC I actually mean that they merge with a SC from the range of possible constructions, not one single construction. The idea to analyze the modals as selecting a SC is not new, it goes back to Stowell (1981, 1983). Under his analysis modal verb complements are raising style VP small clauses as in (40):

(40) John$_i$ must [$_{VP}$ t$_i$ leave]

If we assume the Subject VP-internal hypothesis, all the VP small clauses imply raising of the subject in English.

We should not mistaken the raising in this case for the raising of the subject of typically "raising" verbs (where the subject DP raises from the downstairs clause to the upstairs one), like *seem*. The modals and the SC with which they merge in the derivation represent mono-sentential structures.

3.3.2. The modals under VP

3.3.2.1.The data.

The first position assumed as a possible position occupied by the English modals is under VP as shown in (35). This is the position which a modal like *can* may occupy when used in a context like the one provided in (41) or *will* when used in a context like the one in (42):

[80] Modality is defined as marking the speaker's belief or the speaker's will to change the world, not merely to describe it.

(41) *John can dance.*

(42) *I will drown and no one shall save me!*

That would correspond to what Palmer (1979) calls "subject oriented dynamic modality" and which he opposes (in the case of *can*) to the so-called neutral use of the modal verbs, as in (43)-(44) below:

(43) *Who knows? It can go either way.* (Palmer 1979: 71)

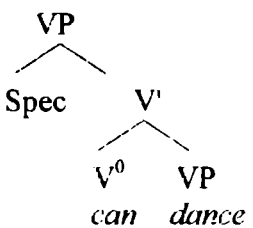
(44) *Signs are the only things you can observe.* (Palmer 1979:71)

I have assumed that the modals are defective verbs or verbal elements which cannot assign any theta-role, not even the external one, i.e. in this respect they clearly behave like "auxiliaries".[81]

3.3.2.2 .The subject

The main question is whether the DP *John* in (41) is the external argument of *can*, of *dance* or of *can dance*. We have already assumed that the modal cannot assign any theta-role, hence it cannot have any argument, not even an external argument. Thus, our problem is reduced to whether there is/is not a "transfer" of the external argument of *dance* to the VP *can dance* resulting in the structure given in (45):

(45)



Theta-assignment is strictly local, i.e. the subject DP receives a theta-role from the lexical verb *dance*. Within the approach chosen for the present analysis, the status of the DP is determined by the relations it bears in the relational structure. The roles are derivative of lexical syntactic relations. So, what we should look at are exactly these relations. When a

[81] See also the definition of auxiliaries adopted by Dobrovie-Sorin (1993) or Cornilescu (1994).

verb takes a complement which is also headed by a verb, the relation of complementation involves an asymmetrical c-command relation between the matrix verb and the head of its VP complement. The referential argument of a lexical verb is the notional type "event" (Higginbotham 1985, Kratzer 1989, Cornilescu 1995). Each verb has its own event argument. We can assume, following the line of investigation proposed by Hale and Keyser (1993), that, besides the syntactic relation, the relation of complementation involves an asymmetric semantic relation between two events: the event of the verb in the complement is a proper part of the event denoted by the matrix verb. What about a structure in which the "matrix" verb is a defective verb, unable to assign any theta role? Thematic relations, the event structure and the argument structure of a lexical verb are closely connected, in the sense that "thematic relations connect the events to their participants, time and place of occurrence, their manner of execution" (Alexiadou 1994:239) and the event structure determines the argument structure of a predicate (van Hout 1994). If the English modals lack the ability to assign thematic roles it will follow that they also lack an event structure and that their argument structure is null. We could thus reformulate the definition of "auxiliaries" as in (46):

(46) Auxiliaries are verbal elements which lack an event structure.

That will certainly qualify auxiliaries as functional categories.

In the relation *can/will*-VP which we are analyzing, the event denoted by the head of the complement VP is the only event of the structure, i.e. the argument structure of the whole will be determined by the argument structure of the head of the complement VP. Within the approach proposed by Williams *(1994), what we have to do is assume that in this case it is the "non-head"* category, the complement, which determines the properties of the whole[82] The head is, in this particular case, a lexical category which is not fully specified. The argument structure of the "non-head" VP is transferred to the complex VP, resulting in one single argument structure and, obviously, in one single event structure. The resulting VP denotes one event across *can* and *dance*, with one single agent DP.

---

[82] Williams (1994) adopts the notion of "relativized head" which can apply generally. A non-head can also determine the properties of the whole whenever the "absolute" head is not fully specified.

Sentences which contain such a structure resist passivization. (Jenkins 1972). Compare (47) and (48) below:

(47) *The doctor can examine John.*
(48) *John can be examined by the doctor.*

The meaning of the two sentences is different as shown by their paraphrase which clearly points to the fact that (48) is not the passive counterpart of (47):

(47') *The doctor is able to examine John.*
(48') *It is possible for John to be examined by the doctor.*

Obviously, both (47) and (48) could have other possible readings But, what is relevant for our analysis here is the fact that ability *can* (in 47) shares the argument structure of the lexical verb *dance*; they share the object DP *John*. In the passive sentence the modal *can* does not share the argument structure of the lexical verb, the promoted DP is an argument of the lexical verb only. Hence the two different interpretations.

If we assume such an analysis, modals like **can** in (41) could be defined as light verbs with no thematic arguments and no event specification. In a structure like the one in (45), which I take to be the most appropriate representation for (41), the modal and the VP share the argument structure and the event specification. Such an analysis can also explain why previous analyses of the so-called deontic modals assumed that *can* and *will* may assign a secondary or ajunct theta-role (Roberts 1992, Zubizaretta 1982), i.e. that they are categories which cannot create structural positions in virtue of their thematic properties and which simply theta-mark the subject.

The present analysis advances the idea that *can* and *will* in (41)-(42) share, as a result of event structure transfer, the external argument provided by the non-deficient lexical verb. The subject DP occupies the Spec position of the whole VP pre-syntactically, through "transfer" of event structure, and not via movement. The position is structurally created; it cannot be a projection of the modal alone since the modal cannot create structural positions. The subject DP will only move to check its nominal features to Spec Agrs/TP.

3.3.2.3. Modals move to Inflection overtly

Unlike the English lexical verbs, but similarly to the auxiliaries *have* and *be*, *can* in (41) or *will* in (42) can move to Inflection overtly. Chomsky (1995) analyzes *have* and *be* as "very light verbs" which lack semantically relevant features and thus are not visible to LF rules. They have to move overtly. But *can* does not lack semantic relevant features and it certainly is visible at LF. How can we then account for its ability to raise overtly?

One possible explanation would be that some root premodals have retained, in present day English, the verb-like properties they had in Old English and in Middle English, when they could move to Inflection, i.e. they have not changed as much as generally assumed in the literature. The modals which merge with a VP are [+V] elements .They behave more like what Roberts (1993) calls "lexical auxiliaries". Their [+modal] feature seems to be very weak. As will be shown in Section 3.4., I take the loss of subjunctive inflections to be one of the most important changes in Middle English which triggered the reanalysis of the premodals into functional categories. Periphrastic constructions with modals gradually replaced the verbs inflected for the subjunctive mood. A modal like *can* in (41) could hardly be interpreted as an appropriate modal in a periphrastic substitute in a subjunctive context.

Actually, ability *can* and volitional *will* are analyzed in the literature as the last of the English modals which were "reanalyzed" as members of a distinct new class. There are researchers who deny their modal content. Steele (1975) or Boyd and Thorne (1969) regard *can* as modal only when it conveys permission, denying the modal content of ability *can*. Their reanalysis seems to be "incomplete", which may lead to the conclusion that they are the most verbal-like modal auxiliaries. They can raise to Tense and root meaning *can* even retained non-finite forms in various English and Scottish dialects.

3.3.2.4. The bare infinitive

A few remarks on the status of the bare infinitive selected as a complement by *can /will* are in order here. Bare infinitives have been analyzed as either VPs or AgroPs, with heads containing finiteness features failing to be projected. Whitman, Boser et al. (apud Phillips 1995) define root infinitives (i.e. infinitives used during the first stage of language

acquisition in contexts in which adult English uses finite predicates) as dependent verbs, embedded under an elided auxiliary, modal or propositional attitude predicate. Rizzi (1994) defines them as "truncated" clauses, Phillips (1995) as clauses in which merger of the verb with inflection has not taken place. Root infinitives appear to be the spell-out of verbs which have not attached to tense and agreement features by merging with inflection and which do not move (Rizzi 1994). Such a "bare" clause is projected only as far as VP or AgroP.

From the point of view of their interpretation, bare infinitives differ from *to*-infinitival complements. Fisher (apud van Kemenade 1993) argues that there is a clear-cut distinction between (i) a configuration with a bare infinitive complement (V+ bare infinitive) and (ii)a configuration with a *to*-infinitive complement (V+ to infinitive).

The configuration under (ii) reflects two events that do not occur simultaneously[83] whereas the one under (i) reflects either one event or two simultaneous events.

For example, in (49) below the infinitival clause (a *to* infinitive) and the verb in the matrix denote two non-simultaneous events. The *to*-infinitive denotes something "unrealized" with respect to the matrix (Stowell 1982), its temporal meaning being dependent on the meaning of the verb in the matrix.

(49) *They hope to meet her soon.*
(50) *They can speak Japanese fluently.*

In (50) the modal is followed by a short infinitive. The modal and the lexical verb denote one single event. The modal lacks an event structure of its own; thus, the only possible reading is that of "one event" across the modal and the lexical verb.

I shall assume the view that BIs are "truncated" clauses . The lexical verb shares the event structure with the modal.

Can/will + BI is a configuration in which the modal has merged to the truncated clause before the latter had any chance to merge with any (other) functional node.

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[83] Stowell (1982) argues that to-infinitival clauses take tense. Thus, one important difference between to-infinitives and bare infinitival constructions would be that the former has tense whether the latter lacks a tense projection.

(51) *can* [bare infinitive]

(52) *will* [bare infinitive]

3.3.2.5. Bare infinitives and negation

Rizzi (1994) also points out the absence of negated root infinitives, relating this property to the fact that verbs in such configurations are unmoved verbs. In what follows, I will point out that English root infinitives can be made negative. Consider simple utterances like (53) - (55) below:

(53) *I cannot dance with you.*

(54) *Can you NOT shout at everybody?*

(55) *He can't NOT shout at everybody.*

In (53) Negation attaches to the modal which has raised to the functional domain of the sentence and negates the whole sentence. In (54) NOT has local scope, it only negates the BI. In (55) both the modal and the BI are negated but the sentence is, in spite of the apparent double negation, grammatical. The negation is not double, the event structure is negated only once (when negation attaches to the tensed modal). NOT negates only the BI, i.e. the VP, not the whole sentence.

Cardinaletti and Guasti (1995) claim that negation in Italian epistemic SCs has a different status and a different distribution than negation in full clauses. It is semantically similar but structurally different. In SCs, Neg is expressed in an Adverbial Phrase, evincing the features of a specifier-like element, similar to adverbs.[84] If their view is adopted[85], the following structure can be suggested for *can + negative bare infinitive*:

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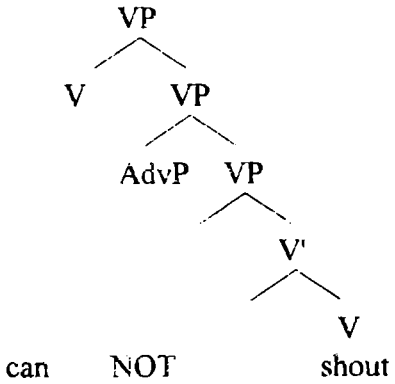
[84] Higginbotham (1983) argues that negation in bare infinitive complements does not function as simple negation; it is generally interpreted as combining with a VP to create an antonymic predicate.

[85] For a different point of view, which denies the adverb-like behaviour of NOT, see Williams (1994).

(56)



Just like NON in Italian SCs, the English NOT in SCs is stressed, which points to the fact that it cannot be a clitic.

The negative adverb has local scope, it does not render the whole sentence negative as the following relevant test shows:

(57) **a**. *You can NOT shout, can't you?*
b. **You can NOT shout, can you?*

(58) **a.** *Can you NOT shout at anyone anymore?*
b.**Can you NOT shout at someone?*

The examples in (57a) and (57b) prove that NOT does not render the whole sentence negative whereas the examples in (58a) and (58b) show that NOT has scope over the whole SC.[86]

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[86] Zanuttini (1996) also argues in favour of treating the English negative marker "not" as an adverb which occurs in an adjoined position, behaving, in many respects, like the negative marker "nen" in Piedmontese. She also advances the idea that "n't" and "not" represent two distinct syntactic elements: "n't" is a functional head, X, whereas "not" is, as I have just posited out, an adverb. What is important for the present analysis is the fact that the idea of treating "not" as an adverb has been advanced before. Johnson (1988) also distinguishes between two types of "not":

(a) a contrastive one, which bears focal stress and which may precede any VP, SCs included:

Mikey made Garry NOT drink the martini. (Johnson 1988:164)

(b) a non-contrastive NOT, which does not receive focal stress and which can only precede a verb in Infl.

His hypothesis is that contrastive NOT is base-generated in the Spec of VP whereas its non-contrastive homophone is a member of Infl. I am not going to discuss the details of his analysis. What I would like to retain from his analysis is the idea that

3.3.2.6.. *Residual questions and tentative solutions*

(a) VP or AgroP?

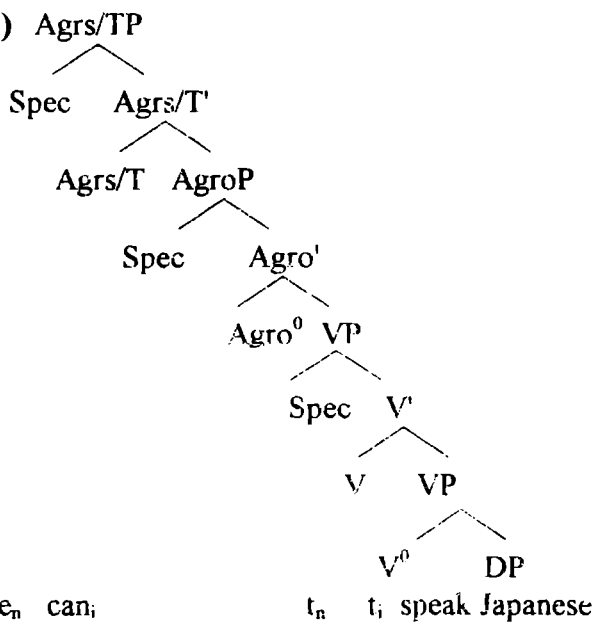
When discussing the status of the bare infinitive I said that it is generally analyzed as either a VP or AgroP. What is the status of the BI complement of the configurations analyzed in this section?

We have already seen that the modal can move to Inflection to check its tense feature and that it assigns Nominative case to the subject DP under a Spec-head configuration. Movement of the modal and movement of the subject DP is overt, before Spell-Out.

Recall that the predication relation was defined as a relation between the subject DP and the periphrastic *can+bare infinitive*. If we assume Rizzi's hypothesis, the BI verb will be defined as an unmoved verb, in the sense that it does not move before Spell-Out, but it will have to move at LF next to the modal in order to check the predication relation.

According to such an analysis, in (59) below the BI *speak* has remained in situ. The modal has raised to Agrs/T and the DP subject *she* to SpecAgrs/TP to check its [D] features and get Nominative case:

(59)



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the two NOTs occupy different positions in the clause and that it is only the non-contrastive one which can contract onto the verb in INFL.

The object DP has to move to a position in which it can be assigned case. But it can only move after the lexical verb has moved. In this particular case, the lexical verb would be forced to move for interpretive reasons (to check its predication relation), a possibility which, if possible, should be eliminated. Movement is triggered by morphological features."Derivations are driven by the narrow mechanical requirement of feature checking only, not by a 'search for intelligibility' or the like" (Chomsky 1992: 33).

What we could say instead is that the trace left behind by the modal which has raised to Inflection is a copy of the moved element, deleted by a principle of the PF component . But the copy still exists at LF, so the modal and the unmoved VP can be interpreted as a unit. That would lead to the desirable conclusion that the verb does not move for interpretive reasons.

But the problem of the object DP remains unsolved. Structural case can only be assigned in a Spec-head configuration. If the verb does not move, what happens to the direct object DP? How does it check its features? With the BJ verb in situ, the DP object cannot possibly move. Object raising is possible only if the verb has raised. How is the raising of the object for Case-checking freed?

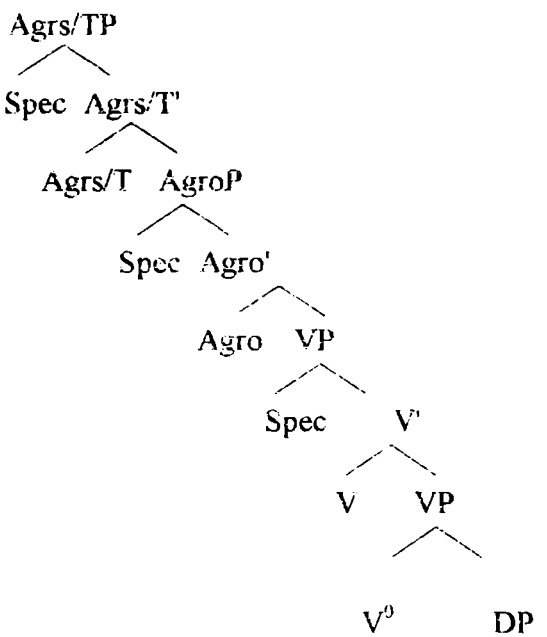
One possibility would be to assume that the lexical verb does move at LF next to the modal. But what exactly drives this movement? We have already seen that movement for interpretive reasons should be avoided. The necessary driving force can only be provided by morphological requirements. Stipulating that the lexical verb moves to the modal in order to allow the object DP to move to a Case-checking position would mean allowing for too altruistic a movement. The moved element gains no benefit from moving. More than that there seems to be no morphological feature which could justify the move.

One possible approach would be to start from the properties of the modal. We have already seen that the English modals lack a theta-structure of their own; hence they cannot project an argument structure of their own and auxiliaries have already been redefined as lacking an event structure of their own. They are dependent on the lexical verb with which they merge. But that would still count as a semantic property. Functional categories have often been associated in the literature with affixes, be they freestanding or bound. The remaining possibility seems to lie in treating the modals under analysis as LF affixes: they are freestanding at PF but they need a host at LF. At LF they no longer have an X^0 status, but an X^{-1} status (in the sense of Roberts 1993), and

hence they need a host. In this case, the lexical verb must move to the modal and adjoin to it or else the derivation will crash at LF. Still, such a movement would not observe Greed, as movement of the lexical verb is to the benefit of the modal, i.e. of the target. But, if we assume Lasnik's (1995) theory of Enlightened Self-Interest, according to which items can also move to satisfy the requirements of the position they move to, not only to satisfy their own requirements, the movement will be motivated. Thus we can say that the movement of the lexical verb to the modal is motivated under Enlightened Self-Interest. Just like in the case of *a avea* ('to have'), one could also analyze the movement of the lexical verb as a two-force driven instance of Move: on the one hand, as already discussed, the verb moves to satisfy the need of the functional element for a "host". But, on the other hand, one might assume that at LF verbs always move to check their features, so the lexical verb which heads the SC which has merged with the modal may simply move because it is a verb. Again, the movement does not violate Greed.

The object DP will be free to move. The Spec Agro (or the Spec of a fused Asp and Agro projections) position to which it raises is the one provided for the whole VP/the Vmax, not only for the bare infinitive VP or only for the modal.

(60)



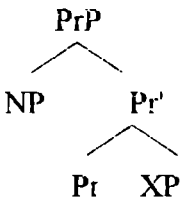
She_n can_i $speak_j$ $Japanese_k$ t_n t_i t_j t_k

Theoretically, that could lead to defining light verbs not only as verbs which lack a theta-structure and hence an event structure of their own but also as LF affixes which need a host at LF.

Johnson (1991), following an idea in Stowell, assumes the view that the heads of SCs in general Incorporate into the selecting verb at LF In our case, the head of the small clause, V, could be said to move to the modal and to incorporate into it at LF.

Such an analysis is somehow in line with Bowers (1993), who argues in favor of a universal structural definition of clauses (both main clauses and small clause predication), as in (61):

(61)



Pr (= predication) is defined as a functional category that evinces the following properties:

(i) the canonical D-Structure position for external arguments is [Spec,Pr]

(ii) Pr^0 F-selects the maximal projection XP of any lexical category X (V,A,N,P)

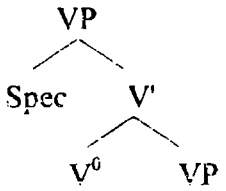
(iii)either PrP is F-selected by I^0 or it can be subcategorized as a complement by V

(iv) the semantic function of Pr is predication, which is defined as holding between Spec PrP and the complement of Pr. PrP is analyzed as a complete functional complex which can stand as a complete information unit, as opposed to VP which is seen as standing for a property.

The verb must move obligatorily by head-to-head movement into the Pr position. Thus, the structural conditions under which theta-roles are assigned are identical to those under which case is assigned.

Let us return now to the configuration assigned for sentences (41) and (42) in (45), repeated here for convenience under (62) and in which the V^0 position hosts the modal *can* or *will*:

(62)



Remember also that we analyzed the modal and the lexical verb as sharing the argument structure. The Spec position was analyzed as the subject position, the subject being that of the whole V-complex. A la Bowers, that would translate into saying that the predication relation holds between the subject DP and the complement of Pr, in our case the VP. Pr is, in this case, the modal. The verb moves to Pr, i.e. the modal. The relation between the syntax and the semantics of predication becomes transparent: the verb moves, at LF, to satisfy the need of the modal for a host (Pr has an affixal nature at LF) and to check the predication relation. The object DP is an argument of the whole functional complex "modal +VP". If the verb moves to the modal, case will be assigned under the same structural conditions: the modal and the verb share the arguments so they should assign case (both Nominative and Accusative) "together".

The answer to the question I started from is the following: the status of the English bare infinitive is that of VP. It has to move to a Pr position which hosts a lexicalized element (affixal), in our particular case, to a modal.

In the configurations analyzed in this section the modal can be defined as merging with a SC whose status is that of a VP. They form together a complex V [modal+V]. The subject DP and the object DP will *be treated as the subject and respectively the object of the verbal complex*, case-checking mirroring the argument structure of the complex. That would also be in line with studies which argue that cases stand in a one-to-one association with theta-roles (Burzio 1994) and with the view that case-checking is a property of LF (Lasnik 1995).

(b) why can't can and will take temporal aspectual forms freely?

If *can* and *will* are defined as verbal elements which can raise to the tense projection, we would expect them to be able to take temporal-aspectual forms freely. But they are incompatible with any form which

involves the auxiliaries *have* and *be*, as we have already seen. One possible solution would be to say that the English modals are defective verbs which lack a present/past participle form. This is an idiosyncratic property stated as such in the lexicon. Since *have* and *be* c-select these particular forms of the verb, they cannot take modals as their complement. The analysis of *have* and *be* might reveal other important properties which can account for their incompatibility with the modals.

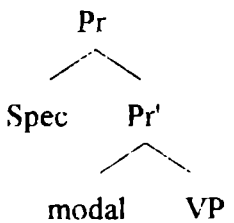
3.3.2.7.Conclusions so far

Can and *will* in sentences like (41) and (42) have been analyzed as evincing strong [V] features behaving like lexical verbs in some respects. Their modality content is extremely weak. These modals behave more like "lexical auxiliaries" (where lexical auxiliaries are defined as in Roberts (1993)) which lack an event structure but which share the event structure and the arguments of the lexical verb that heads the VP with which they merge and with which they form a predication projection (in the sense of Bowers 1991).

(63) *can* [VP]

(64) *will* [VP]

(65)



The head of the SC will move to the modal (which is analyzed as an LF affix) at LF and incorporate into it forming a verbal complex.

Such an analysis is in line with Chomsky's claim that "we might regard Aux-V as a verbal complex, assigning case and assuming clitics as a unit, analogously to causatives and restructuring constructions in the Romance languages" (Chomsky 1981: 140). But, as we are going to see, it is only when modals occupy a position under VP in the structure that they form a verbal complex with the verbal head of the SC with which they merge.

3.3.3 Modals in the functional domain

3.3.3.1. The data

The contexts which will be analyzed in this sub-section are the ones represented by (66)-(68):

(66) *You may leave now.*

(67) *You must finish your dissertation by December.*

(68) *They shall be rewarded.*

At first sight, it seems there is no difference between the modals discussed in **3.3.2.** and the ones in the above sentences. They have been treated together in the literature as belonging to the class of deontic modals and as generated under the same position. No structural difference has been assumed. Remember that the present analysis assumes that the English modals are defective verbs which lack an event structure and which merge with a SC in the derivation, with the notion of SC defined as a truncated clause.They may occupy various positions which account for the various contextual readings we assign to modal configurations. As I have pointed out, at first sight *may*, *must*, *shall* seem to take a VP complement. Nevertheless, assuming such an analysis would mean disregarding both the intuitive and the formal differences between these structures. Firstly, while with the modals occupying a VP position it was pretty clear that the modal-VP complex denoted one single event, it is not equally clear that the structure we are dealing with behaves similarly. The full lexical verb seems to refer to either a subsequent event (as in 69) or to an event which is part of an implicit "always" when the sentence denotes an iterative situation (as in 70).

(69) *You must leave tomorrow*

(70) *You must work every day.*

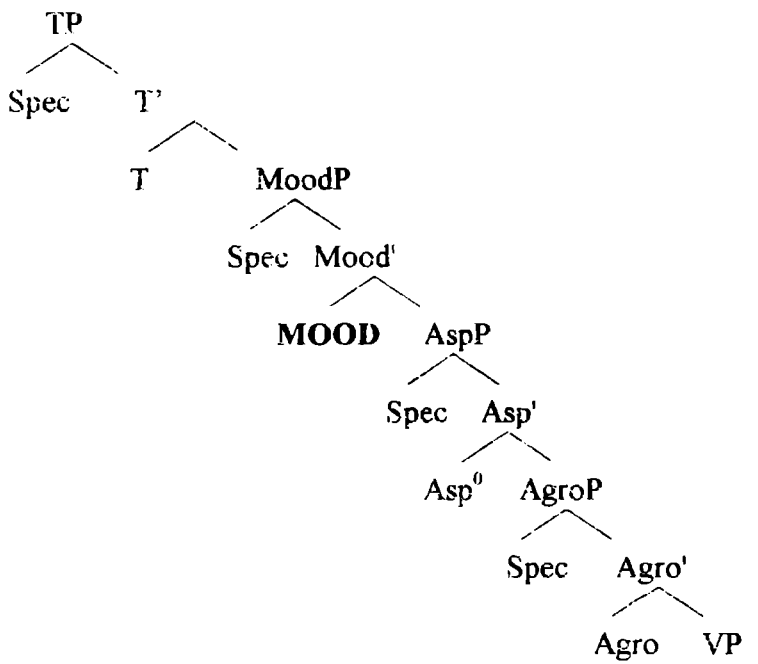
Whereas the modals are associated with ST (they are, in this case, always present, hence ST=RT) the SC refers to a situation whose existential status (in the sense of Johnson 1981) is "non-historical". The complex V+bare infinitive denotes either one event or simultaneous events (as seen in the case of the configurations with *can* and *will* in 3.3.3.) but it

does not denote subsequent events, which points to the fact that the SC cannot be a BI (i.e. a VP) in this case.The verb which heads the SC has a [-Perfective] feature which must be checked in a position which is able to check such a feature. I take this position to be Asp and the SC to be AspP. This will force merging of the modal with an AspP, "pushing" it higher in the functional domain. The modal will take "scope" over a "wider" SC:

(71) modal [AspP]

The modal will occupy the Mood position in (36) repeated under (72) for convenience:

(72)



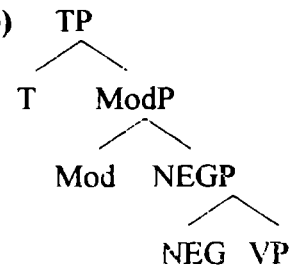
These modals have a "lighter" [V] feature but they are "heavier" from the point of view of the modality they denote.

The modal moves to Tense to check its tense feature before Spell-Out.

Ouhalla (1991) assumes that the Mood projection is the projection of all the English modals. He argues that this position can account for the raising of the modal to Tense to support the affixal element occupying it (modals appear inflected for at least tense and for the fact that the main

verb remains in situ (V-movement over Mod and over Neg would violate the Head Movement Constraint).Ouhalla places Negation under ModP and VP as in (73):

(73)



He can thus account for the fact that modal verbs appear preceding Negation. The English modals are analyzed as functional categories, excluded from the predicate phrase.

3.3.3.2.T-chains and aspectual adverbs

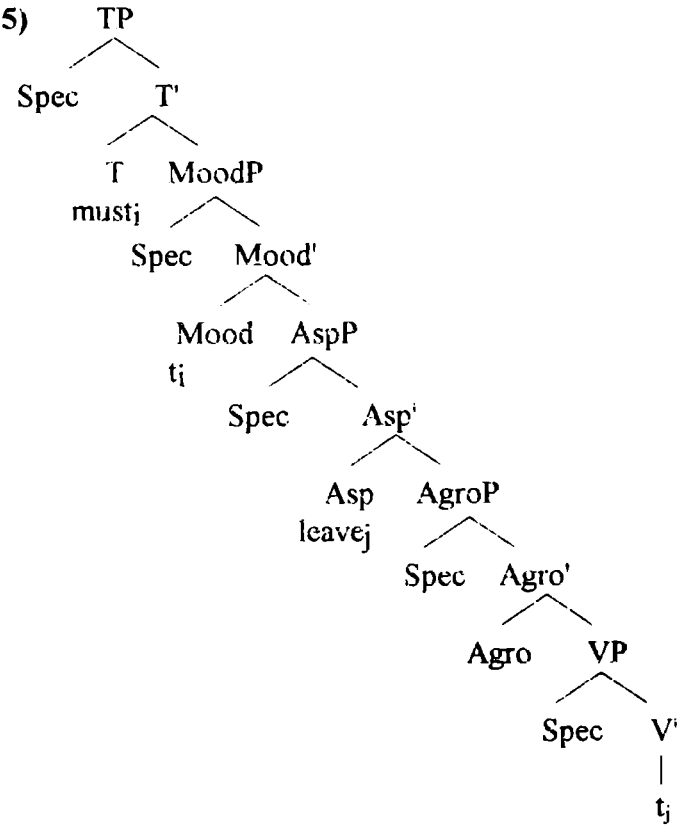
Gueron and Hoekstra (1995) propose that a minimal tense chain (T-chain) in a full clause consists of a Tense Operator, a Tense position and a verb, with the Tense operator occupying SpecC[87] and ranging over the discourse world. Verbs have an event role (e-role) bound by tense, such that :

(74) Each T-chain bears an e-role.

The tense features and the e-role may be found in a single element or may be distributed over a verb and its complement in case the verb lacks the descriptive content necessary to supply an event role. As already argued in **3.3.2.** the event structure is none other but the thematic *structure or the thematic content of the verb. The English modals lack* such a content. They raise to Tense to check their tense feature but the e-role stays with the lexical verb. According to Gueron and Hoekstra (1995) a T-chain must have one single lexical element or one single element with lexical content. In our case, the lexical verb. As we have already shown, the lexical verb is marked [-Perfective] and it has to check this feature in Asp. The modal moves to Tense to check its tense feature and the lexical verb moves to Asp to check its aspectual feature:

[87] Enc (1987) places the Tense operator in C.

(75)



The idea that in English the verb moves overtly to a functional projection has already been argued for in the literature. Johnson (1991) advances the idea that the main verb moves out of the VP which it heads to allow the complement NP to move to a case position. The functional projection he assumes is, according to him, Chomsky's Agro. The present account claims that the verb moves (overtly) to Asp, a functional projection against which the verb can check its aspectual feature [+/-perfective].[88]

The T-chain will obligatorily include the Asp projection:

---

[88] Laka (1994) claims that the object DP moves to SpecAspP to get Accusative case. But, if we adopt Alexiadou's (1994)analysis of adverbs, SpecAspP is the position in which aspectual adverbs can have their features licensed. Thus the DP object will either have to move to SpecAgroP to get case after the verb itself moves to Agro or we can assume that Asp and Agro are fused into one single node with two different Specs.

(76) Tense Operator
\
TenseP
\
AspP

The structure of the T-chain will thus provide a structural basis for the interpretation of temporal chains: tense and aspect cannot be interpreted separately. Assuming the frameworks proposed by Johnson (1981) and Giorgi and Pianesi (1987), the temporal aspectual interpretation has to take into account the value of the three relations which obtain between three time intervals:(i) the relation which obtains between speech time (ST) and reference time (RT), (ii) the relation which obtains between RT and event time (ET) and (iii) the relation which obtains between ST and ET. The relation ST-RT gives the tense value of the configuration, the relation RT-ET is responsible for the aspectual value of the configuration while the relation between ST and ET is responsible for its "existential status". In our particular case, the modal raises to tense and checks the tense feature, i.e. the relation ST-RT i.e. the lexical verb is responsible for the aspectual value. RT is prior to ET, i.e. [-Perfective]. That would amount to saying that the temporal interpretation is distributed over the modal and the lexical verb, each with its own contribution. That actually means that the AspP small clause evinces a certain degree of independence. The difference between the modals occupying a VP position and the ones occupying the Mood position lies in the fact that in the case of the former the VP small clause is not temporally independent in any way. The lexical element in the case of the modals generated under VP is the Vmax itself, with the modal being part of this lexical element. The modals generated under Mood are no longer lexical elements. They could be analyzed as the "substitutes" of Old English and Middle English subjunctive inflections.

One of the main problems of the analysis suggested above is that it is based mainly or mostly on interpretive facts. In what follows I will try to provide some (quasi) independent arguments in favor of this analysis. My claim will be that Aspectual adverbs which occupy a position between the modal and the lexical verb can only be [-perfective] adverbs which proves, on the one hand, that the feature of the Asp projection is [-perfective] and, on the other hand, that they are licensed only by the lexical verb, the modal playing no part in the process. This part of the analysis is based on Alexiadou (1994).

Alexiadou (1994) argues that aspectual adverbs are licensed as Specifiers of Aspect. In particular, in Modern Greek, they are generated in the Specifier position of the AspP and are licensed under feature matching with the head features.Asp and aspectual adverbs can have the following features:

(79)

ASP		ADVERBS
+PERF	-PERF	
+Punctual	+Habitual	+/-Durative
+Definite	-Definite	+/-Definite Frequency
	+Durative	+/-Point
		+Continuous

According to her theory, if the head feature is [-perfective] the aspectual adverbial can only be [-perfective], or else there will be no feature matching and the adverbial will not be licensed. An imperfective head will license a durative or indefinite frequency adverb while a perfective head will only license definite frequency or point adverbs.

In English there are aspectual adverbs which intervene between the modal and the lexical verb: *never*, *always*, *usually*, i.e. (indefinite) frequency adverbs:

(80) *You must never talk to me like that.*

(81) *You may always use my pen.*

The feature of the adverb and the feature of the lexical verb match. Consider (82) below which is ungrammatical precisely because the [+perfect] feature of the adverb and the [-perfect] feature of the head do not match:

(82) **You must just leave.*

The aspectual adverbs discussed above are interpreted as part of the SC. They are operators only over the SC. The modal is generated higher up in the structure, the aspectual adverb cannot take scope over it.

One question which immediately presents itself concerns the position of tense adverbs and their contribution to the interpretation of the sentence. I shall resume this discussion with further arguments in **3.3.5.**

3.3.3.3. Remarks on Negation

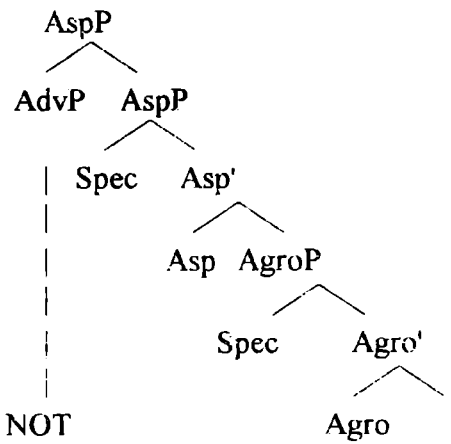
Semantic accounts of the English modals claim that with the so-called deontic modals either the modality or the event may be negated:

(83) *You may not leave right now.*

(84) *You may NOT come with us if you don't feel like going anywhere.*

In (83) *may* is negated (permission is refused) while in (84) it is assumed that the event is negated (permission is granted NOT to...). The question is whether in this case we have a single node Neg, two nodes Neg or a node Neg and an adverb-like not, identical to the one in VP small clauses, which may adjoin to AspP as in (85):

(85)



In this case it is not the sentence that is negated, NOT has scope only locally

(86) *I can NOT leave, can't I ?*

As the tag question proves, the sentence is affirmative. (87) below (due to Palmer 1979) shows even clearer that NOT negates only the SC:

(87) *You can come or you can NOT come, as you wish.*

When modality is negated, the sentence is syntactically negative, evincing all the features of negative sentences as the tests in (88)-(91) prove:

(88) *I can't leave now, can I?*

(89) *I cannot leave and neither can you.*

(90) *I cannot stay up late, not even till 10.00.*

(91) *I cannot leave and Jim can't either.*

Sentence negation takes scope over the whole sentence, the SC included.

Ouhalla (1991) places his ModP higher than Neg which is placed immediately above the VP. But, if the modal is generated under ModP and then raises to Tense to check its tense feature, how can it ever check its Neg feature? I will not argue in favor of one position or other for Neg, as that would be beyond the aim of the present analysis. But I would like to suggest that Neg probably occupies a position higher than Tense, which would provide a universal ordering for functional categories. The position which Neg occupies could thus no longer be seen as a parameter distinguishing between languages like English (in which it has been claimed that the Neg phrase is generated below Tense) and languages like Romanian (where the Neg phrase has been analyzed as generated above T) (see also Laka 1990). Such an approach would be consistent with the almost common view that languages may not have the same inventory of functional categories but the order of these functional categories seems to be the same cross-linguistically (for a different view, see Ouhalla 1991, for whom the order of functional categories is subject to parametrization).

At first sight, such a view seems to violate Laka's Tense c-command condition:

(92) Tense is the highest sentential operator in a sentence.

In her view, finite tense marks the insertion of the speaker in the language and hence it should c-command the other sentential operators. But my view does not violate Laka's condition. Alexandra Cornilescu (p.c.) proposed that tense still is the highest sentential operator if we assume that the Tense operator does not occupy a position in the functional domain, but above it. Gueron and Hoekstra (1995) define a T-chain as involving a T-Operator which occupies SpecC, while Enc (1987) argues that the T-Operator occupies C. I will not discuss whether the most appropriate position is SpecC or C. What is relevant for our analysis is

that the operator is above the tense projection, above negation, etc. It may be the case that it occupies the FinP in Rizzi's clausal architecture. Laka's condition is not violated, the tense operator c-commands the other operators.

Apart from these remarks, I will not take a stand with respect to the actual position of NegP in English. I will only be assuming that it is situated higher than MoodP and TenseP.

3.3.3.4. Must, shall and negation

Palmer (1979), Perkins (1983), Ştefănescu (1988), among many others, argue that in sentences like (93)-(94) below it is not the modality which is negated but the event:

(93) *You mustn't tell anybody what happened.*

(94) *They shall not pass.*

According to Palmer (1987), *mustn't* lays an obligation "not to act" and *shan't* gives un undertaking that the event will not take place. For Perkins (1983) the core meaning of *mustn't* is:

(95) K (C entails not-X)[89]

The core meaning of *shan't* is :

(96) K(C is disposed towards not-X).

That would lead us to the conclusion that with some modals (*may*, for example) negating the event means adjoining an adverb-like negator,NOT, at the SC and negating the modality means raising the modal to negation. With other modals (*must*, for example) negation attaches to the modal but the event is negated.

Such an analysis faces two problems. Firstly, we have seen that when the event is negated, the sentence is syntactically affirmative, NOT has scope only over the SC, negation is local. When modality is negated, the sentence is syntactically negative. Let us see whether (93) -(94) are syntactically negative or affirmative:

---

[89] K stands for "system of laws" and C for "empirical circumstances". But see Perkins (1983) for a detailed analysis of the semantics of the English modals.

(97) **a.** *You mustn't tell anybody what happened, not even your mother.*

b. *You mustn't tell anybody what happened and your sister mustn't either.*

c. *You mustn't tell anybody and neither must your sister.*

d. *You mustn't tell anybody, must you?*

As (97a-d) prove, (93) is syntactically negative. The same tests hold for (94).

Also, consider the following possible conversation:

(98) *Must I go there alone? On the contrary, you must NOT go there alone.*

(98) is a case of NOT adjoined to the SC, with local scope.

One more proof that in (93), for example, it is the modal not the event that is negated is the status of NOT: I have already shown that NOT, the adverb-like element which negates the event, is always stressed; hence it cannot be cliticized. *Mustn't* hosts a clitic.

Secondly, we cannot start from the possible "paraphrases" of a configuration when discussing the syntactic behavior of one of its elements. Actually, the explanation Palmer (1979) offers as support to his denying the existence of any forms of *must* that negate modality takes into account only and only the semantics of this modal. What he says is that "modality" cannot be negated, not the modal. He also provides the following relevant examples:

(99) *I think I mustn't worry too much about this.* (p.94)

(100) *Well, one just mustn't mind.* (p.94)

He analyzes such sentences as follows: "In this it is not the event that is negated, nor strictly the modality, but the whole sentence." (p.95).

Syntactically, *must* and *shall* in (93)-(94) can be negated. Semantically, *shan't* could be defined as in (101):

(101) K (C is not disposed towards x)

Mustn't cannot be interpreted as in (102):

(102) K (C precludes X),

on a par with (deontic) *may not* or *cannot*.

3.3.3.5. Conclusions so far

In this section I have argued that the English modals can also head a Mood projection, in the functional layer of a sentence. In this case, the modal merges with a SC whose status is that of an AspP.

In spite of the thinness of this analysis, I think that such a position can account for the differences between (103) and (104), on the one hand, and between (103) and (105) on the other hand:

(103) *You can speak Kannada.*
(104) *You can leave as soon as you have finished your work.*
(105) *You can speak Kannada if you want, I don't mind.*

In (103) *Kannada* is the object of both the modal and the lexical verb which form a verbal complex whereas in (105) *Kannada* is the object of the lexical verb only. It raises to Spec Agro where it checks case in a Spec-head relation with the lexical verb. (105), unlike (103), can be passivized:

(106) *Kannada can be spoken in this room.*

Passivization is possible because it only affects the lexical verb, with *Kannada* being part of the argument structure of the lexical verb. The lexical verb can be passivized. The complex modal-lexical verb in (103) cannot be made passive precisely because the modal is part of the theta-role assigning domain and modals do not passivize.

Semantically, both (104) and (105) contain stage-level predicates, whereas (103) contains an individual-level predicate.

3.3.4. The modals under Mood2

3.3.4.1.The data

As already claimed in **3.3.1.**, the English modals can also occupy a position in the "operator" domain of the sentence, i.e. above IP, and I take this position to be Mood2, a position which corresponds to the position Rivero (1994) proposes for the languages of the Balkans. The position M^0

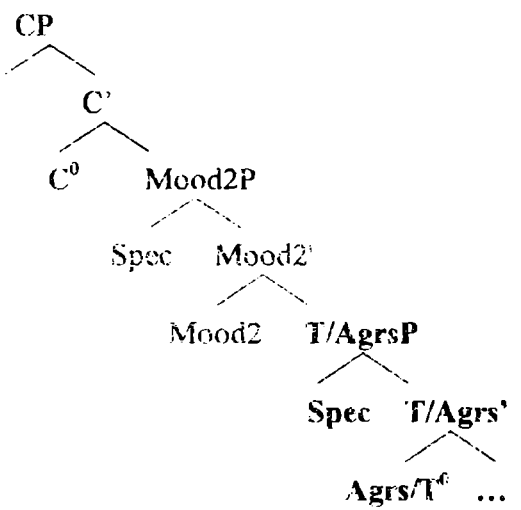
assumed by Rivero (1994) hosts modal and future particles in all Balkan languages and morphemes that mark aspect. I shall only assume that there is such a position across languages, but that it does not necessarily have to host the same inventory of elements. Other researchers (McDowell 1987, apud Isac 1996) argued that epistemic modals raise to Comp in order to take scope over the whole proposition. The intuition seems to be the same: epistemic modals occupy a position outside IP. Also, I do not claim that they raise to this position (raising is costly), choosing a cheaper strategy: I assume that the modals merge with a SC. Merge is cheaper than raising.

I also start from the common intuition that the so-called epistemic modals are, in both their syntax and their semantics, clearly distinct not only from the other modals but also from other functional categories. On the other hand, as we are going to see in the analysis, this position is not exclusively assigned to "epistemic" modals; members of the so-called "deontic" class can also occupy this position when the SC with which they merge is of greater complexity. Their meaning remains unchanged, it is only the complexity of the SC complement which changes. I assume that these modals take an IP complement:

(107) modal [IP]

Within a split IP hypothesis, this IP will actually be AgrsP/TP.

(108)



T/AgrsP represents the borderline of the functional domain of a clause. Whatever is above this node should be regarded as the operator domain, with nodes hosting elements with operator-like properties and which range over the whole clause. The modals which belong to this operator domain do indeed take scope over the whole clause, making judgements about the possibility/impossibility/certainty/etc. that something is/is not the case. Epistemic modality has always been defined as the modality of propositions.

3.3.4.2. Modals and tense

Assuming that the modals which take scope over the whole proposition are higher in the structure than T/AgrsP can nicely account for the fact that such modals are actually incompatible with tense. Usually, in the literature, they are analyzed as being always "present", but there is a clear difference between the "present" of deontic *must*, for example, and the "present" of its epistemic counterpart. One explanation of the fact is the one provided by Palmer (1979):

> *The clearest evidence of the subjective [...] nature of epistemic modality is the fact that the relevant modals occur only in the present tense, for the judgement and the act of speaking are simultaneous and so can only be present.* (p. 41)

It is obvious that such a modal marks the insertion of the speaker's knowledge/judgement/evaluation/etc. in the language, it is part of the discourse. It cannot take any tense for the mere reason that, being devoid of any event variable, there is no event variable which tense could bind. Epistemic modals have been analyzed as "tenseless". There is one condition though: Mood2P should be in the c-command domain of the T-Operator, which should c-command the rest of the sentence. And it is. Whether the T-Operator occupies C (as in Enc 1987) or SpecC (as in Gueron and Hoekstra 1995), the result will be the same: it c-commands Mood2P, making it part of those "markers" associated with the speaker's insertion in the language.

(109) TOperator
\
Mood2P
\
TP

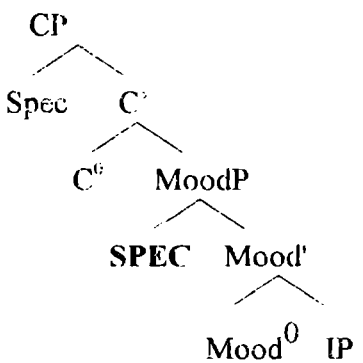
Such an account can also explain why the distribution of these epistemic modals is restricted to finite clauses. Mood2 must be c-commanded by the T-Operator. But it is only finite tense that can mark the insertion of the speaker in the language, thus c-commanding the rest of the clause.

I take these modals to be incompatible with tense, they are part of the discourse in a way that reminds us of the behavior of modal adverbials because, to a certain extent, they play the same part as adverbs such as *probably, possibly, maybe*, etc., marking the realis/irrealis status of the proposition (Cinque apud Alexiadou 1994).

3.3.4.3. SpecMood2 or Mood2 ?

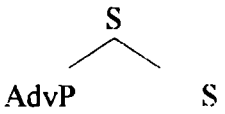
If we assume that "epistemic" modals play the same part as modal adverbs, we might also assume that they may occupy the same position. Alexiadou (1994) claims that modal adverbs are generated in the Spec Mood position, being licensed by feature checking in a Spec-head configuration.

(110)



$Mood^0$ evinces the feature [+/- realis] and the adverbial will be licensed if this feature is checked. The idea to place modal adverbials outside the IP is not new in generative grammar, where Sentence Adverbials have (almost) always been assumed to occupy a position outside the sentence as in (111):

(111)



The question is whether this is a possible position for the modal. In what follows I will claim that this cannot be a possible position for the modal for various reasons. Firstly, I take a Spec position to be able to host only elements which evince a [+N] feature, no matter how light that feature might be. Modals do not evince a [+N] feature. One of the main differences between adverbs and modals is that while the former could be interpreted as evincing a [+N] feature (see Jackendoff 1977) the latter are devoid of such a feature. Adverbs do not subcategorize for anything, they lack the ability to select a complement whatsoever. At the most, they can be lexically selected by some verbs . Thus, they can be generated in a Spec position, they are not heads. Modals merge with a SC, in the particular case analyzed in this sub-section, an IP, and they occupy a head position.

It may also be the case that modal adverbs themselves are not generated in the Spec position of the Mood2P, but I will not engage in the analysis of modal adverbs here.

Secondly, recall that when we say that two elements *a* and *b* merge, at least one of them must be a head. The SC is not a head; if the modal were not a head itself, Merge could not take place. Also, if modals and Mood adverbs occupied the same position we would expect them to be in complementary distribution, which is denied by examples such as (112) or (113) below:

(112) *You may possibly prefer that one.*
(113) *It must surely be just a beautiful relic from the past.*

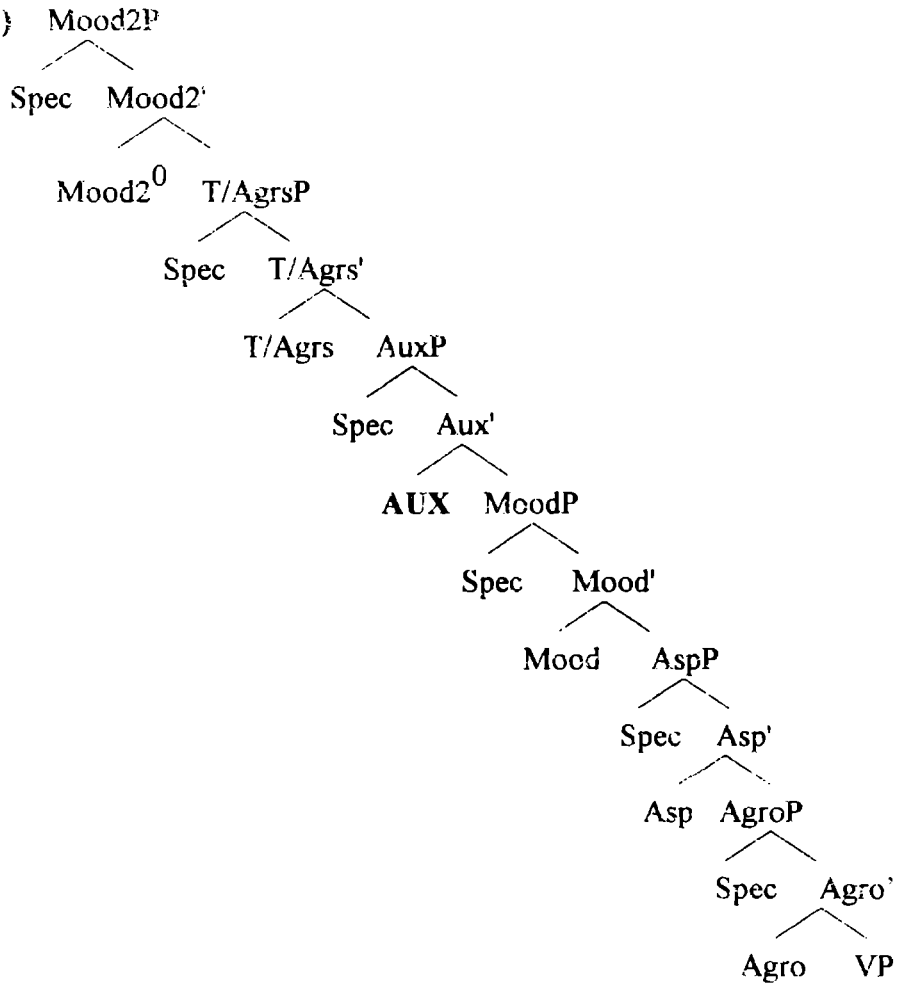
3.3.4.4.Modals have scope over the whole IP

Assuming the "epistemic" modals to be generated under Mood2, above the whole IP, can account for the fact that they judge/evaluate a proposition, not only an event. The SC may denote a present/past/future situation evincing a high degree of independence in this respect. The fact that modals can occupy such a high position explains why, in this context, they are compatible with the perfect infinitive or with progressive configurations:

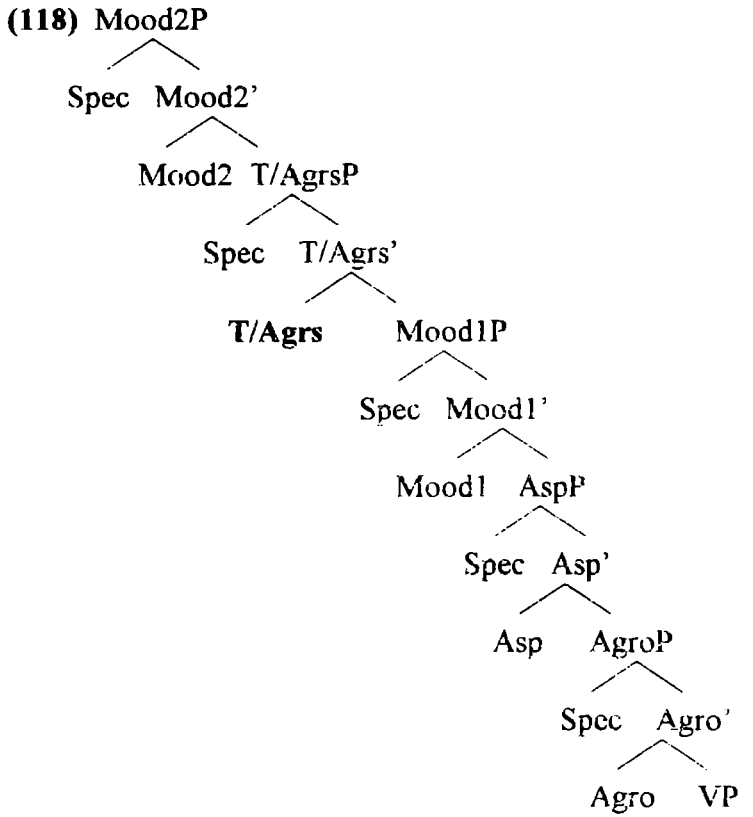
(114) *They may have met her.*
(115) *He must be working in his room.*
(116) *She can't have been hiding this all along.*

The auxiliaries *have* and *be* occupy a lower position in the structure, below T/Agrs, possibly as in (117),or Agrs/T (possibly as in 118)[90]:

(117)



[90] The present analysis will not discuss which representation is the more appropriate one.



If we assume that *have* occupies a position above Mood1P (as in 117), we can also account for the fact that the modals which occupy the position Mood1 are incompatible with perfect infinitive SCs. Their own incompatibility with complex temporal-aspectual forms which include auxiliaries has already been accounted for in **3.3.4.**

3.3.4.5. The temporal interpretation of the small clause

I have assumed, slightly modifying the definition in Gueron and Hoekstra (1995),that a T-chain involves a T-operator, a Tense position and an Asp position. Epistemic modals are known to judge/evaluate/etc. present/future/past situations. How can we account for these different interpretations? I have claimed that modals in Mood2 are "above" tense but under the T-operator. They do not take tense. They simply belong to the discourse. The lexical verb does not raise to Tense, movement being blocked. The chain has a T-operator and a verb, but it seems one link is missing: the tense position.

Nevertheless, the temporal interpretation of the predication is not blocked. It means that the link is not actually missing.

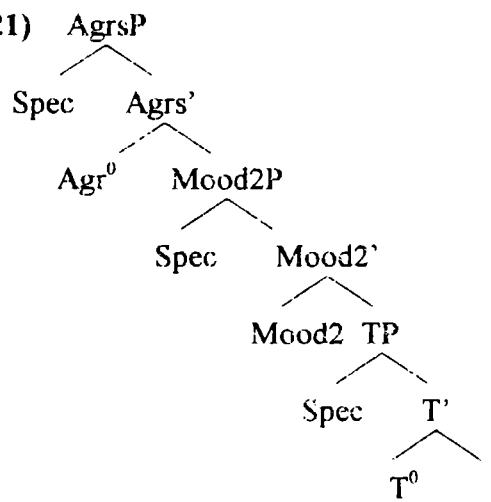
One possibility would be to assume that the auxiliary raises to Tense, as it does in root clauses. But in English the Split-IP parameter (Thrainsson 1995) has been analyzed as having negative value. The auxiliary should move to a mixed node [Tense+Agreement]. But that would result in ungrammaticality:

(119) **He must has done it.*

(120) **She can't is sleeping.*

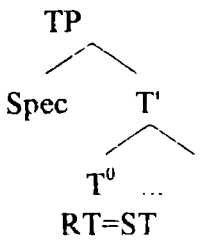
Which means that the auxiliary either does not move at all or, if it does, it does not move to a fused node [Tense+Agreement]. English auxiliaries do move. We have no reason to believe that they move in main clauses but remain in situ in small clauses. The remaining possibility is that the auxiliary moves to Tense, but not to Agrs. Movement to Agrs is blocked by the intervening modal (121). The implications of this hypothesis are non-trivial. If the analysis is correct, it means that the value of the Split-IP parameter is not negative in English (contra Thrainsson 1995) and that AgrsP is the highest projection at the borderline between the functional and the complementizer domains. When a modal intervenes, Agrs and T no longer "fuse" into one single projection. As we are going to see in **3.3.5.7.** such a representation can also account for the position of the subject.

(121)



The tense position of the T-Operator (the "now" of the discourse) is transmitted to the tense position in the functional domain. If there is no overt marker for tense, we can assume that the T-Operator and Tense have the same value: present, i e. ST=RT:

(122) T-Operator
RT=ST \



The situation denoted by the SC is interpreted as simultaneous, prior or future with respect to this present RT transmitted from the T-operator to Tense in the functional domain. Thus ET can be prior, simultaneous or future with respect to RT. We have already seen that the relation RT-ET is responsible for the aspectual value of a sentence. The lexical verb moves to Asp to check its [+/- perfective] value. I take the [+perfective] value to be associated with the past participle of the verb and the [-perfective] value to be associated with the present participle or with the short infinitive of the verb. We thus obtain the following interpretations:

(123) *It is said that one of the Took ancestors must have taken a fairy wife.*
CP (T-Operator: ST=now)-Mood2P- T/AgrsP (RT=ST= present)-AuxP-AspP (ET prior to RT,+perfective)

(124) *They might be working in their office right now.*
CP (T-Operator : ST=now)- Mood2P-T/AgrsP (RT=ST= present)- AuxP-AspP(ET=RT,-perfective)

(125) *They could be late tomorrow.*
CP (T-Operator: ST=now)-Mood2P-T/AgrsP(RT=ST= present)- AuxP-AspP(RT prior to ET,-perfective)

The presence of the time adverbial as well as the situation type aspect[91] are also responsible for this interpretation. Within the framework I have assumed for temporal interpretation, time adverbs are analyzed as denoting RT in combination with the morphological markers of tense. Nevertheless, the time adverb *tomorrow* in (125) does not specify the RT of the sentence which has already been assumed to be present (RT=ST). One possibility would be to assume that time adverbs are lexical means of "binding" the event variable of the predicate. As the event variable resides in the lexical verb, which is a part of the small clause complement, we can assume that the time adverbial modifies only the SC. That would amount to saying that time adverbs stand for ET and not for RT. But this is not borne out in sentences like (126):

(126) *He had arrived before Monday.*

Which means that we should try and provide an analysis that could account in a unitary way for the temporal interpretation of root clauses and small clauses of the type we are analyzing. I will propose that time adverbs do not stand for RT, they do not stand for the "tense" value of the sentence but for its existential status, i.e. they denote the value of the relation ST-ET.

Let us return to the interpretation of (125). I have already assumed that RT is prior to ET. That means that ST is also prior to ET (remember that ST=RT). Thus, the existential status of the sentence is, in Johnson's (1981) terms, "non-historical". A time adverb like *tomorrow* is compatible with this value.

Such an approach can also account for the fact that the SC which merges with an "epistemic" modal differs from a root IP: while in a root IP the T-chain is complete, with an overt Tense position, the SC does not have an overt Tense marker in the Tense position of the functional domain. The Tense position hosts an abstract feature. That would confirm, to a certain extent, Starke's (1995) definition of SCs as full clauses whose functional projections have a different content.

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[91] Smith (1992) distinguishes between situation-type aspect and viewpoint aspect. Situation-type aspect is associated with the lexical meaning of the verb constellation (to what was traditionally called Aktionsart) while viewpoint aspect is associated with the morphological markers of aspect.

3.3.4.6. Mood2 modals and negation

It has been assumed that NegP is above MoodP and Tense and hence below Mood2P. That would account for the fact that in sentences like (127) negation is interpreted as having scope over the SC complement, it is the complement which is negated, not the modal:

(127) *You may not know who she is.*

That would be in line with Halliday (apud Palmer 1979), who claims that there is no such thing as negative modality. However, such an analysis raises serious problems.

There are cases in which Mood2 modals are negated, such as in (128)-(129):

(128) *She can't have done that!*
(129) *That shouldn't be difficult!*

Such sentences are treated in the literature as cases of negated modality[92]. Groefsema(1995) is an exception in that she assigns a sentence like (130a) the interpretation in (130b):

(130) **a**. *Ann can't be in court.*
b."It is certain that Ann is not in court."

There is one problem though. (130a) is syntactically a negative sentence, i.e. negation has attached to the modal. Then, if we assume that the modal and the proposition evince a certain degree of independence (we actually have a judgement and a proposition), we may not be able to explain the clitic like behavior of negation which attaches to the modal while actually negating only the SC. Remember also that it has been assumed that negation of SCs is different from negation in root clauses, with NOT behaving more like an adverb and adjoining to the SC. One of its main properties was shown to be "stress", incompatible with cliticization.That could account for the fact that a negated modal is compatible with a negative SC,without leading to double negation in the sentence and hence to ungrammaticality. The same situation seems to be at work with epistemic modals

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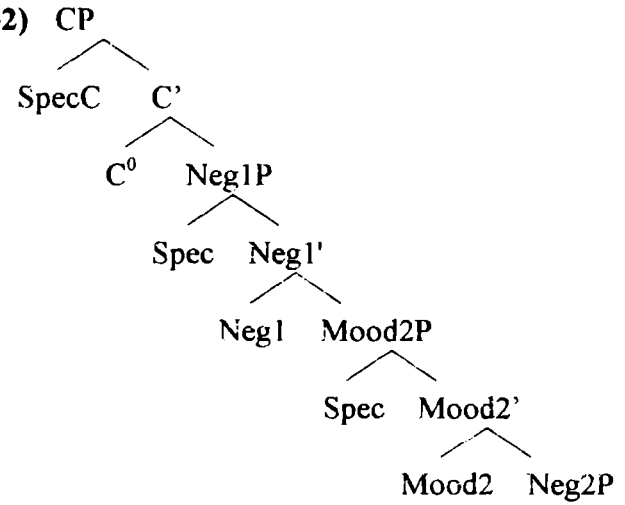
[92] For more examples as well as for a discussion of the semantic interpretation of negative modal configurations see Bâră (1979).

(131) *You can't NOT know who she is.*

Both the modal and the SC are negated, with NOT stressed and adjoined to the SC. There are two ways in which this problem could be tackled. We could assume that there is a second node NegP, higher than Mood2P. Rivero (1992) argues that NegP is higher than MoodP, at least in Modern Greek and Romance, where negation is located as the leftmost element. Assuming that there is one single NegP located above Mood2P would imply that verbs must always raise higher than Mood when negated, i.e. outside IP. Zanuttini (1991) claims that UG provides two NegPs : one in the functional domain, inside Inflection, which interferes with verb movement, and one in the operator domain, preceding all Inflectional heads. I will adopt her view, but I will assume that the NegP in the operator domain is located above Mood2P and under the node which hosts the T-operator:

(132)



In (131), for example, *can* raises to Neg1. Does that imply that NOT is hosted by Neg2, in the functional domain? In what follows I will try to demonstrate that this would be impossible. One reason derives from a general property of English while the second reason is linked to the status of NOT and a property of SCs in general.

I assume that those categories which have a representation in both the functional and the operator domain will form a chain, just like the

T-chain we have already discussed. The chain consists of an operator, a representation in the functional domain and a lexical item . UG would thus have available a T-chain, a Neg-chain and a Mood-chain. The Neg-chain will consist of a Neg-operator, the one which is placed above Mood2P, a negation representation in the functional domain, i.e. in the Neg node inside the IP, and an element in the lexical domain. The Neg feature of the chain can be overtly realized only once across the chain[93] If the Neg feature of the Neg-operator is made visible (in our particular case by the modal having raised to it), the Neg node in the functional domain will only contain an abstract [Neg] feature. The whole sentence is syntactically negative. If we pursue this line of investigation, the immediate conclusion we are led to is that NOT in (131) cannot occupy the Neg node in the functional domain. It has to find another position which I claim to be an AdvP adjoined to the SC.

Such an analysis would provide a unifying interpretation for the behavior of SCs : they are always locally negated by an adverb-like negator. I have already argued in favor of the analysis which treats negation in SCs as different from negation in full clauses. Within such an approach, NOT cannot be cliticized, hence when the SC is negated, the negator cannot adjoin to the modal.

Stipulating that Mood2 modals can raise to negation, and hence be negated, does not lead to the generalising conclusion that all Mood2 modals necessarily have a negative form. Some may not have a negative form, but that is an idiosyncratic property dealt with in the lexicon. The syntax must provide the mechanism for those modals which may be negated[94] :

(133) *Yes, we went to school in the sea, though you mayn't believe it.* (L.Carroll)

(134) *He wouldn't be a friend of yours I suppose!*

(135) *Mightn't it surprise people?* (Collins Cobuild 1992:220)

(136) *You needn't have done that.*

(137) *He mustn't have been very hungry.*

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[93] It might be the case that languages differ with respect to this property: in some languages the feature could be overtly marked only once (as in English), in other languages it could be overtly marked twice.

[94] For a different point of view see Williams (1994).

3.3.4.7.The subject

If the modal occupies the Mood2 position, how do we account for the word order of the sentence, with the subject DP preceding the modal? The subject position in English is assumed to be SpecIP or, under a split IP hypothesis, SpecT/Agrs, i.e below the Mood2 projection or, under more recent analyses, the Spec of a fused node Agrs/TP. Recall that the modal occupies a position under Mood2, which is higher in the structure than the position to which the subject DP moves if we adopt the view in Thrainsson, among others, that the split-IP parameter has a negative value for English. But a sentence like (138) below points to the fact that either the subject DP does not raise to the Spec of the fused node or that the node is not "fused".

(138) **Must he have left.*

The subject DP moves higher than Mood2. But what is the morphological necessity that motivates its movement?

One possibility would be to assume that it moves to check a [topic] feature .That is why it must move higher, to a Topic position in which it can have this feature checked before Spell Out. Semantically, in the structures which contain a Mood2 modal the subject could be analyzed as a topic. Such configurations have the flavour of compound presentations which consist of two acts: the act of recognition of the entity which is to be made the subject and "the act of affirming or denying what is expressed by the predicate about the subject" (Kuroda 1972:154). The modal, in our case, evaluates a situation "about" a particular subject. But, although we do not really know too many things about how to appropriately test topichood, at least we know that *there* cannot occupy a topic position:

(139) *There must be some way out!*

(139), with *there* in sentence initial position, proves that the subject cannot be a topic in this configuration.

Another possibility would be to assume that the subject raises to Spec Mood2P, but it is difficult to detect a feature in this node which could license the movement of the DP. Besides, it might be the case that this is the position in which Mood adverbs get licensed (Alexiadou 1994).

The analysis I will propose is that the subject moves to Spec Agrs which is higher than Mood2. The immediate consequence of such a standpoint is that the split IP parameter has a positive value in English (contra Thrainsson 1994). The DP moves to this position not only because it has D features to check but also in the spirit of Lasnik's Principle of Enlightened Self-Interest. It seems it is a general property of English that subjects must occupy the sentence initial position. We can take this position to be Spec Agrs, i.e. a position at the borderline between the functional and the complementizer layers (maybe Rizzi's SpecFinP). Movement of the subject DP will be driven both by the D features which must be checked but also by this general property of the position: it must always be occupied by a subject (or by a "substitute").

Assuming that the subject always moves to Spec Agrs has two important consequences:

(i) it means that the functional layer (of English) includes Neg2P and Mood2P

and

(ii) the split IP parameter has a positive value for English.

Assigning a positive value to the split IP parameter will require discussions about the status of Agrs in English. Agrs has been analyzed as having weak features, which can explain why the verb does not move overtly. Agrs can only be postulated if it induces overt movement. As already seen, the subject DP moves overtly to a position which I have taken to be Spec Agrs. Agrs seems to have strong [D] features . That would account for the overt movement of the subject DP and it leads to the conclusion that Agrs exists in English.

One more consequence of this analysis concerns the status of Agro. We expect Agrs and Agro to behave similarly. If Agrs has strong [D] features so will Agro, which means that object movement is overt or else the derivation crashes. Agr must check the phi-features with which the DP comes from the lexicon, at least number, which are not uninterpretable. Agr features may be uninterpretable on the verb, as verbal agreement,just like case, stands for a "relation". But nominal features (phi-features) of the DP have to be checked. That would explain why the DP moves overtly to Agr while the verb can procrastinate .

3.3.4. Tentative answers

The tentative answers to the questions addressed in **3.1.1.** could be the following ones:

(i) The English modals have one single entry in the lexicon. They are verbal elements which lack an event structure, i.e they do not have arguments of their own, not even external arguments; they merge in the derivation with a SC. The resulting structure is monoclausal. The complexity of the SC will "force" the modal to occupy different positions in the structure of the clause. Merging of the modal with the SC takes place after the merging of the elements contained in the SC. The position which the modal occupies will trigger different interpretations: the core meaning is "extended" according to the degree of complexity of the SC whose import is key in defining the syntactic structure. Thus, a modal like *can* merges with a VP/an AspP /IP. Its meaning is always the same (for example, assuming the core meanings in Perkins 1983, K (C does not preclude e to occur)), but its different interpretations will be a function of the complexity of the expression of "e". It has also been shown that different positions are not associated with certain meanings (epistemic or deontic), the positions are only associated with the scope the modal can take, i.e. with how "extended" its meaning can be.

(ii) The English modals are defined as verbal elements whose precise status is defined by the position they occupy in the structure. If the modal occupies a position under VP, it evinces a strong [V] feature, and it behaves like a lexical auxiliary. It shares the event structure of the Vmax with the lexical verb which heads the VP, and hence its arguments. That is why it can take tenses more freely when generated in this position. The lexical element of the T-chain of a structure which contains a modal generated under VP is not the lexical verb but the modal-VP complex.

The leftmost position, Mood2, is associated with adverb-like features. The [V] feature is extremely "light" in this case. The modal does not share the event structure of the lexical verb, it is generated above tense, it is "tenseless", being c-commanded only by the T-operator.

The modals which occupy the Mood position within the functional domain behave more like a functional category while still retaining the lexical content of their predecessors. The modal does not share the event structure of the lexical verb but, being generated below tense, it still has the possibility to move to tense overtly. The incompatibility of modals with

some temporal forms is to be seen as a consequence of their being "defective", i.e. as a consequence of their idiosyncratic properties .

The "leftmore" the position the modal occupies is, the lighter its verbal features get but the stronger its modal features. While a modal inserted under VP may be even treated as not expressing modality (Steele 1975, Boyd and Thorne 1969), a modal which occupies Mood2 is "heavy" with modality. That should not be surprising: it simply reflects, at a different level, the diachronic shift of (some) modals from full lexical verbs to functional elements. But this will make the subject of the following subsection.

3.4. A Brief History of the English Modals

3.4.1. The framework

There is no doubt that the English modals represent a distinct class both when compared to lexical verbs or to functional elements in English and when compared to the means of expressing modality in other languages. Their history may provide an interesting explanation for their "unique" behavior and status.

Language change will be assumed to be a subcase of language acquisition (Lightfoot 1979, Lightfoot and Hornstein 1981, Clark and Roberts 1993) in the sense that the crucial mechanisms involved in the two processes are the same: hypothesis formation and retraction. The logical problem of both language change and language acquisition is related to how learners set parameters to particular values. From this perspective, diachronic change can provide crucial information on how learners select hypotheses and, on the other hand, studies of language acquisition can shed new light on data from diachronic evolution. Diachronic change is thus defined as parametric change, triggered by co-existing systems in the input. The "target" language contains parameter values which cannot be uniquely determined. The learner faces the task of selecting one particular value, i.e.one particular grammar, while eliminating the "unfit" hypotheses. The learner's choice of one particular value (from the various alternatives which the input provides) is underdetermined by the input data (which are ambiguous). Hence, the value(s) set by the learner may be different from those of his/her parents. The new parameter setting is the diachronic change.

The ambiguity, the alternatives can only create an unstable system. Parametric change is forced by an unstable language system. As I will try to

point out in what follows, Middle English, through a variety of independent changes, became highly unstable, resulting, among other phenomena, in the (almost) complete loss of subjunctive inflections and in the creation of a new class: the modals. The cumulative effect of their morphological irregularities, the moribund system of the subjunctive inflections, the change from one agreement sytem to another was to destabilize the system. The English modals shifted from one class to another.

In what follows I will try to argue that the initial weakening of the subjunctive inflection[95] combined with the morphological irregularities of the so-called premodals created a system which ultimately led to the shift of this class of verbs to a more functional class. The "ambiguous" system allowed the learner to choose between functional projections (the subjunctive) and lexical ones (the modals) to express modality. Functional projections are acquired gradually and at a later stage. In this I adopt a weak version of the No Functional Projection Hypothesis in language acquisition, following the line of Radford 1990, Lebeaux 1988, Tsimpli 1990, Smith and Tsimpli 1995 or Vainikka 1994, among many others)[96] . Unlike Radford I will assume, with Vainikka, that functional projections develop gradually, they do not appear all at once. Both Tsimpli (1990) and Vainikka (1994) try to adopt an "intermediate" position between the strong continuity hypothesis and the maturational approach. However, Tsimpli proposes that maturation affects only the acquisition of functional categories (not the principles of UG) whereas Vainikka (1994) does not invoke maturation: she assumes that, at an early stage, sentences may involve only a VP projection. Functional projections develop gradually, on the basis of the input (which provides the necessary triggers). Whether the acquisition of functional projections does/does not involve maturation is obviously a non-trivial question for the understanding of the process of language acquisition. However, for the present analysis, the relevant aspect is that lexical projections seem to enter a child's language before functional projections.

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[95] For an analysis of the history of the English modals which focuses on the relationship between the gap in the notional realisation of the English auxiliary system due to the loss of the subjunctive inflection and the semantic compatibility of the modals with the subjunctive see Steele et.al (1981).

[96] For a different point of view, see Wexler (1994), Weinberg (1994), Bohnacker (1997).

Let us return to the problem of change. The learner was under pressure from fitness and from the "least effort" principle (I assume that acquisition of functional categories is more costly since it is "postponed") to "eliminate" the functional projection, i.e. to ignore the functional projection since the system offered lexical means of expressing modality. The changes in the system are the ones which offered the learner an unclear, changing inflectional system, on the one hand, and lexical means of expressing the same concepts on the other hand. We have to stress the importance of the changes in the system in order to account for the fact that not all the languages with reduced morphology have undergone the same shift. These lexical means gradually replaced the "functional" ones, shifting from one structural position to another.

One more claim will be that the English premodals evinced all the necessary "features" for the shift they underwent in the 16th c. This does not mean denying the importance of the independent changes in the language structure which led to the creation of the new class. It simply tries to advance the view that the premodals represented a class likely to be affected by these changes. One line of investigation focuses on the inherent properties of the premodals as an important factor which "allowed" the shift and the other line focuses on the importance of the large number of clear, independent changes in the language for the reanalysis of the premodals (van Kemenade 1993). I would like to prove that, while fully acknowledging the role of the changes in the system[97], one cannot deny the importance of the inherent properties of the premodals which made them the best "candidates" for reanalysis (Roberts 1985). Their properties can also account for the fact that they have not followed a uniform chronology (Warner 1990) while some of them are still *reflected in the behavior of the present-day modals*

3.4.2. A few remarks on premodals

Premodals are analyzed either as main verbs with perfectly ordinary complementation (Lightfoot 1979) or as a morphologically definable subclass of verbs which behave like main verbs in many respects

[97] It is important to focus on the fact that the changes in the system are at least as important as the inherent properties of the premodals. Dutch has also lost its subjunctive system and still no reanalysis of the Middle Dutch modals seems to have taken place (Scholten 1988).

(they can take NP objects, tensed clauses, infinitival clauses as complement, occasionally they have non-finite forms and their agreement morphology is richer than the one of present-day modals, they are theta-role assigners, subject to the V-Visibility condition as defined by Roberts 1985,1992[98], and they moved to Inflection) but their morphology is defective to some extent even in OE (Roberts 1985,1991,van Kemenade 1993).They are also syntactically marked in taking a Bl complement. Already in OE they were a separate group. More interestingly for the present analysis is that it seems that in OE there were three structures available for modals. Van Kemenade (1993) describes the three structures as follows:

(i) volitional *will* (*wile*) and ability *can* (*cann*) and *may* (*maeg*)) had their own subject and a propositional VP complement with a PRO subject that is co-referential with the matrix subject. The structure they entered corresponds to subject control structures. Semantically, their modal meaning is extremely weak but definitely deontic. They are main verbs.

(ii) modals like hypothetical *may* (*maeg*), *must* (*mot*), *shall* (*sceal*) do not have their own thematic subject and they select a propositional VP. Thematically, the subject in the matrix is the subject of the infinitive verb. They are, according to van Kemenade, main verbs with subjectless syntax, i.e. raising verbs.[99] Semantically, they denote epistemic modality.

(iii) a small group of modals were used in auxiliary constructions even in OE (Denison 1990, van Kemenade 1993), generated under Inflection. For example *wile* and *sceal* are used in future constructions embedded under verbs which express intention, promise, expectation.

In Middle English, modals still represented a morphologically definable subclass of verbs (Roberts 1985) though they seem to evince some main verb characteristics (van Kemenade 1993). For example, they occur in infinitival and participial forms and in each other's complementation.

Harris and Campbell (1995) propose a somewhat different approach to the reanalysis of the English premodals. They advance the hypothesis that the modals may have been reanalyzed at different times and that it is possible that a modal auxiliary developed while the

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[98] Roberts defines the V-Visibility condition as follows: V assigns theta-roles iff V is governed at S-Structure

[99] van Kemenade (1989), Denison (1990), Warner (1990) argue that when the modal was followed by an impersonal verb it behaved like an auxiliary rather than like a main verb.

homophonous lexical verb continued to exist. Within such an approach, one may speculate that in Middle English the modals which could take direct objects were the lexical ones, not the auxiliary ones. But otherwise they remain isolated in the Proto-Germanic class of preterit-presens : they lack third person singular agreement in the present .The tense relationship between the preterit and present tense forms gradually erodes, there is a breakdown in the present/past relationship of some modals (Lightfoot 1979). For example, pairs like *shall* and *should* are felt like separate modals rather than different temporal forms of the same modal. In this respect, Middle English modals represented an "anomalous" class semantically as well. It seems that by this time modals appeared quite frequently in an auxiliary configuration (van Kemenade1993, Harris and Campbell 1995).

Thus modals already represented a definable group, members of an unstable class, that of the preterites. The fact that they represented a "marked" class qualified them as a possible "target" of diachronic reanalysis. Also relevant for this analysis is the fact that modals seem to enter different structures as early as OE. The three structures available for OE modals argued for in van Kemenade seem to be "mirrored" by the three possible structures I have proposed for present-day English. van Kemenade's "control" modals correspond to my modals under VP, her "raising" modals to my Mood2 modals whereas the group of auxiliaries generated under Inflection could be said to correspond to my Mood modals. I would also like to point out the fact that the "control" modals seemed to have hardly any modal meaning, which did not make them the first "candidates" to take over the function of the subjunctive. That might explain the fact that they are the last to lose non-finite forms and that in present-day English they still retain strong verbal features. They are the most "verbal" modals.

3.4.3. Middle English changes relevant for the development of modals

The development of the distinct class of modals is part of the parametric change which English underwent approximately in the 16th c.: English shifted from a morphological agreement system (agreement affixes are generated in Inflection and the verb moves to them) to a syntactic agreement system (AGR governs V) and this change triggered a change in the structures in which the modals appeared[160].

[160] David Lightfoot (p.c.) points out that V-to-I movement is actually lost

This subsection heavily relies on Roberts (1985, 1991) He considers that the main factors which led to the shift from one agreement system to another were:

(i) the erosion of the subjunctive

(ii) the morphological irregularity of the modals (which has already been mentioned)

(iii) the loss of agreement inflection

(i)-(iii) could only lead to an input which triggered a different grammar. The learner faced the task of choosing from two possible means of expressing modality: the inflections of the subjunctive (which were already weakening) or the modals. In a subjunctive clause, the theta-role is assigned by the lexical verb. Modals do not seem to have behaved uniformly from the point of view of theta-assigning. In van Kemenade's "classes" the control class can assign theta roles, the modals in this class have their own subject, whereas the modals falling under the other two structures (raising and auxiliaries) do not have their own subject. The ambiguity seems stronger in their case, which led to their being reanalyzed first. Their modality content was also stronger, thus they were more likely to be substitutes of the subjunctive.

How can we account, from the perspective of language acquisition, for the fact that in Middle English (late Middle English according to Roberts 1985, early Middle English according to Harris and Campbell 1995) the modals took over the function of the subjunctive beginning to appear in periphrastic constructions ? I said I assume a weak version of the No Functional Projection Hypothesis which implies that during the "single-word stage" child speech contains no functional elements and hence no functional projections. It consists entirely of lexical projections The child starts out with a one-word lexical-looking grammar, whose content is determined by X elements. The theta-grid of each word is represented in tree-form in the lexicon, the set of theta-theoretic primitives are analytically prior to the set of case-theoretic primitives. The child then builds the phrase structure by Project α (Lebeaux 1988), a rule that matches the lexical tree to the syntactic tree. The child faced with two means of expressing modality will choose the lexical means which seems to imply less effort (the lexical sub-tree is prior to any rule) and which, being

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only in the 18thc., but the morphological changes were pretty much complete by the 14th c.

lexical, is more likely to enter child language at an earlier stage. Once the lexical modal has been chosen it will take over not only the function but also the properties of the subjunctive.

Thus, even if we assume, with van Kemenade, that some modals could not assign the external theta-role, or, with Roberts (1985) that premodals were theta-role assigners, the diachronic change will lead to the same conclusion: the modals which are now substitutes of the subjunctive will also take over its theta-properties, i.e. lack of ability to assign theta-roles. If the modal stops assigning theta-roles, it means that it must occupy an ungoverned position, outside the VP, and it must not show agreement. The fact that modals lacked agreement morphology made them even more compatible with the shift. With the modals in Inflection, the lexical verb no longer moved in tensed clauses because it could meet the V-Visibility condition by being syntactically governed by some element in Inflection, AGR for example. The lexical verb has no reason to move to Inflection; remaining in situ is cheaper than moving. The agreement system has shifted from a morphological agreement system to a syntactic agreement system, with weak Agr.

'Well', said Pooh, 'we keep looking for Home and not finding it, so I thought that if we looked for this Pit, we'd be sure not to find it, which would be a good thing, because then we might find something that we weren't looking for, which might be just what we were looking for, really. (A.A.Milne – *Winnie-the-Pooh*)

Chapter 4

REMARKS ON THE SYNTAX AND SEMANTICS OF THE ROMANIAN MODALS

4.1 Introduction

4.1.1. In this chapter it is argued that the Romanian modals,which have been treated as "modal (semi-) auxiliaries", do not represent a syntactic class, behaving in most respects like full lexical verbs.

It will be argued that the Romanian modals (*a putea* 'can, be able to, manage' and *a trebui* 'must, have to, need') are lexical verbs associated with two parallel structures, a VP-complex and a biclausal one. The former is the result of the modal verb merging with a bare infinitive (BI) or a participle-based SC while the latter is the result of the modal merging with a MoodPhrase (MoodP) or with a Complementizer Phrase (CP).

Despite the descriptive orientation of this chapter, I believe it can also be of some theoretical interest. It will lend additional support to the idea that semantic notions may be expressed by functional categories in some languages and by lexical categories in others. It follows that there is cross-linguistic variation in the realization of certain semantic notions which clearly proves that similar semantic facts do not result in similar syntactic configurations. Modal elements in English and Romanian have a different categorial status (and hence different syntactic behavior) but, as will be shown in the present analysis, their scopal properties are not subject to variation.

Though the Romanian modals may not offer as interesting a subject of investigation as the English ones (they are not a "distinct" class)

I hope that their analysis may offer interesting insights into related areas of Romanian syntax from a minimalist perspective as well as into aspects of temporal interpretation.

The examination of the Romanian complex predicates will also hopefully point out that there is a distinction between syntactic and semantic complex predicates and will offer arguments against the view that deontic modals enter control structures whereas epistemic modals are raising verbs. It will also be shown that the modals which have been treated as deontic (both syntactically and semantically) do not actually fall into one single class.

4.1.2. The organization of the chapter is as follows:

In **4.1.** I present the aim and the organization of the chapter.

In **4.2.** I briefly review the main lines of investigation of the Romanian modals.

In **4.3.** I present the outline of the analysis.

In **4.4.** and **4.5.** the configurations with *a putea* ('can, be able to, manage') and *a trebui* ('must, have to, need') will be analyzed with a view to showing that (i) Romanian modals evince different properties and enter different configurations, i.e. they do not represent a homogeneous class and (ii) they behave like lexical verbs.

4.2. Main lines of investigation

4.2.1. *Romanian modals and predication*

Romanian traditional and structural grammars usually focus on the meaning of the so-called modal verbs, pointing out that they cannot form a predicate simply because of their meaning: they need to co-occur with another verb with which they express one single event, i.e. a complex structure. Most traditional and structural studies agree that the Romanian modals can form a predicate only if they co-occur with another verb; however, one can notice two main directions of investigation :

(i) the Romanian modals are treated as "auxiliaries"/ "semi-auxiliaries" (Iordan 1943, Guțu 1956, Nedioglu 1956, Teodorescu 1966)

(ii) the Romanian modals are treated as lexical means of expressing modality, which often have different morpho-syntactic properties (Gramatica Academiei 1963, Dragomirescu 1963, Constantinescu 1970, Avram 1986).

4.2.2. *The VP-complex analysis*

Within the modal-as-auxiliary analysis, which assumes a complex predicate status for the configurations "modal verb + lexical verb", modals like *a putea* ('can') and *a trebui* ('must') are actually analyzed as having a double status. In configurations like the ones in (1)- (3) below, they are treated as auxiliaries of modality .

(1) *Trebuie să lucrezi.*
must-2nd pers.sg. *să* work-2 pers.sg.
'You must work.'

(2) *Poți să lucrezi.*
can-2nd pers.sg. *sa* work
'You can/may work.'

(3) *Poți lucra.*
can-2nd pers.sg work
'You can work.'

In (1) and (2) the modal takes a subjunctive clause, introduced by *să*, as a complement. In (3) *a putea* is followed by a BI.

Such analyses usually focus on the semantic contribution of the two verbs to the sentence: the verb with which the modal co-occurs is assumed to be more important in this respect.

The same modals can be predicates only when they take a DP complement or when they represent the focus of communication.

Such an approach raises several problems. Firstly, it is quite difficult to assume that the change in syntactic status is triggered by what might be called communicative intention. Secondly, stipulating that the Romanian modals are predicates when taking a DP complement but part of a complex predicate when taking a clausal complement may lead to the generalizing conclusion that the verbs which take a clausal complement are not predicates.

It should also be pointed out that such an analysis cannot account for the difference between the configurations in which the modal is followed by a BI (as in 3) and the ones in which it is followed by a subjunctive (as in 1 and 2) or by a CP.

Teodorescu (1966) starts from the same assumption: the Romanian modals can be predicates or part of a complex predicate; however, her analysis does not take into account the type of complement which the

modal takes (DP or clausal) but its various meanings. She argues that *a putea* is a predicate when it has deontic readings but an auxiliary, part of a complex predicate, when it has epistemic readings.[101]

(4) *Pot să rup lanțul.*
can-1st pers.sg. *să* break chain-the
'I can break the chain.'

(5) *Pot rupe lanțul.*
can-1st pers. sg. break the chain
'I can break the chain."

(6) *Pot să iau cartea?*
can-1st pers.sg. *să* take book-the
'Can I take the book?

(7) *Pot să procur cartea*
can-1st pers.sg. *să* find book-the
'I can find the book.'

(5)-(7) represent instances of "predicate" *a putea*, with the modal analyzed as a transitive verb. Recall that when analyzing the English modals, Ross (1969) also reached the conclusion that deontic modals are associated with transitive configurations.Unlike *a putea* in (5) -(7), the modal in (8) has an epistemic value and it is to be analyzed as a "modal syntactic auxiliary":

(8) *Pot să mă rătăcesc.*
can-1st pers. sg. *sa* me(Acc.)lose my way
'I can lose my way.'

It is however difficult to assume a one-to-one mapping between the so-called deontic modals and their syntactic structure because deontic modals do not behave uniformly (for arguments which support this point of view see **4.4.** in this chapter). If there is a difference which needs to be accounted for, it is the one pointed out by Dragomirescu (1963), Dobrovie-Sorin (1987,1993), Pană-Dindelegan (1992): the syntactic difference between the configuration in which the modal is followed by a BI and the one in which it is followed by a subjunctive configuration.

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[101] Teodorescu does not explicitly distinguish between epistemic and deontic modals: but, analyzing the examples she provides, one can reach this generalization.

Syntactically, the modal in (8) does not behave like an auxiliary. Auxiliaries lack referential value, they have reduced or null semantic content and hence cannot assign any theta-role and do not govern any tensed clause. They merge with a SC whose head is a lexical verb. If a verb can alternatively govern a tensed clause (IP or CP) and a VP, it should be classified as a lexical verb (Gueron and Hoekstra 1988). If this definition of auxiliaries is adopted, then the Romanian modals can only be treated as lexical verbs.

4.2.3.The modals as lexical verbs analysis

The studies which treat the Romanian modals as lexical means of expressing modality usually focus on their semantic similarities, pointing out that they evince different syntactic properties.

More recent studies (Dobrovie-Sorin 1987,1994, Avram 1989,1994) start from this assumption: in Romanian, modal verbs do not represent a syntactic class. Dobrovie-Sorin (1994) argues that *a putea* combines with Tense morphemes, on a par with lexical verbs.[102] It also takes a predicational type of complement, again unlike auxiliaries and on a par with lexical verbs. At least in its deontic reading (when it expresses ability), it also assigns a theta-role, property which qualifies it as a lexical verb.

One can also notice the general tendency in the GB literature to analyze deontic configurations as control structures and epistemic configurations as raising structures.

(9) *Maria poate citi cărți japoneze.*
Maria can-3rd pers sg. read books Japanese pl
'Maria can read Japanese books.'

(10) *Maria poate veni mai devreme.*
Maria can 3rd pers.sg.come earlier
'Maria can/may come earlier.'

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[102] *A putea* in its "ability" reading can indeed take tenses freely:
Present: *Poate să cînte.*("He can sing.")
Past: (a) *perfect-compus* : *A putut să cînte.* ('He has been able to sing.')
(b) *imperfect* : *Putea să cînte.* ('He could sing.')
(c) *perfect simplu* : *Putu să cînte.* ('He was able to sing.')
(d) *mai-mult-ca-perfect* : *Putuse să cînte.* ('He had been able to sing')
(e) *future: Va putea să cînte/O să poată să cînte/Are să poată să cînte.*
('He will be able to sing.')

Within such an analysis, the subject of the infinitival clause in (9) is co-indexed with the subject of the matrix .I will not discuss the status of the infinitival subject: PRO/*pro* here. Dobrovie-Sorin (1994) proposes that Romanian controlled subjects of subjunctive and infinitival clauses are "contextual anaphors" which she defines as elements which participate in an anaphoric relation without being intrinsically marked as [+anaphoric]. Hence, they are not necessarily subject to Principle A of Binding Theory. According to her, the null subject cannot be of type PRO, but most probably of type *pro* (see Dobrovie-Sorin 1994 for a detailed analysis of null subjects in Romanian infinitival and subjunctive clauses):

(9') Maria$_i$ poate [PRO$_i$ citi cărți japoneze]

In (10) (when the modal is interpreted as having an epistemic value), the modal can be analyzed as a raising verb which does not impose any selectional restrictions on the subject which is assigned a theta-role by the embedded verb:

(10') Maria$_i$ poate [t$_i$ veni mai devreme].

Under such an analysis, the modals are generated under VP and they behave either as raising or as control verbs.

This explanation cannot capture the intuition that the so-called deontic *a putea* can enter two different structures; the different syntactic contexts may lead to different functional interpretations. The idea I have already advanced in this chapter is that *a putea + bare infinitive* represents a VP complex (one in which the modal and the syntactic head of the VP denote one event structure and hence one argument structure), similar to the one of ability *can+ bare infinitive* in English Such an analysis follows, for the Romanian data, the line of Guțu –Romalo (1956,1973), Dobrovie- Sorin (1987) or Pană-Dindelegan(1992). They analyze *a putea + bare infinitive* as a complex predicate. But *a putea+ subjunctive* represents a biclausal structure.

An analysis of the Romanian modals should be able to account for this difference.

One more important fact which this analysis should capture is that modals expressing permission and modals expressing ability have been wrongly treated as belonging to one homogeneous class, semantically to that of "deontic" modals and syntactically to that of verbs of control. The

modals expressing "ability" could be hardly interpreted as "modal" (as already discussed in the previous chapter), they simply describe a state of affairs. The modals expressing permission can be associated with the idea of modality when the modal is used to ask for or grant permission and when the speaker tries to change the world not only to merely describe it. Syntactically, deontic modals cannot always be associated with control structures.

(11) *Poți pleca dacă vrei.*
can-2nd pers.sg.leave if you want-2dn pers.sg.
'You can go if you want to.'

The only external theta-role assigned is the one of the verb in the VP as will be shown in the present analysis.

The fact that the Romanian modals do not really represent members of a clearly defined class has also led to different lists. With Nedioglu (1956), the list of modals includes : *a putea* (can,to be able to, to manage), *a trebui* (must, have to, need, to need), *a avea* (in structures like "are de terminat teza" - she has her thesis to finish or "are să plece" - she is leaving), *a fi* (to be) and *a voi* (to want) ; with Guțu-Romalo (1956), *a voi* (to want) is not a member of this class; but her list also includes *a veni* (in structures like "Îmi vine să plîng" - I feel like weeping) and *a părea* (to seem). Avram (1986) adds *a da* (in structures like *dă să spună* - she is about to say...) and *a sta* (in *stă să cadă* -it is going to fall down)to the verbs in the previous lists.

4.3. The analysis

4.3.1.Preliminary remarks

The present analysis will start from the following empirical generalizations:

(i) the Romanian modals can enter two parallel structures, a VP complex (12) and a biclausal one (13) :

(12) *Maria poate desena foarte bine.*
Maria can-3rd pers.sg. draw very well
'Maria can draw very well.'

(13) *Maria poate să deseneze foarte bine.*
Maria can-3rd pers.sg. *să* draw-3rd pers.sg. very well
'Maria can draw very well.'

With *a putea*, the VP complex is a real counterpart of the biclausal one: both configurations can express the same contextual values of the modal verb and, even syntactically, the VP complex is a "reduced" copy of the biclausal structure in many respects.

With *a trebui* the VP complex configuration can be associated only with deontic readings (14) while the biclausal one can be read both deontically and epistemically (15):

(14) *Cărțile acestea trebuiesc/trebuie citite.*
books-the these-fem.pl. must-3rd pers.pl./must-3rd pers. sg. read- participle-fem.pl.
'These books must be read.'

(15) *Copiii trebuie să vină curînd.*
children-the must-3rd pers.pl. *să* come-3rd pers. soon
'The children must come/be coming soon.'

(ii) in Romanian, the so-called "modals" evince "lexical verb"-like features: they take tenses (almost) freely and they behave like lexical verbs from the point of view of agreement morphology.

On the other hand, some of them may be defective in some respects: there are cases when they cannot take certain tenses or when they cannot appear in non-finite clauses. None of the Romanian modals analyzed here can be used in the passive [103]

While modals under their more "concrete" readings can take any tenses freely, they are subject to interesting restrictions under their epistemic reading (when they are more abstract, behaving like operators). Remember that the English modals which occupy Mood2, taking scope over the whole sentence, are "tenseless"

Epistemic *a putea* ('can') and *a trebui* ('must') are questionable (sometimes impossible) in the *perfect compus*:

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[103] Very rarely, 'a trebui' may be used in passive constructions (when its contextual reading is "to need":

Socotesc dar că în lume eu întâi sînt trebuită . (DLR,Vol.T:574)
believe-1st pers.sg. hence that in world I firstly am needed-fem.sg.

(16) ?? *A trebuit că ştia el ceva.*
has must-past part. *Că* knew-3rd pers.sg. he something

(17) ?? *A putut să vină de la o clipă la alta.*
has could-past part. *să* come-3rd pers.sg. any minute

Though (18) is a good, grammatical sentence:

(18) *Nu s-au putut stinge toţi oamenii dintr-o ţară..*
not *se* have could-past part. perish all people-the in a country

The incompatibility with some temporal-aspectual forms, under certain readings, should actually be discussed for each verb, as they behave differently in this respect What I would like to suggest at this stage of the present analysis is that the Romanian epistemic modals, unlike lexical verbs, and unlike their deontic counterparts, cannot always take tenses freely. They are rarely used in other tenses than the present (or the *imperfect*) a property which should be related to their aspectual properties. More than that, their "adverbial" counterpart (*poate*, *se poate*) no longer evinces the features of verbs: they no longer take tense, they are "tenseless", behaving, in this respect, like the English modals which head the Mood2 projection.

Epistemic modals are incompatible with non-finite contexts:

(19) **Putînd să fi venit ieri noapte...*
can-*ind* (gerund) *să* be come-past participle yesterday night

(20) * *Trebuind că a greşit...*
must-*ind* (gerund) *că* has made a mistake

(iii) the Romanian modals (at least under certain readings) can assign theta-roles:

(21) *Copilul poate învăţa orice limbă uşor.*
child-the can-3rd pers.sg acquire any language easily
'A child can easily acquire any language.'

(22) *Îmi trebuie/trebuiesc cărţi.*
me (Dative) need-3rd pers.sg./need-3rd pers.pl books
'I need books.'

(23) *Acum văd eu ce poate femeia.*
now see-1st pers.sg. I what can-3rd pers.sg. woman-the
'Now I can see what a woman can do.'

(iv) in Romanian, elements with the semantic properties of the English modals are lexical verbs, i.e. the same semantic notion, modality, is expressed by functional elements in English and by lexical ones in Romanian. That reinforces the idea that functional categories do not exhibit uniform properties across languages, because they are associated with idiosyncratic mechanisms of language.

(v) The differences between the English and Romanian modals can be explained as *consequences* of other differences. Recall that the English modals developed as a homogeneous distinct class as a result of a major parametric change in the history of English: the shift from a language with rich morphology and with a morphological agreement system to a language with a syntactic agreement system (Roberts 1985,1992). Before the 16th century, English had a morphological agreement system and the English modals behaved like lexical verbs in many respects. The change of the agreement system triggered the development of a morphologically and syntactically distinct class in modern English. Romanian has always had a morphological agreement system. It is not unexpected then that the Romanian modals behave like the Old English modals: they assign theta-roles, they move to INFL, they take clausal complements.

(vi) in spite of the main difference between the English and the Romanian modals (functional vs lexical class) there is a certain similarity in their behaviour: they may take complements whose complexity varies. In certain cases, the difference in complexity leads to different interpretations,i.e. in the mapping to LF there is a correspondence between the complexity of the complement and the logical representation of the whole configuration. Again, this is something which is to be expected: it is generally assumed in generative theory that LF representations will be more similar across languages than otherwise.

(vii) Romanian sequences of a modal verb and a bare infinitive differ from similar sequences in other Romance languages. Italian, Catalan

and even French (where the structure in which the clitic has climbed is perceived as outdated) allow both a structure in which the clitic pronoun remains in situ, next to the verb whose argument it is, and one in which the clitic can be extracted from it and cliticized on the modal (as seen in 26, 27 and 28 below; the examples quoted are from Burzio (1975) for Italian and from Picallo (1990) for Catalan):

(24) Italian:

a. *Gianni ha potuto parlargli personalmente.*
Gianni has can-past part. speak-him personally

b. *Gianni gli ha potuto parlare personalmente.*
Gianni him has can-past part. speak personally
'Gianni could speak to him personally.'

(25) Catalan:

a. *En Joan deu afaitar-se.*
Joan must shave-self

b. *En Joan es deu afaitar.*
self-must shave

(26) French:

a. *J'aurais pu me contenter de...*
I have-conditional -1st pers.sg.can-participle me (Acc) please

b. *Je m'aurais pu contenter de...*
I me (Acc) have-conditional-1st pers.sg can-participle please..
'I could have been pleased with...'

In Romanian, clitic climbing is obligatory under all the readings of the modal:

(27) a. *Ion i-a putut vorbi personal.*
Ion him/her (Dative) has can-participle speak personally
'Ion could speak to him personally.'

b. **Ion a putut vorbi -i personal.*

(28) a. *Maria se poate rătăci.*
Maria *se* can-3rd pers.sg. lose her way
'Maria can/may lose her way.'

b. **Maria poate se rătăci.*

The participation in clitic climbing is one of the tests which show that the modal and the infinitive form a complex. In Romanian, with clitic climbing being the only choice, it is obvious that the sequence modal+VP can only be analyzed as a complex predicate at any level of analysis.

Clitic climbing is also relevant for the status of the BI: if clitic climbing is possible it means that the BI has no functional extension.[104]

(viii) Romanian sequences modal+ subjunctive do not allow clitic climbing:

(31) **a.** *Ion a putut să-i vorbească personal.*
Ion has-3rd pers.sg.could *să* -him (Dative) speak-3rd pers. personally.
b. **Ion i-a putut să vorbească personal.*
Ion him (Dative) has-3rd pers.sg. *să* speak-3rd pers.personaliy

(32) **a.** *Maria poate să se rătăcească.*
Maria can-3rd pers.sg.*sa se* lose-3rd pers. her way
b. **Maria se poate să rătăcească.*
Maria *se* can-3rd pers.sg. *să* lose-3rd pers. her way

If we take clitic climbing as a reliable diagnostic for "reconstruction" and hence for a VP complex status, we can say that the configuration modal +subjunctive differs, at least in this respect, from the configuration modal+infinitive.

4.3.2.Outline

In what follows I will analyze the modal verbs *a putea* ('can') and *a trebui* ('must') with a view to showing (i) that they behave differently from a syntactic point of view, i.e. they are not members of the same syntactic class, (ii) that the assumption that deontic modals should be

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[104] One should notice the difference between the Romanian BI and the infinitive with *a*, which has its own projection as the following examples prove:

(i) *Înainte de a se pieptăna...*
before *de a se* comb

(ii) *Însă aripile-i albe lume-a le vedea nu poate.*(Guțu-Romalo 1956)

(iii) *A-i risipi nu i-a putut.* (Guțu - Romalo 1956).

analyzed as control verbs while epistemic modals as raising verbs is too "overgeneralizing" for Romanian (and for other languages as a matter of fact) and (iii) that the Romanian modals admit double categorization:

A. they are main verbs taking a DP or a sentential complement (MoodP and CP);

B. they behave like "light" verbs, inserted into a verbal complex, which merge with a VP (similar, in many respects, to the Romance causative and perception verb constructions).

The analysis of complex VPs is based on Rosen's (1990) analysis of complex predicates in Romance although the results may represent an extension to her analysis. Following her study, complex predicates will be defined as formed by the merger of two independent argument structures and as denoting one event across both verbs comprising the complex VP; they also evince certain specific syntactic properties.

My analysis departs from that of Rosen in that the restructuring verb of the complex will not be (necessarily) analyzed as a light verb with no thematic arguments and no event specification. The examination of the Romanian modal *a putea* (in its ability reading) will provide solid arguments that either the definiton of "light" verbs should be made "weaker" (closer to Grimshaw and Mester 1988, where "light" verbs are defined as thematically incomplete, not totally devoid of thematic structure) (or it might be the case that some "light" verbs are "lighter" than others) or the definition of complex predicates should be modified so as to accommodate those cases in which the "restructuring" verb is not necessarily a light verb in the sense of Rosen.

My analysis will also somehow depart from that of Rosen's in assuming that within a complex VP it might be the case that the two verbs do not always denote one event in the same way: the temporal interpretation of the embedded verb may be more or less "dependent" on the temporal interpretation of the "matrix" verb. Again, evidence in favor of this view comes from the examination of the Romanian modal *a putea* (in its epistemic and permission reading).

It will be shown that complex predicate formation may be the result of the properties of the VP with which the restructuring verb (in Rosen's terms) merges, not only or necessarily of the properties of the restructuring verb. Romanian BIs will be analyzed as referentially defective VPs which "force" complex predicate formation. The same modal, *a putea*, can merge with a BI, with which it forms a VP complex, and with a full embedded clause with which it will form a biclausal configuration.

The present analysis will also point out the importance of aspectual properties in the interpretation of complex VPs. A modal like *a putea* is a state predicate. If we adopt Kratzer's (1989) hypothesis that state predicates lack an event variable (or, as will be argued in this chapter, that there are certain restrictions on what temporal-aspectual forms and what time adverbs can identify this event variable without triggering any recategorization process) this aspectual feature may be crucial for the interpretation of the configurations with *a putea*

4.4. A PUTEA

4.4.1. The Data

In modern Romanian, the verb *a putea* (can, may) can enter the following configurations:

(i) Deontic *a putea* (when it expresses physical/mental ability; 'can', 'to be able to'):

(33) *Acum nu mai putea GÎNDI NIMIC.*
Now not more could-3rd pers. sg. think nothing
'Now he couldn't think any more.'

(34) *De rele ce sînt nu pot SĂ TRĂIASCĂ LA UN LOC.*
of wicked of what are not can-3rd pers.pl. *să* live-3rd pers. together
'They are so wicked that they cannot live together.'

(35) *Iubim frumusețea și pe cei ce pot CA S-O REDEA.*
Love-1st pers.pl. beauty and those who can-3rd pers. *ca să* it (Acc) express-3rd pers.
'We love beauty and the people who can create it.'

(36) *Cum ai putut DE-AI FĂCUT ASTA?*
How have-2nd pers.sg.could de have-2nd.pers.sg. done that
'How could you do that?'

(37) *AȘA CEVA nu pot.*
Such thing not can-1st pers.sg.
'I cannot do such a thing.'

(ii) Deontic *a putea* (expressing permission, advice; 'can', 'may')

(38) Poți SĂ STAI pînă tîrziu.
can-2nd pers.sg. *să* stay-2nd pers.sg. till late
'You can stay till late.'

(39) *Poate veni și el dacă vrea.*
can/may-3rd pers.sg. come and he ...
'He can /may come too if he wants to.'

(iii) Epistemic *a putea* (expressing possibility)

(40) *Curajul meu de-atunci putea SĂ PARĂ copilăresc.*
courage my of then could-3rd pers.sg. *să* seem-3rd.pers.sg. childish
'At the moment my courage could/may have seemed childish.'

(41) *Curajul meu de-atunci putea părea copilăresc.*
courage my of then could *să* seem childish
'At the moment my courage could seem childish.'

(42) *Poate să vină mîine.*
can-3rd pers.sg. *să* come-3rd pers.sg./pl.tomorrow
'He may come tomorrow.'

(43) *Poate să fi venit ieri.*
can/may-3rd pers.sg. *să* be come-past.part.
'He may have come yesterday '

4.4.2. A PUTEA + bare infinitive

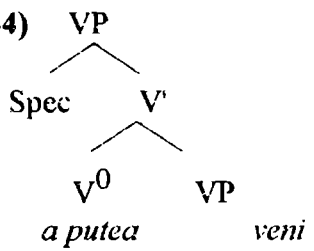
4.4.2.1. Deontic a putea + bare infinitive

Sentence (33) illustrates deontic *a putea*. If we assume, following the line of Manzini (1983) and Gueron and Hoekstra (1988), that root modals must control an empty category in an argument position of the embedded clause, being verbs of obligatory control, i.e. the subject of the embedded clause must be controlled by an argument of the matrix verb, we should also assume that *a putea* in its deontic reading and the BI are parts of a biclausal configuration.

In what follows I will try to point out that such an analysis is actually incorrect. *A putea*, in its deontic meaning, when co-occurring with

a BI, is not a verb of obligatory control. It is part of a complex VP whose argument structure is shared by the modal and the infinitive verb in a way similar to the English configuration which contains non-modal *can*.

(44)



The subject of a sentence like (33) is the subject of the complex *a putea* + bare infinitive. The argument structure of the non-modal verb is transferred to the complex VP, resulting in one single argument structure and in one single event structure.

Arguments in favor of such an analysis are provided by a number of independent phenomena, including :

(i) clitic climbing
(ii) negation
(iii)"clitic" adverbs
(iv) passivization

(i) Clitic climbing is licit in sentences like (45) and (46) below:

(45) *Maria le poate citi.*
Maria *le* ('them') can-3rd pers.sg. read
'Maria can read them.'

(46) *Copilul se poate spăla singur.*
the child *se* can-3rd pers.sg. wash alone
'The child can wash himself.'

The clitic *le* ('them') in (46), has climbed over *citi* and *poate*. Clitics are case features of the verb; they form a cluster with the verb with which they raise to Agrs. They always climb to Agrs.[105] In (45) and (46)

[105] Cornilescu (1997) argues that actually in Romanian the clitic has its own projection, CliticP, presumably between MoodP and AgrS.

the clitic has climbed with *a putea*, which means that the BI, which lacks a functional projection, has not raised. Its status is that of a VP (see also Dobrovie-Sorin 1994 for an identical point of view).

Reflexive *se*, in (45), which originates as an argument of the infinitive,climbs to the first available functional projection which is the "extension" of *a putea*, not that of *a spăla.*

The ungrammaticality of (47) and (48) below is further support in favor of the view that Romanian BIs are VPs with no functional projection (or, at least, with no functional projection which may host the clitic)[106]

(47) * *Maria poate le citi.*
Maria can-3rd pers.sg. le read

(48) * *Copilul poate se spăla singur.*
the child can-3rd pers.sg. alone

If we treat the BI as a VP, it will follow that, in the absence of an Inflectional cluster (Tense, Aspect, Agreement) or of a Complementizer node,there is no tense operator which can take scope over the verb and we have to assume that the infinitive in (47) or (48) is not internally specified for tense. It is dependent on *a putea* for its temporal interpretation: the time interval of the BI is the same as that of the "matrix". In the output structure of clitic climbing, the head of the T-chain T-marks the verb, while the clitic defines the initial boundary of a tense domain and its trace the final boundary. *A putea* and the BI with which it co-occurs belong to the same tense domain and to the same theta-domain.

(ii) Negation

Rizzi (1994) points out the absence of negated BIs, relating this property to the fact that verbs in such configurations are unmoved verbs. Romanian BIs bear out this hypothesis. They cannot be negated:

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[106] Kayne (1989) argues that clitic climbing follows from a property of the infinitive inflection in null subject languages that allows clitics to move to the main clause. This is obviously the case with the Romanian bare infinitives: they lack a functional projection and the clitics will have to move to the first available functional node. See also note 1 for the difference between bare infinitives and infinitives with *a* in Romanian with respect to clitic climbing.

(49) **Maria poate nu citi*
Maria can-3rd pers.sg. not read

Recall that in English, the small clause with which the modal merges can be made negative (see **3.3.3.5**). But in Romanian one can only negate the whole V max:

(50) *Maria nu poate citi.*
Maria not can-3rd pers sg. read
'Maria cannot read'

One possible explanation would be that Romanian lacks constituent negation in syntax. Constituent negation takes place only in the lexicon and it presupposes incorporation.

(iii) "Clitic" adverbs

Sentences like (51)- (522) below represent further evidence that Romanian BIs are unmoved VPs."Clitic" adverbs of the type *mai* (still), *şi* (and, also), *cam* (quite, rather), *prea* (quite) can only occupy a position in front of the inflected *a putea*. Dobrovie-Sorin (1994) argues that such adverbs necessarily attach to an Infl node; they cliticize on the verb raised to Inflection.

(51) *Mai poţi munci.*
still can-2nd pers.sg work
'You can still work.'

(52) **Poţi mai munci.*
can-2nd pers.sg.still work

The ungrammaticality of (52) points to the fact that *munci* ('work') has not raised to Inflection. The adverb must cliticize somewhere else, i.e on the closest available functional node.

(iv) Passivization

Sentences which contain such a "complex" resist passivization.[107] Consider (53) and (54) below:

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[107] Romanian behaves like other Romance languages in this respect.The fact that verbal complexes with deontic modals do not preserve meaning under passivization has been noticed for Italian (Rizzi 1978) and for Catalan (Picallo 1990).

(53) *Ion poate spăla cămaşa.*
Ion can-3rd pers.sg. wash the shirt
'Ion can wash the shirt.'

(54) *Cămaşa poate fi spălată de Ion.*
the shirt can-3rd pers.sg.be washed-fem.sg. by Ion
'The shirt can be washed by Ion.'

The meaning of the two sentences is different. (54) is not the passive counterpart of (53). Whereas in (53) *a putea* can have a clear deontic ability reading, in (54) the ability reading cannot obtain. The subject DP *cămaşa* is not an argument "shared" by the modal and the embedded verb, it is an argument of the embedded verb only. *A putea* in its ability reading seems to assign an agent theta-role to its subject. In (54) the subject DP is not an agent. Hence, the incompatibility between the conditions on [+agentivity] and [+control] imposed by *a putea* in the process of subject selection and the [-agentivity] and [-control] features evinced by the subject of the passive configuration.

4.4.2.2. Case checking, agreement feature checking and subject/object movement

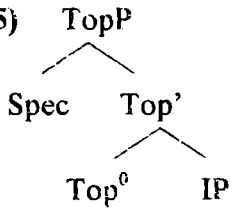
This subsection examines case checking, agreement feature checking and subject/object movement within the configuration (ability) *a putea* + bare infinitive.

Within the framework I have assumed, both the subject and the object move each to a Spec-AgrP position for case and agreement feature checking, i.e. the subject DP moves to SpecAgrsP, whereas the object DP moves to SpecAgroP. Whether movement to a Spec position is overt or covert differs from one language to another. In a language like Romanian, the subject DP can remain in its base VP-internal position, postverbal subjects being allowed.[108] Movement to a preverbal position need not be overt, the DP does not have to move overtly unless it also evinces some extra strong feature which must be checked (Avram 1996) before Spell-Out, as for example a [+topic] or [+focus] feature. In this case the DP

[108] Dobrovie-Sorin (1994), Motapanyane (1995) and Cornilescu (1997) all argue in favor of VSO order in Romanian, with the DP subject occupying a postverbal position. Cornilescu (1997) argues that there are two postverbal subject positions in Romanian: SpecAgrs and SpecVP,both argumental.

subject moves overtly to a position in which this feature can be checked. [+topic] is an operator feature, which means that we should expect the DP subject to move to a non-argumental position, in the "operator" layer of the sentence, to SpecTopP (for a similar point of view, with more detailed argumentation, see Cornilescu 1997):

(55)



Going back to the configuration containing *a putea* followed by a BI, we notice that the subject DP can intervene between the modal and the infinitive in declarative sentences:

(56) *O să poată el repara maşina.*
o (future aux.)sa can-3rd pers.he fix car-the
'He'll be able to fix the car.'

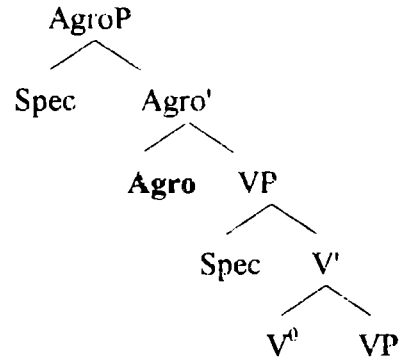
(57) *Nu poate nimeni rezolva problema.*
not can-3rd pers.sg.nobody solve problem-the
'Nobody will be able to solve the problem.'

(58) *O să-şi poată fiecare termina teza la timp.*
o (future aux.) *să* him/her (Dative) each finish dissertation-the in time
'Each of them will manage to finish the dissertation in time.'

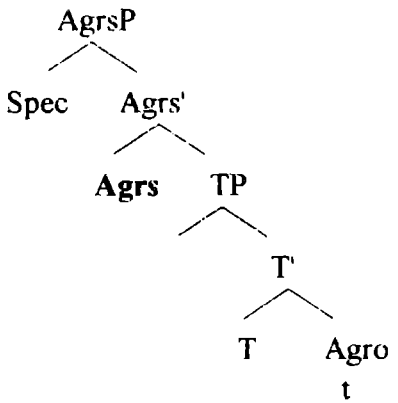
(59) * *Poate acest copil cînta frumos.*
can-3rd pers.sg. this child sing beautifully

Recall that the I-syntax from which such a configuration starts is the one given in (44), with the DP subject occupying the Spec position of the complex VP and having received one single theta-feature. The modal raises to Agro first (as in 60) and then higher up (as in 61):

(60)



(61)



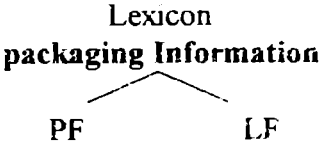
That will result in a grammatical sentence like the one in (56) or (57). The subject DP will have to move overtly in this case. All movement is motivated by the need to check features. If the subject DP must move overtly, before Spell Out, it means that this DP has a strong feature/or some strong features which it must check or else the derivation crashes (as in 59).

I would like to suggest that the subject DP also has a strong [+topic] feature associated with, if not strongly correlated with, a [+specific] feature. Semantically, we could define such sentences as categorical judgements (see Kuroda 1972, Ladusaw 1994, as well as **3.3.5.7**. in the previous chapter), whose subject DP is a "strong construal" (in the line of Milsark 1974 or Ladusaw 1994). The feature must be checked before Spell Out and the subject DP moves overtly to a position in which it can check its [+topic]/[+specific]/[+strong construal] feature, resulting in a correct sentence:

(62) *Acest copil poate cînta frumos.*
this child can-3rd pers sg. sing beautifully
'This child can sing beautifully.'

The theoretical consequence of this analysis would be that some languages (like Romanian, for example) embed information packaging into syntax: on the way to PF, strong features like [+topic] or [+strong construal] must be checked or else the derivation will crash. Thus the subject DP raises in the overt derivation to SpecTopP to satisfy its "topic" or "scopal" properties. Such a view is not in contradiction with the minimalist view assumed as a theoretical framework and within which "morphological features" are features of case, tense, etc. but also of operatorhood. A linguistic object is legitimate only if all its strong morphological features are checked. In the case under analysis, the morphological feature [+topic]/[+specific] is visible at PF via word order (and word order facts are the result of operations on the branch of PF). In other languages, it has a specific morphological marker, like the Japanese *wa*.[109] That would lead to the idea that in some languages information packaging is embedded into syntax while in others it is not (English, for example).

(63)



Chomsky (1992) argues that "we must show that the position of Spell-Out in the derivation is determined either by PF or LF properties.. There are strong reasons to suspect that LF conditions are not relevant." If *[+topic] or any operator-hood features are "morphological features"* visible at PF, it means that they are linked to PF properties. Again, my hypothesis will be in the spirit of the Minimalist program.

Theoretically, such an analysis will lead to postulating a new parameter: in some languages information packaging is relevant before

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[109] Raposo and Uriagereka (1995) also argue, along similar lines, that differences in information structure are encoded into syntax. Individual level and stage level predicates (in the sense of Carlson 1977) are analyzed as marked with a different case. In Irish, auxiliary selection is sensitive to the type of predicate: the auxiliary *is* selects individual-level predicates while the auxiliary *ta* selects stage-level predicates.

Spell-Out, it is embedded in the syntax of the language whereas in other languages it is linked only to LF conditions, and hence it is not relevant before Spell-Out.

Let us return to the Romanian configuration *a putea* + bare infinitive. If the verb is a transitive one, the resulting word order will be: DP-subject - modal *a putea* (inflected) - bare infinitive - DP-object:

(64) *Acest copil poate vorbi japoneza.*
this child can-3rd. pers.sg. speak Japanese
'This child can speak Japanese.'

Which means that the object DP does not have to move overtly for feature checking. Movement will be in this case covert, i.e.after Spell Out. The BI is still in situ. We have already seen that the status of this BI is that of a VP which has not merged with any functional projection. The object DP is also in situ. The position to which it should move to check its agreement features and to get case is SpecAgroP. Under a GB view, the solution would have been quite at hand; we could have said that case is assigned under government and nothing would have had to move. But, within the minimalist framework assumed in this study, features can only be checked in a Spec-head configuration. So, the object DP moves to SpecAgro and receives case only from the inflected *a putea*. In a way, that should raise no problem: a DP can be assigned a theta-role by one element and get case from another. The problem is that the DP is assigned a theta-role by both the modal and the verb in the VP small clause and we would like this fact to be captured at LF.

My suggestion is that the explanation in this case will be the same as the one provided in **3.3.3.6.** for the object DP in the English configurations (ability) *can* + bare infinitive. The core of the explanation lies in postulating that the BI moves to the modal at LF.

Recall that when analyzing the English modals which occupy a position under VP I reached the conclusion that they behave like lexical elements in some respects, they are not completely "functional". They behave more like light verbs. The present hypothesis should thus not be surprising for two obvious reasons: (i) both *can* and *a putea* (in the configurations which are being discussed at this stage of the analysis) are lexical (at least) in some respect and (ii) movement of the verb is at LF, and we do not expect LF to be language specific.

From the point of view of UG, such an analysis leads to the conclusion I already reached in **3.3.3.6**.: the head of the small clause with which (light) verbs merge to form a complex VP will always move to the "selecting verb" and incorporate into it at LF.[110]

There is one difference though. Recall that in **3.3.3.6** the English modal *can* was analyzed as an LF affix. But the Romanian modals do not really behave like "light" verbs, they are fully lexical in most respects. They can be associated with "light" verbs not because of some intrinsic properties which they may evince but because of the syntactic context in which they ocur They cannot be LF affixes. If we accept this hypothesis, it means that in Romanian the verb moves to the modal for different reasons than the ones assumed in **3.3.3.6**., i.e. it does not move to the benefit of the modal. It moves to satisfy its own requirements. Verb movement in Romanian is overt. The [V] feature of Tense and Agreement is strong. The BI cannot move overtly because the modal does: the modal checks the tense and agreement properties of the complex VP. Such features do not have to be double-checked before Spell-Out. The BI can procrastinate movement. It actually has to procrastinate movement for economy reasons, i.e. to avoid "double checking" of features. But it is a verb and it has to check its [V] features at some point or other. Thus it will only move covertly to check them, adjoining to the modal with which it shares the event and the argument structure.[111]

The LF result will be the same as in English but motivation for movement is different.

If this hypothesis is on the right track, we could redefine BIs as in (65) below:

(65) Bare infinitives do not move to Tense or Agreement before Spell-Out but they always move at LF.

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[110] Dobrovie-Sorin (1994) and Cornilescu (1997) for Romanian, and Alexiadou (1994) for Modern Greek show, on different grounds, that SpecAgrsP cannot be a subject preverbal position in these languages.

[111] The idea that the embedded verb in a complex VP moves up to become sister to the matrix verb is already common in the literature: see Burzio (1986), Baker (apud Rosen 1990), Johnson (1991).

4.4.2.3. Epistemic a putea +bare infinitive

If we assume that epistemic modality is mapped out syntactically as a raising construction, then in (66a) *Ion* will be analyzed as the subject of *veni* ('come') which has raised to the subject position of the matrix as shown in (66b):

(66) **a.** *Ion poate veni dintr-o clipă în alta.*
Ion can-3rd pers.sg. come from one minute to another
'Ion can/may come any minute.'
b.[IP Ion$_i$ [I' Agr [VP poate [IP veni e$_i$ în orice clipă]]]

But one can notice the same VP complex effects in spite of the fact that there is no argument structure transfer/merger: the subject DP is the argument of the infinitive verb only.

Clitic climbing is legitimate (see 67), negation attaches to the modal (negating the embedded verb is impossible) (68a and 68b), and clitic-like adverbs can only be hosted by the extended projection of the modal (see 69a and b):

(67) *Ion o$_i$ poate întîlni t$_i$ în orice clipă.*
Ion o (her) can-3rd pers.sg. meet anytime
'Ion may meet her anytime.'

(68) **a.** *Imposibil, nu poate veni atît de tîrziu!*
impossible, not can-rd pers.sg. come that late
'It is impossible, he cannot come that late!'
b. ***Imposibil, poate nu veni atît de tîrziu!***
impossible, can-3rd pers.sg. not come-3rd pers. that late

(69) **a.** *Mai poate veni la 3...*
Still may/can-3rd pers.sg. come at 3.00
'He may still come at 3.00.'
b. * *Poate mai veni la 3...*
can-3rd pers.sg. mai come at 3.00...

That leads to the conclusion that the epistemic configuration evinces the same syntactic features as the "ability" one, i.e. it is a VP complex.

However, there are certain differences between the two configurations which point to the fact that they are not (altogether) similar. Thus we should account for what they share, on the one hand, but also for their differences.

Epistemic a putea and Raising

Since the configuration evinces all the properties of a VP complex, the first thing we should do is provide evidence in favor of the view that epistemic *a putea* followed by a bare infinitive does not represent a raising structure in spite of its " raising" flavor.

I have already voiced support in favor of the view that Romanian BIs are unmoved VPs. I have also pointed out that the subject in the case of epistemics is not an argument shared by the modal and the infinitive verb, it is the subject of the infinitive verb only. The modal does not impose any selectional restrictions on the subject differing, in this respect, from the "ability" modal.

On the other hand, clitic climbing is allowed, negation and clitic-like adverbs can only attach to the modal. Syntactically, it behaves like ability *a putea*. The conclusion we can reach is that the modal and the BI form a syntactic VP complex, just like in the case of ability *a putea*, i.e. the structure cannot be a raising one because it is not biclausal.

Independent evidence in favor of this hypothesis comes from dative *se*. Romanian again differs from other Romance languages. In Italian and French, dative *se* cannot be bound by a derived subject (Kayne 1975, Rizzi 1986) whereas in Romanian, which has morphological means of distinguishing between dative and accusative *se*, dative *se* can be bound by derived subjects:

(70) *Copiii noştri şi-au fost prezentaţi la Crăciun.*
Children-the our them (Dative) have-3rd pers.pl.been introduced-masc.pl.at Christmas
'Our children were introduced to each other at Christmas.'
(Dobrovie-Sorin 1997)

(71) *Îşi e dragă numai ei.*
her (Dative) is dear only her (Dative)

But if the derived subject is the subject of raising verbs it will not be able to bind dative *se*, the result being an ungrammatical sentence (Dobrovie-Sorin 1997):

(72) **Copiii noştri îşi păreau să fie de folos unul altuia.*
children-the our them (Dative) seemed sa be-3rd pers. of use to each other

(73) ** Copiii noştri îşi păreau fericiţi.*
children-the our them (Dative) seemed happy

It means that the ability to bind dative *se* could be a reliable test for raising in Romanian. If *a putea* were a raising verb we would predict ungrammaticalities parallel to (72) and (73). But empirical data lead to different conclusions:

(74) *Copiii noştri îşi pot fi de folos unul altuia.*
children-the our them (Dative) can-3rd pers.pl. be of use to each other
'Our children can help each other.'

(75) *Copiii noştri îşi pot deveni simpatici.*
children-the our them (Dative) can-3rd pers.pl become likeable
'Our children may grow to like each other.'

Sentences like (74) and (75) are fully grammatical. Their grammaticality contrasts with the ungrammaticality of (72) and (73) which clearly suggests that they do not contain a raised subject. *A putea* is not a raising verb.

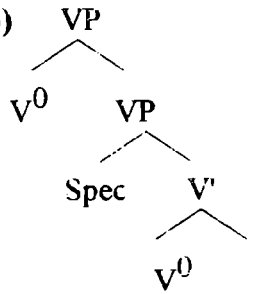
The hypothesis that the Romanian epistemics followed by a BI should not be analyzed as raising verbs is thus borne out.[112]

The configuration is a VP complex, just like in the case of "ability" *a putea* but the external argument is not shared by the modal and the infinitive verb. *A putea* has no external argument of its own .

[112] See Picallo (1990) for an examination of the Catalan sequences modal and infinitive where it is argued, with different arguments, that Catalan epistemics (followed by an infinitive) are not raising verbs. They are analyzed as constituents of INFL.This analysis also provides arguments against the two overgeneralizing mapping: deontic-control, raising-epistemic.

I will tentatively explain this phenomenon assuming that the l-syntax of the "epistemic" VP complex might be as in (76) below:

(76)



The modal c-commands the whole event from the very beginning In this case *a putea* cannot have an external argument, it only takes an internal argument which is a VP. Unlike ability *a putea*, the epistemic cannot assign case, behaving like an unaccusative verb. That would be in line with more traditional studies which analyzed epistemics as intrasitives.

4.4.2.4. The temporal interpretation of the bare infinitive

Another difference has to do with the temporal interpretation of the small clause. The BI which co-occurs with epistemic *a putea* evinces a certain degree of independence when compared to its deontic (ability) counterpart. That means that the embedded verb is not as referentially dependent on epistemic *a putea* as it is on ability *a putea*.

With ability *a putea*, the BI and the modal share the temporal interpretation: the time of the BI is the same as that of the modal, the infinitive itself is "tenseless". This seems to be a cross-linguistic common *feature. deontic modals have tenseless infinitival complements (van* Gelderen 1993). On the other hand,one could draw some conclusions about the behavior of BIs: they do not have a Tense-operator, no tense and hence no referential independence; they do not have any phi-features. They could be defined as referentially defective VPs. Their event variable can be bound only if they enter a VP complex.

Bresnan (1972) argues that an infinitival complement describes something "hypothetical or unrealized". The fact that an infinitival clause is neither present nor past has the effect of specifying that the time frame (present or past) is unrealized with respect to the tense of the matrix,

which makes Bresnan (1972) and Stowell (198) conclude that its tense is that of a possible future. [113]

In the case of ability *a putea*, it is obvious that the modal and the infinitive identify one single state of affairs. The infinitive verb may be telic or atelic; its aspectual properties will not trigger any change in the "temporal" interpretion of the Vmax Consider (77) and (78):

(77) *Ion poate cînta frumos.*
Ion can-3rd pers.sg. sing beautifully
'Ion can sing beautifully.'

(78) *Ion poate repara o maşină.*
Ion can-3rd pers.sg. fix car-the tomorrow
'Ion can fix the car tomorrow.'

At first glance, the "one single" state of affairs reading obtains both in (77), where the infinitive is atelic, and in (78), where the infinitive is telic.[114]

It also seems obvious that both (77) and (78) have a generic flavor. An accomplishment like *a repara o maşină* ("fix a car") is recategorized because of the context in which it occurs: it denotes a dispositional property[115], not an accomplishment. If we use a different temporal-aspectual form, the generic flavor is gone and the sentence will denote an (instantiated) "slice" of this dispositional property. The modal will be better interpreted as :"it is possible for x to.../it was possible for x to...". The speaker expresses a judgement about the extent to which the instantiation of the subject's dispositional property is/was possible. The VP complex behaves like a generic sentence in many respects: the non-modal verb, regardless of its aspectual class, is interpreted as denoting a homogeneous property when used in this configuration; it is a "genuine" stative or a "genuine" individual level predicate (ILP); but, if the temporal

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[113] Both Bresnan and Stowell analyze to-infinitival clauses.

[114] When I refer to the infinitive verb as being telic/atelic I have in mind the aspectual feature intrinsic to the verb, disregarding any recategorization process which may take place when that particular verb is used in various contexts.

[115] Dispositional property will be defined as in Rescher (1974): "A disposition represents a feature that a thing does in reality have, yet which relates not only to how it does comport itself in the actual circumstances, but also to how it would comport itself in other, strictly hypothetical ones. In talking of the (actual) dispositions of (real) things, we thus characterize the real in a way that is inherently possibility-referring." (p.132)

aspectual form changes, the generic flavor is lost (with the exception of the *Imperfect* in certain contexts) and there is a tendency with present declarative sentences to place their subject preverbally; leaving the subject in its base position may render the declarative sentence at least awkward if not ungrammatical·

(79) **a**.?? *Poate Maria dansa frumos.*
can-3rd pers.sg.Maria dance beautifully
b. *O să poată ea dansa pînă la urmă.*
O să can-3rd pers.sg. Maria dance in the end
'Maria will be able to dance in the end.'

While sentence (79a) is impossible, (79b) is grammatical. When the sentence is interpreted as generic, the tendency is to place the subject in preverbal position. But, if the sentence predicates about a stage (in the sense of Carlson 1977), being about the event, the subject may remain in situ. Syntactically, we are faced with one single type of VP complex Semantically, the BI behaves differently: it can be interpreted as a stage-level (SLP) or as an individual-level (ILP) predicate. When it is interpreted as a SLP, *a putea* can take tenses freely and the subject may remain in situ; when it is interpreted as an ILP, *a putea* is incompatible with any other tenses but the present, and the subject must move to a higher position as has already been shown in this analysis.

Evidence in favor of this difference comes from the aspectual classes of predicates with which ("genuine") ability *a putea* can co-occur. Consider the following sentences:

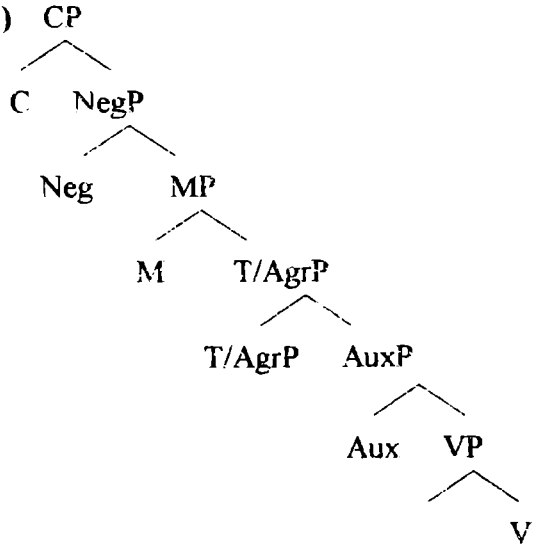
(80) *Ion poate veni azi.*
'Ion can/may come today.'

(81) *Ion poate pleca repede.*
'Ion can/may leave quickly.'

(82) *Copiii pot tuşi iarna.*
'Children can/may cough in winter.'

(83) *Maria poate sughiţa .*
'Maria can/may hiccup.'

(102)



The modal phrase MP is headed by an (uninflected) particle. She assumes that in Romanian M is the locus for the gerund *-ind* and, like in all Balkan languages, for subjunctive markers. Hence *să* heads the M projection. Cornilescu (1997) also argues that Romanian disposes of Mood markers : the particles *să* for the subjunctive and *a* for the infinitive. In her definition of the skeleton of the Romanian clause Mood is the highest node all the verbs move to in overt syntax. Such a configuration can account for what has been treated as the "double" status of *să*: when the head of the CP projection is filled, *să* is a mere M marker, part of the functional domain. When both the head and the Spec of the CP projection are empty, the CP projection is also empty (Speas 1993) and hence *să* will automatically be treated as a subordinating element in the syntax[121] Rivero (1994) proposes that when C is empty, *să* raises to it, hence its "mixed" properties. I do not think *să* raises to C because it has no feature to check in this position. A MoodP is like a full clause (CP) which lacks a complementizer layer (Rizzi 1994) which means that it has no

[121] The idea that there are finite clauses which are not introduced by a phonologically overt complementizer is not new. Pesetsky (1994) proposes, in accordance with his "zero syntax", that these clauses are actually introduced by a phonologically null (a "zero") complementizer.

"operators".It will be dependent on other elements in this respect, as will be shown in the present analysis. But whether we adopt Rivero's view or the one I have advanced, the status of *să* will remain that of a functional element which heads a functional projection: MoodP.

If this hypothesis is correct, and I believe it is, the status of Romanian subjunctive clauses will be that of MoodP (Modal Phrase).[122,123] What we have to decide on next is whether the configuration *a putea* + MoodP is a complex predicate or a biclausal one.

The answer depends, on the one hand, on the status of the MoodP clause (is it a full clause? is it a "truncated" clause?) and on the syntactic features evinced by the configuration on the other hand (does it allow clitic climbing to the functional projection of the modal? does negation attach to the modal only? can the verb in the embedded clause passivize and the configuration still preserve its meaning?).

The clitic does not move to the functional projection of the modal. Clitic climbing to the matrix is actually blocked:

(103) * *Maria* o_i *poate să citească* t_i.
Maria it-Acc. can-3rd pers.sg. *să* read-3rd pers.sg.

Clitics need a host and they attach to the first available functional domain. MP has its own functional domain. It only lacks a complemetizer domain. The clitic (which starts as an argument of the embedded verb will attach to the raised verb in Agrs (as in 103) resulting in the grammatical sentence (104):

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[122] Cornilescu (1997) assumes that the Romanian finite/non-finite sentences are uniformly (at least) a MoodP.

[123] Assuming this position for *să* does not mean assuming the clausal structure entirely as proposed by Rivero (1994). For example, Rivero's MP is Mood2P in the present analysis, as I assume that the Romanian sentence, just like the English one, has two Mood projections.

dependent on the modal) and by the nature of *a putea* (which has a defective structure: it does not have an external argument, so it might be the case that it can only form a semantic predicate, but not a syntactic one).

It may also be the case that epistemic *a putea* followed by a BI is a VP complex from a syntactic point of view (it allows clitic climbing, negation can only attach to the modal, etc.) but semantically, it does not seem to behave like one: the BI is temporally independent to a certain extent and its argument structure has not merged with the argument structure of the latter. Notice also that epistemic *a putea* (unlike ability *a putea*) can take both SLPs (87) and ILPs (86) without any change of meaning:

(86) *În familia lor sînt slabi toți așa că fata lor poate fi și ea slabă.*
'They are all thin in their family so their daughter may be thin too.'

(87) *Ar putea veni mîine.*
'He might come tomorrow.'

4.4.2.5. Remarks on the ambiguity of the VP complex

How can we account for the fact that BIs can lead to different interpretations? I argued that in English the modal merges with the SC in the position where it surfaces and the different positions, triggered by the complexity of the SC, where it surfaced could account for its various interpretations. In Romanian, both deontic and epistemic modals are lexical verbs which occupy a position under VP. The true problem in this case is that the bare infinitive VP appears with the same morphological outfit in environments whose interpretation is different. One easy way out would be to say that the system of Romanian has morphological forms which are non-commital with respect to the configurations in which they occur. What we have to do is start from these forms and look for a wider context to decide on the relevant alternations. But that would be a far too vague explanation.[118] What we are faced with is the linguistic expression.

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[118] Pesetsky (1995) proposes that when the same phonological form is used in two senses, the more complex sense is contributed by the presence of a phonologically null morpheme.Extending this proposal to the Romanian bare infinitives, we could say that the bare infinitive which occurs in deontic configurations is used in a less complex sense (i), while the one which occurs in an epistemic configuration is used in a more complex sense which is due to a phonologically null morpheme,X as in (ii):

(i) [bare infinitive]

What about this linguistic expression makes us interpret it one way or another? Let us take an ambiguous sentence:

(88) *Ion poate alerga bine.*
'Ion can/may run well.'

(88) can be read either as "Ion can run well" or as "Ion may run well/it is possible that...". How can we account for that?

I think the answer lies in the derivational history of the sentence. In the deontic case, the complex VP has already been formed by Merge in the l-syntax, with the modal and the infinitive sharing the argument structure. *A putea* merges with the BI before they both merge with the subject DP. Recall the tree in (4), with V^0 (i.e. the modal) and the VP (the bare infinitive) being sisters to each other, c-commanded by the subject DP in SpecVP. In this case, the modal will not take scope over the subject. Recall that it was argued that the BI moves at LF next to a *putea* (a mere LF reflex of its l-syntax):

(89) *Acest copil [poate-vorbi] japoneza.*
'This child [can-speak] Japanese.'

Recall also that in this case, the subject may remain in situ. After *a putea* moves to check its [V] features, the subject will occupy a position between the modal and the BI.

In the epistemic configuration, the subject cannot occupy this position:

(90) ***** *Poate Ion veni în orice clipă.*
can-3rd pers.sg Ion come any minute

We would expect (88) to be grammatical if we assume the l-syntax in (42), where *a putea* c-commands the VP which contains the subject DP in its Spec position. If *a putea* moves to check its features, everything else could remain unmoved. Still, (90) is ungrammatical. On the other hand, the subject DP can occupy a postverbal position as in (91)-(92):

(91) *Pot dispărea toți cangurii.*
Can-3rd pers.pl. disappear all kangaroos-the
'All the kangaroos may disappear.'

(ii)[bare infinitive] X]

In minimalist terms, one could associate the phonologically null morpheme with an extra feature which has to be checked in an appropriate configuration.

(92) *L-ar putea vedea un vecin.*
him (Acc) have-conditional-3rd pers.can see a neighbor
'A neighbor might see him.'

It means that the BI moves overtly in this case, leaving the subject DP in situ. This explanation raises at least two questions. The first one concerns the definition of BIs: are they not unmoved VPs? It has already been argued that, when merging with ability *a putea*, a BI only moves covertly, to avoid double checking of features. Can we assume that a BI moves overtly in some cases and covertly in others?

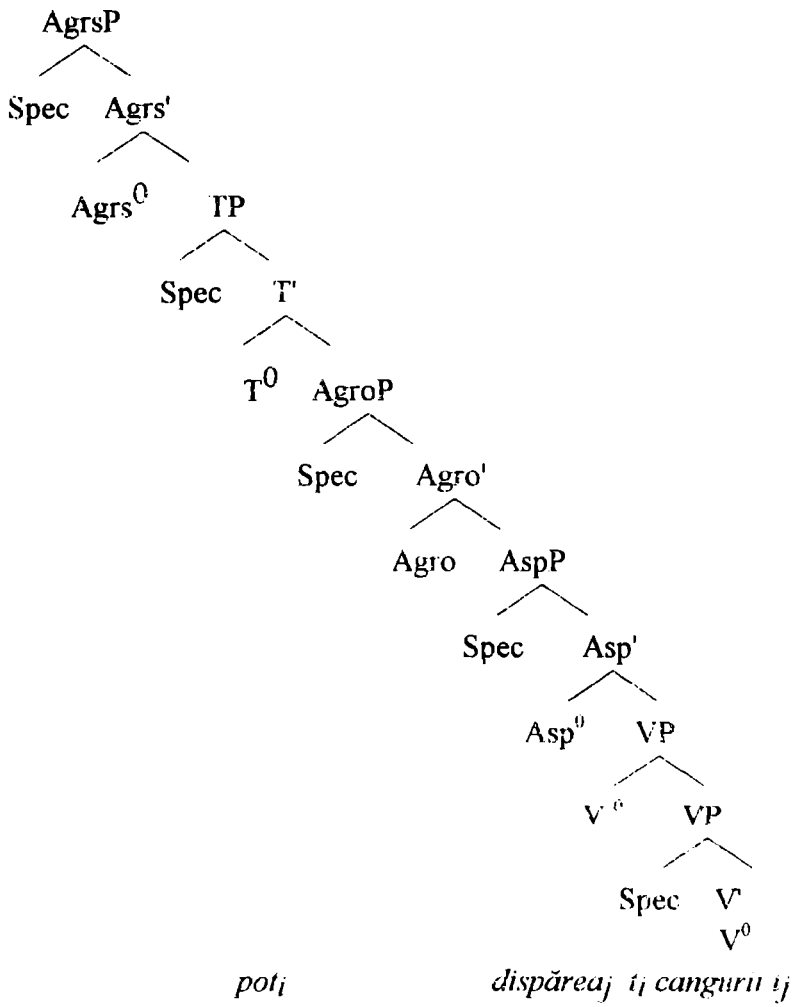
The second question follows from the first: if it is true that the BI moves, what morphological feature drives its movement and where is it checked?

Let us try to answer these two questions.

Recall that epistemic *a putea* can co-occur with both ILPs and SLPs. It can "evaluate" both events and properties. With ILPs the relation which obtains between ET and RT is one of inclusion (ET includes RT) while with SLPs RT is prior to ET. The relation ET-RT represents the aspectual value of the predicate. *A putea* cannot check both these features. Actually, it can only check the relation of inclusion. Recall that it is a state predicate and that statives denote a homogeneous situation which cannot be "sliced" into stages behaving, in this respect, like mass nouns (Mourrelatos 1986). Recall also that Kratzer (1989) defined states (associated with ILPs) as lacking an event variable. Her hypothesis has been criticized by advocates of the view that both ILPs and SLPs have an event variable. But I believe that the intuition behind her analysis is correct and that the hypothesis can still "hold". What we could say is that statives cannot break down their event variable into "pieces" of events: the moment they do, they recategorize as change of state predicates. Their event variable is associated with a strong Aspectual feature: [+continuous] [+homogeneous]. If the event variable is bound by a temporal aspectual form which has these features, the stative is not recategorized. If the temporal aspectual form does not evince these features the result is either ungrammatical or the interpretation will change because of the recategorization process: the stative will turn into a change of state predicate which can be "sliced" into bits of events. There are state predicates which are more "homogeneous" than others, to be tall, for instance. But other state predicates are less homogeneous, they denote "dispositional properties", they are quasi-generic, and, in appropriate contexts, they can recategorize. Going back to Kratzer's analysis we could say that ILPs (statives) lack a "sliceable" event argument.

If *a putea* can only check the "inclusion" value, i.e. the [+homogeneous] [+continuous] feature, when the BI evinces a different aspectual feature it has to be checked. [V] features are strong in Romanian, they have to be checked overtly. The BI moves to check it and the most probable landing site will be Asp[119]:

(93)



[119] Borer (1994) also proposes that aspectual properties of verbs should be represented as Aspect heads; Raposo and Uriagereka (1995) argue that the difference between SLPs and ILPs is not lexico-semantic: it can be encoded into the syntax through different mechanisms.

Just like with the English modals which occupy the head of the MoodP projection, the temporal interpretation of the configuration is distributed over *a putea* and the BI, overtly raised, over the subject DP, to Asp. This explanation does not contradict the definition of BIs given in (65). The bare infinitive moves overtly only to Asp, not to Tense or Agreement.

If this explanation is correct, we are led to the conclusion that overt/covert movement of the BI is responsible for the two possible interpretations we associate with this VP.

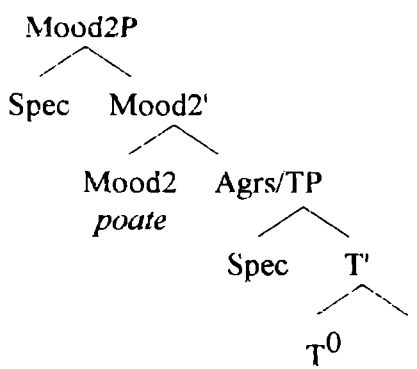
What has not been accounted for yet is why the BI which merges with ability *a putea* does not move. The explanation lies in the fact that the BI and *a putea* have the same aspectual value in this case, so *a putea* checks this feature when it moves overtly.

Evidence in favor of this difference regards, as has been shown, the possibility of placing the subject between the modal and the BI.

We should also expect a different LF structure in the case of epistemic *a putea*. Just like in the case of its deontic counterpart, the infinitival verb will move covertly to check its [V] features ; but the epistemic modal, unlike its deontic counterpart, will also move. It will move higher to take scope over the whole IP. One may advance the hypothesis that it actually moves to Mood2, yielding the same LF structure as in English, a result we did expect.

That would also account for the fact that in Romanian epistemic modals are incompatible with the gerund. Rivero (1994) claims that Mood2 hosts, among other morphological markers, *-ind*, the gerund marker in Romanian. Mood2 must remain empty until LF, to host the epistemic modal:

(94)



Epistemic a putea and passivization

Unlike the deontic configurations, those with epistemic *a putea* followed by a BI are compatible with passives :

(95) *Ion poate fi arestat în orice clipă.*
Ion may-3rd pers. sg.be arrested any minute
'Ion may be arrested any minute.'

(95) can be interpreted as the passive counterpart of (96):

(96) *Îl pot aresta pe Ion în orice clipă.*
îl (him) may-3rd pers.pl. arrest pe Ion any minute
'They may arrest Ion any minute.'

This proves once again that the epistemic modal and the infinitive VP do no have the same argument structure. The epistemic takes a proposition as an argument while *a aresta* ('to arrest') is a transitive verb: it can be passivized.

4.4.2.6. Preliminary conclusions

The definition of "complex VPs" assumed in the present analysis is mainly the one given in Rosen (1990). I have tried to point out the role of eventhood and argument structure in complex predicate formation, on the one hand, and clitic climbing, negation and clitic adverbs,on the other hand. Whereas I do believe that the former two play an important part in complex predicate formation cross-linguistically I also believe that the latter group of properties may be rather language specific than otherwise. Also, the two former play an important part in the semantic interpretation of the VP complex while the latter may be idiosyncratic and play an important part in the syntactic interpretation of the VP complex. That may lead to the following generalization regarding complex predicates:

(97) A predicate made up of two verbs (V1 and V2) is complex if:

(i) it is formed by the merger of two argument structures
(ii) it denotes one event across both verbs
(iii) it evinces certain syntactic properties, probably language specific, which differentiate it from non-complex predicates which form complex sentences.

So far, the definition mirrors Rosen's (1990) analysis.[120]

The analysis of the Romanian modal *a putea* followed by a BI leads to the following generalizations:

(98) (i) A complex predicate must contain at least one referentially dependent VP (V1 or V2)

(ii) some predicates may meet only one or two of the conditions in (97) .

I shall call those complex VPs which meet at least condition (iii) in (97) above syntactic VP complexes. If a VP does not meet condition (iii), but meets condition (i), (ii), or both (i) and (ii) it will be a semantic VP complex.

(iii) denoting one event across both verbs may mean either "sharing" the same event or "sharing" responsibilities : the matrix verb denotes the relation ST-RT whereas the embedded verb denotes the relation RT-ET. In the T-chain of the complex VP they occupy different positions. In the former case, the embedded verb is temporally "bound" to the modal, while in the latter case it is only temporally "anchored" along the T-chain.

Reformulating (ii) in (97) above as a condition on one single T-chain retains the correct intuition of "one single event structure" capturing, at the same time, the difference discussed above.

Starting from (95) and (96) I will try to provide a tentative definition of complex VPs which takes into account the fact that some complex VPs may meet all the syntactic requirements to be qualified as "complex" but semantically they may behave more like "biclausal" ones, probably a reflex (at least in Romanian) of the fact that they can also enter biclausal configurations (see the case of epistemic *a putea*, for example), or that some complex VPs may meet the semantic requirements but not the syntactic ones (see the case of *a putea* + MoodP). Obviously, there are complex VPs which meet both the syntactic and the semantic requirements (see ability *putea*).

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[120] Notice that I have left out the "light" verb part for reasons already discussed in this chapter

(99) A predicate made up of two verbs (V1 and V2) is syntactically complex if:

(i) either V1, V2 or both are referentially dependent
(ii) it evinces certain syntactic properties which simple predicates lack

(100) A predicate made up of two verbs (V1 and V2) is semantically complex if:

(i) its argument structure is the result of the merger of the argument structures of V1 and V2
(ii) it has one single T-chain.

4.4.3. A putea + subjunctive clauses

4.4.3.1. A few remarks on the status of SĂ

In this subsection I will examine the configurations in which *a putea* takes a *conjunctiv* complement,i.e. a clause introduced by *să*:

(101) *Maria poate să cînte la chitară.*
Maria can-3rd pers.sg. sa play-3rd pers.sg. at guitar
'Maria can play the guitar.'

As will be shown in the analysis, *a putea* has the same "core" properties; its behavior will be different because of the syntactic context in which it occurs: modal + *să* clause. One problem would be to decide on the status of this clause. The answer heavily relies on the status of *să*, which is rather ambiguous: it functions both as a subordinating conjunction which occupies the Complementizer position and as a morphological marker of the *conjunctiv*. Dobrovie-Sorin (1994) defines the categorical status of *să* as empirically undecidable. Farkas (1989) proposes quite an interesting solution, close to the one adopted by Dobrovie-Sorin (1994): *să* should be analyzed as leading "a double life", as it occupies the Complementizer position in the syntax and INFL in the morphology. Alexandru Grossu (personal communication) proposes that *să* should be treated as a mood marker; Romanian INFL should also have a node Mood, just as it has a node for Tense and for Agreement, with *să* as one of its realizations. This solution is also advanced by Rivero (1994). She argues that Albanian, Bulgarian, Modern Greek and Romanian share the basic skeleton in (102):

Sentences (80)- (83) cannot be interpreted as generic because of the [+punctual] aspectual feature of the verbs *a veni* (" to come"), *a pleca* ("to leave"), *a tuși* ("to cough") and *a sughița* ("to hiccup"). They could hardly be interpreted as denoting a property. One can also notice the fact that ability *a putea* cannot co-occur with predicates which do not involve an agentive subject, a protagonist who can "control" the state of affairs they denote. Consider also (84) in which this incompatibility is obvious. The modal cannot be interpreted as denoting ability.

(84) *Ion poate fi înalt.*
'Ion can/may be tall.'

The temporal interpretation of the configurations with epistemic *a putea* is different. Consider (85) below:

(85) *Poate veni poimîine.*
can-3rd pers.sg.come the day after tomorrow

The temporal interpretation of the BI and of the epistemic modal is not one of "simultaneity". The infinitive identifies either a state of affairs which might be seen as simultaneous with the one denoted by the modal (actually, the state of affairs denoted by the infinitive refers to a situation which encompasses the time interval denoted by the modal) or posterior to it. One can notice that the modal "evaluates" only "present" or "future" situations (with respect to its temporal interpretation), "hypothetical" or "unrealized" in Bresnan's terms,unlike the configurations in which the modal is followed by a subjunctive clause which may denote simultaneous, future or past situations or unlike the English epistemics[116]. This is due to the nature of the BI: it can only describe "hypothetical or unrealized" states of affairs, it cannot denote past situations. This property is associated with the Romanian aspectual system. Cornilescu (1997) convincingly demonstrates that in Romanian the aspect system

[116] Consider also a sentence like (i) below:
(i) Ieri putea veni azi iar azi poate veni de-abia miercuri.
yesterday could-3rd pers.sg. come today and today can-3rd pers.sg. come only Wednesday
It is obvious that the modal and the BI cannot be interpreted as "simultaneous".

distinguishes a non-perfect verb stem, which appears in the Prezent, Imperfect, Infinitive and Gerund, and a perfect verb stem which appears in the *Perfect Simplu*, *Mai Mult ca Perfect* and Past Participle [117] The infinitive is to be associated with a [- perfect] interpretation. The temporal interpretation of the configuration is determined by the [- perfect] nature of the VP it has merged with.

As can be noticed in (85), the BI can have a time adverbial which does not necessarily coincide with the time adverbial/temporal interpretation of the modal. Recall that in **3.3.5.5**. a new definition of time adverbs was suggested: time adverbs were defined as standing for the existential status of the sentence, i.e. for the relation ST-ET.

The degree of independence evinced by the BI in epistemic configurations can be explained by the modal operator-like behavior of epistemic modals which try to create possible alternatives to the real world (i.e. past, present or future alternatives).

The T-chain is weaker in this case as the infinitive VP seems to establish a temporal reference of its own (the theta-domain is also different from the theta-domain in the case of deontic configurations). Verb projections are T-marked. It seems that the more temporally dependent they are, the weaker their verbal features. This [+/- verb] squish of BIs is in accord/line with the Principle of Functional Determination of Categories (Gueron and Hoekstra, 1988) which states that in general a projection XP is construed as nominal or verbal (ultimately as argument or predicate) not solely on the basis of the categorial value of its head, but by its syntactic context.

The conclusion we can reach is that epistemic *a putea* followed by a BI is "a sort of raising verb" (Dobrovie-Sorin 1994) in the sense that it lacks an external argument (but ergatives also lack an external argument) which enters a complex VP. The complex VP configuration is imposed both by the nature of BIs (they lack a functional projection so they are referentially

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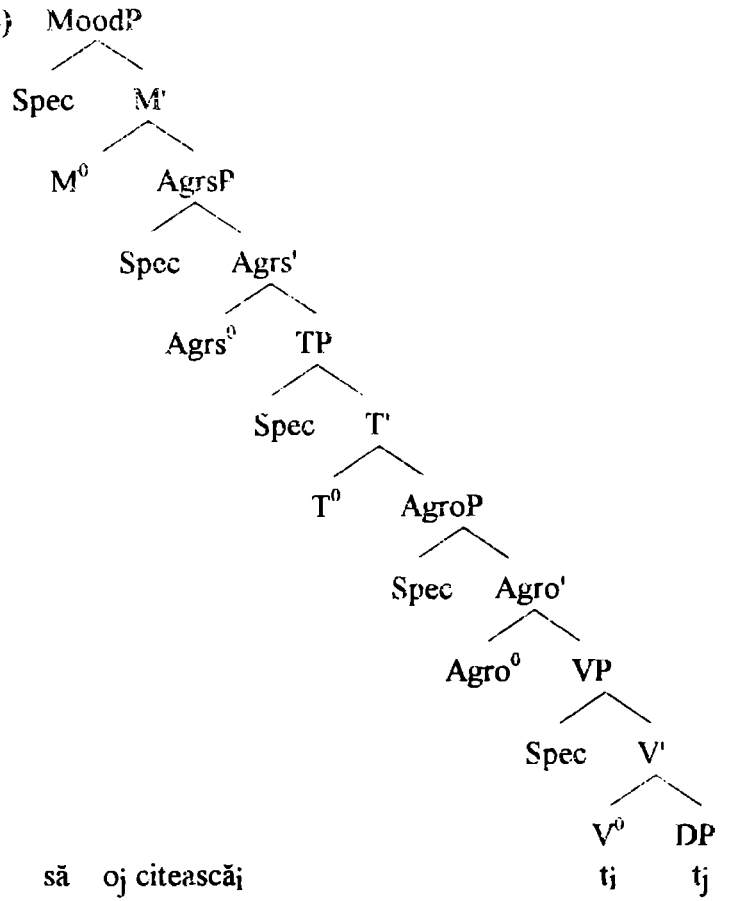
[117] The investigation of the finite and non-finite forms of the synthetic tenses and moods in Romanian reveals a systematic variation for verbs of the 3rd conjugation (Cornilescu 1997). For example, the examination of the paradigm of "a merge" (to go, to walk) can lead to the conclusion that there are two different stems in the paradigm of the verb: MERG, for [+continuous][-perfect] forms, such as the Present, (merge), Imperfect (mergea), Infinitive (a merge), Gerund (mergînd) and MERS for [-continuous] [+perfect] forms, such as the participle (mers) or "mai-mult-ca-perfect" (mersesem).

(104)



(105) *Maria poate să o citească.*
Maria can-3rd pers. sg. *să* it-Acc read
'Maria can read it.'

Clitic adverbs can attach both to a functional projection of the modal and to a functional projection of the verb in the embedded clause:

(106) *Mai poți să te duci și azi?*
still can-2nd pers.sg. *să* you (Acc) go-2nd pers.sg. and today
'Can you still go today?'

(107) *Poate să mai meargă și azi.*
Can-3rd pers.sg.*să* still go-3rd pers. and today
'He can still go today.'

Both the modal and the verb in the MoodP can be made negative:

(108) **a**.*NU pot să nu merg.*
not can-1st pers.sg. *să* not go-1st pers.sg.
'I cannot not go.'
b. *Nu pot să merg.*
Not can-1st pers.sg.*să* go-1st pers.sg.
'I cannot go.'
c. *Pot să nu merg.*
Can-1st pers.sg. *să* not go-1st pers.sg.
'I can not go.'

The configuration does not evince any of the syntactic properties associated with a VP complex in the previous section. Actually this is something we did expect: the Mood Phrase is a clause with functional projections of its own. This is a clear proof that VP complex formation does not necessarily depend on some special properties of the modal ; it may be triggered by the properties evinced by the complement. *A putea* is the same lexical verb (transitive or unaccusative) but this time its complement is a MoodP, not a VP. Whether the configuration is a VP complex or not does not depend on the modal (or at least not only on it).

4.4.3.2.Some Tristram Shandian remarks on the status of MoodP

In what follows I will briefly discuss the status of Romanian MoodPs.

There is a hidden assumption in the GB literature that all finite complement clauses (with the exception of questions), whether headed by "that" or not, are of category CP. This assumption has been questioned on the grounds that if there is no overt element to head CP then there cannot be a complementizer projection and we have to accept that some finite clauses are IPs.

I believe that operator nodes (topic, focus, etc.), which are often an abstract semantic matrix, do not have to be filled, i.e I propose that operator projections are not subject to the Principle of Economy.

Recall that the Principle of Economy (Speas 1993) states that a projection XP can only be projected if it has content, with content defined as either a distinct phonological matrix or a distinct semantic matrix. The nodes in the complementizer layer have properties which make them

different from the ones in the functional layer. One of these properties could be that a projection XP in the complementizer layer can project even when its content is "abstract", a semantic matrix, and when nothing moves to its Spec position to license the features in the "abstract" head. If the complementizer is in this layer this will also apply in its case. If its head is phonologically empty but semantically contentful, the projection can exist without violating the Principle of Economy. If this line of reasoning is correct, then we have evidence in favor of the hidden assumption mentioned above: all finite complement clauses are CPs, even when C^0 is phonologically empty. On the other hand, we also have evidence in favor of the view that such clauses may be different in a way from full lexical clauses : they do not have an operator domain of their own, so they "depend" on the operator domain of the upstairs clause.

Now, going back to the syntax of Romanian, we can find evidence that MoodPs behave like CPs. Consider the following two sentences:

(109) *Să facă scandal poate, dar să muncească nu prea.*
să make-3rd pers.sg. scandal can-3rd pers.sg., but...
'He can kick up a row but he cannot really work.'

(110) *E o prostie să facă scandal.*
Is a foolish thing *să* make scandal
'It is foolish to kick up a row.'

In (109) the MoodP has been topicalized and in (110) it functions as a subject. It is a well-known fact that only CPs can function as subject or topic, whereas IPs cannot. Once again, this will raise the problem of the status of *să*. Is it the element that "nominalizes" the sentence making of it an argument and behaving like a complementizer? I have already proposed that it occupies a position under Mood2, which rules out the possibility of *să* functioning as a complementizer. If we assume the line suggested above the answer will follow naturally:the complementizer node is phonologically empty. It may be the case that its features, [+finite] in this case, will be checked at LF.

That might lead to the conclusion that in Romanian MoodPs are "truncated" clauses, in the sense that they do not have an operator layer. When they behave like CPs, they are "nominalized" by a complementizer which is phonologicaliy null but semantically activated.

4.4.3.3.The temporal interpretation of Mood Phrases

A MoodP clause lacks a complementizer layer, which means that it does not have its own Tense operator. That can account for the fact that the temporal reference of subjunctive clauses has been generally analyzed as dependent on the tense of the main clause; the tense of the subjunctive clause has been treated as anaphoric, unlike the tense in the indicative which is deictic. This is a very general assumption which needs refining. I would like to suggest that the temporal specification of the subjunctive complement of deontic *a putea* is different from that of the subjunctive complement of epistemic *a putea* in the sense that the complement of the epistemic verb evinces, just like in the case of the BI, a greater degree of temporal independence. Consider the following sentences:

(111) *Maria poate să cînte la pian.*
Maria can-3rd pers.sg. *să* play 3rd pers.sg. at piano
'Maria can play the piano.'

(112) *Maria poate să cînte la pian mîine.*
Maria can-3rd pers.sg. *să* play 3rd pers.sg. at piano tomorrow
'Maria can play the piano tomorrow.'

(113) *Maria o să poată să cînte la pian la vară.*
Maria *o să* can-3rd pers.sg. *să* play 3rd pers.sg. at piano at summer
'Maria will be able to play the piano next summer.'

(114) *Maria o să poată să vină în orice clipă.*
Maria *o să* can-3rd pers.sg. *să* come-3rd pers.sg.
'Maria will be able to come any time.'

The tense of the embedded *conjunctiv* clauses can be interpreted in two ways: their tense can be bound to the tense of the higher clause or it can be free. In Enc's (1987) analysis, Tense is in INFL and the interval indicated by the tense index is seen as an argument of the verb. The interval needs a reference to another interval and C^0 (the T-operator in the model which I have used so far provides it. C^0 optionally has a temporal index and if it governs the functional layer, tense can be "anchored" (tense must be "anchored" within its governing category and ultimately linked to the time of speech).

But recall that subjunctive clauses have been analyzed as MoodPs. They do not have a CP to provide a temporal index (or, in our terms, a T-operator).

In (111) for example, the temporal interpretation of the MoodP is identical to that of the matrix *a putea* (which is in T), it is bound. They actually denote one single event. The modal is interpreted as expressing ability The ET of the modal and that of the infinitive verb is the same. Recall that with deontic modals, the head of the SC raises to the modal (which is in T) at LF and they are interpreted as a "complex". In this respect ability *a putea* followed by a MoodP is syntactically biclausal but, from the point of view of temporal interpretation, it behaves like a complex VP.

In the epistemic reading, the tense of the complement is not bound to the higher tense:

(115) *Maria poate să fi sosit deja.*
Maria may-3rd pers.sg. *să* be arrived already
Maria may have already arrived.

(116) *Maria poate să vină la anu'.*
Maria may-3rd pers.sg.*să* come-3rd pers.sg. at year-the
Maria may be coming next year.

(117) *Maria poate să fie în camera ei acum.*
Maria may-3rd pers.sg. *să* be-3rd pers.sg. in room-the her now
Maria may be in her room now.

The tense of the subjunctive clause is free in (115)-(117), in the sense that it does not have to be identical with the tense of the matrix clause. It is only anchored .The modal raises to Mood2, c-commanding the verb which raises to T. The temporal interpretation of the verb is thus "anchored" to the modal. We interpret subjunctive clauses as describing situations which are past, present or future relative to the ET of the modal, not (directly) to ST. The T-chain will consist, in this case, of the tense of the modal, the tense of the subjunctive and the verb in the embedded clause. It is only in this respect that we can assert that subjunctive clauses are dependent on the matrix for their temporal interpretation. The ET of the matrix replaces the Tense operator of indicative matrix clauses.

The conclusion we have arrived at is that it seems plausible to assume that deontic *a putea* "binds" the temporal interpretation of the subjunctive clause, while epistemic *a putea* "anchors" it. We have the same configuration (*a putea* + MoodP); nevertheless, we assign two different temporal interpretations to it : temporally bound vs temporally anchored to the matrix.

In deontic configurations, the matrix and the clause share both the subject and the tense. In epistemic configurations, the matrix has no control whatsoever over the subject of the complement, whose tense is only "anchored" to its ET. Such empirical data may provide additional support to the view that T-domain and theta-domain, as well as T-marking and theta-marking are closely linked.

Recall that epistemic *a putea* +bare infinitive was treated like a VPcomplex from a syntactic point of view but not semantically. Deontic *a putea* + MoodP represents one more instance of discrepancy between syntactic and semantic complex predicates. Syntactically, it behaves like a biclausal structure,but semantically, the temporal interpretation of the MoodP is bound to the matrix in the way in which the temporal interpretation of the two verbs making up a complex VP is

A closer look at the argument structure in the deontic configuration shows that in this case the subject DP attracts two theta-features (the configuration is, in a certain way, a special type of control structure[124]) from the modal and from the embedded verb, but the two theta-features have to be at least "compatible" if not identical.[125] Just like in the case of the VP complex, *a putea*, in its ability meaning has a generic flavor and, in this case, it can only co-occur with certain classes of predicates which are associated with certain argument structures.

4.4.4.Permission a putea

4.4.4.1. The problem

It has generally been assumed in the literature that deontic modals are associated with ability, permission, obligation. Hence, modals expressing permission and ability have often been treated together as

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[124] Manzini and Rousson (1997) propose a minimalist theory of control within which control is defined as the case in which the same DP attracts more than one theta-feature (theta roles are conceived as features in their analysis).

[125] A number of technical details concerning the problem of control from a minimalist perspective remain to be clarified.

belonging to the same semantic and syntactic class: deontic modals which enter control configurations.

Such an analysis cannot account for all the differences (both semantic and syntactic) between "ability" and "permission" deontics.

In the analysis I have proposed for the English modals it was argued that ability *can* and permission *can* actually occupy different positions in the structure, positions determined by the scope which they take over the small clause with which they merge. But the English modals are analyzed as functional categories and hence they can occupy positions in the functional domain in the overt structure. The Romanian modals are full lexical verbs, they occupy a position under VP. It means that ability *a putea* and permission *a putea* occupy the same position. How can we account then for the difference between permission and ability *a putea*, on the one hand, and between permission and possibility *a putea* on the other hand?

4.4.4.2. Permission a putea and control.

In what follows I will try to point out that permission *a putea* does not behave like ability *a putea* (contra the general analysis which treats permission and ability modals as evincing similar properties) and that it is not a verb of control (contra the view that deontic modals are syntactically associated with control structures).

The most important differences between ability and permission *a putea* fall within the domain of argument structure and "embedded" predicate selection as well as within the domain of temporal interpretation. The property of ability modals of assigning an external theta-role (or at least an "adjunct theta role") has already been discussed both in this chapter and in the previous one. The property associated with this theta-role is that of prototypical agent that is interpreted, ontologically, as an individual (in the sense of Carlson 1977).

Permission *a putea* does not assign an agent theta-role.

The state of affairs described by the complement is (almost always) posterior to the ET of the modal. The modal is associated with ST, it is part of the discourse in almost the same way as the epistemics. It does not describe a state of affairs, like ability *a putea*, but it tries to create a state of affairs.

The examination of time adverbs within permission *a putea* configurations will point out an important difference between permission

and ability structures : within the latter, the adverb takes scope over both the modal and its complement while within the former the adverbial takes scope only over the complement. Time adverbs take scope over the whole sentence, the position they occupy does not affect interpretation. If *a putea* is followed by a MoodP, the problem is easy to solve: the complement is a clause, the time adverb takes scope over the clause. But the same interpretation obtains when *a putea* is followed by a BI.

Now if we treat *a putea* as a state predicate and assume Kratzer's (1989) distinction between SLPs and ILPs,that would translate into saying that when the time adverbial takes scope over both the modal and the embedded predicate the two form a semantic complex with one single T-chain which binds one event variable whereas when the time adverbial takes scope only over the complement, *a putea*, for reasons discussed earlier in this chapter, cannot have its event variable "sliced". Its event variable cannot be bound by tense in combination with time adverbs unless they are compatible with its [+homogeneous] [+continuous] value. Thematic roles could be treated, following Parsons (1990), as functions from events to their participants. If *a putea* does not have its event variable bound it means it cannot describe an event and hence there are no "participants", no theta-roles. The modal cannot assign theta-roles. It subcategorizes for a complement (a VP or a MoodP) which is a proposition, behaving in this respect like epistemics. The subject of the sentence is assigned a theta-role by the embedded verb, not by the modal. Semantically, permission *a putea* behaves more like an epistemic than like its ability counterpart: it does not take an external argument and its internal argument is a proposition.

That will lead to the obvious conclusion that permission *a putea* cannot possibly be a verb of control: it does not have an external argument that could control the subject of the complement. The same conclusion is reached if we adopt Manzini and Roussou's (1997) theory of control within a minimalist framework. They define control as the special case in which the same DP attracts more than one theta-feature, i.e. more than one theta-roles In the case of permission *a putea*, there is one single theta-role the subject DP can receive, i.e. the one assigned by the verb in the complement. Such an argument structure is identical to the one of epistemics.

Once again the mapping deontic-control has been proved to be too over-generalizing. Permission *a putea* has a different argument structure from ability *a putea* and it is not a verb of control.

4.4.4.3. Time adverbs

Evidence in favor of the view that with permission *a putea* the time adverb binds only the event variable of the verb in the complement comes from word order.

Word order in Romanian is not very strict,and time adverbials may occupy various positions in a sentence. Still, one can notice that in permission *a putea* configurations it is rather odd to place the time adverb in sentence initial position or between the modal and the complement:

(118) **a.** *??Imediat poți pleca/să pleci.*
immediately can-2nd pers.sg.leave./*să* leave-2nd pers.sg.
b. *?? Mîine poți veni/să vii.*
tomorrow can-2nd pers.sg.come/*să* come-2nd pers.sg.

(119) **a.** *?? Poți mîine să vii/veni.*
can-2nd pers.sg. tomorrow *să* come-2nd pers.sg./come

b. *?? Poți imediat să pleci/pleca.*
can-2nd pers.sg. immediately leave/*să* leave-2nd pers.sg.

The only acceptable position is after the embedded verb:

(120) **a.** *Poți pleca imediat.*
can-2nd pers.sg.leave immediately
b. *Poți veni mîine.*
can-2nd pers.sg.come tomorrow

The adverbial must occupy this position.[126] It might be the case that word order reflects the derivational history of the configuration (the modal merges with the complement which already contains the time adverb ;moving of the adverb would not be justified, we have seen that time adverbs can occupy various positions in Romanian, which means that

[126] This position may actually be the base position. Parsons (1990) or Rothstein (1995) argue that time adverbs are base generated within the VP. Alexiadou (1990) also suggests that time adverbs are like DPs in many respects (they are referential expressions) and as such they have a thematic role. VP being the domain of theta-role assignment within a minimalist model, she reaches the conclusion that time adverbs merge to the VP and then move to SpecTP for licensing.

they only check their features -if they do- only at LF). I will leave this question open for further research. What is important is that the adverb is base generated or, in minimalist terms, merged within the complement of the modal, be it a MoodP or a VP.

The brief analysis of permission *a putea* has pointed out that it actually behaves like epistemics: it does not have an external argument and it takes a proposition as argument.

One should also remark that permission *a putea* does not take a CP complement. Sentences like (123) below are ungrammatical:

(123) *Poţi ca să pleci dacă vrei.
can-2nd pers.sg *ca să* leave-2nd pers.sg. if want-2nd pers.sg.

It may be the case that unaccusatives (which are defective verbs in a way) cannot take a fully referential clause as a complement. As will be shown in **4.4.5.2.**, epistemic *a putea* loses its [V] features when merging with a CP.

4.4.5. A putea + CP

4.4.5.1. Deontic a putea +CP

Sentences (33) and (34) are clear examples of *a putea* followed by a CP. One can notice that the only reading we can associate with this configuration is the "ability" one. Such sentences are very rare in contemporary Romanian. (34) is only encountered in colloquial speech (*de* can introduce the arguments of other verbs as well) while (33) is considered substandard by many people.

Still, they are relevant for the behavior of *a putea*. A CP has the distribution of a *DP*, i.e. it can be an argument. If "ability" *a putea* can be followed by a CP (which is not an adverbial in spite of the "purpose" or "result" flavor of the complementizers *ca* and *de*)[127] the only conclusion we can reach is that it can take arguments, more precisely that it can take a direct object. In this respect, ability *a putea* behaves like a transitive verb which subcategories for a DP (as can be seen in (35)) or a CP

[127] It would be interesting to find out if there is any link between the semantics of *a putea* and that of the two complementizers CA and DE. Note the difference in meaning between the clause introduced by CA, which has a causal, generic flavor and the clause introduced by DE, which may be said to have a "stage", iterative reading.

argument, a direct object. A CP is a full clause, so one cannot doubt the lexical status of the modal which does not form a VP complex with the embedded clause. It maps into a complete clause and takes a CP as its complement. Sentence (35) provides the strongest argument that *a putea* is a case-assigner: it takes a DP argument to which it assigns case though no theta-role. The fact that "ability" *a putea*, i.e. a deontic modal, behaves like a transitive verb is something we expected. It has been argued in the literature that deontics in general enter transitive configurations and Romanian linguists have argued that *a putea* is a transitive verb.

I think it is worth pausing now to draw the obvious conclusion: *a putea* in its ability reading behaves like a transitive verb in all the configurations which it can enter:

a putea + DP
a putea + MoodP
a putea + CP

Recall that the BI is referentially defective, it has no functional projection to "identify" it as a verb. Recall also that a projection XP is construed as nominal or verbal (ultimately as argument or predicate) both on the basis of its categorial value and by its syntactic context. One could analyze the BI which merges with ability *a putea* as an argument of the modal. *A putea* (in its ability reading) is a transitive verb.

4.4.5.2. Epistemic a putea + CP

Epistemic *a putea* can also take a clausal complement, introduced by *că*, as in (124):

(124) *Acea vreme poate că nu e prea departe.*
that moment can-3rd pers.sg.*că* not is too far away
"That moment may not be too far away."

In this configuration, the verb *a putea* behaves differently from the configurations in which it is followed by a VP or by a MoodP. It does not agree with the subject. Consider the following examples:

(125) *Eu poate că te-am dezamăgit.*
I can-3rd pers.sg.ca you-Acc have-1st pers.sg. disappointed
'I may have disappointed you.'

(126) *Voi poate că veți veni la timp.*
You-pl can-3rd pers.sg. ca will-2nd pers.pl.come in time
'You may be coming in time.'

As I have already pointed out, epistemic modals behave like sentence operators; they are, in this respect, more "abstract" than their deontic counterparts. In the configurations presented above, *a putea* no longer behaves like a lexical verb but it has acquired the features of a sentence adverbial: it cannot take any tense, it does not have any phi-features, it does not assign any theta role. This conclusion is in accord with traditional studies (Gramatica Academiei), which treat *poate* as a "predicative adverb". It can only select a CP complement. The complementizer head may be empty without any change of grammaticality or meaning.

(127) *Voi poate ϕ veniți la timp.*
you can-3rd pers.sg.0 come-2nd pers.pl. in time

At LF it will raise to Spec Mood2 to get its aspectual features licensed (Alexiadou 1990) and to take scope over its complement.

One could speculate and advance the idea that epistemic *a putea* lost its [V] features during the process of meaning extension. The only [+V] feature which it has retained and which is not a regular feature of adverbs is its ability to take a complement. Its behavior is not isolated in Romanian, which has a class of adverbs which subcategorize for full clauses which they "modify".

Epistemic *a putea* behaves like an unaccusative when its complement is a VP or a MoodP. When co-occuring with a CP it behaves like a Mood Adverb which acts as a sentence modifier.

4.4.6.Conclusions so far

The descriptive analysis of the configurations with *a putea* leads to the following conclusions:

A. Regarding the properties of the analyzed modal:
(i) *a putea* can enter the following configurations:
1. *a putea* + VP (bare infinitive)

They form a VP complex. The modal is forced, by the syntactic environment (actually by the nature of the BI), to behave like a "light" verb. Its l-syntax for the "deontic" and "epistemic" readings qualifies it as a transitive and as an unaccusative forced to enter a complex predicate structure.

2. *a putea* + MoodPhrase

They form a biclausal structure (with the MoodP dependent on the operator layer of the matrix)

3. *a putea* + complementizer phrase

They form a biclausal structure (with two full clauses).

A putea is a lexical verb which enters the following types of configurations:

(i) transitive
(ii) unaccusative
(iii) a VP complex

A putea merges with clauses whose complexity varies (from VP to CP).The complexity of the clause does not affect the various contextual readings of the modal (as in English) but it affects the status of the configuration : a syntactic /semantic VP complex or a biclausal structure.

B. From a theoretical point of view, the analysis has proved once again that the mapping deontic meaning - control structure and epistemic meaning - raising structure is overgeneralizing and that it does not work.

Permission and ability modals have been shown not to fall into the same class, either syntactically or semantically. Permission modals are best analyzed on a par with epistemics.

Hopefully, the analysis is an argument in favor of the necessity of operating a distinction between syntactic complex predicates and semantic complex predicates.

The examination of the configurations modal+VP/MoodP/CP has also revealed the importance of argument structure and T-chain for the referential independence of a clause. CPs have their own argument structure, they have their own tense and their own T-operator (i.e. a complete T-chain): they are fully referential, they behave like DPs. MPs have their own argument structure, they have their own tense but they lack a T-operator . They behave

more like pronouns : they can be either "bound" or "free" (with respect to the operator domain of a matrix clause). Bare infinitives do not have their own argument structure (they share it with a VP which has a functional projection), they do not have their own tense or T-operator. They behave more like anaphors (sometimes like *se* sometimes like *self*).

4.5. A TREBUI

4.5.1. The most "unstable" of them all!

In modern Romanian, the verb *a trebui* ('must, 'to need, 'it is necessary') has often been analyzed as the most "abstract" of the Romanian modals (Constantinescu 1970) or as one of the verbs with two parallel paradigms (at least for the present of the indicative): a [+agreement] and a [-agreement] one (Pană-Dindelegan 1987, Drașoveanu 1997).

Its very etymology places *a trebui* at the crossroads of concrete and astract meanings as well as at the crossroads of "personal" and "impersonal" use. *A trebui* ('must') is derived from the Old Slavic *trebovati*, which expressed mainly deontic modality ('to need', 'to make use of', 'to make a sacrifice') and which could be used both transitively and intransitively, with a [+agreement] paradigm, and *trebe*, its frozen locative singular, which was used as an impersonal verb. The stem of the *Prezent* (Present) form of *a trebui* has been analyzed as derived from *trebuje*, the 3rd pers sg. of *trebovati* (Lombard apud Constantinescu 1970). In the beginning, *a trebui* ('must') was used as an impersonal verb. Gradually, it began to agree with the grammatical subject of the sentence[128] which finally resulted in the existence of two parallel paradigms: [+agreement] and [-agreement] which seem to be associated with certain contextual meanings or with certain configurations (Pană-Dindelegan 1987):

A. The [+agreement] paradigm was mainly used in those configurations in which *a trebui* is followed by a participle with passive meaning (as in (128) - (130)) and when *a trebui* takes a Dative Indirect Object (as in 131 or 132):

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[128] Iordan (apud Guțu-Romalo 1956) argues that *a trebui* began to behave like a personal verb under the influence of foreign structures, especially from German. Agreement by proximity could also represent a plausible cause of this shift from "impersonal" to "personal" inflection.

(128) *Şi trebuiesc luptate războaiele aprinse.*
and must-3rd pers.pl.fought-fem.pl. wars-the
'And one must fight the cruel wars.'

(129) *Ele trebuiesc trezite.*
they must-3rd pers.pl. woken-fem.pl.up
'They must be woken up.'

(130) *Cartea trebuieşte cumpărată.*
book-the must-3rd pers.sg.bought-fem.sg.
"The book must be bought."

(131) *...formularele ce-ţi trebuiesc pentru asta.*
... forms-the what-you(Dative) need-3rd pers.pl. for this
'...the forms you need for this.'

(132) *...merindele care le trebuiesc pentru drum.*
food-pl.-the which they (Dative) need-3rd pers.pl. for trip
'...the food they need for the trip.'

One can notice that the contextual meanings are quite concrete .*A trebui* denotes obligation/necessity in this case.

B. The [-agreement] paradigm (with *a trebui* having one single form : 3rd person singular) was associated both with the idea of obligation and with the idea of probability. It was mainly used in those configurations in which *a trebui* is followed by a *să* subjunctive clause (the Romanian "conjunctiv"):

(133) *Veţi afla ce trebuie să faceţi mai departe.*
will-2nd pers.pl. find out what must *să* do-2nd pers.pl. next
'You will find out what you must do next.'

(134) *Biata Venus trebuie să-şi fi avut chinul ei cu Adonis.*
poor-the Venus must *să* her (Dative)be had her suffering-the with Adonis
'Poor Venus must have suffered because of Adonis.'

One can notice a certain mapping between the meanings covered by *a trebui* in the [+agreement] paradigm and the old Slavic *trebovati* (meanings associated mainly with deontic modality) and the ones covered by *a trebui* in the [-agreement] paradigm and the frozen locative *trebe*

(both deontic and epistemic modality but, syntactically, *a trebui* behaves like a "frozen" form, in the sense that it does not agree with the subject of the sentence). It may be the case that deontic *a trebui* followed the pattern of *trebovati* while epistemic *a trebui* followed the pattern of *trebe*.

After 1940, one can notice the tendency to abandon the [+agreement] paradigm in all the contexts (Pană-Dindelegan 1987) The only configuration which seemed to resist this tendency was the one in which *a trebui* is followed by a passive participle. Constantinescu (1970) argues that this change was due, on the one hand, to the fact that the [-agreement] paradigm is "easier" and, on the other hand, to the fact that *a trebui* can express necessity in a stronger way than the imperative[129] The intransitive meanings also imposed a [-agreement] paradigm. The result of this change was that *a trebui* lost many of its contextual meanings and it was mainly used as a more "grammaticalized" means of expressing modality.

In modern Romanian *a trebui* is used both as a "personal" and as an "impersonal" verb. Normative grammar tries to impose the [-agreement] paradigm but it is a fact that both paradigms are in use.

(135) *Îmi trebuiau nişte creioane.* (Draşoveanu 1997)
me (Dative) needed-3rd pers.pl.some pencils
'I needed three pencils.'

(136) *Va trebui să admitem...*(Draşoveanu 1997)
will must *să* agree-1st.pers.pl.
'We'll have to agree...'

(137) *Rezultatele trebuiau verificate.* (Draşoveanu 1997)
results-the had-3rd pers.pl. checked
'The results had to be checked'

In the present analysis I will try to show that there is a link between the syntactic configuration in which the modal occurs, its meaning(s) and the [+/- agreement] feature.[130]

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[129] Recall that the English modals were also used to replace a mood, the subjunctive. It may be the case that modal verbs in several languages took over a certain mood, and thus they were (more or less) grammaticized.

[130] Deontic meanings seem to be associated mainly with [+agreement] whereas epistemic meanings with [-agreement].

4.5.2. The data

4.5.2.1 In modern Romanian, the verb *a trebui* ('must', 'to need/need') can enter the following configurations:[131]

(i) Deontic *a trebui* (when it expresses obligation or necessity; 'must', 'have to','need')

(138) *Trebuie să pleci imediat.*
must-2nd pers.sg.*să* leave-2nd pers.sg. immediately
'You must leave immediately.'

(139) *Trebuiau rezolvate toate problemele.*
must-past-3rd pers.pl.solved-fem.pl. all problems-the
'All the problems had to be solved.'

(140) *Trebuie acționat rapid.*
must-3rd pers.sg act rapidly
'One must act fast.'

(141) *Îmi trebuie o carte.*
me (Dative) need-3rd pers.sg.a book
'I need a book.'

(142) *Cărțile care-ți trebuiau pentru azi...*
books-the which you (Dative) needed-3rd pers.pl. for today
'The books which you needed for today...'

(ii) Epistemic *a trebui* (when it expresses probability):

(143) *La început gîndea că preoteasa trebuie să fi ocărînd pe Catinca.*
at beginning thought-3rd pers.sg. that the priest's wife must *să* be scold-*ind pe* Catinca
'In the beginning he thought that the priest's wife must have been scolding Catinca.'

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[131] I have not included in the analysis corpus the configuration *a trebui* + *a* infinitive which was used in the 19th c (even then only rarely) and which is no longer used in modern Romanian:

Pentru a judeca și a prețui meritul unui autor, trebuie a cunoaște timpul în care el a scris. (Guțu- Romalo 1956)

(144) *Trebuie să aibă vreo treizeci de ani.*
must-3rd pers.sg. *să* have-3rd pers.sg. around thirty years
'He must be around thirty.'

(145) *Trebuie să fi suferit mult din pricina lor.*
must-3rd pers.sg.*să* be suffered a lot of their cause
'He must have suffered a lot because of them.'

(146) *Trebuie că el singur a făcut lucrul ăsta.* (Constantinescu 1970)
must-3rd pers.sg. that he himself has done thing-the this
'He must have done it himself.'

One can notice that the only configuration which can be used with both readings, deontic and epistemic, is the one in which *a trebui* is followed by a *să* subjunctive clause. Even in this case, the deontic configuration is compatible only with the present form of the *conjunctiv*, whereas the epistemic one is compatible with the present (144) and the past (145) of the subjunctive as well as with the so-called *prezumtiv* (143). Otherwise, *a trebui* can be followed by a Complementizer Phrase only in its epistemic reading (146) and by a participle (139) or a *supin* (140) only in its deontic interpretation. It is also worth pointing out that it is only the deontic configuration which allows a DP as an argument of *a trebui* (141).

4.5.3. *[+agreement]/[-agreement]*

A closer look at the corpus provided by the literature (Guțu Romalo 1956, Constantinescu 1970, Pană-Dindelegan 1987, Drașoveanu 1997) reveals the fact that there is a clear tendency to use the [+agreement] paradigm with deontic *a trebui* and the [-agreement] paradigm with epistemic *a trebui*. The only configuration which is unstable in this respect is *a trebui* + *să subjunctive* (which, as we have already seen, can be interpreted both deontically and epistemically).

Consider sentences (141) and (142) above: *a trebui* "agrees" with the grammatical subject *cărțile* ('books') /*carte* ('book'). Sentence (141) would remain grammatical even if the subject were in the plural:

(141') *Îmi trebuie niște cărți.*
me (Dative) need-3rd pers.sg. some books
'I need some books.'

But, if we change the tense, the sentence seems ungrammatical when *a trebui* does not agree with the subject:

(141") ?? *Îmi trebuia niște cărți.*
me (Dative) needed-3rd pers.sg. some books

(142) would also be ungrammatical if the verb did not agree with the plural subject. While both paradigms ([+agreement]/[-agreement]) can be used[132] in the present, when we change the tense the [+agreement] paradigm seems to be the only choice.

When *a trebui* is followed by a participle (as in 137 or 139 above), the [+agreement] paradigm seems to be the most frequently used, regardless of the tense, though [-agreement] is used in the present. (139') below is ungrammatical, unlike (139"), with the verb in the present:

(139') ?? *Trebuia rezolvate toate problemele.*
must-past-3rd pers.sg.solved-fem.pl.all problems-the

(139") *Trebuie rezolvate toate problemele.*
must-3rd pers.sg. solved-fem.pl. all problems-the
"All the problems must be solved."

When *a trebui* is followed by a subjunctive clause, one can notice the tendency to use the [-agreement] paradigm only in the present (and even in this case it alternates with the [+agreement] one) but the [+agreement] paradigm everywhere else (especially with plural subjects). Consider the following sentences:

(147) **a**. *Cu lacrimi dar am trebuit să mă supun.* (Constantinescu)
with tears thus have-1st pers.sg. must-ed *să* me(Acc.) obey-1st pers.sg.
'Thus I had to obey, tears in my eyes.'
b. *Cu lacrimi dar a trebuit să mă supun.*
With tears thus has must-ed *să* me (Acc.) obey-1st pers.sg.

[132] It might be the case that the singular form *trebuie* is interpreted as being a plural form as well (Alexandra Cornilescu, p.c.)

(148) **a.** *În cele din urmă copiii trebuie să plece.*
in the end children-the must-3rd pers.sg. *să* leave-3rd pers.
'In the end, the children must leave.'
b. *În cele din urmă copiii trebuiră să plece.*
in the end chidren-the had-3rd pers.pl *să* leave-3rd pers.
'In the end, the children had to leave.'
c.?? *În cele din urmă copiii trebui să plece.*
in the end children-the had-3rd pers.sg.*să* leave-3rd pers.

When *a trebui* is used in its epistemic reading it never agrees with the subject of the sentence. Agreement leads to ungrammaticality:

(149) **a.** ?? *Voi trebuiți să fi suferit mult.*
you-pl must-2nd pers.pl.*să* be suffered a lot
b. ?? *Copiii trebuiesc să fi umblînd prin curte.*
children-the must-3rd pers.pl. *să* be walking in the yard

The conclusion we can reach is that *a trebui* does not agree with the subject of the sentence in its epistemic reading (or at least one can notice a strong tendency towards non-agreement). In its deontic readings, one can notice that some configurations are incompatible with the [-agreement] paradigm whereas others are unstable. Nevertheless, even in this case, there is a strong tendency towards the [+agreement] paradigm.

What could all that tell us about *a trebui*? Firstly, it has an "unstable" syntactic behavior with a "stable" tendency towards "grammaticalization" in its epistemic reading. In its deontic reading, the [+agreement] forms are preferred when the verb "describes" a state of affairs but when it is used with an "imperative" value (and hence it belongs to the discourse) the [-agreement] forms are frequently used. Compare (150) and (151) below:

(150) **a.** *Trebuie rezolvate problemele pînă mîine!*
must-3rd pers.sg.solved-fem.pl. problems-the till tomorrow
The problems must be solved by tomorrow!'
b. *Trebuie să plece imediat!*
must-3rd pers.sg. *să* leave-3rd pers. immediately
'He/They must leave immediately!.'

(151) **a**.*Trebuiau rezolvate problemele imediat.*
must-past-3rdpers pl.solved-fem.pl.problems-the immediately
'The problems had to be solved immediately.'
b.??*Trebuia rezolvate problemele imediat.*
must-past-3rd pers.sg.solved-fem.pl. problems-the immediately
c. *Trebuiau să plece imediat!*
must-past-3rd pers.pl. *să* leave-3rd pers.immediately
'They had to leave immediately.'
d.?? (Ei)*Trebuia să plece imediat!*
(They)must-past-3rd pers.sg. *să* leave-3rd pers.

Secondly, it seems that *a trebui* is perceived as a verb which takes a proposition as an internal argument, hence the tendency towards non-agreement in so many contexts. On the other hand, Romanian is a language with rich morphology and the rich morphological system seems to resist this tendency at least in those cases in which agreement is already overt in the sentence (as in the configuration with a "passive" participle).[133]

Constantinescu (1970) argues that *a trebui* has been an "abstract" verb since the very beginning, which might explain its tendency towards "grammaticalization".

One more fact which supports the hypothesis that *a trebui* develops towards a more abstract meaning is the "history" of its contextual values. In the beginning, *a trebui* was used mainly with "concrete" meanings.[134] It was only later that it was associated with the idea of probability. The configuration in which it is followed by a complementizer

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[133] Recall that in English the shift from a system with rich morphology to a system with poor morphology and from a morphological agreement system to a syntactic agreement system favored the creation of a new class, that of the modals.

[134] Constantinescu (1970) presents a very clear analysis of the meanings of *a trebui* . It could be interpreted as : "to ask for something" (i), "to use, to make use of" (ii), "to need" (transitive configuration) (iii), "to deserve" (iv), "to be necesary" (intransitive configuration) (v), "to have to" (vi), etc.:

(i) *Domnul mieu eşti tu,că bunătăţile mele nu trebueşti.* (Psaltirea Scheiană 1916)

(ii) *..şi aceia le va trebui spre alte lucruri reale.* (Carte românească de învăţătură 1646)

(iii) *Nu-mi trebuie fiamuri...* (19th c.)

(iv) *...tu şi cei de-o seamă cu tine ai trebui ucişi.* (19th c.)

(v) *Nu trebueşte sănătosului vraci, ce bolnavului.* (Coresi, Tetraevanghel, 1560-1561)

(vi) *În cele din urmă trebuiră să-l îngroape.* (19th c.)

clause (as in 146 above) is a "newcomer" in the language In this respect, *a trebui* resembles the English modals which developed from very concrete meanings, from configurations in which they could assign theta-roles, towards more abstract meanings and a more functional behavior. It might be the case that there is a tendency towards *a trebui* behaving like a functional category, on a par with the English modals; its extension of meaning may also represent an "extension" of the clause with which it merges: when it merges with a more "complex" clause, it may tend to occupy Mood2 overtly (hence the strong tendency towards the [-agreement] paradigm and the incompatibility with tenses . One can also notice that when merging with a CP *a trebui* behaves like *a putea* : it can only be used in the present. it does not agree with the subject, it selects a CP as a complement.

4.5.4. A trebui and temporal forms

One important difference between deontic and epistemic *a trebui* is linked to its compatibility/incompatibility with various temporal-aspectual forms. As already pointed out, *a trebui*, just like *a putea*, cannot take tenses freely in its epistemic reading. Actually, it can only be used in the present. Consider the following sentences:

(152) **a.** ?? *Va trebui să aibă vreo patruzeci de ani.*
will-3rd pers.sg.must *să* have-3rd pers. around forty of years
b. ?? *Trebuia să fi umblînd prin curte.*
must-past-3rd pers.sg. *să* be walking in the yard

Unlike epistemic *a trebui*, its deontic counterpart can be freely used with any temporal forms.

4.5.5. A trebui + participle-based small clause complements

4.5.5.1. Introductory remarks.

This section examines the structure of the type illustrated in (139) repeated under (153) for convenience:

(153) *Trebuiau rezolvate toate problemele.*
must-past 3rd pers.pl. solved-fem.pl.all-fem.pl. problems-the
'All the problems had to be solved '

The controversy surrounding the analysis of this structure has centered on whether the modal and the participle form a complex predicate or not. One of the main arguments in favor of the complex predicate analysis was the tendency of *a trebui* towards the [+agreement] paradigm (Guțu-Romalo 1956).

4.5.5.2. A possible analysis.

In what follows I will adopt this line though, as will be seen, the complex predicate evinces properties which distinguish it from restructuring structures in Romance. *A trebui* does not assign an external theta-role nor does the participle share its thematic structure with the modal. *A trebui* merges with a participle-based SC which is not assigned any theta-role. In this respect, it could be said to behave like copular verbs, i.e. ergatives which take a SC as their complement (Hoekstra and Mulder 1990). At first glance, the configuration *a trebui* + past participle seems syntactically similar to a construction of the type illustrated in (154):

(154) *Erau spălate mașinile.*
were washed-fem.pl.cars-the
'The cars were washed.'

The difference between the two configurations is linked to modality, aspect and temporal interpretation, i.e.to semantic facts.

An analysis of the configuration can only start from a close examination of the participle-based SC. It has been analyzed as an "elliptic" construction with a null *a fi* ('be'):

(155) *Trebuie [să fie] reparate mașinile.*
must-3rd pers.sg. [*să* be-3rd pers.] fixed-fem.pl.cars-the

If we adopt Starke's (1995) definition of SCs as structurally full clauses, headed by a null verbal predicate, we could say that in this particular case the null predicate is *a fi*. In this dissertation, SCs have been defined as "truncated clauses" within which a relation of predication obtains. Whether we adopt the former or the latter view, the participle construction which follows *a trebui* definitely falls into this class.

It is generally assumed in the literature (Contreras 1994 among others) that verbal SCs, unlike [-verbal] ones, have subjects.The subject of the

participle in (154) is *maşinile*. It can stay in post-participle position (DPs move covertly for case and agreement checking in Romanian) and the participle always agrees with it (gender and number agreement). The morphology of the configuration can certainly tell us something about its status. We have already pointed out, following the line of Cornilescu (1997), that the Romanian participle is associated with the features [-continuous] [+perfective]. We also know that verbs move overtly in Romanian to check their [+V] features. We have also seen that BIs, analyzed as [+continuous][-perfective] did not always have to move overtly: they can remain unmoved before Spell-Out. The participle comes from the lexicon with features which must be checked. These features cannot be checked under VP, they can only be checked in the Spec-head configuration of a functional projection. We could take this position to be Asp. That would mean that *a trebui* merges with a SC whose status is AspP, as shown in (156):

(156) *a trebui* [AspP]

Recall that the English modals which occupy a position under Mood also merge with an AspP. Romanian differs from English though . Notice all the cases in which the modal merges with what has been defined so far as an AspP configuration: the participle always agrees (in number and gender) with the DP. In this respect, it behaves like an adjective. Adjectival predicates have been analyzed as AgrsP (Moro 1994 among others). In this case, we could assume that *a trebui* merges with a SC whose status is AgrsP, as in (157):

(157) *a trebui* [AgrsP]

This approach could account for the checking of the phi-features of the participle.

The modal (at least with some speakers when it is in the present and probably with most speakers when used with other temporal forms) in its turn agrees with the DP, whether the latter remains in situ or moves to a pre-modal position. Verb agreement is always with the (syntactic) subject which means that the DP subject of the SC is actually the syntactic subject of the whole complex. Notice also that the subject DP cannot intervene between the modal and the participle (unlike the configuration in which *a fi* merges with an AgrsP):

(158) ?? *Trebuiesc maşinile reparate.*
must-3rd pers.pl. cars-the repaired-fem.pl.

The ungrammaticality in (158) points to the fact that if the subject DP moves out of its base position it will not land in the specifier of a functional projection of the SC.

How can we account for these empirical facts? I suggest that *a trebui* is more than a modal verb in this particular case. The participle-based SC behaves,in many respects, like an Adjectival Phrase (AP). APs, when used predicatively, merge with a copula or a copula-like verb. In this particular case, the copula is missing. *A trebui* takes over the syntactic function of the copula . It could be treated like a lexical verb with modal meaning which is "forced" to take over the syntactic function of the copula because of the SC with which it merges. The modal will perform a double function. This analysis can account for the agreement of *a trebui* with the DP and it will not clash with its syntactic status .that of an unaccusative verb.

A consequence of this analysis would be that sentences in which *a trebui* is followed by an AP should be grammatical:

(159) * *Trebuie frumoase maşinile.*
must-3rd pers.sg. beautiful-fem.pl.cars-the

Sentence (159) is definitely ungrammatical. *A trebui* can merge with a participle-based SC but not with APs. Which means that *a trebui* does not behave like copular *a fi* and APs do not behave like participle constructions. *A trebui* does take over the function of *a fi* but when it is part of a passive configuration[135] .

Consider the following sentences whose ungrammaticality proves that *a trebui* can only merge with a participle-based SC whose head is a verb which can be made passive:

(160) a. * *Trebuie plecat băiatul.*
must-3rd pers.sg. left-masc.sg. boy-the
b. * *Trebuie venită mama.*
must-3rd pers.sg.come-fem.sg. mother-the

[135] That also proves that passive and copular BE (in Romanian at least) should be treated as verbs with different features.

Both *a pleca* ('to leave') and *a veni* ('to come') can occur in configurations with *a fi* (161 a and b) but they are unergatives and are incompatible with the passive:

(161) **a**. *Băiatul e plecat.*
boy-the is left-mesc.sg.
'The boy is gone.'
b. *Mama e venită de mult.*
mother-the is come-fem.sg. of long
'Mother came a long time ago.'

That will also represent evidence that *a trebui* does not behave like raising verbs, whose complements can be adjective-based clauses[136]:

(162) *Băiatul pare inteligent.*
boy-the seems intelligent-mesc.sg.
'The boy seems intelligent.'

It actually behaves similarly to the lexical verb *a merita* ("to be worth")

(163) **a.** *Merită văzută piesa asta.*
is worth seen-fem.sg. play-the this
'This play is worth seeing.'
b. *Cărțile astea meritau citite.*
books-the these were worth read-fem.pl.
'These books were worth reading.'

Now, returning to the very question, we could say that *a trebui* and the AgrsP form a syntactic complex.

One more argument in favor of this analysis comes from the domain of negation: negation can only attach to the modal, rendering the whole sentence negative (as in 164) ;the SC cannot be made negative (as in 165):

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[136] The difference between the two configurations can be correlated with the different aspectual properties of adjectives and participles: while (most) adjectives denote individual-level properties, participles denote stage-level properties.

(164) *Nu trebuie(sc) reparate maşinile .*
not must-3rd pers.sg./pl. fixed-fem.pl. cars-the
'The cars do not need to be fixed.'

(165) **Trebuie(sc) nu reparate maşinile.*
must-3rd pers.sg./pl. not fixed-fem.pl.cars-the

The ungrammaticality of (165) supports the view advanced in Zanuttini (1996) that negation in Romance languages and English is parasitic on Tense, i.e. NegP can be generated in the structure only when TP is licensed. An Asp projection does not license Tense and hence the absence of a tense projection will block the generation of NegP.

Summarizing the analysis, we can say that *a trebui* merges with a participle-based SC, whose status is that of an AgrsP[137] ; the result is a complex predicate[138] in which *a trebui* selects a proposition as its complement. The modal takes over the syntactic function of a missing element: *a fi* in passive constructions.

There is one empirical fact which has not been tackled yet: the fact that there are cases in which the modal may not agree with the DP (when in the present tense). Sentences (166a -166b) are grammatical:

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[137] For a more detailed discussion on the analysis of participial clauses in the literature as well as for an analysis of the participle clause which merges with 'a avea' and 'a fi' see Chapter 2.

[138] Recall that it has been suggested that this is a special complex predicate: it is monoclausal but some functional projections are projected both higher than and under the "main" verb. On the other hand, *a trebui* + past participle evinces some properties of monoclausal structures: adverbs cannot modify only the matrix verb (i)-(ii) nor can the same adverb co-occur twice (iii) (Cinque 1997):

(i) *Mîine trebuie reparate maşinile.*
tomorrow must fixed-fem.pl. cars-the
'The cars must be fixed tomorrow.'

(ii) **Azi trebuie reparate mîine maşinile.*
Today must-3rd pers.pl. repaired-pl tomorrow cars-the

(iii)**Mai trebuie mai reparate maşinile*
Again must again repaired-pl cars+the

Some transperancy effects (Rizzi 1976) are allowed, as for example Long DP-Movement:

(iii)*Toate maşinile astea albastre trebuie reparate.*
all-fem.pl. cars-the these-fem.pl. blue-fem.pl. must fixed-fem.pl.
'All these blue cars must be fixed.'

(166) **a.** *Trebuie citite toate aceste cărți.*
must-3rd pers.sg. read-fem.pl.all-fem.pl. these-fem.pl.books
'All these books must be read.'
b. *Trebuie aduse mai multe scaune.*
must-3rd pers.sg. brought-fem.pl.more chairs
'One must bring some more chairs.'

But recall that it has already been suggested that *trebuie* is interpreted as both singular and plural. When the verb takes any other temporal-aspectual form agreement is obligatory so we do not expect *a trebui* to be syntactically different when it occurs in the same configuration but has different temporal-aspectual forms. Semantically, it is a deontic modal but syntactically it behaves like a light verb.

4.5.6. A trebui and supine -based small clauses

The Romanian supine has been defined as a mood form which has a double nature: verbal and nominal (*Gramatica Academiei* 1963). In this respect it resembles the long infinitive, which should not be surprising: the Latin supine was a verbal noun and it was gradually replaced by the infinitive. Romanian seems to be the only Romance language which preserved the Latin supine (Dumitrescu et al. 1978).

Its phonological form is identical to that of the (past) participle. The main difference between the two lies in the fact that the supine cannot carry any agreement markers. Quite often it is preceded by a preposition[139], as in (167) below:

(167) **a.** *cal de furat*
horse of steal-supine
'stolen horse'
b. *fier de călcat*
iron of press/iron-supine
'iron'
c. *era la spălat*
was at wash-supine
'was in the laundry'

[139] The preposition which precedes the supine form of the verb is a proof of its nominal nature.

A trebui can merge with a verb in the supine mood ; as can be seen in (168) the supine is not introduced by any (overt) preposition in this case:

(168) **a**.*Trebuie mers la primărie.*
must-3rd pers.sg. go-supine at townhall
'One must go to the townhall.'
b. *Trebuie vorbit cu profesorul.*
must-3rd pers.sg. speak-supine with teacher-the
'One must speak to the teacher.'

The supine is, in this case, [-tense] and [-agreement] ; it does not denote an event, but rather the name of an event.

One fact which strikes us is that transitive verbs with a DP direct object are not allowed in this configuration:

(169) **a.**?? *Trebuie mîncat mere.*
must-3rd pers.sg. eaten apples
b.?? *Trebuie citit cărți.*
must-3rd pers.sg. read books

More exactly, we can say that Accusative objects are excluded. Dative objects (170a-b) or prepositional objects (168b), on the other hand, seem to be OK:

(170) **a**. *Trebuie spus lucrurilor pe nume.*
must-3rd pers.sg. said things-the-dative on name
b. *Trebuie explicat copiilor de ce ...*
must-3rd pers.sg.explained children-the-dative why...

Again, one can notice that the supine in (167a-c) evinces properties which differentiate it from the supine in the configurations with *a trebui*. When preceded by a preposition the supine can occupy positions which DPs can occupy:

(171) **a.** *De vorbit e ușor dar de scris e mai greu.*
de spoken is easy but *de* written is more difficult
b. *Are de scris zece scrisori.*
has *de* written ten letters

One can also notice that when preceded by a preposition, the supine verb can take an Accusative object.

The prepositional supine seems to resist modification by adverbs:

(172) *De vorbit ??blînd/ ?? cu blîndețe/?? imediat e ușor.*
de spoken kindly/with kindness/immediately is easy

When the prepositional supine modifies a NP, it cannot be modified by any adverb:

(173) **cal de furat pe furiș*
**fier de călcat ușor*
**mașină de spălat repede*

The non-prepositional supine, on the other hand, is compatible with adverbs:

(174) **a.** *Trebuie mers imediat la primărie.*
must-3rd pers.sg. gone immediately to townhall
b. *Trebuie vorbit politicos cu profesorii.*
must-3rd pers.sg. spoken politely with teachers-the

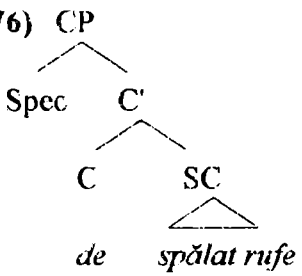
It seems that the double nature of the supine, verbal and nominal, is context sensitive; it is not the case that the supine is at once nominal and verbal. The Romanian participle can be nominalized just as some Romance infinitival constructions can. In Romanian, there are two available strategies of deriving deverbal nouns: starting from the long infinitive or from the participle. The participle acquires D features when preceded by a preposition or by a Determiner, i.e. when used in a DP context. Otherwise, it is verbal.

Let us return to the configuration in which *a trebui* merges with a past participle that cannot take agreement markers and which cannot assign Accusative. How can we account for this fact? If no Accusative DP is allowed there is one conclusion which immediately presents itself: the participle clause lacks a projection in which Accusative case can be checked. Let us say then that *a trebui* merges with an AspP ; the fact that Accusative objects are excluded may mean two things: (i) SpecAspP may not be a position to which the object DP can move to check its D features and to have its case licensed, i.e. SpecAspP is not an Accusative licensing

position in Romanian or (ii) that Accusative just like Nominative cannot be assigned in [-tense] contexts in Romanian[140]. This solution, however, raises another question: how can we explain the fact that prepositional supines can take Accusative objects:

(175) a. *maşină de tocat carne*
tool *de* minced meat
b. *maşină de spălat rufe*
machine *de* washed laundry

Let us suppose that the preposition *de* is the one which nominalizes the verbal structure (which it does) just like complementizers allow the clauses which they head to occupy DP positions. In this case, *de* could be said to behave like a complementizer which occupies the head position of CP:

(176)


The verb in the SC must move to AspP first to check its Asp feature and then to a Mood position, maybe the same position which other invariable mood forms occupy (Mood2P) and which might be responsible, in Romanian, for the finiteness feature of the clause. Within such a configuration, the DP object can move at LF to a position (possibly SpecAgroP) where it can check its case in a Spec-head relation with the copy of the verb which has moved higher[141].

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[140] The infinitive with *a*, which allows Nominative subjects, is a [+tense] projection.

[141] Consider the following substandard sentences which bring further support that the presence of the preposition correlates with the possibility of Accusative case licensing:

(i) *Trebuie de spălat vasele.*
must-3rd pers.sg de washed dishes-the

(ii) ⟵ *Trebuie de rezolvat problema.*
must-3rd pers.sg de solved problem-the

Such a view is not without consequences. Firstly, it implies that a (past) participle form can occupy two different positions : under Asp and under Mood2 (or, in Rizzi's terms, under Fin) and that the two configurations thus created evince different properties. Secondly, it means that what has been called "supine" is actually a participle which raises in the derivation to the borderline between the functional and the complementizer domains of the clause. The fact that the prepositional participle construction is assigned a CP status can account both for the fact that it can occupy DP positions and for the interpretation associated with such configurations when they are noun modifiers and when they perform a semantic function similar to that of a restrictive relative clause.

The behavior of the Romanian past participle does not seem to be singular. A look at the *-ind* form of verbs (the "gerund") will immediately point to a similar "double" position. Consider the following two sentences:

(177) **a.** *O fi dormind.*
o be sleep-*ind*
b.*Venind spre casă şi-a amintit că...*
come-*ind* towards house *şi* (reflexive) has remembered that.

In (177a) the *-ind* form occupies Asp whereas in (177b) it raises to Mood2 (the position Rivero 1994 or Cornilescu 1997 associate with the Romanian gerund).

Returning to the Romanian modals, the conclusion we have reached in this subsection with respect to *a trebui* is that it can merge with an AspP in the derivation. In this case negation can only attach to the modal which is the only element that can take tense. At first sight it might seem that *a trebui* behaves like the "perfect" *a avea* ('to have') (which also merges with an AspP). But recall that *a trebui* can take tense markers, it has tense features to check, unlike *a avea*, in *perfect compus* configurations which is associated, idealizing, with present tense only. That means that *a trebui* cannot possibly occupy the same position in the structure. As any lexical verb which takes tense it is inserted under VP

A second difference is that the "modal" configuration will allow some lexical elements to intervene between the "modal" and the verb which heads the SC (178 a-b) though not degree adverbs (178c), which are allowed in the periphrastic perfect:

(178) **a.** *Trebuie de asemenea mers la primărie.*
must-3rd pers.sg.also gone to townhall
b. *Trebuie neapărat vorbit cu profesorul.*
must-3rd pers.sg.by all means spoken with teacher-the
c. **Trebuie mai mers la primărie.*
must-3rd pers.sg. again gone to townhall

Also recall that there was no restriction with regard to the verb in the SC in the case of the periphrastic perfect with *a avea* (which could merge with SCs headed by either transitive or intransitive verbs). However, one can notice a similarity between the class of verbs (i.e. unergatives) which can head the SC that merges with *a fi* and the one which can head the SC which merges with *a trebui*. This might suggest that the two configurations could be analyzed in a similar way ;but, as we are going to see, this view is incorrect.

Another important property of the configuration with *a trebui* is that, unlike in the *a fi* structure, the subject of the embedded VP is never phonetically realized. It is assigned a theta-role by the embedded VP and it is interpreted as an arbitrary *pro* . Recall that the subject DP of the *a fi* configuration was analyzed as attracting two theta-features (**2.4.2 - 2.4.3**). *A trebui*, just like in the configuration in which it merges with AgrsP, is an unaccusative: it does not assign an external theta-role, the only theta-role the subject receives is from the verb in the SC, i.e the arbitrary *pro* attracts one single theta-feature:

(179 trebuie [vorbit *pro*/PRO cu profesorul]
must-3rd pers.sg. [spoken *pro*/PRO with teacher-the]

The configuration looks more like a raising structure than like a control one. This serves as one more proof that there is no one-to-one mapping between deontic meanings and control structures.

4.5.7. A trebui and subjunctive clauses

The configuration examined in this subsection can be read both deontically and epistemically. A sentence like (180) below is ambiguous between the two possible readings:

(180) *Trebuie să vină curînd.*
must-3rd pers.sg. *să* come-3rd pers. sg. soon
'He must come/be coming soon.'

The status of *să* clauses has already been discussed in **4.4.3.** The modal merges with a MoodP .The configuration does not evince any syntactic properties which can qualify it for the status of "syntactically complex."

In what follows I will try to show that the different contextual readings are actually read off straight from the syntactic configurations. The central claim will be that (180) can be the phonological outfit of two different configurations.

Recall that epistemic *a trebui* does not agree with the subject nor can it take tenses freely. It cannot assign any theta-role. It resembles the English epistemics in this respect. One way of accounting for these properties would be to assume that it occupies a position higher than the tense and the agreement projections. But which is this position? Could it be Mood2, as in English? The modal evinces the same features as the English epistemics but the clause with which it merges is a MoodP: it is also "truncated", but it only lacks the complementizer layer. And we have already analysed *să* as occupying the head of the Mood2 projection. This position does no longer seem available. Recall also that *a trebui* expressing the idea of probability is approximately more recent in the language (Constantinescu 1970b). Epistemic *a trebui* takes scope over the whole MoodP .That might explain the tendency of interpreting it as a sentence modifier in a way similar to the way in which some adverbials can modify a whole clause.[142] On the other hand, Romanian has a class of adverbials which subcategorize for a clausal complement (they select a CP). When *a trebui* selects a CP as its complement, it behaves like these adverbials and like *poate*. But in the case examined in this subsection it merges with a MoodP. Could it be that *a trebui* vacillates between a verbal and an adverbial value and that it occupies the specifier position of the Mood2 projection, as in (181) below?

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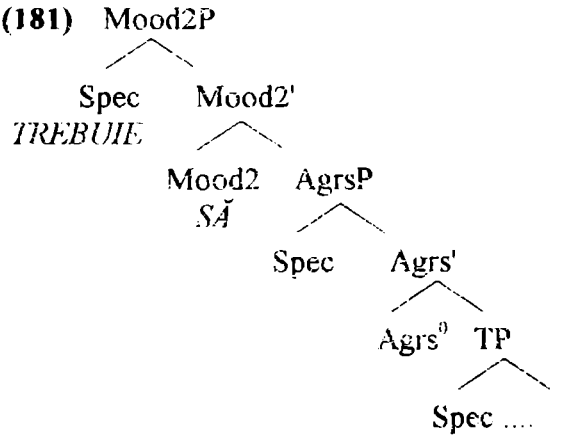
[142] The Romanian linguists have often pointed out the so-called "adverbial value" of *a trebui* in certain contexts. (Guțu-Romalo 1956, Constantinescu 1970b)

(181)



On the other hand, it is compatible with the conditional (*condițional optativ*) **(182a)** or with the past **(182b)**:

(182) **a.** *Ar trebui să aibă vreo treizeci de ani.*
ar (conditional marker) must *să* have-3rd pers. around thirty of years
'He should be thirtish.'
b. *Trebuia să aibă vreo treizeci de ani.*
must-past tense 3rd pers.sg. *să* have-3rd pers.sg.around 30 of years
'He should/must have been thirtish.'

In this respect, it behaves like a lexical verb.

When *trebuie* has an epistemic reading, the MoodP it merges with may denote a state of affairs which is simultaneous, past or future with respect to ST .The temporal interpretation of the MoodP is "anchored" to the RT of *trebuie* .

When it is interpreted as denoting obligation or necessity, the interpretation of *a trebui* is similar to the one suggested for *a putea* + MoodP when expressing permission (see **4.4.4**.).

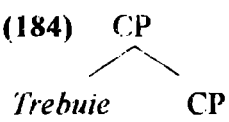
4.5.8. A trebui + complementizer phrase

When *a trebui* takes a CP as its complement it behaves like *a putea* : it does not agree with the subject and it does not take any tense except for the present:

(183) **a.** *Trebuie că au venit de mult.*
must-3rd pers.sg. that have come long ago
b. **Ei trebuiesc că au venit de mult.*
they must-3rd pers.pl that have come long ago
c. **Trebuia că au venit de mult.*
must-past tense-3rd pers.sg. that have come long ago
d. **Vor trebui că vin repede.*
will must that come-3rd pers.pl.fast

A trebui has lost its verbal features and it behaves like an adverb which takes a sentence as a complement. It merges with a CP, the result being another CP:

(184)



One can notice an extension of meaning which maps the "extension" of the complement. The semantic extension goes from concrete meanings towards more abstract ones and the complement extends from DP to CP. The more complex the complement, the more functional the behavior of the modal which tends to be recategorized from a lexical modal verb into a sentence adverb . If when *a trebui* selects a DP as its complement it is a theta-role assigner (behaving like the lexical verb *a plăcea*), it does not assign any theta-role in any of the other possible configurations which it enters.

The vacillation between the [+agreement] and the [-agreement] paradigm reflects the vacillation between its verbal and its adverbial nature.

When *a trebui* is part of a complex predicate this is due to the nature of the SC with which it merges, not to any intrinsic properties it might evince. One might ask why the degree of complexity of the SC does not "push" the modal higher in the structure, as it was suggested for the English modals or for the Romanian *a avea*. These auxiliaries also merge with SCs with various structural properties and the result of merging is a single T-chain with a single argument structure. But the brief examination of *a trebui* has clearly proved that it still behaves like a lexical verb with respect to tense and agreement and that it has its own argument structure.

it is an unaccusative which takes a proposition as its internal argument. It is this property which makes its recategorization possible (under its epistemic reading): it shifts to a special type of mood adverb which resembles unaccusatives. Unlike the English modals or the Romanian *a avea*, *a trebui* does not lose its selection properties in the derivation. It still selects its complement (a DP/AgrsP/AspP/MoodP/CP) which must be a proposition. Merging of *a trebui* with its complement is left to right.

The unstable system of *a trebui* is more likely to make the subject of late acquisition. As expected, children will first acquire the more lexical *a trebui* and only much later the epistemic or the adverb-like verb.

The cumulative effect of its morphological irregularities has probably led to its adverbial use.

The examination of *a trebui* has also revealed that it behaves differently from *a putea*. Syntactically, they are not members of a distinct syntactic class.

Well, I'm going to jump right back', announced the Humbug, who [...]leaped as far as he could, and landed in a heap two feet away. 'That won't do at all', scolded Canby[...].'You can never jump away from Conclusions. Getting back is not so easy. That's why we're so terribly crowded here '

(Norton Juster- *The Phantom Tollbooth*)

INSTEAD OF CONCLUSIONS

5.1 Jumping back

The main claim of this dissertation has been that auxiliaries can be analyzed as verbs inserted under various functional nodes in the derivation. The place of insertion is determined by the complexity of the SC with which it merges. Such an approach allows for a unifying analysis of the English modals or the Romanian *a avea* which tries to find the mechanism associated with auxiliary phenomena and which builds on the assumption that the lexicon contains one single entry *a avea*, one single entry *can*, a.s.o. whose properties differ according to the structural position it occupies. All the related conclusions have been provided in each and every chapter and I will not repeat them here

Limitations of all sorts have made it impossible to find answers to all the questions about auxiliaries and auxiliary-related phenomena. In what follows I would like to raise a few questions in guise of conclusions. That would somehow turn this ending part into a beginning, as the answers to the raised questions still await serious research.

5.2 Questions about the framework

5.2.1 The never ending splitting

The split-IP representation, with two Mood projections and an Asp one, as well as the split-CP a la Rizzi (1995) which have been assumed throughout this dissertation are a matter of concern. The Minimalist Program tries to do away with the blow-up-functional- nodes technique used in many recent generative studies. Thus, at first sight one might spot

a certain incompatibility between the general framework which has been assumed (the one provided by standard (?) minimalism) and these two hypotheses which have been incorporated into the analysis. However, I see no real contradiction. Indeed, such a clausal representation is not minimalist in the "metaphoric" way, but it is, nevertheless, compatible with the spirit of minimalism where a functional projection has to be justified either by phonetic or semantic interpretation (i.e. by output conditions) or by theory-internal arguments. There is no explicit constraint on the number of possible functional categories nor on their specific nature.

Also, adopting the view that there are features such as [+topic] or [+focus] which need to be checked and that there are special projections where such features can be checked opens the way to a never-ending splitting of functional projections as well as to questions concerning the nature of such features and whether they belong to the class that encompasses D features or V features. I do not have an answer here. I think that we are actually dealing with different types of features and different types of projections, where different constraints may be at work. Whatever features are licensed in the left periphery may be different from those which are licensed in the functional domain. However, before we have an answer to this problem, I see no harm in split projections. Just like in photography, "blow up" may help reveal details which we might have overlooked in the "un-blown-up" picture. I think we can reduce the picture only after we have carefully looked at all the details. Not before.

5.2.2 [+focus]/[+topic] features?

In the analysis of subject positions in English and Romanian I have advanced the hypothesis that some languages, like Romanian, import some facts from the informational component (for example, the feature [+topic] is crucial for subject sentence initial position in Romanian, where the subject DP can otherwise remain in postverbal position, i.e. in situ) into syntax and that this might be a parameter which distinguishes between languages. Such a view, though compatible with the general framework, has important consequences for the whole approach to the computational system called language. Importing the informational component into syntax (through the form of features, for example) implies that at least some of the informational package may affect the way in which the mechanism of language works and, more importantly, it raises the question of whether there really is one single interface which incorporates both

conceptual and intentional information (I/C). If features such as [+topic] are responsible for overt word order then the implication is that information structure (or at least part of this structure) can drive movement on a par with morphological features.

5.2.3 The old theta-roles

Also in the domain of features, I adopted the view that theta-roles are actually features which can account for the type of syntactic structure Intuitively, it is not difficult to embark on such a view. However, I believe that one should be careful when using the same label for various things. Just like [+topic] or [+focus], theta-features must be different from V features, for example. More than that, they are part of what Chomsky (1988) considered the conceptual part of the lexicon. If that is the case, it means that some "conceptual" facts are responsible for syntactic projections. And that, if we want to retain features such as theta-features in the analysis we have to go back to the Principle of Projection and revisit it from a new perspective. It may be the case that it is difficult to do away with it as drastically as assumed within a minimalist framework.

On the other hand, if we adopt the view in Chapter 4 (Chomsky 1995) that theta-roles are actually argument structure, i.e.they can be defined structurally, one can question whether retaining the idea of movement from one theta-position to a theta-position or to a non-theta position is still justified. And, if theta-roles are defined as structural positions, one can also advance the hypothesis that every time a DP moves and enters a different configuration its theta-role is changed. Actually, that could be one more argument against A-movement reconstruction.

5.3. Auxiliaries and negation

In the analysis proposed in this dissertation I did not discuss the interplay between negation and auxiliaries or main verbs from a crosslinguistic perspective. The place auxiliaries or main verbs can occupy with respect to negation has been used in many studies as a starting point in deciding whether auxiliaries or main verbs in a particular language or group of languages can/cannot raise to Inflection and thus in finding evidence in favour of the position they could occupy: inside or outside the VP constituent. English main verbs and Mainland Scandinavian verbs (both main verbs and "auxiliaries") have been analysed as base generated inside VP and thus surface after negation. English auxiliaries are base generated in Infl and thus precede negation.

A look at the Romanian *a avea*, for example, which is always in a post-negation position, shows that the position a verbal element can occupy with respect to negation cannot account for the other properties that particular element evinces. We should try and analyze the nature of negation in particular configurations and in particular languages. Whether Negation is a functional head which projects or whether it is an adverb which occupies a Spec position are non-trivial questions and obviously the answer to such questions could shed new light on the analysis of auxiliaries. Interestingly, it might be the case that the position of auxiliaries with respect to Negation is not directly derivative of the property of auxiliaries but of the nature of negation in that particular language. If the assumptions in Chomsky (1998) are on the right track, it means that there is no covert/overt V-to-I distinction. In this case, a proper analysis of negation (its nature and its position) might be the key to distinguishing between languages.

5.4 The acquisition of the English modals

Not much has been said about the acquisition of the English modals in spite of the fact that ideas from acquisition studies were used to account for their diachronic change. In what follows I would like to tentatively examine this topic.

Perkins (1983) claims that the acquisition of modal devices in general is closely linked to the child's social, moral and cognitive development. While I will not deny that there is a link with cognitive development in general I would like to provide evidence in favor of the view that there are structure reasons which make some modal configurations the subject of late acquisition.

That children acquire epistemic modals at a later stage is already a common view, accepted as such in the literature[143] (Kuczaj and Maratsos 1975, Wells 1979, Perkins 1983, Richards 1990, Goodluck 1991). Root meanings emerge before epistemic readings (Sweetser 1993). The first modals which emerge before the age of two are *can* and *will*, but mostly in their negative contracted forms (*can't*, *won't*) and in a more restricted way than in adult language[144]. Even at the age of five, when the child has

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[143] Coates (1988), however, reports that an incidental result of the experiment she ran in order to test children's system of modal meaning was that comprehension of deontic modals lagged behind that of epistemic modals

[144] Fletcher (1979) for example argues that the English modals are first used as pure performatives.

usually begun to use most of the other modals, these two modals are still the most frequent and interpersonal and action-oriented. Thus *will* is used to express willingness (though it might be the case that in AE children do not use this modal too often), while *can* is used to express ability, request for permission, granting or refusing permission .

The lack of modals in early language is also linked to the so-called Modal Hypothesis (Clahsen 1990, Ingram and Thompson 1996) which tries to account for the optional infinitives (infinitives which children use in matrix clauses, where adult language uses finite forms) in early child language : non-finite forms are argued to occur in modal contexts, i.e. whenever there is a context in which a modal should occur[145] .

What is relevant for the present discussion is that modals are missing in contexts in which they are expected to occur and that, when they do occur, they do it "gradually". Can this be the reflex of cognitive development only? Assuming a weak version of the No Functional Projection Hypothesis we can provide an explanation from a structural perspective. Within such an approach, the child starts with a lexical theta-tree (Lebeaux 1988). The modals which merge with a VP are the most lexical ones, as shown in Chapter 3. This VP small clause is less complex, it does not contain any functional projection. Acquiring such structures should be easier. Once the child has acquired "lexical" *can*, the transfer to the other one ('permission' *can* which merges with a more complex SC) should follow. Such a structure involves two functional projections, but the "lexical" item is already familiar. "Epistemic" modals are acquired later because the SC involved in such configurations contains many functional projections whose parametric value the child must decide on. If we take language acquisition to be a process of building projections, the fact that *epistemic modals are late acquisitions is not surprising at all. Lebeaux* (1988) argues that there should be a correspondence between the grammatical acquisition sequence and the structure of language, i.e. the acquisition sequence reflects the structure of language. The fact that children acquire the modals which occupy a place in the lexical layer of the clause at an early stage and only later the modals inserted in the functional domain reflects the way in which the structure of English is built. The acquisition sequence simply displays the sequencing of projections. Merge implies elements which are more and more complex.

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[145] For arguments against the Modal Hypothesis, see Poeppel and Wexler (1993).

A non-trivial implication of such an analysis is that the modal is only stored once; its "extended" meaning derives from the computation, i.e. it is given by Universal Grammar. Lexical learning takes place once, in the beginning. The features of the modals are derived from their core features plus those of the functional projection which they head. In this respect, I depart from Stromswold (1990) who describes the process of acquisition of the English modals as a process during which children form categories for each individual modal.

In the same vein one can advance the hypothesis that in child Romanian lexical *a avea* ('have') will be the first one to emerge, followed by the perfect auxiliary and only at a later stage by the conditional configuration.

But both "stories" await experimental studies on the acquisition of the English modals or the acquisition of the Romanian *a avea*, which could test them.

REFERENCES

Akmajian.A., S.Steele and T.Wasow. 1979. 'The category AUX in Universal Grammar'. *Linguistic Inquiry* 1, 1-64.

Alexiadou, A. 1994. 'Issues in the Syntax of Adverbs'. Phd dissertation. Potsdam University.

Arad, M. 1995.'A minimalist view of the syntax-lexical interface'. *UCL Working Papers in Linguistics*, 8, 215-241.

Avram, L. 1988. 'Verb auxiliar în limba română: categorie lexicală sau morfem gramatical?' *Studii şi cercetări lingvistice*, XXXIX, 5, 439-445.

Avram, L. 1989. 'Verbele de modalitate în limba română'. *Studii şi cercetări lingvistice*, XL, 3, 203-206.

Avram, L. 1992. 'On subject position(s) in Romanian'. *Cahiers de linguistique théorique et appliquée*, XXXIX, 121-128.

Avram, L. 1994a. 'A Contrastive Analysis of Modals in English and Romanian'. *Revue Roumaine de Linguistique*, XXXIX, 3-4, 267-284

Avram , L. 1994b.'Auxiliary configurations in English and Romanian'. *Revue Roumaine de Linguistique* XXXIX, 5-6, 493-510.

Avram, M. 1986. *Gramatica pentru toţi*. Bucureşti: Editura Academiei.

Avrutin, S. 1997. 'Discourse-based analyses of root infinitives'. ms. University of Yale.

Baciu, I.1994. *Wh-Movement in English and Romanian*. Bucureşti: Editura Universităţii Bucureşti.

Bâră, E. 1979. *Aspects of Modality in English*. Bucureşti. TUB.

Belletti, A. 1992. 'Agreement and Case in Past Participle Clauses in Italian' in T. Stowell and E. Wehrli (eds) *Syntax and Semantics 26*, 21-44.

Benveniste, E. 1966 (1971 translation). *Problems in General Linguistics*. Miami Linguistics Series 8, University of Miami Press.

Bobaljik, J. 1995. 'Morphosyntax: the Syntax of Verbal Inflection'. Phd dissertation, MIT.

Bohnacker, U. 1997. 'Determiner Phrases and the Debate on Functional Categories in Early Child Language'. *Language Acquisition*, 7.

Borer, H. 1993. 'The Projection of Arguments' in E. Benedicto and J.Runner (eds) *Functional Projections*. University of Massachusetts Occasional Papers 17.

Boskovic, Z. 1994. 'D-Structure, Theta-Criterion, and Movement into Theta-Positions'. *Linguistic Analysis* , 24 , 3-4, 247-286.

Bowers, J. 1993. 'The syntax of predication'. *Linguistic Inquiry* 24,4, 591-656.

Boyd, J.and J.P.Thorne.1969. 'The semantics of modal verbs'. *Journal of Linguistics* 5, 57-74.

Bresnan, J. 1972. 'Theory of Complementation in English Syntax', Phd dissertation, MIT.

Burzio, L. 1981. 'Intransitive Verbs and Italian Auxiliaries', Phd dissertation, MIT.

Burzio, L. 1983. 'Conditions on representation and Romance syntax'. *Linguistic Inquiry* 4, 193-221.

Burzio,L. 1986. *Italian Syntax: A Government-Binding Approach*, Dordrecht: Reidel.

Burzio, L. 1993. 'Case Uniformity', ms. Johns Hopkins University.

Cardinaletti, A. and M.T.Guasti . 1995a 'Small Clauses: Some Controversies and Issues of Acquisition', in *Syntax and Semantics 28*.

Cardinaletti, A. and M.T. Guasti. 1995b. 'Negation in Epistemic Small Clauses' (to appear in *Probus*).

Cardinaletti, A. and M. Starke. 1994. 'The typology of structural deficiency. On the three grammatical classes'. *University of Venice Working Papers in Linguistics*, vol.4, 2, 41-109.

Centineo, G.1986. 'A lexical theory of auxiliary selection in Italian'. *Davis Working Papers in Linguistics* 1, 1-35.

Chomsky, N. 1957. *Syntactic Structures*. The Hague: Mouton.

Chomsky, N. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.

Chomsky, N. 1988. *Language and Problems of Knowledge: The Managua Lectures*. Cambridge, Mass.: MIT Press.

Chomsky, N. 1992. *A Minimalist Program for Linguistic Theory*. MIT Occasional Papers in Linguistics, 1.

Chomsky, N. 1995. *The Minimalist Program*. Cambridge, Mass./ London: MIT Press.

Chomsky, N. 1998. 'Minimalist Inquiries'. ms MIT

Cinque, G. 1997 *Adverbs and Functional Projections. University of Venice Working papers in Linguistics*, vol 7, nr.1-2.

Clark,E.and I.Roberts.1993. 'A Compositional Model of Language Learnability and Language Change'. *Linguistic Inquiry* 24, 2, 299-345.

Clahsen, H. 1990. 'Constraints on Parameter Setting: A Grammatical Analysis of Some Acquisition Stages in German Child Language', *Language Acquisition* 1, 4, 361-392.

Coates, J. 1983. *The Semantics of the Modal Auxiliaries*, London and Canberra: Croom Helm.

Coates, J. 1988. 'The acquisition of the meanings of modality in children aged eight and twelve', *Journal of Child Language* , 15:425-434.

Constantinescu, G. 1970a.'Particularitatile morfologice ale verbului *a trebui*' *Limbă şi literatură* XXIV, 163-175.

Constantinescu, G.1970b. 'Particularităţile semantice şi sintactice ale verbului *a trebui* '. *Limba română* XIX,1,15-24.

Cornilescu, A. 1995 *Concepts of Modern Grammar*. Bucureşti, Editura Universităţii Bucureşti.

Cornilescu, A. 1997. Subject Positions in Romanian (to appear in *Revue Roumaine de Linguistique*).

Culicover, P.W. 1976. *Syntax*. New York: Academic Press.

de Hoop, A. 1992. 'Case Configurations and Noun Phrase Interpretation'. Phd University of Groeningen, The Netherlands.

Denison, D. 1993. *English Historical Syntax*. London/New York: Longman.

Dobrovie-Sorin, C.1987. 'Syntaxe du roumain. Chaines thématiques'. Phd Université de Paris VII.

Dobrovie-Sorin, C. 1993/1994. *The Syntax of Romanian. Comparative Studies in Romance*. Berlin/New York: Mouton de Gruyter.

Dobrovie-Sorin, C. 1997 'Remarks on the analysis of SE'. Paper presented at the University of Bucharest.

Dragomirescu, G.N. 1963. 'Auxiliarele modale'. *Limbă şi literatură*, 7, 231-255.

Drasoveanu, D.D. 1997. *Teze şi antiteze în sintaxa limbii române*. Cluj: Clusium

Dimitrescu, F. et al. 1978. *Istoria limbii române*. Bucureşti: Editura didactică şi pedagogică.

Egerland,V. 1996. 'The Syntax of Past Participles'. Phd dissertation, Lund University Press

Ehrman, M.E. 1966. *The Meanings of the Modals in Present-day English*. The Hague: Mouton.

Emonds, J. 1976. *A Transformational Approach to Syntax*. New York: Academic Press.

Emonds, J. 1978. 'The verbal complex V-V' in French'. *Linguistic Inquiry* 9, 49-77.

Emonds, J. 1985. *A Unified Theory of Syntactic Categories*. Dordrecht:Foris

Enc, M. 1987. 'Anchoring conditions for tense'. *Linguistic Inquiry* 18, 633-657.

Farkas, D. 1988. 'On obligatory control'. *Linguistics and Philosophy*, 11, 27-58.

Fletcher, P. 1979. 'The development of verb phrase'. P.Fletcher and M. Garman (eds) *Language Acquisition. Studies in First Language Development*, Cambridge: Cambridge University Press, 261-284.

Gazdar, G., Pullum, G. and Sag, I. 1982. 'Auxiliaries and related phenomena in a restricted theory of grammar'. *Language* 58, 591-638.

van Gelderen, E. 1993. *The Rise of Functional Categories*. Amsterdam/Philadelphia: John Benjamins.

Giorgi, A. and F.Pianesi. 1989. 'Toward a syntax of temporal representation'. *Probus* 3.2, 187-213.

Goodluck, H. 1991. *Language Acquisition. A Linguistic Introduction*. Oxford UK/Cambridge USA: Blackwell.

Gramatica Academiei 1963, Bucureşti: Editura Academiei.

Grimshaw, J. and A. Mester 1988. 'Light verbs and theta-marking'. *Linguistic Inquiry* 19, 205-232.

Groefsema, M. 1995. 'Can, may, must and should: A Relevance theoretic account'. *Journal of Linguistics* 31, 53-79.

Guéron, J. 1986. 'Le verbe avoir'. *Recherches Linguistiques*, 14/15, 155-188.

Guéron, J. and T. Hoekstra. 1988. 'T-chains and the constituent structure of auxiliaries' in G. Cinque and G. Giusti (eds) *Annali Di Ca'Foscari.Rivista della faciolta di Lingue e letterature straniere dell' Universita di Venezia*, 4, 35-50.

Gueron, J. and T. Hoekstra. 1995. 'The Temporal Interpretation of Predication' in *Syntax and Semantics 28*, 77-107.

Guţu-Romalo, V. 1956. 'Semiauxiliarele de mod' in *Studii de gramatică*, vol.I, 57-81, Bucureşti:Editura Academiei.

Guţu-Romalo, V. 1962. 'Formele verbale compuse'. *Studii şi cercetări lingvistice*, XIII, 2, 141-194.

Hale, K. and S.J.Keyser. 1993. 'On argument structure and the lexical representation of syntactic relations' in K. Hale and S.J.Keyser (eds) *The View from Building 20*. Cambridge, Mass.:MIT .

Harris, A. and L. Campbell. 1995. *Historical Syntax in Cross-Linguistic Perspective*. Cambridge UK/New York:Cambridge University Press.

Heim, I. 1982. 'The Semantics of Definite and Indefinite Noun Phrases'. Phd dissertation, University of Massachusetts, Amherst.

Higginbotham, J. 1985. 'On semantics'. *Linguistic Inquiry* 16, 547-593.

Hoekstra, T. and R. Mulder. 1990.'Unergatives as copular verbs; locational and existential predication'. *The Linguistic Review* 7, 1-79.

Hornstein, N. 1991 . *As Time Goes By*. Cambridge, Mass.: MIT Press.

Hoye, L. 1997. *Adverbs and Modality in English*, London and New York: Longman.

van Hout, A. 1994. 'Projection based on event structure', ms.

Huang, C.J. 1993. 'Reconstruction and the structure of VP'. *Linguistic Inquiry* 24, 103-13.

Huddleston , R.D. 1974. 'Further remarks on the analysis of auxiliaries as main verbs'. *Foundations of Language* 11, 215-229.

Huddleston, R.D. 1979. 'Would have become: empty or modal WILL'. *Journal of Linguistics* 15, 203-395.

Ingram, D. and Thompson, W. 1996 'Early syntactic acquisition in German: evidence for the modal hypothesis'. *Language*, 72, 97-120.

Isac, D. 1996. 'Negative Concord and Negative Quantifiers' (to appear in *Revue Roumaine de Linguistique*).

Jackendoff, R. 1972. *Semantic Interpretation in Generative Grammar* Cambridge, Mass.:MIT Press.

Jackendoff, R. 1977. *X'-Syntax: A Study of Phrase Structure*. Linguistic Inquiry Monographs, Cambridge, Mass.:MIT Press.

Jenkins, L. 1972. 'Modality in English Syntax'. Phd dissertation. MIT.

Johnson, M.R. 1981. 'A unified temporal theory of tense and aspect' in *Syntax and Semantics* 14, 145-168.

Johnson, K. 1988. 'Verb Raising and HAVE'. *McGill Working Papers in Linguistics. Special Issue on Comparative Germanic Syntax*, 156-167.

Johnson, K. 1991. 'Object positions'. *Natural Language and Linguistic Theory* 9, 577-636.

Kayne, R.S. 1975. *French Syntax: The Transformational Syntax*. Cambridge, Mass.:MIT Press.

Kayne, R.S. 1989a. 'Null subjects and clitic climbing' in Jaeggli,O. and K. Safir (eds) *The Null Subject Parameter*, 239-261, Dordrecht: Reidel.

Kayne, R.S. 1989b. 'Facets of Romance past participle agreement' in P. Beninca (ed) *Dialect and the Theory of Grammar*, 85-103, Dordrecht:Foris.

Kayne, R.S. 1993. 'Toward a modular theory of auxiliary selection'. *Studia Linguistica* 47, 3-31.

van Kemenade, 1993.'The history of English modals: a reanalysis', *Folia Linguistica Historica* XIII/1-2, 143-166.

Koizumi, M. 1995. 'Phrase Structure in Minimalist Syntax'. Phd dissertation, MIT.

Koopman, H. and D.Sportiche. 1991. 'The position of subjects'. *Lingua* 85, 211-258.

Koster, J. 1987. *Domains and Dynasties. The Radical Autonomy of Syntax.* Dordrecht/Providence:Foris .

Kratzer,A. 1977. 'What must and can must and can mean'. *Linguistics and Philosophy* 1, 337-355.

Kratzer, A. 1988. 'Stage-level and individual-level predicates'. ms. University of Massachusetts.

Kuczaj, S. and M.Maratsos. 1975. 'The initial verbs of yes-no questions: a different kind of grammatical category'. *Development Psychology* 19, 440-444.

Kuroda, S.Y. 1972. 'The categorical and the thetic judgment. Evidence from Japanese syntax'. Foundations of Language 9, 153-185.

Ladusaw, W. 1994. 'Thetic and categorical, stage and individual, weak and strong'. Linguistics Research Center, Cowell College, UCSC.

Laka, I. 1990. 'Negation in Syntax: On the Nature of Functional Categories and Projections'. Phd dissertation, MIT.

Lasnik, H. 1995. 'Case and expletives revisited: on Greed and other human failings'. *Linguistic Inquiry* 26, 615-633.

Lebeaux, D. 1988. 'Language Acquisition and the Form of the Grammar'. Phd dissertation, University of Massachusetts, Amherst.

Lema, J. and M.L.Rivero 1990. 'Long Head Movement: ECP vs HMC' in J.Carter et al.(eds) *Proceedings of NELS* 20, 333-347.

Levin, B. and M.Rappaport Hovav.1995. *Unaccusativity.* Cambridge, Mass./London: MIT Press.

Lightfoot, D. 1974. 'The diachronic analysis of English modals', in J.M Anderson and C.Jones (eds) *Historical Linguistics.Proceedings of the First International Conference on Historical Linguistics*, Amsterdam, 219-249.

Lightfoot, D. 1979. *Principles of diachronic syntax*, Cambridge University Press.

Lightfoot, D. 1991. *How to Set Parameters: Arguments from Language Change*. Cambridge, Mass.: MIT Press.

Llinas, M. 1993. 'An incorporation analysis revisited'. *Catalan Working Papers in Linguistics* 3.1, 139-152.

Lois, X. 1987. 'Choix parametrique des auxiliaires'. Paper presented at 7e Colloque International de Linguistique de l'Université Paris VIII, May 1987.

Manzini, R. and A. Roussou. 1997. 'A Minimalist Theory of A-Movement and Control', ms. Firenze/UCL- Bangor.

McCawley , J.D. 1975. 'The category status of the English modals'. *Foundations of Language* 12, 597-601

Moro, A. 1995. 'Small Clauses with Predicative Nominals' in *Syntax and Semantics 28*, 109-132.

Motapanyane, V. 1995. *Theoretical Implications of Complementation in Romanian*. Padova:Unipress.

Mourelatos, A. 1986. 'Events, Processes and States' in P. Tedeschi and A. Zaenen (eds) *Syntax and Semantics 14, Tense and Aspect*, New York: Academic Press, 191-212.

Nedioglu, G. 1956. 'Predicatul verbal'. *Limba română* V, 34-45.

Ouhalla, J. 1991. *Functional Categories and Parametric Variation*, England. T.J.Press

Palmer, F.R. 1979. *Modality and the English Modals*. London/New York: Longman.

Parsons, T. 1990. *Events in the Semantics of English. A Study in Subatomic Semantics*. Cambridge, Mass. : MIT Press.

Pană-Dindelegan, G. 1987. *Aspecte ale dinamicii sistemului morfologic verbal* Bucureşti: TUB.

Pană-Dindelegan, G. 1992. *Sintaxă şi semantică*. Bucureşti: Editura Universităţii Bucureşti.

Perkins, M.R. 1983. *Modal Expressions in English*. Norwood/New Jersey: ABLEX Publishing Corporation.

Perlmutter, D. 1978. 'Impersonal passives and the unaccusative hypothesis' in *Proceedings of the Fourth Annual Meeting of the Berkeley Linguistics Society*. Berkeley Linguistics Society, University of California.

Pesetsky, D. 1995. *Zero Syntax. Experiencer and Cascades*, Cambridge, Mass.: MIT Press.

Picallo, C. 1990. 'Modal verbs in Catalan'. *Natural Language and Linguistic Theory* 8, 285-312.

Plank, F. 1984. 'The modals story retold'. *Studies in Language* 8, 305-364.

Poeppel, D. and K. Wexler. 1993. 'The full competence hypothesis in clause structure in early grammar'. *Language* 69, 1-33.

Pollock, J.Y. 1989. 'Verb movement and the structure of IP'. *Linguistic Inquiry* 20, 365-424.

Pullum, G.K. 1981. 'Evidence against the AUX node in Luseno and English' *Linguistic Inquiry* 12, 435-463.

Radford, A. 1990. *Syntactic Theory: the Acquisition of English Syntax*. Cambridge, Mass: Blackwell.

Raposo, E. and J. Uriagereka. 1995. 'Two Types of Small Clauses' in *Syntax and Semantics* 28, 179-231.

Reichenbach, H. 1947. *Elements of Symbolic Logic*, New York: MacMillan Company.

Rescher, N. 1974. *A Theory of Possibility*, Oxford Blackwell.

Reuland, E.J. 1983. 'Government and the search for AUX a case study in cross linguistic category identification in Henry', F.B. and Richards (eds)- *Linguistic Categories: Auxiliaries and Related Puzzles*, vol. I, 99-168, Dordrecht: Reidel.

Richards, B.J. 1990. *Language Development and Individual Differences. A Study of Auxiliary Verb Learning*, Cambridge University Press.

Ritter, E. and S.T. Rosen. 1997. 'The function of have'. *Lingua* 101, 295-321.

Rivero, M. L. 1994. 'Clause structure and V-movement in the languages of the Balkans'. *Natural Language and Linguistic Theory* 12, 63-120.

Rizzi, L. 1982. *Issues in Italian Syntax*. Dordrecht: Foris.

Rizzi, L. 1986. 'Null objects in Italian and the theory of pro' *Linguistic Inquiry* 17, 501-557.

Rizzi, L. 1994. 'Some notes on linguistic theory and language development the case of root infinitives'. *Language Acquisition*, 3(4), 371-393.

Rizzi, L. 1995. 'The Fine Structure of the Left Periphery', ms. University of Geneva.

Roberts, I. 1985. 'Agreement parameters and the development of English modal auxiliaries'. *Natural Language and Linguistic Theory* 3.

Roberts, I. 1993. *Verbs and Diachronic Syntax*. Dordrecht/Boston/New York. Kluwer Academic.

Roberts, I. 1993. 'A formal account of grammaticalization in the history of Romance futures'. *Folia Linguistica Historica* XIII/1-2, 219-258.

Rosetti, Al. 1968. *Istoria limbii române, de la origini până în secolul al XVII-lea*, Bucureşti.

Rosen, S.T. 1990. *Argument Structure and Complex Predicates*. New York/London: Garland Publishing, Inc.

Ross, J. 1969. 'Auxiliaries as main verbs'. *Studies in Philosophical Linguistics* 1, 77-102.

Rothstein, S. 1995. 'Adverbial quantification over events'. *Natural Language Semantics*, vol. 3, 1, 1-30.

Runner, J. 1993. 'A Specific role for AGR' in E. Benedocto and J. Runner (eds) *Functional Projections*. University of Massachusetts Occasional Papers 17.

Scholten, C.G.M. 1988. 'Principles of UG and the Auxiliary Verb Phenomena'. Phd dissertation, University of Maryland.

Smith, C. 1991. *The Parameter of Aspect* Dordrecht Kluwer Academic.

Smith, N. and I.M. Tsimpli. 1995. *The Mind of a Savant Language Learning and Modularity*. Oxford Blackwell.

Speas, M. 1993. 'Null arguments in a theory of economy of projections' in E. Benedicto and J. Runner (eds) *Functional Projections*. University of Massachusetts Occasional Papers 17.

Spencer, A. 1992. 'Nominal inflection and the nature of functional categories'. *Journal of Linguistics* 28, 313-341.

Spencer, A. 1994. 'Inflectional morphology and functional heads'. ms. University of Essex.

Starke, M. 1995. 'On the Format of Small Clauses' in *Syntax and Semantics* 28, 237-276.

Steele, S. 1975. 'Is it possible?' *Stanford University Working Papers in Language Universals* 18, 35-58.

Steele et al. 1981. *The Encyclopedia of AUX. A Study in Cross-Linguistic Equivalence* Cambridge, Mass: MIT Press.

Stowell, T. 1981. 'Origins of Phrase Structure'. Phd. dissertation, MIT.

Stowell, T. 1982. 'The tense of infinitives'. *Linguistic Inquiry* 13.

Ştefănescu, I. 1988. *English Morphology*, vol. II, Bucureşti, TUB.

Ştefănescu, I. 1997. *The Syntax of Agreement in Romanian*. MIT Occasional Papers in Linguistics 14.

Stromswold, K. 1990. 'Learnability and the Acquisition of Auxiliaries'. Phd dissertation. MIT.

Sweetser, E. 1984. 'Semantic Structure and Semantic Change. A Cognitive Linguistic Study of Modality, Perception, Speech Acts, and Logical Relations'. Phd dissertation, University of California, Berkeley.

Sweetser, E. 1993. *From Etymology to Pragmatics*. Cambridge University Press.

Teodorescu, E. 1996. 'Însemnări pe marginea auxiliarelor de modalitate'. *Anuar de lingvistică şi istorie literară*, XVII, 137-142.

Thrainsson, H. 1995. 'On the (non-)universality of functional categories', ms. University of Harvard.

Tiktin, H. 1995. *Gramatica română*, ediţia a II-a, Bucureşti.

Tsimpli, I.M. 1991. 'On the maturation of functional categories: early child speech'. *UCL Working Papers in Linguistics*, 123-147.

Uriagereka, J. 1995. 'Aspects of the Syntax of Clitic Placement in Western Romance'. *Linguistic Inquiry* 26, 1, 79-123.

Uriagereka, J. 1996. 'Warps: some thoughts on categorization'. *ZAS Papers in Linguistics*, 5, 119-158.

Vainikka, A. 1993/1994. 'Case in the development of English syntax'. *Language Acquisition*, 3(3), 257-325.

Vincent, N. 1982. 'The development of auxiliaries *habere* and *esse* in Romance' in N. Vincent and M. Harris (eds). *Studies in the Romance Verb*, London: Croom Helm.

Weinberg, A. 1994. Comments on Wexler's paper in D. Lightfoot and N. Hornstein (eds) *Verbs Movement*. Cambridge: Cambridge University Press.

Wells, G. 1979. 'Learning and Using the Auxiliary Verb in English' in V. Lee (ed) *Language Development*, New York: John Wiley and Sons, 250-270.

Wexler, K. 1994. 'Optional infinitives, head movement and the economy of derivations in child grammar' in D. Lightfoot and N. Hornstein (eds) *Verb Movement*, Cambridge: Cambridge University Press, 305-350.

Williams, E. 1994. 'A Reinterpretation of Evidence for Verb Movement in French' in Lightfoot, D. and N. Hornstein (eds) *Verb Movement*, Cambridge University Press, 89-105.

Zagona, K. 1988. *Verb Phrase Syntax: A Parametric Study of English and Spanish*, Dordrecht Kluwer.

Zanuttini, R. 1996. 'On the Relevance of Tense for Sentential Negation' in A. Belleti and L. Rizzi (eds) *Parameters and Functional Heads*, New York and Oxford: Oxford University Press, 181-208.

Zdrenghea, M. 1979. 'Modals Embedding Generics in English and Romanian', *Cahiers de linguistique théorique et appliquée*, XVI, 1, 85-91.

Zdrenghea, M. 1982. 'Willingness and Insistence in a Representation of English Modals'. *Revue Roumaine de Linguistique* XXVII, 3, 195-201.

Zubizaretta, L. 1985. 'The relation between morphophonology and morphosyntax: the case of Romance causatives'. *Linguistic Inquiry* 16, 247-289.

Zwarts, J. 1992. 'External arguments'. ms.

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