TOPICS IN PORTUGUESE SYNTAX:
THE LICENSING OF T AND D

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Thesis submitted in partial fulfilment
of the requirements for the degree of PhD

University College London

June 1995
Aos meus pais e ao Domingos
ABSTRACT

The purpose of this thesis is to provide a detailed analysis of two phenomena in Portuguese which will be argued to crucially involve the complementiser (C) position: the inflected infinitive and pronominal clitic placement. The analysis is formulated in the Minimalist framework (Chomsky 1993, 1995).

In chapter 1 I provide a brief introduction to the discussion, by presenting an outline of the issues to be considered and offering an overview of the proposals to be made. Both chapters 2 and 3 are devoted to the inflected infinitive. In chapter 2 the data is introduced, as well as the main idea behind the analysis suggested here, i.e. that inflected infinitives are possible in languages which make use of a marked option in UG allowing an infinitival T to be associated with Case features, which, in the absence of finite morphology, has to be licensed by C. This process of licensing is the subject of chapter 3. First, a characterisation of the properties of the infinitival T is provided and then the structure of each of the contexts exhibiting inflected infinitives, and in particular the properties of their C-position, are investigated. This leads me to the conclusion that the strategy followed for licensing of the Case features of the infinitival T by C is determined by the content of C; an empty C triggers T-raising, while a filled C can satisfy the licensing requirement of T through a dependency.

A similar approach is taken in chapter 4 regarding the licensing of clitic pronouns. I consider clitic placement in finite and infinitival contexts and argue that the apparently many differences between (European) Portuguese and other Romance languages may be reduced to just one, namely the fact that both C and I (as opposed to only I) have the ability to license clitics in Portuguese. This is related to another unique property of Portuguese, the fact that a special functional head between C and I is provided for clitic movement, as argued by Rouveret (1992). The different patterns found, i.e. enclisis and proclisis, are derived from the different licensing strategies available. The clitic may be licensed by a filled C, or it may be licensed by I, which either adjoins to the clitic position or allows the clitic to adjoin to it.
ACKNOWLEDGEMENTS

My greatest academic debt is to my supervisor, Rita Manzini. Rita was the ideal supervisor. She was always ready to listen to me (either here or from Italy), and she invariably gave me lots of good ideas and intellectual stimulus, a great deal of valuable criticism and guidance, and a lot of faith in myself and in my ability to do research. At the same time, she had the knack to always make me feel that it was all worthwhile, particularly when I was feeling discouraged about my work. For all this and for her friendship, I want to say thanks.

Also on top of my list of people who deserve special mention are Neil Smith and Misi Brody. I am very grateful for their trust and for the lots of encouragement, support and many valuable comments that they gave me throughout these years.

I also want to thank all the people at UCL (some of whom are now gone) who have made the department feel like a second home. A few of them are: Stefanie Anyadi (who always listened patiently to all my 'moans'), Yorgia Agouraki, Luciana Bertolino-Zan, Emi Rees, Anna Roussou, Yorgos Xydopoulos, ... Anna Roussou deserves a special mention, for her constant encouragement, for our many discussions on factives, for offering to read two of the chapters of the thesis, and, generally, for her friendship throughout these years. At SOAS, I would like to thank Wynn Chao, for her interest in my work, and Anna Pettiward, for all our chats on 'writing-up'.

I am also grateful to all the people who throughout these years took the trouble to give or send me their comments on my work, in particular Charlotte Galves and Heloisa Salles. Thanks to Heloisa also for checking my Brazilian data and for her warmth when I was feeling down.

I would also like to thank my linguistics lecturer in Lisbon, Graça Vicente, who first got me interested in syntax and taught me to have high standards with academic work.

I am very grateful to the Junta Nacional de Investigação Científica e Tecnológica for their financial support (under grant no. 198) during the last three years of my studies at UCL.

I also want to thank all my non-linguistic friends, both in England and in Portugal, who have been a big part of my life in the last few years, specially Charlotte, Dave, Nick, Steve, Célia, Ângela, Benvindo, Armando. A big thanks to the Portuguese lot for their patience in answering all the questions about my 'funny' data. Also to Isabel, who kept calling to 'check up' on me, and who always made me laugh even at times of 'crisis'.

Although he doesn't want to be mentioned, I also have to thank Luis, who has been the most important person in my life for the past nine years. Thanks for sharing all my happy moments and for patiently putting up with my bad moods, particularly in the last few weeks, and for trying to make it easier for me in every way.

Last, but not least, I wouldn't know where to start thanking my parents. They made it all possible, by their love and constant support, by always believing in me, by always putting my needs first and cheerfully putting up with me being far away, by helping me out financially in the first two years, and in countless other ways. I couldn't have done it without them. This thesis is dedicated to them and to my brother Domingos, who always encouraged me to do my best and kept up the pressure in the last few months.
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CHAPTER ONE

INTRODUCTION

The purpose of this introduction is to present a brief overview of the issues which will be investigated in this work and to introduce the discussion which will follow. The theoretical framework adopted here is the Minimalist framework as developed in Chomsky (1993, 1995), and in works by other researchers. I will not discuss the framework in this introduction, as this will be done as the need arises throughout the discussion.

It is a tenet of current linguistic theory that all parametric variation should be exclusively attributed to variation in the properties of individual lexical items (see, for example, Borer 1984, Wexler and Manzini 1987) and, in particular, of functional categories (see Ouhalla 1991 and Chomsky 1991, 1993). This view contrasts with the one proposed in Chomsky (1981, 1986a, 1988), according to which parameters are associated with principles of Universal Grammar. One example of this would be the word-order parameter known as the Head Parameter (Chomsky 1986a), which regulates the position of heads with respect to their complements, allowing for two options, Head-first, and Head-last. The Head Parameter is assumed by Chomsky (1986a) to be associated with X-bar theory. Languages may vary according to which option of the Head Parameter they select; while languages such as English select the Head-first option, other languages, such as Japanese, select the Head-last option. A consideration of 'mixed' languages such as German, however, appears to indicate quite conclusively that such a view may not be completely adequate. German is an illustration of the fact that categories within one language may select different options of the Head Parameter. This may be taken as evidence for the claim that parameters are associated, not with UG principles, but rather with individual categories.

Both inflected infinitives and the specific patterns of clitic placement in Portuguese, the two phenomena investigated in this thesis, appear to be unique to Portuguese among
modem Romance languages. Assuming the view that parametric variation is restricted to properties of functional categories, the analyses proposed for these phenomena derive this uniqueness from different properties of certain functional categories in Portuguese.

Inflected infinitives are discussed in chapters 2 and 3. The discussion is restricted to the four contexts discussed in Raposo (19987a), namely complements to declarative/epistemic verbs, factive complements, and subject and adjunct clauses. Two problems are identified in chapter 2 regarding inflected infinitives in these contexts. One problem refers to word order. It appears that subject/verb inversion is either obligatory (in complements to declarative/epistemic verbs), optional (in factive complements and subject clauses) or impossible (in adjunct clauses). The other problem refers to an asymmetry found in the classes of predicates which are allowed under inversion. Following Ambar (1993), this asymmetry appears to correspond to the stative/eventive divide, as only stative predicates are generally admitted in inversion contexts.

It is proposed in chapter 2 that inflected infinitives are possible in languages which make use of a marked option in UG allowing an infinitival T to be associated with Case features. The idea that heads may vary across languages with respect to their ability to be associated with Case features in particular contexts is at the core of the Case Parameter of Bobaljik (1992) and Laka (1993), according to which languages may vary as to which head, T or V, may be associated with active Case features in clauses headed by an intransitive predicate. I argue that, in the absence of finite morphology, the Case features of T must be licensed by C.

This process of licensing is the subject of chapter 3. First, the temporal interpretation of infinitival clauses in Portuguese and in English is examined, leading initially to the conclusion that the infinitival T may either have anaphoric or modal properties. This will be modified later, as it appears that T in infinitives may be better characterised as an indefinite element which must be bound by some temporal expression.

Then, I investigate the structure of each of the contexts exhibiting inflected infinitives, and in particular the properties of their C-position. This investigation leads us to the
conclusion that the occurrence or non-occurrence of inversion appears to be determined by the properties and content of the infinitival C. Inversion, which is derived by raising of T to C, is found only in clauses where the C-position is empty, while those contexts not exhibiting inversion have a C which is either associated with semantically contentful features (as in the case of factive complements, for example), or is filled by an overt or null prepositional complementiser (as in the case of adjunct clauses). The stative/eventive asymmetry observed in contexts where T raises to C may be derived from the different binding properties of the event argument associated with each of these classes of predicates, namely from the fact that while the event argument of a stative predicate has the properties of a definite element, that of an eventive verb behaves as an indefinite element.

Finally, the licensing conditions for the infinitival T in inflected infinitives are defined. I argue that an infinitival T which is associated with Case features must be licensed by C. Two strategies are available for such licensing: either T raises to C, which is only possible in Portuguese when C is empty, but the only licensing strategy available to Italian in Aux-to-Comp constructions, or T establishes a dependency with a filled C through which its Case features may be licensed.

A similar approach is taken in chapter 4 regarding the licensing of clitic pronouns. I consider clitic placement in finite and infinitival contexts, where, unlike in other Romance languages such as Italian or Spanish, the same syntactic conditions determine enclisis and proclisis. I argue that the different conditions which determine clitic placement in Portuguese may be derived from the ability of C to license clitics. This is related to another property of Portuguese, the fact that a special functional head between C and I is provided for clitic movement, as argued by Rouveret (1992), who labels this head W(ackernagel). The different patterns found, i.e. enclisis and proclisis, may be derived from the different licensing strategies available. The clitic may be licensed by a filled C, deriving a proclitic structure in which the clitic and the verbal complex are in different functional heads, which explains the fact that they behave as independent elements.
Another possible strategy is for the clitic to be licensed by I\(^1\) (more precisely, by T). T may adjoin to the clitic position when C is empty (deriving enclisis), given that an empty C appears not to have the ability to license the clitic. Alternatively, the clitic adjoins to I, deriving a proclitic structure where the clitic and the verb behave as a complex unit. This alternative is found in contexts where I must raise to an operator head above the clitic position.

In conclusion, the analyses proposed for the occurrence of inflected infinitives and for the particular facts of clitic placement in Portuguese are based on the idea that the uniqueness of Portuguese among Romance languages with respect to these phenomena can be derived from different properties in Portuguese of the functional categories T and C, and in the specific case of clitic placement, from the availability of a special functional category. In so far as Portuguese is like Old Romance in exhibiting these two phenomena, it could also be argued that the move from Old to modern Romance can be explained in terms of a parametric shift, from a state where the relevant functional categories were associated with the properties which they are argued to have in modern Portuguese, to a state where they have the properties of modern Romance (on the relevance of parametric shifts to diachronic changes, see, among others, Lightfoot 1991).

\(^1\) Throughout this work, I will use the labels 'I' or 'IP', either when I am discussing analyses proposed before the Split Infl Hypothesis of Pollock (1989), or when it is not essential to distinguish between the different inflectional heads.
CHAPTER TWO

THE INFLECTED INFINITIVE

1. Introduction

The Portuguese inflected (or personal) infinitive represents a well-known exception to the observation that Nominative subjects are restricted to finite contexts. For this reason, an examination of the distribution and properties of inflected infinitival clauses might shed some light on more general questions regarding the differences between finite and infinitival clauses and the conditions for Nominative Case licensing. Such an examination will be the purpose of this and the next chapter.

The chapter is organised as follows. Section 2 seeks to provide a description of the facts which should be taken into account in any analysis of the inflected infinitive, and to identify the main questions raised by these facts. Four contexts will be considered: complements of declarative/epistemic verbs (in 2.2), adjunct clauses (in 2.3), complements of factive verbs and subject clauses (in 2.4). Three analyses which have been proposed for these facts are considered in section 3: Raposo's (1987a) (in 3.1), Ambar's (1992) (in 3.2) and Galves' (1991b) (in 3.3). Finally, in section 4 I suggest that the fact that Nominative subjects are possible in infinitival clauses in some languages but not in others may be derived from ideas proposed by Bobaljik (1992) and Laka (1993) regarding the existence of a Case Parameter.

2. Overview of the data
2.1. General picture of infinitival complementation

The inflected infinitive found in Portuguese and Galician has two fundamental properties: it displays agreement morphology and it may take a lexical subject which is
assigned Nominative Case. The relevant paradigm is presented in (1), where the agreement endings are shown in bold.

(1) a (para) eu falarØ
(for) I to-speak(1sg)

b (para) tu falares
(for) you to-speak(2sg)

c (para) ela falarØ
(for) she to-speak(3sg)

d (para) nós falarmos
(for) we to-speak(1pl)

e (para) vocês falarem
(for) you to-speak(2pl)

f (para) elas falarem
(for) they to-speak(3pl)

Non-inflected and inflected infinitives may alternate in a number of contexts. A representative list of these contexts is given below.

1. **Complement position**
   (i) declarative/epistemic verbs:

(2) a Afirmaram não estar(em) em casa.
claimed(3pl) not to-be(-3pl) at home
"They claimed that they weren't at home."

b Crêem estar(em) doentes.
believe(3pl) to-be(-3pl) ill
"They believe that they are ill."
(ii) factive predicates:

(3) Lamentam ter(em) perdido os documentos.
   regret(3pl) to-have(-3pl) lost the documents
   "They regret having lost the documents."

(iii) direct object control verbs:

(4) Persuadi os rapazes a vir(em) mais cedo.
   persuaded(1sg) the boys to-come(-3pl) more early
   "I persuaded the boys to come earlier."

(iv) ditransitive subject control verbs:

(5) Prometemos à Maria comprar(mos)-lhe um disco.
   promised(1pl) to+the Maria to-buy(-1pl) her-dat a record
   "We promised Maria to buy her a record."

(v) causative verbs:

(6) a  Fi-los escrever a carta.
    made-1sg them(acc) to-write the letter
    "I made them write the letter."

     b  Fiz os alunos escreverem a carta.
    made the pupils to-write(3pl) the letter
    "I made the pupils write the letter."

(vi) perception verbs:

(7) A Maria viu as amigas a chorar(em).
    the Maria saw the friends to-cry(-3pl)
    "Maria saw her friends crying."
2. **Subject position**

(8) É impossível (eles) ganhar(em) tanto dinheiro.

is impossible (they) to-earn(3pl) so much money

"It is impossible (for them) to earn so much money."

3. **Adjunct position**

(9) Foram para a mesa sem lavar(em) as mãos.

went(3pl) to the table without to-wash(3pl) the hands.

"They went to the table without washing their hands."

There appears to be only one context in which only an inflected infinitive is allowed, namely in the clausal complement of indirect object control verbs. See (10):

(10) a *Eu exigi aos alunos fazer um trabalho.
    I demanded to+the pupils to-do a project
    "I demanded that the pupils do a project."

b Eu exigi aos alunos (eles) fazerem um trabalho.
    I demanded to+the pupils (they) to-do(3pl) a project
    "I demanded that the pupils do a project."

Moreover, there are at least three embedded contexts in which only non-inflected infinitival clauses are allowed, namely as complements to volitional and other objectless subject control verbs (see (11)), as interrogative clauses (see (12)) and as relative clauses (see (13)).

(11) a O Governo quer publicar o relatório.
    the government wants to-publish the report

b *O Governo quer o relatório ser publicado.
    the government wants the report to-be(3sg) published.
Here I shall concentrate on four of the contexts in which inflected infinitives are found: as complements of declarative/epistemic and factive predicates, as subject clauses and as adjunct clauses. I will also seek to provide an account as to why inflected infinitives are ruled out in the cases shown in (11-13).

2.2. Complements of declarative/epistemic verbs

The first case I shall consider is the complement position of declarative and epistemic verbs. A representative list of these verbs can be found in (14) and (15), respectively.

(14) Declarative Verbs:
- acentuar "emphasize"
- acrescentar "add"
- afirmar "assert, claim"
- alegar "allege"
- anunciar "announce"
- argumentar "argue"
- assegurar "assure"
- asseverar "assert"
- concluir "conclude"

- garantir "guarantee"
- indicar "indicate"
- insinuar "hint"
- jurar "swear, vow"
- mencionar "mention"
- observar "remark"
- proclamar "proclaim"
- referir "report, state"
- relatar "report"
confessar "confess"  responder "reply"
contar "tell"             revelar "reveal"
declarar "declare"       sublinhar "stress"
dizer "say"

(15) **Epistemic Verbs:**
achar "reckon, think"    entender "understand"
acreditar "believe"     ignorar "not know"
advinhar "guess"        imaginar "imagine, fancy"
admitir "admit, acknowledge"  julgar "fancy, judge"
calcular "estimate, judge"  notar "notice"
compreender "understand"  pensar "think"
conjecturar "conjecture"  presumir "assume, presume"
considerar "consider"    reconhecer "acknowledge"
crer "believe"            saber "know"
desconfiar "suspect"      supor "suppose"
deduzir "deduce"          suspeitar "suspect"
duvidar "doubt"

The most striking facts about the inflected infinitival complements selected by declarative/epistemic predicates concern word order. As shown in (16), subject-auxiliary inversion appears to be obligatory.

(16) a *Pensam / afirmam a polícia ter apanhado os assaltantes.

think(3pl) / claim(3pl) the police to-have(3sg) caught the burglars
"They think/claim that the police have caught the burglars."

b Pensam / afirmam ter a polícia apanhado os assaltantes.

think(3pl) / claim(3pl) to-have(3sg) the police caught the burglars

Only some aspectual auxiliaries are allowed in these complements. These include, apart from *ter "to have"* (shown in (16)), verbs such as *estar "to be"* and *andar "to have been"* (see (17)).
(17) a Penso estar o João a lavar o carro.
   think(1sg) to-be(3sg) the João to-wash the car
   "I think João is washing the car."

b Creio andar o João a ler este livro desde Maio.
   believe(1sg) to-have-been(3sg) the João to-read this book since May
   "I believe that João has been reading this book since May."

However, verbs such as começar "start" and continuar "continue", which have traditionally been labelled 'aspectual auxiliaries', are excluded from this position. See (18):

(18) a *Penso começar o João a ler este livro amanhã.
   think(1sg) to-start(3sg) the João to-read this book tomorrow
   "I think that João is going to start reading this book tomorrow."

b *Penso continuar a Inês a trabalhar no restaurante.
   think(1sg) to-continue(3sg) the Inês to-work in+the restaurant
   "I think that Inês is still working in the restaurant."

Modal auxiliaries such as poder "can" and dever "must" can also be found in these structures. See (19):

(19) a Afirmou poderem eles ajudar-nos.
   claimed(3sg) to-be-able(3pl) they to-help-us(acc)
   "(S)he claimed that they could help us."

b Julgo deverem estar a chegar.
   think(1sg) to-have(3pl) to-be to-arrive
   "I think that they must be arriving."

Other verbs that can appear in pre-subject position in these clauses are the two copulas ser and estar, both meaning "to be" (see (20)) and ter "to have" in what Pollock (1989) calls its 'lexical' use (see (21)).
(20) a Creio serem eles muito pobres.
   believe(1sg) to-be(3pl) they very poor
   "I believe that they are very poor."

   b Penso estarem todos em casa.
   think(1sg) to-be(3pl) all at home
   "I think that all of them are at home."

(21) Creio ter o Pedro um carro novo.
   believe(1sg) to-have(3sg) the Pedro a car new
   "I believe that Pedro has a new car."

There is some argument in the literature over whether subject-auxiliary inversion is actually obligatory in inflected infinitival complements of declarative/epistemic verbs. Mateus et al (1989), for example, consider clauses where no inversion has taken place to be possible, although clearly marginal. See (22) (examples from Mateus et al: 271-2):

(22) a ??Os criticos disseram o filme ter ganho o festival.
   the critics said the film to-have(3sg) won the festival
   "The critics said that the film had won the festival."

   b ??Os professores acreditam os Centros terem recebido verba.
   the teachers believe(3pl) the centres to-have(3pl) received funding

Here I will assume, contrary to Mateus et al, that inversion is obligatory in these complements. In so doing, I am following not only my own intuitions but also what appears to be the general consensus among my informants.

At first sight, it appears that lexical verbs are generally disallowed in inflected infinitival complements of declarative/epistemic verbs in the absence of an auxiliary. See (23):
(23) a *Pensam / afirmam a polícia apanhar os assaltantes.
think(3pl) / claim(3pl) the police to-catch(3sg) the burglars
"They think/claim that the police will catch the burglars."
b *Pensam / afirmam apanhar a polícia os assaltantes.
think(3pl) / claim(3pl) to-catch(3sg) the police the burglars

However, Perlmutter (1976) notes that there is at least one class of lexical verbs which
are allowed in these complements without an auxiliary, namely the class of verbs which
admit 'downgraded' subjects (which corresponds roughly to the class of unaccusative
verbs). These verbs behave like the auxiliary verbs just reviewed, in that they obligatorily
undergo inversion. See (24) (examples from Ambar 1992; see also Casteleiro 1981):

(24) a *O Júlio afirmou coisas incríveis acontecerem em Lisboa.
the Júlio claimed things incredible to-happen(3pl) in Lisbon
"Júlio claimed that incredible things happen in Lisbon."
b O Júlio afirmou acontecerem coisas incríveis em Lisboa.
the Júlio claimed to-happen(3pl) things incredible in Lisbon

A few more examples from Perlmutter (1976) are shown in (25):

(25) a Ele disse existirem muitos candidatos nesta eleição.
he said to-exist(3pl) many candidates in+this election
"He said there are many candidates in this election."
b Ele disse surgirem controvérsias como essas.
he said to-arise(3pl) controversies like those
"He said controversies like those arise."

However, notice that these facts are not unique to inflected infinitival clauses. Perlmutter
(1976) notes that in finite clauses inversion is also obligatory with unaccusative verbs,
unless they are 'adorned'. This is illustrated in (26).

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However, it appears that there is one important difference between infinitival and finite contexts. Notice that the 'downgraded' subjects in (24)-(26) above are all either bare plurals or quantificational DPs, whose presence forces a generic interpretation. If the subject is a non-quantificational DP, inversion is still obligatory in finite clauses (see (27)), but, as Ambar (1993) notes, ruled out in inflected infinitival clauses. The sentence becomes grammatical if an auxiliary is added (see (28)).

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Moreover, Ambar (1993) observes that the lexical verbs which display these restrictions are all eventive verbs. Stative verbs, on the other hand, always seem to be allowed in these infinitival clauses, with or without the presence of a quantificational expression (inversion is of course obligatory).^ See (31):

(31) a Julgo saber ela a resposta / muitas coisas.
    think(1sg) to-know(3sg) she the answer / many things
    "I think that she knows the answer/many things."

       b Julgo gostarem eles de cinema.
       believe(1sg) to-like(3pl) they of cinema
    "I believe that they like cinema."

2.3. Adjunct clauses

Infinitival adjunct clauses are always introduced by a preposition. As shown in (32), subject-auxiliary inversion is disallowed in these clauses.

(32) a Fiquei admirada por ele ter comprado o jornal.
    became(1sg) surprised for he to-have(3sg) bought the newspaper
    "I was surprised that he had bought the newspaper."

    b *Fiquei admirada por ter ele comprado o jornal.
    became(1sg) surprised for to-have(3sg) he bought the newspaper
We find therefore the inverse situation from that found with complements of declarative/epistemic verbs, where subject-auxiliary inversion is obligatory. Moreover, there don’t seem to be any restrictions on the type of verbal element that can appear in adjunct clauses. See (33) and (34):

(33)  a  Não o posso ajudar até ele começar a estudar.
      not him(acc) can(1sg) to-help until he to-start(3sg) to-study
      "I can’t help him until he starts studying."

b  *Não o posso ajudar até começar ele a estudar.
      not him(acc) can(1sg) to-help until to-start(3sgg) he to-study

(34)  a  Estou admirada por ele comprar o jornal (todas as sextas-feiras).
      am surprised for he to-buy(3sg) the newspaper (all the Fridays)
      "I am surprised that he buys the newspaper (every Friday)."

b  *Estou admirada por comprar ele o jornal (todas as sextas-feiras).
      am surprised for to-buy(3sg) he the newspaper (all the Fridays)

As shown in (33b) and (34b), inversion is impossible with these verbs, just as it was with the aspectual auxiliary ter "to have", seen in (32). The same applies to other verbs that were seen to occur in pre-subject position in complements of declarative/epistemic verbs, such as saber "to know" and gostar "to like". See (35) and (36):

(35)  a  Fomos castigados por ela não saber a lição.
      were(1pl) punished for she not to-know(3sg) the lesson
      "We were punished because she didn’t know the lesson."

b  *Fomos castigados por não saber ela a lição.
      were(1pl) punished for not to-know(3sg) she the lesson

(36)  a  Fomos ver esse filme por ela gostar de comédias.
      went(1pl) to-see that film for she to-like(3sg) comedies
      "We went to see that film because she likes comedies."

b  *Fomos ver esse filme por gostar ela de comédias.
      went(1pl) to-see that film for to-like(3sg) she comedies

23
There is only one type of verb with which inversion is not only allowed but obligatory in adjunct clauses, namely unaccusative verbs (cf. (37) and (38) below). It is interesting to note that those instances of inversion involving these verbs which were seen to be ungrammatical in complements of declarative/epistemic predicates are allowed in adjunct clauses (contrast (37a) with (28a) above). These therefore display a parallel behaviour to finite clauses.

(37) a Ela só vai voltar depois de acontecer uma desgraça.
    she only goes to-return after of to-happen(3sg) a tragedy
    "She will only come back after a tragedy happens."

b *Ela só vai voltar depois de uma desgraça acontecer.
    she only goes to-return after of a tragedy to-happen(3sg)

(38) a Ficou admirada por surgirem controvérsias como essas.
    became(3sg) surprised for to-arise(3pl) controversies like those
    "She was surprised that controversies like those arise."

b Ficou admirada por controvérsias como essas surgirem *(frequentemente).
    became(3sg) surprised for controversies like those to-arise-3pl *(often)

It appears then that the two facts which we observed in inflected infinitival complements of declarative/epistemic predicates, i.e. obligatory inversion and restrictions on the occurrence of certain verbs, are not properties of inflected infinitival clauses generally, but only of those particular complements. The type of inflected infinitival clause considered in this section, i.e. adjunct clauses, displays the word order typical of finite clauses, i.e. SVO, and no restrictions on the type of lexical verbs which they may embed.

2.4. Factive complements and subjects clauses

The two different sets of possibilities found in complements of declarative/epistemic verbs and in adjunct clauses appear combined in the two other contexts to be considered in this chapter, namely in complements of factive predicates and in subject clauses.
A representative list of factive verbs is shown in (39):

(39) **Factive Verbs:**

- **achar (bem/mal)** "find it good/bad"  
- **gostar (de)** "like"  
- **criticar** "criticise"  
- **deplorar** "deplore"  
- **lamentar** "regret"  
- **aprovar** "disapprove"  
- **desaprovar** "disapprove"  
- **sentir** "be sorry"  
- **desculpar** "excuse"  
- **suportar** "stand"  
- **desestilar** "hate"  
- **tolerar** "tolerate"

As shown in (40), subject-auxiliary inversion is allowed in factive complements (although non-inversion appears to be the preferred option). Lexical verbs are allowed when an auxiliary is not present, but in this case no inversion is allowed, as can be seen in (41).

(40) a Lamento o Joã£o ter comprado esse livro.
   regret(lsg) the Joã£o to-have(3sg) bought that book
   "I regret that Joã£o has bought that book."

   b Lamento ter o Joã£o comprado esse livro.
   regret(lsg) to-have(3sg) the Joã£o bought that book

(41) a Lamento o Joã£o comprar esse livro.
   regret(lsg) the Joã£o to-buy(3sg) that book
   "I regret that Joã£o bought that book."

   b *Lamento comprar o Joã£o esse livro.
   regret(lsg) to-buy(3sg) the Joã£o that book

The same facts hold for subject clauses, as shown in (42) and (43).

(42) a É estranho eles terem gasto o dinheiro.
   is strange they to-have(3pl) spent the money
   "It is strange that they have spent the money."

   b É estranho terem eles gasto o dinheiro.
   is strange to-have(3pl) they spent the money
As with complements of declarative/epistemic predicates, inversion with lexical verbs becomes in fact grammatical (although it remains optional) in certain cases, namely when the lexical verb is stative, or, if the verb is eventive, when there is some quantificational expression in the clause. See (44) and (45):

(44)  
(44) a Lamento comprar o João tantos livros.
   regret(lsg) to-buy(3sg) the João so+many books
   "I regret that João buys so many books."
   b Lamento saberes tu tão pouco.
   regret(lsg) to-know(2sg) you so little
   "I regret that you know so little."

(45)  
(45) a É estranho gastarem eles tanto dinheiro.
   is strange to-spend(3pl) they so+much money
   "It is strange that they spend so much money."
   b É estranho gostar o João de teatro.
   is strange to-like(3sg) the João theatre
   "It is strange that Joâo likes theatre."

With respect to the occurrence of unaccusative verbs, factive complements and subject clauses behave on a par with adjunct clauses. This is shown in (46) and (47) below.

(46)  
(46) a Lamento / é estranho acontecer uma desgraça tão grande nessa família.
   regret(lsg) / is strange to-happen(3sg) a tragedy so big in+that family
   "I regret/it is strange that such a big tragedy happened in that family."
   b *Lamento / é estranho uma desgraça tão grande acontecer nessa família.
   regret(lsg) / is strange a tragedy so big to-happen(3sg) in+that family
2.5. Summary

In short, there are two facts concerning inflected infinitival clauses which must be accounted for. One refers to the possibility of subject-verb inversion. This is obligatory in complements of declarative/epistemic verbs, ungrammatical in adjunct clauses and optional in factive complements and subject clauses. The other fact refers to the classes of predicates which these clauses may embed. There seem to be fairly strict restrictions in complements of declarative/epistemic verbs, no restrictions at all in adjunct clauses, and restrictions in factive complements and subject clauses only in cases of inversion. These two facts are obviously correlated. It would appear that certain predicates are incompatible with inversion. If inversion does not occur, then these predicates are allowed. The only exception to this is found with unaccusative predicates, which consistently require inversion. However, even in this case we find an asymmetry between the contexts that require inversion and those that don’t, whenever a non-generic interpretation is forced. This seems to be also a relevant factor in determining the class of lexical verbs which are compatible with inversion. As Ambar (1993) observes, only when a generic/habitual reading is available are these verbs allowed to occur in inversion contexts. Under this reading, all lexical verbs, whether stative or eventive, are assigned a stative interpretation. It could therefore be argued that the class of verbs compatible with inversion can be characterised as corresponding to the stative class.

These facts are summarised in the table in (48), with an indication of examples in the text which illustrate each point. I ignore the variation found with respect to aspectual auxiliaries, since we might assume that 'aspectual auxiliaries' which are ruled out in inversion contexts can be included in the class of eventive verbs. +Q and -Q refer to the
presence and absence, respectively, of an expression in the sentence (typically, but not necessarily, a quantificational expression) which forces a generic/habitual interpretation.

(48) Summary of the facts:

<table>
<thead>
<tr>
<th></th>
<th>decl./epist. complements</th>
<th>adjuncts</th>
<th>factive complements/subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>inv.</td>
<td>no inv.</td>
<td>inv.</td>
</tr>
<tr>
<td><strong>Auxiliary</strong></td>
<td>✓</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>(16b)</td>
<td>(16a)</td>
<td>(32b)</td>
</tr>
<tr>
<td><strong>Stative V</strong></td>
<td>✓</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>(31)</td>
<td>(35b)</td>
<td>(35a)</td>
</tr>
<tr>
<td><strong>Non-stative V</strong></td>
<td>+Q</td>
<td>✓</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>(29b)</td>
<td>(34b)</td>
<td>(34a)</td>
</tr>
<tr>
<td></td>
<td>-Q</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>(23b)</td>
<td>(34b)</td>
<td>(34a)</td>
</tr>
<tr>
<td><strong>Unaccusative V</strong></td>
<td>+Q</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>(24b)</td>
<td>(24a)</td>
<td>(38a)</td>
</tr>
<tr>
<td></td>
<td>-Q</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>(28a)</td>
<td>(28b)</td>
<td>(37a)</td>
</tr>
</tbody>
</table>

Furthermore, it is necessary to explain why inflected infinitives are ruled out in certain contexts, namely in the complement position of subject control verbs such as _querer_ "want" (see (11b)), in interrogative clauses (see (12b)) and in relative clauses (see (13b)). In order to do this, it will be necessary to characterise the conditions under which inflected infinitives are licensed.
3. Some previous accounts

The inflected infinitive has been the object of numerous studies by traditional grammarians. See, for example, Ali (1919), Maurer (1968) and Sten (1952). Within a generative grammar framework, it is worth mentioning the important paper by Rouveret (1980). In this section, however, I shall consider only studies which have been formulated within a Government and Binding framework. Three analyses are discussed: Raposo (1987a) (see 3.1), Ambar (1992) (see 3.2) and Galves (1991b) (see 3.3). These three analyses have in common the claim that the C-position is crucially involved in the licensing of the inflected infinitive (a view also adopted by Rouveret 1980, albeit in different terms). An alternative view can be found, for example, in Uriagereka (1993), who argues for the existence of an independent projection in languages such as Portuguese where inflected infinitives can be licensed without inversion.

3.1. The Case requirement on Agr

The best-known analysis of the Portuguese inflected infinitive formulated within a Government and Binding framework is Raposo's (1987a). The main assumption behind Raposo's analysis is that in non-tensed clauses Agr may assign Nominative Case only if it is itself Case-marked. Furthermore, Raposo assumes that inflected infinitival clauses where no inversion takes place are IPs, while those displaying inversion are CPs.

Let us see how these two assumptions are put to work to account for the particular cases that we are considering. For the cases without inversion, Agr, being the head of the clause, may be assigned Case from outside by a governing head. This head is V in the Case of factive complements, P in the case of adjunct clauses and matrix I in the case of pre-verbal subject clauses. If the subject clause is extraposed, as is typically the case, Case is assigned to an expletive null pronominal in canonical subject position and transmitted to the head of the extraposed IP via a CHAIN (cf. Chomsky 1986a). This is shown in (49) and (50).
Factive complements (without inversion) and adjunct clauses:

\[ [iP ... [VP PP V/P [iP DP [i Agr] ...]]] \]

Case

(50) a Pre-verbal subject clauses:

\[ [iP [iP DP [i Agr] VP] I VP] \]

b Extraposed subject clauses:

\[ [iP pro I VP [iP DP [i Agr] VP ]] \]

Case

Case-transmission

In clauses displaying inversion, on the other hand, Agr must raise to C, the head of the clause, so it can receive Case from the matrix V. The implication is that complements of declarative/epistemic verbs are always CPs, whereas factive complements may be CPs or IPs. This is shown in (51).

(51) Complements of declarative/epistemic verbs and factive complements (displaying inversion):

\[ [iP ... V [CP [C [i Agr]]] [iP DP t_i ...]] \]

Case

Notice that nothing in Raposo's analysis leads us to expect the restrictions on the occurrence of lexical verbs in pre-subject position observed in section 2. The most problematic aspect of the analysis, however, concerns the assumption that Agr must be Case-marked in order to be able to assign Nominative Case.

At first sight, it would appear that this assumption is at odds with well-known restrictions on the distribution of clauses (see, among others, Emonds 1970, 1976, Jackendoff 1977, Koster 1978, Stowell 1981 and Kempchinsky 1992). In English, for example, both tensed and infinitival clauses are ruled out in the object position of
prepositions within VP (see (52)), in the subject position of ECM complements (see (53)),
as subjects of infinitival clauses introduced by for (see (54)), and as subjects of small
clauses (see (55)).

(52) a  *He blamed it [on [that Bill was too strict]]
      b  *He blamed it [on [to have been too strict]]
(53) a  *I consider [[that John came home] to be fortunate]
      b  *I consider [[to come home] to be easy]
(54) a  *It would be nice [for [that John won the election] to have a positive effect on
        the growth of leftist parties]
      b  *It would be nice [for [to win the election] to have a positive effect on the
        growth of leftist parties]
(55) a  *The government considers [[that the recession is deepening] a serious problem]
      b  *The government considers [[not to vote] very wrong]

Stowell (1981) notes that the positions from which clauses are typically excluded have in
common the fact that they are all Case-positions. He proposes to derive this fact from the
general principle given in (56).

(56)  **Case-Resistance Principle (CRP)**

Case may not be assigned to a category bearing a Case-assigning feature.

Stowell argues that both finite and infinitival clauses are specified as [+Tense]. The
[+Tense] feature is represented by a tense operator which appears in Comp at least at LF.
The [+Tense] feature is, according to Stowell, a Case-assigning feature; hence, by the
CRP, clauses may not appear in positions to which Case is assigned.

However, there are apparent counterexamples to this generalization. For instance, both
finite and infinitival clauses may appear in the subject position of finite clauses (see (57))
and also in the complement position of Case-assigning heads such as V (see (58)).
(57)  a  [That Jenny is a good hostess] is self-evident
     b  [(For you) to take this course] would help you
(58)  a  Paul knows [that Jim lives with his sister]
     b  John has promised [to help us]

Following Emonds (1976) and Koster (1978), Stowell assumes that the sentential subjects in (57) are topicalised, rather than in true subject position. Evidence for this assumption comes from the fact that sentential subjects are ruled out in contexts where topicalisation is impossible. Topics may not occur in the subject position of the sentential complement of a noun (see 59a)), nor can they appear in the subject position of an adjunct clause (see 60a)). As shown in the (b) and (c) examples, both finite and infinitival sentential subjects are also excluded in these contexts.

(59)  a  *John’s belief [(that) [the Geography course]], Bill really wanted to take [e],] is unfounded
     b  *John’s belief [(that) [that you took the course] helped you] is unfounded
     c  *John’s belief [(that) [(for you) to take this course] would help you] is unfounded

(60)  a  *Although [with his sister], John was reluctant to travel [e], ...
     b  *Although [(that the house is empty] may depress you],...
     c  *Although [[(for you) to take this course] would help you] ...

As for the embedded tensed clause in (58a), Stowell argues that it is not in complement position but extraposed. Evidence for this comes from a fact noted by Jackendoff (1977), namely that a postverbal clausal complement must follow all other subcategorised constituents in VP, and even certain adjuncts. Contrast (61) and (62):

(61)  a  Mary said [e], quietly [that she wanted to drive],
     b  Paul mentioned [e], to Bill [that his shirt was dirty],
     c  John knew [e], from experience [that the law was unfair],
(62) a *Mary said [that she wanted to drive] quietly
   b *Paul mentioned [that his shirt was dirty] to Bill
   c *John knew [that the law was unfair] from experience

Infinitival complements such as the one in (58b), however, don’t appear to be restricted in this way. See (63) and (64):

(63) a John has promised [repeatedly] [to help us]
    b John explained [to Bill] [how to open the jar]

(64) a John has promised [to help us] [repeatedly]
    b John explained [how to open the jar] [to Bill]

Stowell argues that the control verbs in (63) and (64) are unable to assign Case. Hence, the infinitival complement may remain in object position without violating the CRP. This becomes puzzling, however, if we consider that there are positions in which neither tensed nor infinitival clauses are licensed, despite the fact that no Case is assigned to these positions. See for example (65), which shows that clauses are excluded from the subject position of an interrogative infinitival complement, and (66), where a clause is ruled out in the subject position of a raising complement.

(65) a *John wondered [how [[that Bill arrived late] to upset Mary]]
    b *Bill wondered [how [[to have come home] to have upset Mary]]

(66) a *(It) appears [[that Bill came in late] to have upset Mary]
    b *It appears [(for Bill) to have come home] to have upset Mary]

Stowell proposes that the ungrammaticality of the sentences in (65) and (66) can be derived from the Visibility Condition (cf. Aoun 1979 and Chomsky 1981, 1986a). As arguments, the sentential subjects in these examples should be associated with Case (which they clearly are not) in order to be visible for Θ-marking. The distribution of clauses can thus be said to be the product of the conflict between the CRP and the Visibility Condition. On the one hand, the CRP excludes clauses from positions where they are assigned Case directly. On the other hand, clauses must be linked to a Case
position in order to satisfy the Θ-Criterion. Hence, they must move from a Case-position in order to bind a Case-marked trace.

However, (63) and (64) still remain to be explained. If control complements don’t assign Case to their infinitival complement, how do they satisfy the Θ-Criterion? Stowell’s suggestion is that (subcategorised) infinitival clauses are intrinsically Case-marked and, therefore, they are not dependent on Case-assignment in order to be visible for Θ-marking.

If Stowell is correct, then Raposo’s (1987a) analysis of the inflected infinitive runs into serious problems. Alternatively, if Raposo is correct in assuming that inflected infinitival clauses are licensed only in Case-positions, then Stowell’s theory must be modified in order to accommodate inflected infinitives whilst preserving the predictions it makes regarding other types of clauses. This is precisely what Kempchinsky (1992) attempts to do.

Kempchinsky (1992), discussing some differences in the distribution of clausal complements among Romance languages, presents some arguments against Stowell’s (1981) CRP. One of her arguments is based on the examination of the Portuguese inflected infinitive. She argues that Raposo’s (1987a) analysis can be maintained if the effects of the CRP are derived from a different set of assumptions from those adopted by Stowell.

Like Stowell, Kempchinsky assumes that CPs are headed by a temporal specifier. Unlike Stowell, however, she assumes that the Case-assigning feature in the clause is not associated with the temporal specifier in C, but rather with Agr in I (Chomsky 1981, 1986a). She therefore argues that, since clauses are not generally headed by a Case-assigner, their distribution cannot be derived from the CRP. In complement clauses, the temporal specifier in C is bound by the temporal index of the matrix I, which also binds the matrix VP (or the temporal argument associated with VP), yielding a temporal chain of the form (I, V, C_i) (see, among others, Enç 1987 and Zaguna 1993). Moreover, following Baker (1988), Kempchinsky proposes that structural Case-assignment involves Case-indexing of the head of the Case-marked category. The Case index assigned by V
to the head of its complement is distinct from the temporal index. This means that if the head of a CP complement is Case-marked, the temporal specifier bears an index distinct from the temporal index of the matrix V, resulting in the formation of an improper temporal chain.

In the case of inflected infinitival complements, however, 'Case Resistance' effects can be evaded in one of two ways. If the inflected infinitival clause is an IP, then it is not associated with a temporal specifier (which would be located in C). Hence, Agr can be directly Case-marked in I. This also applies to subject and adjunct clauses, which in Raposo's (1987a) analysis are IPs. If, on the other hand, the inflected infinitival clause is a CP, Agr moves to C, where it behaves for all effects as the head of the clause. This means that the Case-index is assigned to Agr, rather than to the temporal specifier. Hence, in Kempchinsky's view, the CRP makes the wrong predictions in the case of inflected infinitival CPs which, following Raposo (1987a), are headed by the Case-assigning feature Agr but nevertheless occur in Case-positions.

Kempchinsky’s analysis predicts that the temporal interpretation of inflected infinitival clauses should vary according to their categorial status (following Stowell 1981, 1982; see chapter 3). Hence, inflected infinitival IPs should always receive a tenseless interpretation, while inflected infinitival CPs should behave as tensed clauses. This, however, does not seem to be borne out by the data, as will be shown in chapter 3.

Nevertheless, even if it turns out that this is not a serious objection and that therefore we can assume that Kempchinsky is correct and Raposo's analysis can be maintained, there are still problems with the assumption that infinitival Agr must be Case-marked in order to be able to assign Case. In fact, such an assumption makes a number of predictions which are not confirmed by the facts.

On the one hand, inflected infinitival clauses are expected to be able to occur in every Case-position where infinitival clauses may appear. However, this doesn’t seem to be correct. As shown above (see (11b), (12b) and (13), repeated below), they are not allowed
to occur as complements of volitional and other objectless subject control verbs, nor are they allowed to appear as embedded infinitival interrogatives and relatives.

(11) b *O Governo quer o relatório ser publicado.
    the government wants the report to-be(3sg) published.

(12) b *Não sabemos a quem darmos o livro.
    not know(lpl) to whom to-give(lpl) the book

(13) b *Nem têm uma caneta com que escreverem.
    nor have(3pl) a pen with which to-write(3pl)

Raposo invokes a selectional argument in order to account for the case of complements of volitional verbs, which he takes to be CPs. According to him, Agr may only raise to C if this contains a tense operator (this is the case of complements of declarative and epistemic verbs) or if the matrix predicate admits a nominal complement, as Agr in C nominalises the clause (this is the case of factive complements). Volitional predicates do not select for a tense operator in C, nor, Raposo argues, do they select for nominal complements. Hence, Agr may not raise to C, and inflected infinitives are impossible.

However, it doesn't seem to be correct that volitional (and other objectless subject control) predicates do not take nominal complements, as shown in (67). So, following Raposo's assumptions, inflected infinitives should be allowed.

(67) a Querem a tua ajuda.
    want(3pl) the your help
    "They want your help."

    b Recusámos a proposta.
    refused(1pl) the proposal
    "We refused the proposal."

As for the impossibility of occurrence of inflected infinitives in embedded infinitival interrogative and relative clauses, it can be explained in one of two ways. Agr may remain in I, in which case it is not Case-marked. Alternatively, it may raise to C, which Raposo
rules out as leading to a violation of the Doubly-Filled Comp Filter (and, in the case of (13b) and maybe also (12b), Agr would still not be Case-marked in C).

However, it is generally assumed (see, for example, Pesetsky 1992) that Doubly-Filled Comp Filter phenomena are found when C is filled by a complementiser but not when it is filled by movement. This is clear, for example, in interrogative tensed clauses in Portuguese (see (68)) and in Verb-Second constructions in German (see (69)).

\[(68)\]
\[\text{a} \quad \text{Ela sabe} \left[ \text{cp quem} \left[ \text{c viu} \right] \left[ \text{ip o Pedro t} \right] \right] \]
\[\text{she knows who saw the Pedro} \]
\[\text{"She knows who Pedro saw."} \]
\[\text{b} \quad \text{Ela sabe} \left[ \text{cp [c que]} \left[ \text{ip o Pedro viu o primo]} \right] \right] \]
\[\text{she knows that the Pedro saw the cousin} \]
\[\text{"She knows that Pedro saw his cousin."} \]
\[\text{c} \quad \text{*Ela sabe} \left[ \text{cp quem} \left[ \text{c que} \right] \left[ \text{ip o Pedro viu t]} \right] \right] \]
\[\text{she knows who that the Pedro saw} \]
\[\text{*"She knows who that Pedro saw."} \]

\[(69)\]
\[\text{a} \quad \text{Hans sagte,} \left[ \text{cp den Mann} \left[ \text{c habe]} \right] \left[ \text{ip ich t} \right] \right] \]
\[\text{Hans said the man have I seen} \]
\[\text{"Hans said that I saw the man."} \]
\[\text{b} \quad \text{Hans sagte,} \left[ \text{cp [c dass]} \left[ \text{ip ich den Mann gesehen habe]} \right] \right] \]
\[\text{Hans said that I the man seen have} \]
\[\text{c} \quad \text{*Hans sagte,} \left[ \text{cp den Mann} \left[ \text{c dass]} \right] \left[ \text{ip ich t} \right] \right] \]
\[\text{Hans said the man that I seen have} \]

If this is the case, then some other explanation must be found to account for the ungrammaticality of inflected infinitives in interrogative and relative clauses.

Another prediction made by Raposo’s proposal regarding the Case-requirements of Agr is that inflected infinitival clauses should not be allowed to occur in non-Case-positions. However, once again, this doesn’t seem to be correct. Ambar (1992) notes two contexts in which inflected infinitives appear in positions to which Case is not available.
These are exclamative root clauses (see (70)), where no external element is available to
Case-mark the infinitival Agr, and complements of unaccusative verbs such as parecer
"seem" (see (71)), where the inflected infinitive obligatorily raises, although the embedded
C receives no Case from the matrix verb.8

(70) Poderes tu ajudar-me!
    to-be-able(2sg) you to help me(acc)
    "If only you could help me!"

(71) a *Parece eles terem perdido aquele comboio.
    seems they to-have(3pl) missed that train
    b Parece terem eles perdido aquele comboio.
    seems to-have(3pl) they missed that train

3.2. T/Agr-licensing and the Θ-Criterion

Ambar’s (1992) analysis deals with inflected infinitival complements of
declarative/epistemic verbs only, although it might conceivably be extended to account for
the other cases under study here.

Ambar assumes a representation of clause structure as in Pollock (1989), where T is
higher than Agr. Both inflectional elements, T and Agr, are specified negatively if they
are not phonetically realised, and positively if they are. Non-phonetically realised elements
must be identified via government. Moreover, both T and Agr may be further specified
as being [+/- strong]. Elements which are [-strong] must also be identified via
government, but they are unable to act as governors. Ambar assumes furthermore that Agr
must always be governed, whether it is phonetically realised or not. In languages such as
Portuguese T in finite clauses is [+T, +strong]. As such, it does not need to be governed
and it has the ability to govern Agr. Lexical verbs can then raise to the already identified
Agr, without giving rise to a Θ-Criterion violation. Hence, government of Agr by finite
T renders it transparent (in the sense of Pollock (1989)), allowing a lexical verb to raise
up to it while still retaining its capacity to assign a Θ-role to its complement. In inflected
infinitival clauses, however, T being [-T, +strong] does not have the ability to identify Agr. Hence if a lexical V raises to the unidentified Agr it will govern it and assign it any Θ-role it has to assign. In consequence, the complement of the verb doesn’t receive a Θ-role in violation of the Θ-Criterion. In other words, an Agr which is not governed by T is opaque in the sense of Pollock (1989). Only auxiliaries are therefore allowed to raise to Agr in inflected infinitival clauses. On the other hand, T, being phonetically null, must also be identified; that is why it must move up to C, where it is accessible to government by the matrix verb or by a T operator in Spec of CP.

Notice that Ambar’s proposal predicts that inversion with lexical verbs should always be ruled out as a Θ-Criterion violation. However, as we have seen in section 2, this is not strictly correct as lexical verbs are allowed to invert in certain contexts.

Ambar notes a case in which inversion is not allowed in complements of declarative/epistemic verbs, namely if the subject is under the scope of a focus operator such as só "only". See (72):

(72) a Penso só os deputados terem votado a proposta.
    think(lsg) only the MPs to-have(3pl) voted the proposal

b ?Penso só os deputados votarem a proposta.
    think(lsg) only the MPs to-vote(3pl) the proposal

c *Penso terem só os deputados votado a proposta.
    think(lsg) to-have(3pl) only the MPs voted the proposal

   d *Penso votarem só os deputados a proposta.
    think(lsg) to-vote(3pl) only the MPs the proposal

Ambar accounts for this data by assuming that in these cases T need not raise to C as it can be governed in situ by the focus operator with scope over the subject. Being governed, the [+strong] T is able to govern Agr, and a lexical verb can adjoin to Agr without giving rise to a Θ-Criterion violation. According to Ambar, the marginality of (72b) may be due to the fact that Agr in this sentence is identified by a 'defective'
element, one which inherently is not a governor but only acquires the ability to govern once it is itself governed.

In order for the analysis to work, Ambar needs to make a number of ad hoc assumptions, for which there doesn’t always seem to be independent motivation. For example, it is not clear what makes T and Agr [+strong] or [-strong], or why Agr should always need to be identified, whether it is phonetically realized or not. In section 4, I will show that it is possible to provide a more principled account of the facts in question, without making recourse to such assumptions.

3.3. Licensing Agr in C

Both Raposo’s (1987a) and Ambar’s (1992) analyses derive subject-auxiliary inversion from movement of the auxiliary into C motivated by the requirement that I be licensed by some element which has C in its governing domain. Galves’s (1991b) analysis follows a similar path, with one difference: she takes Aux-to-C movement to be triggered by some element in C which attracts the auxiliary and it is this element in C which needs to be licensed.

Unlike Raposo (1987a), Galves assumes that all inflected infinitival clauses are CPs with the following structure:

\[ (73) \ldots [_{\text{CP}} \text{Spec}_{_{\text{C}}} \text{C-Agr1}_{_{\text{Agp}}} \text{Spec}_{_{\text{Agp}}} \text{Agr2}_{_{\text{TP}}} \ldots \]

According to her, the option of having inflected infinitives in a language is a consequence of the fact that Agr may be generated in C rather than in I. This Agr-in-C must be licensed by being in the government domain of either a temporal operator (as in factive complements, which Galves, following Cinque (1990b), assumes to be adjoined to VP, and in subject clauses) or a preposition (as in adjunct clauses). In the case of complements of epistemic and declarative verbs, Galves adopts Raposo’s assumption that an abstract tense feature is selected in the C-position of these complements. Crucial to her analysis
is Roberts' (1993) theory of Case-assignment, according to which Agr may assign Nominative Case under Spec-head agreement but T can only assign Case under government. Since in this case it is T, not Agr, that is the head of C, the subject must remain in Spec of IP to receive Case under government from T (in all the other cases the subject raises to Spec of CP, an A-position by virtue of being in a Spec-head configuration with Agr). Only auxiliaries may raise to C, as the presence of tense in C is somehow incompatible with lexical verbs. This, however, doesn't account for the facts observed in section 2 regarding the restrictions on the occurrence of lexical verbs in inversion structures.

4. Nominative Case and infinitival tense

In this section I consider some questions regarding Nominative Case assignment and the licensing of subjects in infinitival clauses, and I suggest a possible explanation for the licensing of Nominative Case in infinitival contexts.

4.1. Licensing Nominative Case


Two views can be taken on the mechanisms by which DPs are assigned Case in structural configurations. One view, taken in Chomsky (1981) and much subsequent work, assumes Case to be assigned under government by a Case-assigning head. Assuming a definition of government in terms of m-command (cf. Chomsky 1986b), two modes of Case assignment are allowed: one which is dependent on a head-complement relation, and
another one which depends on a Spec-head relation. The list of contexts for Caseassignment proposed in Chomsky (1981) is shown in (74).

(74)  a  Nominative Case is assigned to the DP governed by (finite) Agr (Spec-head)

b  Accusative is assigned to the DP governed by V (head-complement)

c  Oblique Case is assigned to the DP governed by P (head-complement)

Sportiche (1988) and Koopman and Sportiche (1988, 1991) suggest that all heads have the potential ability to select either mode of Case assignment. Which mode they actually select is a matter of parametric variation. Thus, for example, they argue that finite I assigns Nominative Case under Spec-head agreement in SVO languages such as English (see (75)) but under government (which they define in terms of c-command rather than m-command) in VSO languages such as Irish or Welsh (see the Welsh example in (76)).

According to their VP-Internal Subject Hypothesis, the subject is generated in VP in both types of languages, but it must raise to Spec of IP in SVO languages to be assigned Case.

(75)  a  The children sang every day.

b  \[
\bar{I} \quad \begin{array}{c}
\text{IP} \\
\text{DP} \\
I \quad \text{VP}
\end{array}
\]

\[
\text{NOM}
\]

(76)  a  Canodd y plant bob dydd.

sang-3sg the children every day

b  \[
\bar{I} \quad \begin{array}{c}
\text{IP} \\
I \quad \text{VP} \quad \text{DP} \quad \ldots
\end{array}
\]

\[
\text{NOM}
\]

Assuming the Split-Infl Hypothesis (see, among others, Pollock 1989, Chomsky 1991, Belletti 1990), Roberts (1993) further argues that both Agr and T have the ability to assign Nominative Case. However, while Agr can assign Case both under Spec-head agreement and under government (defined in terms of c-command), as Roberts argues to be the case for English (see (77)), T can only assign Nominative Case under government. Case assignment by T to the subject in VP is found not only in VSO languages but also in free inversion structures in languages such as Italian, in which,
following Giorgi and Longobardi (1991), Roberts assumes the subject to be generated to the right of V (see (78)). Furthermore, T can assign Case to the subject in Spec of AgrP once it raises to C in the Aux-to-Comp construction in Italian (see (79)).

(77) a Case-assignment by Agr under Spec-head agreement:

\[ [\text{AgrP} \text{ they } [\text{Agr} \text{ have} \ldots [\text{VP} \text{ seen Mary}]]] \]

(b) Case-assignment by Agr under government:

\[ [\text{CP} [\text{C} [\text{Agr} \text{ have}]],] [\text{AgrP} \text{ they } [\text{Agr} \text{ t} \ldots [\text{VP} \text{ seen Mary}]]] \]

(78) a Ha telefonato Maria.

has telephoned Maria

"Maria has telephoned."

(b) \[ \ldots [\text{TP} \text{ T } [\text{VP} \ldots \text{DP} \ldots] \ldots] \]

(79) a Avendo Maria accettato di aiutarci, ...

having Maria accepted to-help us

(b) \[ [\text{CP} [\text{C} \text{ T } ] [\text{AgrP} \text{ DP } \ldots [\text{TP} \text{ t} \ldots] \]

A more restrictive view of Case assignment, or Case checking, is taken in the Minimalist framework of Chomsky (1993), which assumes that structural Case assignment always involves a Spec-head relation. T is associated with Case features and once it adjoins to Agrs it checks Nominative Case on the DP in Spec of AgrsP. Accusative Case is determined by V, which adjoins to Agrv, checking Case on the DP in Spec of AgrvP. Notice that, although Case assignment involves the mediation of Agr, the true Case assigners, or the heads associated with Case features, are not the Agr-heads but T and V. This is shown in (80):
Case checking may take place in the syntax (or in Chomsky's 1993 terms, before Spell-Out) or at LF (after Spell-Out), depending on whether the D-features of the Case-checking head are weak or strong. Let us see how this works for Nominative Case. If the D-feature of T is strong, Case checking must take place before Spell-Out, on the assumption that the D-features of T disappear once they check the DP in Spec of Agr₃P, and strong features have to be eliminated before PF. Hence the subject must raise overtly to Spec of Agr₃P to have its Case features checked. This is the case for English. If, on the other hand, the D-feature of T is weak, as seems to be the case for Irish and Welsh, then no overt DP-movement takes place; weak features don't have to be eliminated before PF since they are invisible to PF processes, hence by the Procrastinate principle (according to which LF movement is less costly than overt movement) the subject DP can only raise covertly (after Spell-Out).

The view that Case checking is consistently mediated by the Spec-head relation is intrinsically appealing for its greater simplicity; reducing the different modes of Case licensing to just one is obviously a desirable achievement. This is the view I will follow here. I will also assume the Minimalist view that only T is associated with, and has the ability to check, Nominative Case features.
4.2. The Case of infinitival subjects

If infinitival clauses are tenseless, it is predicted that Nominative Case can not be licensed in infinitival clauses. Hence overt subjects are only expected to occur if some special mechanism is available for checking Case on the infinitival subject. One such mechanism is instantiated by Exceptional Case Marking and Raising phenomena. See (81):

(81) a I believe [him to have left]
    b She, seems [I, to have left]

Accusative Case on the infinitival subject in (81a) is licensed by the matrix V believe. In the framework assumed in Chomsky (1981), the matrix verb directly governs and Case-marks the DP in the specifier of its clausal complement. In the Minimalist framework the assumption is that the infinitival subject DP moves to the matrix Spec of Agr$_g$P, where its Case is checked. In a similar fashion, both frameworks assume that the infinitival subject in the raising construction shown in (81b) raises all the way to the matrix Spec of Agr$_s$P, where its Nominative Case is checked. If the subject DP cannot move out of the infinitival clause to check its Case features, then the prediction is that only the empty category PRO can be licensed in the infinitival subject position. This is because PRO is standardly assumed to be licensed in ungoverned (hence Caseless) contexts. See (82):

(82) I tried [[*Mary/PRO to leave]]

There have been suggestions in the literature to the effect that non-finite clauses may have a Tense-head which is associated with Case features. As described above, Roberts (1993) proposes that overt DP subjects in gerundival clauses in Italian are assigned Nominative Case by T, following raising of T to C. Also Chomsky and Lasnik (1991) depart from the standard view that the subject position of non-finite CPs is a Caseless position and argue that non-finite T is associated with Case features which allow it to check what they call Null Case on PRO subjects (which they argue is restricted to occurring in contexts where Null Case may be checked, rather than in Caseless contexts).
It was shown above that infinitival subjects bearing Nominative Case are licensed in specified contexts in Portuguese. The same phenomenon is found in Italian Aux-to-Comp constructions (Rizzi 1982), which may be found not only in gerundival clauses (see (79) above) but also in infinitives (see (83)) (as well as in subjunctive clauses; for a more detailed description of Aux-to-Comp in Italian see Rizzi 1982; for Aux-to-Comp in infinitives see also subsection 4.2 in chapter 3).

\[(83)\] Mario afferma [esser lui in grado di affrontare la situazione]
"Mario asserts to-be he able to face the situation"

Given that Nominative-Case checking is typically a property of finite T, how can we account for the occurrence of infinitival Nominative subjects? One possibility is to follow the spirit of Roberts' (1993) analysis of Aux-to-Comp in Italian and assume that there is an abstract (i.e. not morphologically realised) T in infinitival clauses which has the ability to check Nominative Case, subject to parametric variation. In chapter 3, I will show that there is strong motivation for claiming that both inflected and non-inflected infinitival clauses have T. Assuming that this is correct, it is necessary to explain, on the one hand, why Nominative subjects are restricted to inflected infinitival clauses, and, on the other hand, why we don’t find inflected infinitives in languages such as English. This is the purpose of the next subsection.

4.3. The Case Parameter

The analyses discussed in section 3 adopt different views concerning the licensing of inflected infinitives and, concomitantly, of Nominative subjects in infinitival clauses. Raposo (1987a) proposes that the possibility of having inflected infinitives in a language is a consequence of the interaction between the null-subject parameter (see, among others, Chomsky 1982 and Rizzi 1982) and what he calls the Infl parameter. The Infl parameter specifies the possible combinations of the inflectional feature [+- Tense] and the feature Agr. Languages such as English, which are negatively specified for the Infl parameter, obligatorily select [+Tense] once Agr is positively specified. The marked setting for the
parameter, a positive setting, allows a language free choice of [+/-Tense] in an Infl with Agr. This is the option instantiated in inflected infinitival clauses, where Infl is specified as [+/-Tense], Agr. An Agr which is not in the domain of a [+Tense] feature has the ability to assign Nominative Case only if it is licensed in a special way, namely by being itself specified for Case (see subsection 3.1 above), a possibility only open to Agr in null-subject languages. On the other hand, Ambar (1992) suggests that one of the ways of licensing Agr (the Case-assigner) in inflected infinitives is by allowing a strong [-Tense] to govern it (see the analysis for the examples in (72) above). The possibility of having inflected infinitives is therefore partly dependent on the option of allowing [-Tense] to be specified as [+strong], rather than as [-strong], as is the unmarked option in infinitival clauses. Finally, Galves (1991b), as we have seen above, suggests that the possibility of having inflected infinitives is related to the possibility of generating the Case-assigner in C.

All three analyses capture the fact that inflected infinitives (or the presence of Nominative subjects in infinitival clauses) correspond to a marked option in UG. Moreover, they all share a number of important assumptions. On the one hand, they assume that the Case-assigner, which in all three analyses is taken to be Agr (and also T, in Galves' analysis), must be licensed in a particular way before it is able to assign Case. On the other hand, although inflected infinitival clauses are assumed to be marked [-Tense], their [-Tense] feature is argued to have different properties from that of other infinitival clauses, either because it is associated with Agr (in Raposo's analysis) or because it has a different feature specification (in Ambar's analysis). Although the analysis that I would like to propose here shares these assumptions, it differs in that I take T to be the functional head which checks Nominative Case.

Following Chomsky (1993), Bobalijk (1992) argues for a Case Parameter which distinguishes Nominative languages (such as English) from Ergative languages (such as Inuit). If a predicate selects only one argument, then only one of the two projections available for structural Case assignment, i.e. Agr$_S$ or Agr$_O$, is activated. If the default choice in a language is Agr$_S$, then that language will have a Nominative Case system (see
alternatively, if the default choice is $\text{Agr}_O$, then the result is an Ergative language such as Inuit (see (85)).

(84) a She$_{\text{NOM}}$ saw her$_{\text{ACC}}$
   b She$_{\text{NOM}}$ fell
   c She$_{\text{NOM}}$ laughed

(85) a Jaani-up$\text{erg}$ natsiq$_{\text{abs}}$ kapi-jaNa
    Jaani seal stab-trans
    "Jaani stabbed a seal."
   b inuk$_{\text{abs}}$ tikit-tuq
    person arrived
    "The person arrived."
   c ilinniaqtitsiji$_{\text{abs}}$ uqaq-tuq
    teacher spoke
    "The teacher spoke."

Laka (1993) suggests a reformulation of the Case Parameter (largely motivated by her study of unergative predicates in Basque), whereby what is assumed to be active or inert, are not the Agr-heads, but the Case features borne by T and V. Hence, a Nominative Case system is one which takes $C_T$ (the Case feature borne by T) as its default choice; the default choice in an Ergative Case system, on the other hand, is $C_V$ (the Case feature borne by V).

For the purposes of this chapter, what is interesting about the proposals described above is the idea that languages may differ as to whether the Case features of a particular head are active or inert. I would like to suggest that this is precisely what accounts for the contrast between English and Portuguese. Since there are two elements involved in the process of Case checking, i.e. the Case-checking head and the Agr element to which it adjoins, there are two alternative ways in which we can account for this contrast. One way would be to assume that, whilst the T found in inflected infinitival clauses in Portuguese is associated with Case features and thus it is able to license Nominative subjects, its English counterpart is not, hence the lack of Nominative subjects. An alternative way of
deriving this contrast would be to assume that Nominative Case checking is necessarily mediated by an Agr$_s$ projection. This projection is present in Portuguese (as could be inferred from the presence of overt agreement morphology), but not in English.

However, it doesn't seem to be the case that Case checking must be mediated by an Agr projection. In her analysis of unergative predicates in Basque, Laka (1993) argues that absolutive Case in Basque can be assigned either directly by V in VP, or to Spec of Agr$_o$ following adjunction of V to Agr$_o$. If this is correct, it is possible that these two ways of Case assignment are open for Nominative Case as well. More than that, it is possible that Case checking never involves a mediating Agr projection, as proposed by Chomsky (1995). If this is correct, then we could think of the agreement morphology shown on the inflected infinitive as a spell-out of the Case-features of T. This is the view that I will assume here.\(^{13}\)

Let us then see how the analysis would run. In the same way that V may be associated with active or inert Case features (as is the Case of transitive and intransitive verbs in English, respectively), so can T. I will assume that the non-inflected infinitival T is not associated with Case features at all (see note 13). A T associated with Case features, on the other hand, is canonically realised as finite T. One hypothesis suggested by this correspondence is that whether or not T is associated with Case features is related to its semantic content. This hypothesis is explored by Martin (1992), who suggests that a direct link may be established between the semantic content of T and its ability to check Case, or in other words, its ability to be associated with Case features. In this view, the richest T (which is finite T) checks Nominative Case, and the most impoverished T, (which he identifies as the T found in certain infinitival complements) fails to check Case.\(^{14}\)

I shall return to Martin's proposal in chapter 3. Let us assume for the moment that this view is correct. This would represent the unmarked option. The marked option, on the other hand, corresponds to the case where a T which has very little semantic content can be associated with Case features. Assuming that infinitival T has somehow less semantic content than finite T, this is the option instantiated in inflected infinitival clauses. This option is allowed in Portuguese, but not in English.
In the next chapter, I will argue that an infinitival T which is associated with Case features must be licensed in a particular way. It would be interesting to determine whether there are any differences between finite T and an infinitival T which bears Case features with respect to their licensing. If we assume that there is a projection above TP where Case checking takes place in a Spec-head configuration, the standard Agr\(\_\)P (an assumption which I am not adopting here), then we may assume that Agr\(\_\) plays a role in licensing the Case features of both finite and infinitival T. However, there seems to be evidence that C is crucially involved in this licensing, at least in the case of infinitival T. It may be that the Case features of finite Agr do not need to be licensed in this way, given that they may be assumed to be licensed by the finite morphology. Nevertheless, it has been proposed that C also plays a role in the process of Case assignment in finite clauses, if not in the licensing of the Case features of finite T. Watanabe (1993), for example, suggests a modification of the Case theory proposed in Chomsky (1993), whereby the head Agr\(\_\) must raise to C following Case checking in Agr\(\_\)P to check off a [F] feature which is created during the process of Case checking. The analysis that I propose in chapter 3 also takes the creation of a dependency with C to be a necessary component of the process of Case checking, although it differs in what it takes to be the motivation for such a requirement.

5. Conclusion

In this chapter I have identified two main questions which need to be addressed regarding the four inflected infinitival contexts under consideration here: (1) why is inversion obligatory (or possible) in certain contexts and disallowed in others? and (2) why are eventive verbs ruled out in inversion contexts? These questions tie up with more general ones regarding the licensing of inflected infinitives. I have considered three proposals for dealing with these questions, which all appear to be problematic in some way. Finally, I have suggested that the possibility of licensing Nominative subjects in infinitival clauses may be explained if we assume that T, the functional head responsible for Nominative Case checking, may, as a marked option, be associated with Case features in infinitival clauses. This idea will be developed in the next chapter.
Endnotes

1. My discussion here will be concerned exclusively with Portuguese. For Galician, see Uriagereka (1993).

2. Notice that many of the ungrammatical sentences in the text containing lexical verbs without an auxiliary (see (30a) for example) would in fact become grammatical if assigned a generic rather than a punctual interpretation. I will return to this point in chapter 3.

3. The class of eventive verbs is an heterogeneous aspectual class. Following a long tradition which goes back to Aristotle, verbs can be classified according to whether they express states (stative verbs), activities or telic eventualities (eventive verbs) (see, among others, Dowty 1979; for Portuguese, see Mateus et al 1989). According to Chierchia and McConnell-Ginet (1990: 353-4), both states and activities have "the property of lacking a natural culmination", whereas telic eventualities "have a natural end point or culmination". Stative and eventive verbs can be distinguished by their syntactic behaviour. For example, eventive verbs can occur in the imperative and in the progressive, but not stative verbs. This is illustrated in (i)-(iii) (where (i) shows a verb denoting a state, (ii) a verb expressing an activity and (iii) a verb expressing a telic eventuality):

   (i)  a *Know Latin!
        b *John is knowing Latin.
   (ii) a Drive carefully!
        b Mary is driving carefully.
   (iii) a Write to me!
        b Joan is writing a letter.

The stative/eventive distinction appears to be the relevant distinction underlying the facts observed in complements to declarative/epistemic verbs with respect to the class of predicates which they admit. This is seen very clearly with verbs such as cheirar "smell" which have a dual use, i.e. they may behave as statives or eventives. When the two uses are contrasted, as in (iv), it becomes very clear that only statives are allowed in these clauses.

   (iv) a Afirroum cheirares muito bem.
        claimed(3sg) to-smell(2sg) very well
        "He claimed that you smell very nice."
        b *Afirroum cheirares o perfume
        claimed(3sg) to-smell(2sg) the perfume
        "He claimed that you smell the perfume."

This lends support to Ambar’s (1993) suggestion that the relevant distinction is not between auxiliaries and lexical verbs but rather between stative and eventive verbs.
The distinction between activities and telic eventualities, on the other hand, plays no role in these clauses, as shown in (v):

(v) a *Pensa guiar a Maria o carro
thinks to-drive-3sg the Maria the car
"He thinks that Maria drives the car."
b *Pensa escrever a Joana a carta,
thinks to-write-3sg the Joana the letter
"He thinks that Joana writes the letter."

This confirms the view, to be developed in chapter 3, that the stative/eventive asymmetry found in these clauses may be attributed to tense properties. In fact, as Stowell (1994, 1995) notes, it appears that only the distinction between stative and eventive verbs, but not any of the finer distinctions to be drawn within the eventive class, is relevant for tense construal.

4. For presentational purposes, subject clauses and factive complements are here introduced together, since they exhibit a similar behaviour with respect to the facts discussed in this section.

5. Notice that the examples in the text involve what appear to be extraposed subject clauses. I will argue in chapter 3 that some of them are in fact objects. For all cases, though, the postverbal position is the most natural one. The relevant point here is that there is no contrast between preverbal and postverbal 'subject' clauses with respect to the facts discussed in this section.

6. For Raposo (1987a) inversion in factive complements is perfectly grammatical. Moreover, he ignores the possibility of inversion in subject clauses. However, his analysis could easily be extended to account for this, by adding the assumption that, like factive complements, subject clauses may be either CPs or IPs.

7. The fact that the tense feature present in both finite and infinitival clauses is assumed to be a Case-assigning feature appears to be problematic in face of the fact that infinitival clauses don't typically license Nominative subjects. Stowell (1981) therefore distinguishes between the Tense feature, which might be interpreted as a categorial feature, and the [+/-Past] feature, which gives the head position of the clause lexical content. Finite clauses are [+/- Past], whereas infinitival clauses are unspecified for this feature. The fact that Nominative Case is not licensed in infinitives follows from the fact that only a head position with lexical content has the ability to govern and therefore assign Case (adopting Chomsky's 1981 assumptions on Case-assignment).

8. As Ambar (1992) notes, this argument may be circumvented if it is assumed that the complement of the unaccusative verb forms a CHAIN with an expletive pro in subject position which receives Case from the matrix I. As with extraposed subject clauses, Case
is transmitted via the CHAIN, which allows Agr in C to be Case-marked.

9. Identical variation is suggested for Accusative Case. They argue, for example, that in Dutch Accusative Case is always assigned under agreement (for arguments, see Koopman and Sportiche 1988, 1991).

10. Alternatively, it might be argued that Agr assigns Case under Spec-head agreement in both examples in (77), if it is assumed that, following movement of Agr to C, its trace retains the ability to Case-mark the subject in its Spec.

11. For alternative analyses for free subject inversion see, among others, Rizzi (1982), Burzio (1986) and Belletti (1988).

12. Bobalijk (1992) equates "nominative" with "ergative" (the Case assigned in Spec of Agr$_\text{s}$), and "accusative" with "absolutive" (the Case assigned in Spec of Agr$_\text{o}$).

13. Bobalijk's (1992) and Laka's (1993) proposals are designed to account for Case licensing in finite clauses. A fundamental assumption of both proposals is that a Case feature can be activated only after the default choice of the Case Parameter has been made use of. Hence, in a language such as English, where Nominative is the default choice of the Case Parameter, Accusative can only be assigned if Nominative is also assigned. This obviously doesn't account for the patterns found in infinitival clauses with transitive predicates. A possible way of maintaining the Case Parameter in face of these facts would be to assume that the Case features with which a head is associated may be active or inert if they are present, but that they may also be altogether absent. The Case Parameter then is taken as making reference to Case features which are present. The facts found in non-inflected infinitival clauses, both in Portuguese and in English, would then be consistent with the Case Parameter, on the assumption that the infinitival T in these clauses is not associated with Case features. Thus, this infinitival T is different from the T found in clauses with intransitive predicates in Ergative languages, which is associated with inert Case features.

14. Martin (1992) also suggests that the T found in control complements, which has more semantic content than the T of ECM complements but less than finite T, licenses Null Case. I shall not consider Null Case here.
CHAPTER THREE

A TENSE-BASED ACCOUNT OF THE INFLECTED INFINITIVE

1. Introduction

The purpose of this chapter is to motivate the claim made in chapter 2 regarding the role played by T in the checking of Nominative Case in inflected infinitival clauses, and to propose a precise formulation of the conditions and mechanisms involved in the licensing of inflected infinitives.

The chapter is organised as follows. In section 2, I discuss the tense properties of infinitival clauses both in Portuguese and in English. In section 3, the structure of the contexts where inflected infinitives are found is examined, leading us to the conclusion that the alternation between non-inversion and inversion correlates with the content (or lack of content) of the infinitival C. Finally, in section 4, I propose an analysis for the facts, which, after taking into consideration the Aux-to-Comp phenomenon in Italian and the contexts where inflected infinitives are excluded in Portuguese, suggests that both T and C are crucially involved in the licensing of Nominative subjects in infinitival clauses.

2. The tense of infinitival clauses

2.1. Infinitival complements in English and in Portuguese

Stowell (1981) assumes tense to be an operator which takes a full proposition, i.e. a subject-predicate structure, as its operand. The tense operator appears in Comp at some level of representation (presumably LF), so as to c-command its clausal operand. Stowell distinguishes between the feature [+/-Tense] and the morphological feature [+/Past], which gives the head position of the clause lexical content. While finite clauses are [+Tense, +/-Past], infinitival clauses are [+Tense, --], i.e. they are associated with a tense
operator but not with the morphological feature [+/-Past] (see endnote 7 in chapter 2). The fact that infinitival clauses are neither past nor present has the consequence that the infinitival tense is interpreted as being unrealised with respect to the matrix tense. As Stowell (1981: 40-41) puts it, "the tense of a to-infinitive is roughly that of possible future, recalling Bresnan's (1972: 86) observation that an infinitival complement 'may describe something hypothetical or unrealized'". Hence, in (1a), for example, Jenny has not locked the car at the time when she remembers to do so. Similarly, in (1b) John has not yet brought the wine when he wants to do so. Both infinitival complements have therefore an unrealised tense interpretation with respect to the matrix.

(1) a Jenny remembered [PRO to lock the car]  
    b John wanted [PRO to bring the wine]

However, only control infinitives appear to be uniformly assigned this unrealised interpretation. Stowell (1981, 1982) notes that the tense of ECM complements, on the other hand, appears to be unspecified and largely dependent on the semantics of the matrix predicate. Hence, the state of affairs denoted by the infinitival clause in (2a) is located in the past with respect to the matrix, while in (2b) it is interpreted as being simultaneous, and in (2c) as future, with respect to the matrix tense.

(2) a I remember [John to be the smartest]  
    b Bill considers [himself to be the smartest]  
    c I expect [John to win the race]

Stowell concludes from this that, unlike control complements, ECM complements of believe-type verbs are tenseless, i.e. they are not associated with a tense operator in Comp. This follows from their status as IPs (Chomsky 1981) and thus from the fact that they lack a Comp position altogether.

The tense of ECM complements of verbs such as want, on the other hand, is correctly predicted to be unrealised with respect to the matrix tense, on the assumption that these complements are CPs introduced by a null for-complementiser (Chomsky 1981). See (3):

    The tense of ECM complements of verbs such as want, on the other hand, is correctly predicted to be unrealised with respect to the matrix tense, on the assumption that these complements are CPs introduced by a null for-complementiser (Chomsky 1981). See (3):
(3) John wanted [me to bring the wine]

Another class of infinitival-taking verbs in English is the one Pesetsky (1992) labels the \textit{wager}-class. This class of verbs includes verbs of saying, which, unlike \textit{believe}-type verbs, do not allow ECM complements. The subject position of the infinitival complements of these verbs must be filled by a trace. See (4):

(4) a Mary was said [t to be ill]
    b Mary was announced [t to be the winner]

The tense interpretation of these infinitival complements is identical to the one found with ECM complements of \textit{believe}-type verbs, i.e. it appears to be largely dependent on the matrix tense. Hence, the state of affairs denoted by the embedded clauses in (4) is interpreted as being simultaneous with the matrix event. Under Stowell's analysis, these complements are not associated with tense and therefore they must be taken to be IPs.

Notice that the \textit{believe}-class and the \textit{wager}-class correspond largely to what we called above declarative/epistemic verbs, one of the groups of verbs which allow inflected infinitival complements in Portuguese. Remember that the three analyses reviewed in chapter 2 take these complements to be CPs and, furthermore, they assume the existence of a tense operator in the Comp position of these clauses. These infinitival complements would therefore be expected to have the unrealised tense found in control infinitives in English. However, this is not the case. The embedded infinitives in (5) have the same simultaneous interpretation with respect to the matrix that was observed in their English counterparts, i.e. in ECM complements of \textit{believe}-type verbs and in raising complements of \textit{wager}-type verbs.
Notice that the infinitives in (5), for example, could equally be understood as being past or future with respect to the matrix, given the appropriate context. See (6):

(6) a Afirmou [não estarem em casa no dia do acidente]
claimed(3sg) not to-be(3pl) at home on+the day of+the accident
"(S)he claimed that they weren't at home on the day of the accident." (The accident was three days before.)

b Afirmou [não estarem em casa no dia seguinte]
claimed(3sg) not to-be(3pl) at home on+the day following
"(S)he claimed that they wouldn't be at home the following day."

One might conceivably argue that these clauses are tenseless IPs. However, this would fail to account for the fact that the equivalent control complements of these verbs, which are undoubtedly CPs, receive precisely the same temporal interpretation. In Stowell's terms, this means that they behave as tenseless clauses. See (7) and (8):

(7) a Crêem [PRO estar doentes]
believe(3pl) to-be ill
"They believe that they are ill."

b Afirmaram [PRO não estar em casa]
claimed(3pl) not to-be at home
"They claimed that they weren't at home."
(8) a Afiriram [PRO não estar em casa no dia do acidente] claimed(3pl) not to-be at home on+the day of+the accident
"They claimed that they weren't at home on the day of the accident."
b Afiriram [PRO não estar em casa no dia seguinte] claimed(3pl) not to-be at home on+the day following
"They claimed that they wouldn't be at home the following day."

In the case of control complements, however, sometimes an unrealised tense interpretation is the only possible one, as is clear from the English paraphrases of the examples in (9).

(9) a Pensam [PRO comprar um carro novo] think(3pl) to-buy a car new
"They are thinking of buying a new car."
b Anunciaram [PRO ir para Paris] announced(3pl) to-go to Paris
"They announced that they were going to Paris."

This is also the only interpretation possible in infinitival complements of control verbs such as *querer* "want" and *tentar* "try", which do not allow inflected infinitival complements. See (10):

(10) a O João quer [PRO ser bombeiro] the João wants to-be fireman
"João wants to be a fireman."
b Tentaram [PRO ser simpáticos] tried(3pl) to-be nice
"They tried to be nice."

The question that we need to address is whether we can maintain Stowell’s assumption that all infinitival CPs are associated with tense, represented by a tense operator in Comp, in view of the ‘tenseless’ behaviour of inflected infinitival and (a subset of) control complements of declarative/epistemic verbs in Portuguese. Before we proceed to address
this question, we need to consider another difference found between 'tensed' and 'tenseless' infinitival complements with respect to the class of predicates which they may embed.

It was shown in chapter 2 that inflected infinitival complements of declarative/epistemic verbs only allow stative verbs, as in the examples in (5) above. The infinitival complement in the ungrammatical example in (11) below, which contains an eventive verb, appears to be assigned no temporal interpretation.  

(11) *Penso / afirmou [lavarem o carro]
think(lsg) / claimed(3sg) to-wash(3pl) the car
"I think/(s)he claimed that they wash the car."

However, if there is some cue in the complements which makes it possible to interpret them temporally, eventive verbs are allowed. This might be a compound form (aspectual auxiliary + past participle/infinitive) which forces the event denoted by the complement to be interpreted as simultaneous, past or future with respect to the matrix event (see (12)), or a quantificational or adverbial expression which forces a generic/habitual interpretation (see (13)).

(12)  a Penso / afirmou [estarem a lavar o carro]
think(lsg) / claimed(3sg) to-be(3pl) to-wash the car
"I think/(s)he claimed that they are washing the car."
  b Penso / afirmou [terem lavado o carro]
think(lsg) / claimed(3sg) to-have(3pl) washed the car
"I think/(s)he claimed that they washed the car."
  c Penso / afirmou [irem lavar o carro]
think(lsg) / claimed(3sg) to-go(3pl) to-wash the car
"I think/(s)he claimed that they are going to wash the car."

(13) Penso / afirmou [lavarem o carro todos os fins-de-semana]
think(lsg) / claimed(3sg) to-wash(3pl) the car all the weekends
"I think/(s)he claimed that they wash the car every weekend."
In control complements of these verbs, however, both stative and eventive verbs are allowed. What is curious is that, whereas eventive verbs only allow the unrealised 'tensed' interpretation (see (9) above), the preferred reading with stative verbs is the 'tenseless' one (see (7) and (8) above).

As expected, complements of control verbs such as querer "want" and tentar "try" allow both stative (as in (10) above) and eventive verbs (see (14) below).

\[(14)\]
\[\begin{array}{ll}
\text{a} & \text{O João quer [PRO comprar o vinho]}\\
& \text{the João wants to-buy the wine} \\
& \text{"João wants to buy the wine."}
\\
\text{b} & \text{Tentaram [PRO roubar um carro]}\\
& \text{tried(3pl) to-steal a car} \\
& \text{"They tried to steal a car."}
\end{array}\]

A similar situation is found in English. It appears that while control complements are compatible with both eventive and stative verbs (see (1) above and (15) below),\(^3\) ECM complements of believe-type verbs and raising complements of verbs of saying are compatible with stative verbs only (contrast (2a-b) and (4) above with (16) below).\(^4\)

\[(15)\]
\[\begin{array}{ll}
\text{a} & \text{I remembered [PRO to be careful]} \\
\text{b} & \text{John wanted [PRO to be a fireman]}
\end{array}\]

\[(16)\]
\[\begin{array}{ll}
\text{a} & \text{*I remember [John to buy the book]} \\
\text{b} & \text{*I believe [John to wash the car]} \\
\text{c} & \text{*Mary is said [t to bring the wine]}
\end{array}\]

Eventive verbs are allowed in the complements in (16) under the same conditions as in their Portuguese counterparts, i.e. in compound forms (see (17)) and in the presence of a quantificational or adverbial expression which forces a generic/habitual interpretation (see (18)).

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Martin (1992) adopts an approach to the asymmetries found among infinitival complements with respect to their temporal interpretation which is compatible with the view that all infinitival complements are, or at least start off as, CPs. He argues that, whereas control predicates in English select a [+Tense] C, which in turn selects a [+Tense] T, ECM/raising predicates select a [-Tense] C, which then selects a [-Tense] T. A [+Tense] T has the ability to check Null Case (Chomsky and Lasnik 1991), hence PRO is licensed in the subject position of control complements. A [-Tense] T, however, is not associated with Case features, and therefore a lexical subject must raise to the matrix clause to have its Case features checked. Raising to the matrix is made possible by the fact that the [-Tense] C of ECM/raising complements has no semantic content and can therefore be freely deleted.

Martin’s analysis establishes a direct link between the semantic content of T and its ability to check Case. The richest T, finite T, checks Nominative Case; the T found in control complements, which has some semantic content but less than finite T, checks Null Case; and the most impoverished T, i.e. the one with no semantic content at all, the T found in ECM/raising complements, fails to check Case. This approach, however, appears to be problematic in view of the Portuguese facts. On the one hand, we find inflected infinitival complements where a T with no semantic content (according to Martin) checks Nominative Case on the lexical subject. On the other hand, we find ‘tenseless’ control complements, i.e. infinitival clauses where a semantically vacuous T checks Null Case on a PRO subject. It would therefore appear that a revision of this approach is in order.

Martin also notes the contrast (which he attributes to Pesetsky, in a talk given at UConn, Spring 1992) found between the class of predicates which control and
ECM/raising complements may embed. In order to explain it, he adopts Enç’s (1991) account of a similar contrast found with the present tense in English.

Enç (1991) notes that both stative and eventive verbs receive a past tense interpretation when they occur in a matrix sentence which has past tense. Hence, both sentences in (19) describe situations which hold at some time prior to the speech time.

(19) a Mary was in her office.
    b Sally sang.

However, when we consider matrix sentences with present tense, it appears that only those with stative verbs are compatible with a present tense reading. While the situation described by (20a) is taken to hold at the speech time, the event described in (20b) is not. Here, only a generic reading is possible.

(20) a Mary is in her office.
    b Sally sings.

Enç (1985) proposes that eventive verbs differ from stative verbs in that they are associated with a temporal argument which is generated within the projection of the verb and must be bound. One potential binder for the temporal argument is tense, which Enç views as a clitic. In (19b) the empty temporal argument of the verb sing is bound by the past tense, hence the past event reading. In (20b), however, there is no tense to bind the temporal argument of the eventive verb, on the assumption that English present tense sentences are tenseless (Enç 1991). In this case, the temporal argument must be bound by a phonologically null generic operator, hence the generic reading.

Returning to infinitival complements, what Martin (1992) proposes is that only the [+Tense] T found in control complements can bind the temporal argument of eventive verbs, while the [-Tense] T of ECM/raising complements is unable to do so. Thus, only stative verbs are found in the latter. Eventive verbs are allowed to occur in these clauses only if they are associated with a generic interpretation (see endnote 4). Following Enç
(1991), they can be regarded in this case as being associated with a generic operator binding the temporal argument of the eventive verb, as in English present tense sentences.

Although the generalisation captured in Martin's analysis appears to be correct, i.e. that there is a correlation between temporal interpretation and the classes of predicates allowed in infinitival complements, the divide between control and ECM/raising complements doesn't seem to be as clear-cut as he suggests. Notice that not all ECM complements in English are associated with a 'tenseless' interpretation. The example shown in (2c) above, for example, is argued by Stowell (1981, 1982) to be assigned a future interpretation, which is very hard to distinguish from the unrealised interpretation characteristic of 'tensed' control complements. That it is the same interpretation is further suggested by the fact that it embeds an eventive verb. On the other hand, the control complement in (21) below, which is associated with an unspecified tense interpretation, does not admit an eventive predicate (at least on a punctual reading).

(21) *They claimed [PRO to win the race]

The same point can be made for Portuguese, where, as mentioned above, a control complement may be assigned an unspecified tense interpretation, in which case only stative predicates are allowed (contrast (7) and (9) above). On the other hand, inflected infinitival complements may be associated with an unrealised tense interpretation, in which case eventive verbs may also be allowed (see (12c) above).

In a nutshell, there is a clear correlation between the temporal interpretation of infinitival complements and the class of predicates which they embed. Complements which allow stative verbs only have what may be described as an unspecified temporal interpretation, which is determined partly on the basis of the semantics of the matrix predicate and partly by the context. On the other hand, complements which are compatible with both stative and eventive verbs have an 'unrealised' tense reading. This contrast in interpretation between the two types of infinitival complements led Stowell (1981, 1982) to the conclusion that, while the former type is tenseless, the latter is tensed. Whether an infinitival complement is tenseless or tensed depends, according to Stowell, on its
categorial status (as an IP or a CP) and on the concomitant availability of a tense operator in Comp. However, as pointed out above, this raises questions as to how to account for the 'tenseless' behaviour of inflected infinitival and certain control complements in Portuguese (and control complements such as (21) in English), which are undoubtedly CPs; and also as to how to explain the dual behaviour (as both 'tensed' and 'tenseless') of some of these clauses.

2.2. Characterising infinitival T

Several analyses have been proposed for tense phenomena within the tradition of generative grammar. Tense has been treated as a sentential operator (as, for example, in Stowell 1981, 1982), as a referential expression (see, for example, Enç 1987), and as a temporal predicate (see, for example, Zagona 1993 and Stowell 1994, 1995). Here I will adopt the theory of tense developed in Enç 1987, which treats tense on a par with nominals.

Tenses are taken to denote intervals and, as referential expressions, they bear an index. Tense being a relational element, the interval which it denotes can only be determined by reference to some other interval. In other words, tense is subject to an identification condition, the Anchoring Principle, which requires each tense to be anchored. The ways in which tenses may be anchored are spelt out in the form of the Anchoring Conditions shown in (22).

(22) Anchoring Conditions (Enç 1987: 643)

a Tense is anchored if it is bound in its governing category, or if its local Comp is anchored. Otherwise, it is unanchored.

b If Comp has a governing category, it is anchored if and only if it is bound within its governing category.

c If Comp does not have a governing category, it is anchored if and only if it denotes the speech time.
Enç adopts the definition of governing category proposed in Chomsky (1986a), according to which the governing category of an expression is the minimal CFC ("complete functional complex") containing its governor. Enç further assumes that the governor must be in the scope of a subject.

Enç deals exclusively with finite clauses. In matrix clauses, neither Comp nor T has a governing category. T can therefore be anchored only if Comp denotes the speech time. For a sentence with past tense, as in (23), this means that the interval denoted by tense (which corresponds to the event time) is taken to precede the interval denoted by Comp, i.e. the speech time. In (24), on the other hand, it means that the interval corresponding to the event time must be simultaneous with the speech time.

(23) a John was at home.
   b \[[cp Comp_0 [ip DP [\text{PAST}_0 VP]]]\]

(24) a John is at home.
   b \[[cp Comp_0 [ip DP [\text{PRESENT}_0 VP]]]\]

In complement clauses such as in (25) two readings are available: a 'shifted' reading, i.e. the time of Mary's pregnancy is prior to the time at which John hears about it, and a 'simultaneous' reading, i.e. Mary is pregnant at the time that John hears about her pregnancy. These two readings correspond to the two ways in which the embedded T can anchor. The 'shifted' reading is obtained if T anchors through Comp. Comp is bound by the matrix T and, therefore, it denotes the same interval, i.e. an interval prior to the speech time. The embedded T is evaluated with respect to its local Comp, and being Past, it must denote an interval prior to that denoted by Comp. Hence, the time of Mary's pregnancy is taken to precede the time when John heard about it. This 'shifted' reading is shown in (25b). The 'simultaneous' reading is obtained if T is bound by the matrix T. In this case, it is taken to denote the same interval, i.e. the time of pregnancy coincides with the time of hearing. This reading is shown in (25c).
(25) a John heard that Mary was pregnant.

    b \[ _{CP} \text{Comp}_0 \{ _{IP} \text{DP} \{ _{IP} \text{PAST}, \text{VP} \} \text{V} \{ _{CP} \text{Comp}, \{ _{IP} \text{DP} \{ _{IP} \text{PAST}, \text{VP} \} \} \} \} \]

(c) \[ _{CP} \text{Comp}_0 \{ _{IP} \text{DP} \{ _{IP} \text{PAST}, \text{VP} \} \text{V} \{ _{CP} \text{Comp}, \{ _{IP} \text{DP} \{ _{IP} \text{PAST}, \text{VP} \} \} \} \]...

Enç notes that these two readings are possible only if the embedded verb is stative. Otherwise, only the 'shifted' reading is available (see (26)).

(26) a Mary found out that John failed the test.

    b \[ _{CP} \text{Comp}_0 \{ _{IP} \text{DP} \{ _{IP} \text{PAST}, \text{VP} \} \text{V} \{ _{CP} \text{Comp}, \{ _{IP} \text{DP} \{ _{IP} \text{PAST}, \text{VP} \} \} \} \} \]...

With this in mind, let us now return to infinitival complements, starting with control infinitives. I will assume that the unrealised tense interpretation of control complements should be attributed to the fact that they are associated with an irrealis mood, which ensures that the truth of the complement is taken to be unspecified at the time of utterance. This view of control infinitives as irrealis complements is adopted by Pesetsky (1992) and Stowell (1994). They differ, however, in that, while Stowell assumes control infinitives to be tensed (associated with a quasi-future Tense or Mood), Pesetsky takes them to be tenseless; the irrealis mood is derived in his analysis from the semantics of the null for-complementiser which introduces these clauses. ECM/raising infinitives, on the other hand, differ from control infinitives in that they are propositional in content.

Pesetsky notes two arguments which justify such a distinction between the two classes of complements. One argument (attributed to Higginbotham p.c.) concerns the fact that truth and falsity can be predicated of complements of the believe-class and the wager-class of verbs, but not of verbs taking for-complements and control complements in general. See (27)-(29) (examples from Pesetsky 1992: 144-5):

(27) a Mary believes [Bill to read books, which is true]

    b Mary imagined [Bill to have left the room, which was false]

(28) a Mary was announced [t to have left the room, which was true]

    b Mary was wagered [t to be the best candidate, which was false]
(29) a  *Mary wanted [Sue/PRO to read a book, which was true]
   b  *Bill attempted [PRO to smoke in class, which would be false]

The second argument refers to an observation made by Bach regarding the different (semantic) classes of nouns taken as complements by these predicates. See (30)-(31) (Bach's examples as quoted in Pesetsky 1992: 145):

(30) She believes that proposition/that fact/the Pythagorean theorem/*that state of affairs/*that contingency/*this eventuality/*the ten Commandments.
(31) She wants that state of affairs/that kind of game/that opportunity/*this eventuality/*that proposition/*that fact/*the Pythagorean theorem.

However, unlike Martin (1992), Pesetsky argues that no direct correlation can be established between the unrealised or irrealis interpretation of certain infinitival complements and their ability to license PRO. In fact, there is at least one verb in English, claim, which selects a propositional infinitival complement that licenses PRO in its subject position (see (21) above). That the infinitival complement of claim is propositional in content is shown by the fact that truth and falsity can be predicated of it (just like the complements of believe- and wager-type verbs). See (32) (Pesetsky 1992: 145):

(32) Bill claimed [PRO to be the king of France, which was true]

The complement in (32) has the same unspecified temporal interpretation as the Portuguese control complements in (7) above, which also have propositional content. See (33):

(33) a  Crêem [PRO estar doentes, o que é verdade]
       believe(3pl) to-be ill which is truth
       "They believe that they are ill, which is true."
   b  Afirmaram [PRO não estar em casa, o que era mentira.]
       claimed(3pl) not to-be at home which was lie
       "They claimed that they weren't at home, which was a lie."
I will adopt Stowell's (1994) view that irrealis complements are associated with a modal tense which ensures that these complements are assigned their typical unrealised tense interpretation. Evidence for the presence of T in irrealis complements comes from the fact that in Portuguese they may be realised as inflected infinitival clauses, where a Nominative subject is licensed. If I am correct in assuming that Nominative Case features are consistently associated with the functional head T, then we must conclude that irrealis complements have T.

The other property associated with these complements, i.e. the absence of restrictions on the type of predicates which they may embed, can also be made to follow from the presence of this modal tense. Following Enç (1985, 1991), the modal tense can be assumed to bind the temporal argument associated with eventive verbs.

Let us now consider infinitival complements of believe-type verbs and of verbs of saying, which are argued by Stowell (1981, 1982) to be tenseless. I will propose that these complements are in fact associated with tense, and that their 'tenseless' behaviour can be derived from the specific properties of the infinitival T in these clauses.

Recall that these complements were argued to be tenseless partly because they do not have an independent time frame. Their temporal interpretation is determined either from the semantics of the matrix predicate or from the context (or both); in any case, like other complement clauses, they are temporally evaluated with respect to the matrix tense (except when assigned a generic interpretation). In the unmarked case, they are interpreted as having a time frame which is simultaneous with the evaluation time, i.e. the matrix event time.

A simultaneous interpretation, however, is not restricted to infinitival clauses. Above we saw two finite contexts in which such an interpretation holds, namely matrix present tense clauses and past tense complements embedded under a past tense. These two finite contexts have two characteristics in common with infinitival complements of declarative/epistemic verbs. On the one hand, they behave semantically as if they were tenseless or, put another way, their tense appears to be semantically vacuous, in that it
doesn't shift the interpretation from the evaluation time (which is the speech time in the case of matrix present tense clauses and the matrix event time in the case of past tense complements). On the other hand, eventive verbs are disallowed in these clauses on this simultaneous reading (they are only allowed in present tense clauses if assigned a generic/habitual interpretation and in past tense complements on a 'shifted' reading). The embedded T in past tense complements is treated in Enç’s (1987) analysis as an anaphoric T, bound (by the higher T) in its governing category (the matrix clause). Present tense in English, on the other hand, although argued not to exist in Enç (1991), is also treated in Enç (1987) and in Zagona (1993) as an anaphoric T, bound by its local C, which denotes the speech time.

Suppose we adopt the view that infinitival complements of declarative/epistemic verbs are associated with an anaphoric T. This means that the infinitival T must be bound by the matrix T, hence the typical simultaneous interpretation. Another option for these complements is to be associated with a modal T. We can then assume that infinitival complements of declarative/epistemic verbs are compatible with two different types of T, either an anaphoric or a modal T. Notice, though, that this assumption doesn't take into account the cases where the infinitival T appears to be bound by a temporal expression in the infinitival clause which results in a disjoint reference from that of the matrix T. In section 4 (see in particular subsection 4.4) a reformulation of this analysis will be proposed which will unify the two types of infinitival T identified here and also take into account these cases.

Regarding the restrictions on the occurrence of eventive verbs, for the time being I will simply adopt Martin's (1992) analysis (based on Enç 1991), that is, I will assume that the anaphoric tense found in these infinitival complements is unable to bind the temporal argument associated with eventive verbs. Hence, eventive verbs may occur only in the presence of an abstract generic operator, or a quantificational or adverbial expression, which acts as an unselective binder for the temporal argument of the predicate, deriving a generic/habitual reading.
2.3. Inflected infinitives - the remaining cases

Factive complements have the unspecified interpretation typical of the inflected infinitival complements discussed above. Hence, the infinitive in (34a) may be understood as past, present or even future with respect to the matrix time frame. Recall that in factive complements inversion is possible. The occurrence of inversion doesn’t seem to affect the temporal interpretation of the infinitival clause, as shown in (34b).

(34) a Lamento [eles não estarem em casa (hoje / quando os fomos
regret(lsg) they not to-be(3pl) at home (today / when them(acc) went(1pl)
visitar / amanhã)]
to-visit / tomorrow)
"I regret that they aren’t at home (today) / weren’t at home (when we went to
visit them) / aren’t going to be at home (tomorrow)."

b ?Lamento [não estarem eles em casa (hoje / quando os fomos
regret(lsg) not to-be(3pl) they at home (today / when them(acc) went(1pl)
visitar / amanhã)]
to-visit / tomorrow)

Precisely the same range of temporal interpretations is obtained with an embedded eventive verb. Hence, (35a) could be uttered at the actual moment when they are buying the house (simultaneous reading), after they have bought the house and moved in (past reading), or after they have decided to buy the house but before they have actually done so (future reading). The past and future readings can be made clear by introducing an auxiliary (see (35b) and (35c) respectively).
Remember from chapter 2 that inversion in factive complements is subject to the same restrictions as in complements of declarative/epistemic verbs with respect to the class of predicates which they are allowed to embed under inversion. Hence, the word order in (35a) is the only possible one with an eventive verb such as comprar "buy".

This is puzzling, given the conclusion we arrived at in subsection 2.2. It appears that we can no longer maintain that an unspecified tense interpretation goes hand in hand with restrictions on the inability to license eventive verbs. This is still true for the factive complements which display inversion, but not for those that do not.

A brief consideration of subject clauses seems to confirm this conclusion. These clauses behave like factive complements with respect to the possibility of inversion, and they have the same unspecified tense interpretation. See (36) and (37):

(35) a Lamento [vocês comprarem uma casa tão pequena]
regret(1sg) you to-buy(2pl) a house so small
"I regret that you have bought/are buying/are going to buy such a small house."

b Lamento [vocês terem comprado uma casa tão pequena]
regret(1sg) you to-have(2pl) bought a house so small

c Lamento [vocês irem comprar uma casa tão pequena]
regret(1sg) you to-go(2pl) to-buy a house so small

(36) a Surpreende-me [eles não estarem em casa (hoje / quando os fomos
surprises me(dat) they not to-be(3pl) at home (today / when them(acc) went
visitar / amanhã)]
to-visit / tomorrow)
"It surprises me that they aren't at home (today) / weren't at home (when we
got to visit them) / aren't going to be at home (tomorrow)."

b ?Surpreende-me [não estarem eles em casa (hoje / quando os
surprises me(dat) not to-be(3pl) they at home (today / when them(acc)
fomos visitar / amanhã)]
got(1pl) to-visit / tomorrow)
(37) a Surpreende-me [vocês comprarem uma casa tão pequena]
surprises me(dat) you to-buy(2pl) a house so small
"It surprises me that you have bought/are buying/are going to buy such a small house."
b Surpreende-me [vocês terem comprado uma casa tão pequena]
surprises me(dat) you to-have(2pl) bought a house so small
c Surpreende-me [vocês irem comprar uma casa tão pequena]
surprises me(dat) you to-go(2pl) to-buy a house so small

Certain subject clauses, however, seem to be restricted to conveying an irrealis interpretation. See (38):

(38) É urgente [enviarmos esta carta]
is urgent to-send(1pl) this letter
"It is urgent for us to send this letter."

Adjunct clauses, which do not display inversion or any restrictions on the predicates that they may embed (see chapter 2), also seem to behave as if they were intrinsically associated with an unspecified tense. Their temporal interpretation is determined in relation to the matrix tense, and on the basis of the semantics of the preposition which introduces the adjunct clause. In the case of adjunct clauses introduced by a temporal preposition, it has been argued (see, for example, Larson 1987 and Stowell 1994) that the preposition behaves as a two-place predicate which takes the matrix tense and the embedded tense as arguments and establishes a temporal relation between the two. Hence, the infinitives in (39a-b) are taken to denote an event which is future (or unrealised) with respect to the event denoted by the matrix; and the infinitive in (39c) denotes an event anterior to the matrix event.
Non-temporal prepositions can also establish such a temporal ordering between the matrix and the embedded events in virtue of their logical meaning. Hence, the event denoted by the purpose clause in (40a) must necessarily be interpreted as unrealised with respect to the matrix event, whereas the event denoted by the causal adverbial in (40b) must be taken to be past with respect to the matrix event.5

(40)  a Saíram cedo [para chegarem a tempo]
      left(3pl) early for to-arrive(3pl) at time
      "They left early in order to arrive on time."
     
      b Foram castigados [por desobedecerem aos pais]
      were(3pl) punished for to-disobey(3pl) to+the parents
      "They were punished for disobeying their parents."

A different case is found in (41), where the most natural interpretation for the adverbial clause is that it denotes an event simultaneous with the matrix event. However, in (41b-c) the adverbial clause can also be interpreted independently from the matrix tense, as conveying a present tense. This interpretation can be made clear by adding an adverb such as agora "now" (this is shown in (42) for (41b)).
(41) a Vive em Londres, apesar de trabalhar em Paris.
   lives in London despite of to-work(3sg) in Paris
   "(S)he lives in London, although (s)he works in Paris."

b Vivia em Londres, apesar de trabalhar em Paris.
   lived in London despite of to-work(3sg) in Paris
   "(S)he lived in London, although she worked/works in Paris."

c Viverá em Londres, apesar de trabalhar em Paris.
   live(fut)(3sg) in London despite of to-work(3sg) in Paris
   "(S)he will live in London, although (s)he will be working/works in Paris."

(42) Vivia em Londres, apesar de trabalhar agora em Paris.
   lived in London despite of to-work(3sg) now in Paris
   "(S)he lived in London, although now she works in Paris."

In summary, although most of these contexts appear to be associated with an unspecified tense interpretation (with the exception of a few cases where a fixed temporal interpretation is determined by the selecting head), there are some differences with respect to complements of declarative/epistemic verbs. While the default interpretation in the latter type of complements is the 'simultaneous' one, the contexts discussed in this section appear to lend themselves to a rather more independent temporal interpretation from the matrix (see for example (35a) and (37a) above, in which the most natural interpretation would be the one where the embedded event is taken to be past with respect to the matrix). Moreover, in these contexts eventive verbs are possible without a generic or modal interpretation. This raises questions regarding the conclusion we arrived at in the previous subsections, i.e. that the inability to license eventive verbs goes hand in hand with an unspecified temporal interpretation. The correct generalisation appears to be rather that eventive verbs are incompatible with an unspecified temporal interpretation only in inversion contexts. I shall return to these questions in section 4.
3. The C-position of inflected infinitival clauses

Here I am assuming the view, proposed in Pesetsky (1992), that both finite and infinitival clauses are CPs. In this section, I will consider each of the four types of inflected infinitival clauses in turn and discuss the properties of their C-position. The conclusions reached in this section will lead me to argue in section 4 that the asymmetries found among inflected infinitival clauses with respect to inversion can be derived from the different properties of the C-heads introducing these clauses.

3.1. Complements of declarative/epistemic verbs

The standard view on subject-auxiliary inversion, adopted by the three analyses discussed in chapter 2, takes this phenomenon to be derived from movement of I into C. This is also the position I will assume here (differing as to the motivations for this movement).

It would appear, at first analysis, that (overt) I-to-C movement cannot be a necessary condition on the licensing of the inflected infinitive. If it were, we would expect to find the same phenomenon in all the other contexts where inflected infinitives are found. This is not the case though; as shown above, inversion is optional in factive complements and subjects and impossible in adjunct clauses. Furthermore, it is a well-known fact that overt occurrences of I-to-C movement in complements of declarative/epistemic predicates are not limited to inflected infinitival clauses, but are also found both in other non-finite and also in finite clauses in a variety of languages. Among phenomena which have been argued to involve I-to-C movement are included Aux-to-Comp in Italian, which involves movement of an auxiliary to C and is found, among other contexts, in complements of declarative/epistemic verbs (see Rizzi 1982; see also subsection 4.2), and embedded V2 in complements of so-called bridge verbs (which comprise declarative verbs and verbs of saying) in German (see e.g. den Besten 1983 and Vikner 1990). See (43) and (44):
It could therefore be argued that it is some general property of the C-position of these complements, rather than the licensing requirements of I, that triggers I-to-C movement.

That the C-position introducing complements of declarative/epistemic verbs is not semantically contentful is a view generally held in the literature (see, among many others, Latridou and Kroch 1992). C may be assumed to be empty, in which case it gets filled either by an expletive complementiser (cf. Law 1991a,b) or by some element raised from I. These two options are found, for example, in Italian (compare (43) above with (45) below) and in German (compare (44) above with (46) below).

Manzini (in prep.) suggests that these two options may also be found in English. Hence, while finite complements of believe-type verbs are introduced by an expletive complementiser, like their Italian counterparts, in infinitival complements the infinitive marker to raises covertly to C (unlike Italian, where the auxiliary raises overtly) and then to the matrix V, licensing raising of the infinitival subject to the specifier position of the matrix AgrP. See (47):
(47) a John said \[\text{CP} \ [c \ (that)] \ [IP \ he \ would \ leave]\]
b Mary believed \[\text{CP} \ [c \ ] \ [IP \ him \ to \ have \ read \ the \ book]\]

Assuming Manzini’s suggestion, it could perhaps be argued that what the infinitival I in Italian Aux-to-Comp constructions and the English infinitive marker to have in common is the fact that they are associated with nominal features, and that the infinitival C must always be filled by elements bearing nominal features. In the case of Italian, it could be assumed that movement is triggered by the need to license the features which allow it to check Nominative case on the subject.

The view that the infinitival C has nominal properties may be found in Raposo (1987b), who argues that the C of infinitival clauses is compatible with nominal elements only. Discussing the nominal properties of the Romance infinitive morpheme, he shows that there is a link between the content of C and the content of T: in declarative embedded finite clauses, C must be filled by a complementiser, whilst in the corresponding infinitival clauses it may not be overtly filled with a complementiser. See (48):

(48) a Creio que / *Ø leu o livro.
   believe(1sg) that / *Ø read(3sg) the book
   "I think that (s)he read the book."
b Creio Ø / *que ter lido o livro.
   believe(1sg) Ø / *that to-have read the book
   "I believe that I read the book."

Raposo then suggests that in infinitival clauses the content of C is determined by the nominal infinitive morpheme; hence, the infinitival C is associated with nominal properties.

A different view of these facts is proposed by Pesetsky (1992). According to him, both infinitival and finite complements of believe-type verbs which lack an overt complementiser are introduced by an affixal null complementiser which raises to the
matrix V overtly to satisfy Lasnik’s Filter, the filter which requires an affixal element to be attached by S-structure.  

Given Baker’s (1988) Government Transparency Corollary (see (49)), the matrix V can then govern and assign Case to the embedded subject position.  

(49) **Government Transparency Corollary** (Baker 1988:64)

A lexical category which has an item incorporated into it governs everything which the incorporated item governed in its original structural position.

This accounts for the possibility of Exceptional Case Marking in English (see (47b) above) and for the subject extraction data in English finite clauses (see (50) below).

(50) Who do you think (*that) left?  

Pesetsky also proposes that languages like Italian display a different strategy to satisfy the requirements of the affixal null complementiser in infinitival complements of believe-type verbs, namely, the infinitival I raises to C to pick up the null complementiser. This derives the Aux-to-Comp phenomena.  

Economy considerations, however, make such an analysis undesirable. If we adopt Chomsky’s (1993) Principle of Greed, which states that elements can only move to satisfy their own requirements, it is hard to see why I would move into C to pick up the null complementiser. It would appear then that the only alternative consistent with Greed is to assume that overt movement of I to C in these clauses is triggered by requirements of the infinitival I itself rather than of the null complementiser alone.

The extension of Manzini’s proposal suggested above does not have this problem, but, as it stands, it seems unable to account fully for the Portuguese facts. If the infinitive must raise to C in order to have its features checked, why is it that it only has to raise overtly in complements of declarative/epistemic verbs, and not in any of the other contexts where inflected infinitives are found? This is a question that must be answered in any analysis.
of the inflected infinitive, although I will argue in section 4 that it is possible to answer it, while still maintaining the essential intuition behind the idea suggested above. Another potential problem regarding the suggestion made above concerns the fact that inversion is also found in contexts where it is not obvious that the verbal element raises to C for checking of its features. This is the case of inversion in counterfactuals not introduced by a complementiser (see (51)) and perhaps (although not so clearly) also the case of inversion in gerundival clauses (see (52)).

(51) a Se tu chegasses a horas, ainda o tinhas encontrado.
    if you arrived(subj) on time still him had(2sg) met
    "If you had arrived on time, you would still have met him."

   b Chegasses tu a horas, ainda o tinhas encontrado.
    arrived(subj) you on time still him had(2sg) met
    "Had you arrived on time, you would still have met him."

(52) Tendo os participantes abandonado a sala, a sessão foi encerrada.
    having the participants left the room the session was closed
    "The participants having left the room, the meeting was ended."

Let us assume that the C-position of infinitival complements of believe-type verbs is radically empty. It is obviously not filled with lexical material, and it is not associated with any semantically contentful features either. By the principle of Full Interpretation (Chomsky 1986a, 1991, 1993), every position in the structure must be licensed if it is to receive an interpretation at the interface levels, PF and LF. An empty position is licensed if it is associated with a contentive element. Hence, it appears that the empty C of these complements must be filled by some lexical element in the syntax. However, movement is always self-serving, which means that I cannot move to C simply to license C. It can only move if this movement serves to satisfy some requirement of I itself. What needs to be established then is what requirements I in infinitival complements of declarative/epistemic verbs satisfies by moving to C. If we adopt the idea suggested above, movement of the verbal complex is triggered by the need to check some other feature of I in C in Italian and Portuguese infinitival clauses. From the examples shown in (51), it would seem, though, that an empty C always attracts the verbal complex.
whenever it does/can not incorporate into the matrix V, if Pesetsky (1992) is correct about English.

3.2. Factive complements

The traditional analysis of factive complements is that proposed by Kiparsky and Kiparsky (1970). Semantically, factive complements are argued to correspond to truth presuppositions; factive predicates presuppose the truth of their complements. Syntactically, factive complements are assigned the structure shown in (53), where (53b) is taken to be derived from (53a).

(53) a I regret [DP the fact [CP that [IP she left]]]
    b I regret [DP [CP that [IP she left]]]

The problem with this structure, as Zubizarreta (1982) notes, is that it leads to the prediction that, like all complex DPs, factive complements should behave as strong islands for movement. What we actually find in English, though, is that only those complements preceded by an overt DP are strong islands, while 'bare' clausal complements behave as weak islands, only blocking extraction of adjuncts. Contrast (54) and (55).

(54) a *What, do you regret [the fact [that she bought t]]
    b *Why, do you regret [the fact [that she bought an expensive car t]]
(55) a What, do you regret [that she bought t]
    b *Why, do you regret [that she bought an expensive car t]

An alternative approach to the problem takes factive complements to be characterised by the presence of some feature in C. At least two different views can be found in the recent literature regarding the nature of this feature, namely Melvold’s (1991), who suggests that this feature is a definiteness feature, and Hegarty’s (1992), who argues that it is a familiarity feature.
Melvold (1991) (see also Roussou 1992) proposes that factive complements are characterised by the presence of an iota operator in Spec of CP which is licensed by a complementiser bearing the feature [+definite] and binds the event position (in the sense of Higginbotham 1985) of the factive complement. This is intended to represent the fact that the clausal complement of a factive predicate is interpreted as a definite description, denoting an individual event. The presence of an operator in Spec of CP blocks adjunct extraction from factive complements.

Hegarty (1992), on the other hand, argues that the distinctive semantic property of factive complements is that they always convey old information; the speaker assumes that the content of the complement is familiar to the listener, either because it has been established earlier in the discourse or because it is considered to be background knowledge. Familiarity is not a property exclusive to factive clauses, but is also shared by certain nonfactive complements (such as complements of verbs like agree and insist) and by definite nominals. Syntactically, the complementiser introducing familiar complements is specified for a familiarity ([+F]) feature. It is the presence of this feature in C that blocks adjunct extraction out of familiar complements. In Hegarty’s account, therefore, the weak island effect can be captured without postulating an operator in Spec of CP in these complements.

A unification of the two views just discussed is suggested by Roussou (1994), who argues that, as a syntactic property, factivity is associated with a parameter which regulates the choice of feature for which factive C is specified. All factive complements in English and a small class of factive complements in Modern Greek introduced by the complementiser oti (see (56)), are introduced by a C bearing the feature [+F]. This feature Roussou takes to convert C into a sentential operator which has the effect of blocking adjunct extraction.
Most factive complements in Modern Greek, however, are introduced by the complementiser *pu*, which Roussou argues to be a definite complementiser. It is a well-known fact that definite heads create strong islands for movement; neither arguments nor adjuncts can be extracted out of definite DPs (see (57)).

(57) a *What* did you witness [dp the destruction of tj]  
   b *How* did you witness [dp the destruction of the city tj]

Precisely the same pattern is found with respect to extraction from factive complements introduced by the complementiser *pu* (contrast (58) below with (57) above).

(58) a *Pion* thimase *pu* sinandises tj?,  
    whom remember(2sg) that met(2sg)  
    "Who, do you remember that you met tj?"  
    b *Jati* thimase *pu* pighe sto Parisi tj?  
    why remember(2sg) that went(3sg) to-the Paris  
    "Why, do you remember that he went to Paris tj?"

This is taken by Roussou as evidence for a [+definite] feature in C in these clauses. The presence of this feature is sufficient to block extraction out of factive complements, without having to postulate an operator in Spec of CP.

Semantically there is no cross-linguistic variation; factive complements are always interpreted as conveying old/familiar information. This is true both for complements
introduced by a [+F] C and those introduced by a [+definite] C. As noted by Heim (1982), definite phrases are consistently associated with old information.

Factive complements in Portuguese display the same behaviour as in English, i.e. they behave as weak islands for extraction. This is true both for finite and infinitival complements. See (59) and (60):

(59) a O que j é que lamentas que ela tenha comprado t_j?
what is that regret(2sg) that she has bought
"What do you regret that she bought t_j?"

b *Porque j é que lamentas que ela tenha comprado um carro novo t_j?
why is that regret(2sg) that she has bought a car new
"Why do you regret that she bought a new car t_j?"

(60) a O quC j é que lamentas ela ter comprado t_j?
what is that regret(2sg) she to-have(Ssg) bought

b *PorqueO j é que lamentas ela ter comprado um carro novo t_j?
why is that regret(2sg) she to-have(Ssg) bought a car new

Following Hegarty’s (1992) and Roussou’s (1994) analyses, the complements in (59) and (60) must be introduced by a C specified for a familiarity ([+F]) feature.

Factive complements in Portuguese may, however, also be introduced by a [+definite] C. This appears to be the case of clauses introduced by a definite determiner. I will assume that the definite determiner is a spell-out of the [+definite] feature of the factive C. This would account for the fact that the definite determiner cannot co-occur with a complementiser and, therefore, is not allowed to introduce finite clauses, as shown in (61).

(61) *Lamento o que eles tenham partido a jarra.
regret(1sg) the that they have broken the vase

As expected, factive complements introduced by the definite determiner constitute strong islands for movement. See (62):
Complements introduced by the definite determiner display the same possibilities for word order as other inflected infinitival factive complements. See (63):

(63) a  Lamento o eles terem partido a jarra.
       regret(lsg) the they to-have(3pl) broken the vase

   b  ?Lamento o terem eles partido a jarra.
       regret(lsg) the to-have(3pl) they broken the vase

Moreover, the same restrictions on the occurrence of eventive verbs apply as in other factive complements. See (64):

(64) a  Lamento o eles comprarem este carro.
       regret(lsg) the they to-buy(3pl) this car

   b  *Lamento o comprarem eles este carro.
       regret(lsg) the to-buy(3pl) they this car

If Hegarty's (1992) and Roussou's (1994) analyses are correct, it appears that factive complements differ from complements of declarative/epistemic verbs in the semantic content of their C. While the C of complements of declarative/epistemic verbs was argued in subsection 3.1 to be semantically vacuous, the C of factive complements appears to be associated with semantically contentful features. Given the different behaviour of the two types of complements with respect to inversion, a reasonable hypothesis is that these two properties may be related, in that one may be derived from the other. It would appear that inversion occurs only if C is not associated with semantic content. However, this raises a question as to why inversion should ever be possible in factive complements. Following a suggestion by Rita Manzini (p.c.), I would like to propose that factive complements may
be associated either with the 'bare' CP structure shown in (65a) or with the structure in (65b), where CP is immediately dominated by a DP projection.

\[
(65) a \\
/ \  \\
V \ CP \\
/ \  \\
C' \\
/ \  \\
C \ IP
[+fact.]
\]
b \\
/ \  \\
V \ DP \\
/ \  \\
D' \\
/ \  \\
D \ CP \\
[+fact.]
/ \  \\
C' \\
/ \  \\
C \ IP
\]

Given these two structures, it could then be argued that the factive feature (whether it is familiarity or definiteness) may be realised either in C (as in (65a)) or in D (as in (65b)). Whenever it is realised in D, C may be taken to be empty, in which case it attracts the verbal complex, as was argued for complements of declarative/epistemic verbs. It appears therefore that the assumption that inversion contexts correspond to contexts associated with an empty C-position can be maintained.

3.3. Subject clauses

So far subject clauses have been treated as a homogeneous class. However, it is not clear that such a treatment is appropriate. As will be shown in this subsection, subject clauses display significant differences among them which might be attributed to the fact that some of them are only apparent subjects.
As is clear from the examples given so far, most subject clauses are selected by adjectives. Discussing 'intransitive' adjectives in Italian, Cinque (1990a) argues that a distinction should be drawn between adjectives whose argument is generated in object position (which, following Burzio 1986, he calls 'ergative' adjectives) and those whose argument is generated in subject position ('unergative' adjectives). A representative list of adjectives belonging to each of these classes is shown in (66) and (67).

(66) Ergative adjectives:

- certo "certain",
- chiaro "clear",
- esplicito "explicit",
- evidente, ovvio "obvious",
- implicito "implicit",
- noto "well-known",
- prevedibile "foreseeable",
- probabile "likely",
- sicuro "sure"

(67) Unergative adjectives:

- buono "good",
- controproducente "counterproductive",
- deprecabile "deprecable",
- impossibile "impossible",
- (in)giustificato "(un)justified",
- (in)giusto "(un)just",
- pericoloso "dangerous",
- pertinente "relevant",
- possibile "possible",
- scostante "rude",
- significativo "significant",
- sorprendente "surprising"

Cinque presents a number of arguments in support of such a distinction. I will review three of those arguments here.

One argument refers to the well-known asymmetry between subjects and objects of V with respect to ne-cliticisation in Italian. As Belletti and Rizzi (1981) have shown, ne-cliticisation is possible only from object position. This generalisation is used by Burzio (1986) as a diagnostic for distinguishing between ergative (or 'unaccusative', following Perlmutter 1978) verbs such as arrivare "arrive", which select an internal argument, and unergative verbs such as telefonare "telephone", which select an external argument. See (68):

(68)  

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>a</td>
<td>Ne arriveranno molti.</td>
</tr>
<tr>
<td></td>
<td>of-them will arrive many</td>
</tr>
<tr>
<td>b</td>
<td>*Ne telefoneranno molti.</td>
</tr>
<tr>
<td></td>
<td>of-them will telephone many</td>
</tr>
</tbody>
</table>
Cinque (1990a) shows that a similar asymmetry is found between adjectives such as *probabile* "likely", which are compatible with *ne*-cliticisation, and adjectives such as *ingiusto* "unjust", which are not. See (69):

(69) a Ne sono probabili ben poche (di dimissioni)
    of-them are likely really few (of resignations)
    b *Ne sono ingiuste molte (di condanne)
    of-them are unjust many (of condemnations)

Another contrast between ergative and unergative predicates refers to the possibility of wh-extraction from the inverted subject. Given that the inverted subject of an ergative predicate is in object position, extraction is possible (see (70a) and (71a)). The inverted subject of unergative predicates, on the other hand, is extraposed and, as is well-known, wh-extraction is disallowed out of extraposed constituents (see (70b) and (71b)).

(70) a In che modo/Per quale ragione potrà succedere [t’ che se ne vada t]?
    "In which way/for which reason can it happen that he leaves?"
    b *In che modo/Per quale ragione avrebbe contato [t’ che lui avesse reagito t]?
    "In which way/for which reason would it have mattered that he had reacted?"

(71) a In che modo/Per quale ragione è probabile [t’ che reagisca t]?
    "In which way/for which reason is it likely that he will react?"
    b *In che modo/Per quale ragione sarebbe stato pericoloso [t’ che se ne fosse andato t]?
    "In which way/for which reason would it have been dangerous that he left?"

A third argument used by Cinque (1990a) has to do with an asymmetry in the distribution of infinitival clauses introduced by a prepositional complementiser in Italian. Only clauses in object position are obligatorily introduced by such a complementiser, as shown in the contrast between (72a), where the infinitival clause is selected by an ergative verb, and (72b), involving an unergative verb.

87
(72) a Mi è capitato [*(di) assistere ad un curioso incidente]
   "It happened to me to witness a curious incident."
   
   b Non ha contato [(*di) essere ricchi]
   "It did not count to be rich."

A similar contrast is found with the inverted infinitival subjects of ergative and unergative adjectives, as shown in (73).

(73) a Non gli era del tutto evidente [*(di) non essere all'altezza del compito]
   "It was not at all evident to him not to be able to face the task."
   
   b È pericoloso [(*di) sporgersi dal finestrino]
   "It is dangerous to lean out of the window."

This argument cannot be applied to help us determine the status of infinitival clauses which appear in 'inverted subject' position in Portuguese, as these are never introduced by a prepositional complementiser. Neither can the argument involving ne-cliticisation, as Portuguese doesn't have any pronominal clitics like the Italian ne. The argument involving wh-extraction, however, shows that Portuguese exhibits a similar contrast to Italian, as shown in the following examples:

(74) a Como, é que convém [eles virem vestidos t_] ?
    how is that suits they to-come(3pl) dressed
    "How should they be dressed?"
    
    b *Como, é que conta [eles terem reagido t_] ?
    how is that matters they to have(3pl) reacted
    "How does it matter that they have reacted?"

(75) a Como, é que é provável [ele reagir t_] ?
    how is that is likely he to-react(3sg)
    "How is it likely that he will react?"
    
    b *Como, é que é perigoso [ele sair t_] ?
    how is that is dangerous he to-leave(3sg)
    "How is it dangerous for him to leave?"
Some adjectives which behave like provável "likely" (i.e. ergative adjectives) are listed in (76), and adjectives behaving like perigoso "dangerous" (i.e. unergative adjectives) are shown in (77). Notice that, while all ergative adjectives seem to be non-factive, unergative adjectives may be either factive or non-factive. This means that all factive subject clauses are real subjects, but the inverse is not necessarily true, i.e. not all real subject clauses are factive. Non-factive subject clauses appear to have in common the property of being associated with a modal value.

(76) Ergative adjectives (non-factive):

certo "certain", claro "clear", evidente, óbvio "obvious", nítido "clear", visível "visible"

(77) Unergative adjectives:

a Factive:
aborrecido "annoying", bom "good", (des)agradável "(dis)agreeable", estranho "odd, strange", impressionante "astounding, shocking", justo "fair", lamentável "regrettable", significativo "significant", surpreendente "surprising", trágico "tragic"

b Non-factive:
benéfico "beneficial", complicado "complicated", custoso "hard", (des)necessário "(un)necessary", difícil "difficult", fácil "easy", (im)possível "(im)possible", importante "important", obrigatório "obligatory", permitido "allowed", simples "simple", urgente "urgent", útil "useful"

In the case of factive subject clauses, it is expected that they may be associated with the two structures that were argued for factive complements. That they behave precisely as factive complements with respect to the possibility of inversion, as illustrated in (78), is, therefore, not surprising.

(78) a É estranho [eles estarem em casa a esta hora]

is strange they to-be(3pl) at home at this hour

"It is strange that they are at home at this time."

b ?É estranho [estarem eles em casa a esta hora]

is strange to-be(3pl) they at home at this hour
The other cases, however, are more problematic. All subject clauses appear to display the same possibilities as factive subject clauses, as shown in (79) and (80).

(79) a É importante [eles ficarem em casa]
   is important they to-stay(3pl) at home
   "It is important that they stay at home."
   b ?É importante [ficarem eles em casa]
   is important to-stay(3pl) they at home

(80) a É óbvio [eles estarem em casa]
   is obvious they to-be(3pl) at home
   "It is obvious that they are at home."
   b ?É óbvio [estarem eles em casa]
   is obvious to-be(3pl) they at home

In the case of subject clauses which have a modal value, it could be argued that they are associated with a modal operator in C, and, therefore, no inversion is required. In the case of the 'subjects' of ergative adjectives, it would also have to be argued that they are associated with a filled C. Italian provides clear evidence for such an hypothesis, given that, as we have seen above, these clauses are always introduced by a prepositional complementiser (see example (73a)). I would like to suggest that the only difference between Portuguese and Italian in this respect is that the prepositional complementiser which introduces these clauses in Portuguese is not lexically realised. For evidence for a null prepositional complementiser in Portuguese in relation to adjunct clauses, see subsection 3.4.

If this is correct, inversion should be impossible, contrary to fact. One possible explanation for the occurrence of examples as in (79b) and (80b) is that they correspond to an overgeneralisation of the possibility of inversion found with factive subjects. In other words, it may be that speakers are interpreting all subject clauses as factives. Because inversion generally, and in factive complements and subjects in particular, has such a marginal status, it may be that such an overgeneralisation is a consequence of the fact that speakers do not typically have very clear intuitions regarding inversion structures, which
leads them to apply the option of inversion indiscriminately. This is the only suggestion I have to offer.

3.4. Adjunct clauses

All infinitival adjunct clauses are introduced by a preposition. Here I will assume that they have the structure shown in (81).

\[(81) \ldots \[\text{pp} \ P \ [\text{CP} \ C \ [\text{ip} \ \ldots ]] \ldots \] \]

This structure is shared by finite adjunct clauses introduced by a preposition. The difference between finite and infinitival clauses is that, while the former are always introduced by a complementiser, the latter aren’t. Compare the (a) and (b) examples in (82):

\[(82) \quad a \text{ Não descansou [até [que eles lhe contassem tudo]]} \\
\quad \text{ not rested(3sg) until that they him(dat) told(3pl) everything} \\
\quad \text{ "She didn’t rest until they told her everything."} \\
\quad b \text{ Não descansou [até [eles lhe contarem tudo]]} \\
\quad \text{ not rested(3sg) until they her to-tell(3pl) everything} \]

I will argue, though, that this difference is only apparent, in that the C-position of the infinitival clause is also filled by a prepositional complementiser which may be lexically realised or not.

Let us consider some evidence for this. In Portuguese, certain prepositions such as *por* "for" and *de* "of" may or must contract with the head determiner of the DP which follows them. See (83):
Rizzi (1984) notices that this process of contraction appears to be subject to Subjacency. Thus, if a preposition takes a DP object, it can contract with the head determiner of its object (see (84a)). However, if a preposition introduces an adjunct clause, it cannot contract with the determiner of the clausal subject (see (84b)). This follows if the structure shown in (81) above is assumed; the DP subject is in Spec of IP and contraction cannot take place across CP and IP.

(84) a Estou contente *por o / pelo João.
    am happy *for the / for+the João
    b Não houve aula por o / *pelo professor estar doente.
    not there-was class for the / *for+the teacher to-be(3sg) ill
    "There was no class because the teacher was ill."

Complex prepositions such as antes de "before of" may also introduce infinitival adjunct clauses. Benucci (1992) notes that in this case contraction of the second prepositional element with the determiner of the subject DP is possible. See (85):

(85) Vamos fazer o jantar antes de o / do João chegar.
    go(1pl) make the dinner before of the / of+the João to-arrive(3sg)
    "Let's cook dinner before João arrives."

If Rizzi (1984) is correct, the only possible explanation for (85) is that in this case the prepositional element de "of" is in C (i.e. it is a prepositional complementiser), being therefore able to contract with the head determiner of the clausal subject across IP. The relevant details of the structure of the sentence in (85) would thus be as shown in (86).

(86) ... [pp [p antes] [cp [c de] [ip o João chegar]]] ....
Notice that this is not a completely new idea. The complementiser status of elements such as *d* when introducing infinitival clauses has been suggested by Kayne (1981) and Rizzi (1982) for French and Italian.

Further evidence for the complementiser status of the second prepositional element in (85) comes from the fact that the finite counterpart of the adjunct clause would have the complementiser replacing the second prepositional element. See (87):

(87) Vamos fazer o jantar antes que / *antes de que o João chegue.

It would be natural to assume that infinitival adjunct clauses introduced by a simple preposition (see (82b) and (84b) above) have a parallel structure to infinitival adjunct clauses introduced by a complex preposition, in that they are also introduced by a prepositional complementiser. The only difference between the two cases would be that while the latter are associated with an overt complementiser, the former are associated with a null one. The relevant details of the structure of (84b), for example, would be as shown in (88).

(88) ... [\([\text{p p } [\text{p por} [\text{c p } [\text{c o professor estar doente}]]] \]
for the teacher to-be(3sg) ill

The view that the first prepositional element in a complex preposition such as *antes de* "before of" should be distinguished from the second element has been argued for independently by Starke (1993a). Starke notes that only a very small number of prepositions may occur as the second prepositional element in a complex preposition (*d* "of" and à "to" in French, a language he examines in detail), whereas the set of elements which may appear in first position is a very large set, including elements which are not necessarily prepositional (see, for example, *en échange de* "in exchange for"). He presents a number of arguments which support the view that 'initial' and 'final' prepositional elements in complex prepositions are members of two distinct classes of prepositions, which are associated with different syntactic and semantic properties.
Prepositions belonging to the class which includes 'initial' prepositional elements are semantically contentful (see the Portuguese examples _antes_ "before" and _depois_ "after"). The class to which 'final' prepositional elements belong, on the other hand, consists of prepositions which don’t make any significant contribution to the meaning of the sentence; they are typically semantically vacuous elements.

Syntactically, the two classes of prepositions display different behaviours in various contexts. In coordination structures, for example, while the second element of the complex preposition must always be repeated in the second conjunct (as shown in (89a)), the first element may or may not be (see (89b)).

(89) a  Il tourne toujours around de la maison et *(de) ses dépendances.
     he turns always around of the house and *(of) its dependencies
b  Il tourne toujours around de la maison et *(autour de) ses dépendances.
     he turns always around of the house and *(around de) its dependencies

A similar contrast is found between prepositions such as _de_ when they occur on their own and other simple prepositions such as _depuis_ "since", as shown in (90).

(90) a  De la vie de Robinson et *(de) son enfance malheureuse, elle ...
     of the life of Robinson and *(of) his childhood unhappy, she ...
 b  Depuis la vie de Robinson et *(depuis) son enfance malheureuse, personne ...
     since the life of Robinson and *(since) his childhood unhappy, nobody ...

Prepositions such as _de_ display the same behaviour as the complementiser _que_ "that", which in coordination structures must also be repeated in the second conjunct, as shown in (91).
(91) a Je crois que Marie arrive demain et *(qu') on va partir ensemble.
   I believe that Marie arrives tomorrow and *(that) we leave together
   b Depuis que la belle saison est arrivée et *(que) les plages se réchauffent,
      since that the nice season has arrived and *(that) the beaches get warmer,
      il est difficile de travailler.
      it is difficult to work

The parallel behaviour of the preposition *de* and of the complementiser in the above examples can be explained if both are taken to occupy the same position, i.e. C. The element *de* can be assumed to be a prepositional complementiser, rather than a 'pure' preposition.\(^{12}\)

A similar contrast is found in Portuguese between the two elements of a complex preposition when this takes a DP complement. See (92):

(92) a Vamos para casa depois do jantar e *(do) café.
   go(pl) to home after of+the dinner and *(of)+the coffee
   "We are going home after dinner and coffee."
   b Vamos para casa depois do jantar e *(depois) do café.
   go(pl) to home after of+the dinner and *(after) of+the coffee

It is curious, though, that if the preposition takes a clausal complement the second prepositional element can be omitted (see (93)). However, this asymmetry between Portuguese and French may be due to independent factors.\(^{13}\)

(93) a Vamos para casa depois de jantarmos e (de) tomarmos café.
   go(pl) to home after of+to-dine(pl) and (of) to-take(pl) coffee
   "We are going home after we have dinner and coffee."
   b Vamos para casa depois de jantarmos e *(depois) de tomarmos café.
   go(pl) to home after of+to-dine(pl) and *(after) of+to-take(pl) coffee
Further confirmation for the view that the two prepositional elements should be distinguished comes from the observation that when the complement of the complex preposition is omitted the second prepositional element obligatorily disappears. See (94) for French and (95) for Portuguese:

(94) Il tourne toujours autour (*de).
    he turns always around (*of)

(95) Ele vai sair antes do almoço, mas eu só saio depois (*de).
    he goes to-go out before of+the lunch but I only go out after (*of)
    "He is going out before lunch, but I am only going after."

Similarly, when de stands as a simple preposition its complement may not be dropped, unlike other simple prepositions such as contre (Fr.), contra (Port.) "against". See (96) and (97):

(96) a  J'ai peur de *(Jean)
       I am afraid of *(Jean)

     b J'ai voté contre (le président).
       I voted against (the president)

(97) a Voltámos ontem de *(Paris).
       returned(1pl) yesterday from *(Paris)

     b Votámos contra (a proposta).
       voted(1pl) against (the proposal)

A third context where the two types of prepositions are found to behave differently is illustrated in (98) and (99). Preposition stranding is marginally possible in both French and Portuguese. However, when it occurs, only the first prepositional element may be stranded.
(98) a Je me demande de quelle fille il tourne autour maintenant.
I wonder of which girl he turns around now
b *Je me demande quelle fille il tourne autour de maintenant.
I wonder which girl he turns around of now

(99) a Gostava de saber de que rapariga é que ele anda à volta.
wonder(lsg) of which girl is that he goes around
"I'd like to know which girl he's been hanging around."
b *Gostava de saber que rapariga é que ele anda à volta de
wonder(lsg) which girl is that he goes around of

What all the pieces of evidence above seem to indicate is that the second prepositional element forms a constituent with its complement to the exclusion of the first prepositional element. This follows under the structure assumed here (see (86) above).

Starke (1993a) also proposes that simple prepositions which are semantically contentful (i.e. which belong to the same class as 'initial' prepositional elements) are associated with the structure shown in (88) above, that is, their complement is introduced by a null complementiser. He argues that strong evidence for the presence of such a null complementiser is provided by Italian, where prepositions such as contro "against" must be followed by di "of" when their object is pronominal. See (100):

(100) a Ho votato contro di lui.
have(1sg) voted against of him
"I voted against him."
b Ho votato contro ∅ quest’uomo.
have(1sg) voted against ∅ this man
"I voted against this man."

No such requirement is found with semantically vacuous prepositions. See (101):
This contrast can be naturally accounted for if it is assumed that *di* in (100a) corresponds to the lexicalisation of the null complementiser which introduces the complement of semantically contentful simple prepositions.

If this is correct, then we must conclude that the C-position of infinitival adjuncts is always filled by an overt or a null prepositional complementiser. This explains the impossibility of inversion observed in inflected infinitival adjunct clauses.

4. Licensing inflected infinitives
4.1. Licensing temporal dependencies
4.1.1. The binding requirement on T

In section 2 above it was suggested that infinitival clauses which are associated with an unspecified time frame have an anaphoric T. However, the presence of an anaphoric T does not correlate necessarily with inversion, or I-to-C raising, as was observed in subsection 2.3. In section 3 it was argued that I-to-C movement is found in contexts which are associated with an empty C-position. It was shown that there is a clear contrast between the C-position of declarative/epistemic complements, which was argued to be radically empty, and the C-position of other inflected infinitival clauses, which was shown to be either associated with semantically contentful features (in the case of factive complements and 'real' subject clauses) or with a prepositional complementizer (in the case of 'subjects' of ergative adjectives and adjunct clauses). Factive complements and subjects which display inversion were also argued to be associated with an empty C. Thus, the claim that there is a correlation between inversion and (lack of) content of C appears
to be well-motivated. Nevertheless, it still remains that inversion contexts are typically those contexts which have what was characterised as an anaphoric T. In this subsection, I would like to explore a possible approach to the inflected infinitive which links its licensing to the licensing of the anaphoric T.

As a first approximation to the problem, I would like to suggest the following condition on the anaphoric T:

(102) An anaphoric T must be locally bound by a contentful head.

What is meant by 'locally bound' is that no head can intervene between T and the head which binds it. We can express this in more formal terms by stating that T must form a binding dependency with a higher head and that this dependency must obey the Basic Requirement on Dependencies (Manzini 1994a), as formulated in (103):

(103) **Basic Requirement on Dependencies**

Let \( (X_i) \) be the minimal domain to which \( A_i \) belongs. \( (A_1, ..., A_n) \) is a dependency only if for every \( i \), \( (X_i) \) is immediately superior to \( (X_{i+1}) \).

The notions 'minimal domain', 'immediate superiority' and 'superiority' are defined in (104)-(106):

(104) The **minimal domain** of a head \( X \), notated \( (X) \), includes all elements that are immediately dominated by, and do not immediately dominate, a projection of \( X \).

(105) A minimal domain \( (Y) \) is **immediately superior** to a minimal domain \( (X) \) iff \( (Y) \) is superior to \( (X) \) and there is no minimal domain \( (Z) \) such that \( (Z) \) is superior to \( (X) \) and \( (Y) \) is superior to \( (Z) \).

(106) \( (Y) \) is **superior** to \( (X) \) iff all categories that dominate \( (Y) \) dominate \( (X) \).

For our purposes, the central claim of the Basic Requirement on Dependencies is that a dependency can be established between two heads only if the minimal domain of one head is immediately superior to the minimal domain of the other. This entails that in a
configuration as in (107) no dependency can be created between X and Y that doesn’t include Z:

\[(107)\]
\[
\begin{array}{c}
\text{YP} \\
/ \ \ \\
\ldots \\
/ \ \ \\
Y \ ZP \\
/ \ \ \\
\ldots \\
/ \ \ \\
Z \ XP \\
/ \ \ \\
\ldots \\
/ \ \ \\
X \\
\end{array}
\]

The dependency established between the infinitival anaphoric T and its binder is a temporal dependency. In the same way that nominal anaphors may only be bound by nominal expressions, only a head associated with temporal properties has the ability to bind an anaphoric T. This is what is meant by the expression 'contentful head' in (102). Let us say that a head which is not associated with temporal properties may not be included in a temporal dependency.

What is the rationale behind a condition such as (102)? The obvious answer is that, being an anaphoric element and therefore devoid of independent reference, the infinitival T must pick its reference from an antecedent; otherwise, the infinitival clause fails to receive a temporal interpretation. Furthermore, binding dependencies involving heads must obey the general licensing requirement on dependencies.

Let us see whether the inversion facts can be derived from (102). It was argued above that the C-position of declarative/epistemic complements is radically empty. If this is correct, then C is not associated with any semantically contentful features. More to the point, it is not associated with any temporal properties. The next head up which has the ability to enter into a temporal dependency with the infinitival T is the matrix V (which
is itself linked to the matrix T). Thus, the infinitival T must raise to C in order to be locally bound by V and be assigned a reference.

However, there is one problem. If the 'local binding' condition is motivated solely by the need for the infinitival clause to be temporally interpreted, it should not have to be satisfied until LF, the only syntactic level relevant for semantic interpretation. Hence, (102) does not explain why T should have to raise overtly to C, rather than covertly, in contexts which are associated with an empty C. Moreover, the C-position of these complements in English appears to be equally empty, but no overt T-to-C raising occurs.

I would like to propose that the contrast between Portuguese and English can be derived from another difference between the two languages which was argued for in chapter 2, namely that only in Portuguese is the infinitival T associated with Case features. Let us assume that the Case features of T have to be activated and that this is done when T is temporally licensed. Let us further suppose that being associated with Case features renders the non-finite anaphoric T strong. Putting this in Chomsky’s (1993) terms, the D-features of an infinitival T are always strong. The 'local binding' requirement must therefore be satisfied in the overt syntax, which means that in infinitival declarative/epistemic complements in Portuguese (but not in English) T is forced to raise overtly to C.

As noted by Ambar (1992) (see chapter 2), there is only one case in which no inversion is found in these complements, namely when the subject is under the scope of a focus operator. See (108):
(108)  a  Penso só os deputados terem votado a proposta.
    think(1sg) only the MPs to-have(3pl) voted the proposal
  b  ??Penso só os deputados votarem a proposta.
    think(1sg) only the MPs to-vote(3pl) the proposal
  c  *Penso terem só os deputados votado a proposta.
    think(1sg) to-have(3pl) only the MPs voted the proposal
  d  *Penso votarem só os deputados a proposta.
    think(1sg) to-vote(3pl) only the MPs the proposal

If some constituent other than the subject is focussed, then inversion is again obligatory:

(109)  a  Afirrnou só ontem terem os filhos chegado.
    claimed(3sg) only yesterday to-have(3pl) the children arrived
  b  ??Afirmou só amanhã lavarem eles o carro.
    claimed(3sg) only tomorrow to-wash(3pl) they the car

I propose that in these cases, no independent Focus projection (Brody 1990) has to be present. Being empty, C can optionally be associated with a focus feature and, by Spec-head agreement, its Spec is licensed as the locus for moved focussed phrases (adapting a suggestion by M. Brody, p.c.). Assuming that these cases involve movement of the verb to C allows us to account for the marginality of the examples with lexical verbs.

Inversion in factive complements and subjects could be explained in a similar way. Assuming that the factive D can be associated with temporal properties, T raises to the empty C in order to be locally bound by D. Contexts not displaying inversion, on the other hand, are the contexts where C has some content and hence it can enter into a dependency with the infinitival T, without T having to raise.

It is obvious that an analysis such as the one suggested above is fairly inadequate in a number of ways. For example, we have seen in subsection 2.1 that complements of declarative/epistemic verbs may be associated with a modal T or they may have a tense interpretation which is disjoint from that of the matrix clause. In other words, the
infinitival T in these complements is not consistently bound by the matrix T. The prediction made by the analysis above is that in these cases no (overt) T-to-C raising should occur. But this is a wrong prediction, as we have seen that inversion is always obligatory in these contexts.

Before proceeding to suggest an alternative analysis for these facts, I will consider the restrictions on the classes of predicates which may be embedded under inversion in inflected infinitival clauses.

4.1.2 Explaining the restrictions on embedded predicates

Remember that the divide with respect to the predicates which are allowed under inversion appears to be between stative and eventive verbs. The class of stative verbs includes not only lexical verbs but also the auxiliaries ter "have", estar and ser "be" and modal auxiliaries. I will argue in this subsection that asymmetry between stative and eventive predicates may be derived from the binding properties of the event arguments associated with each of these classes of predicates.

There are two main types of approaches to the asymmetries in behaviour of the different verbal aspectual classes. One of these approaches, found, for example, in Kratzer (1989) and Enç (1991) holds that only certain classes of predicates, namely stage-level predicates (Carlson 1977), are associated with a 'Davidsonian' argument position for events or spatiotemporal location (a temporal argument, according to Enç 1991), which may be bound. Enç (1991) adds to this that the temporal arguments of eventive verbs (which constitute a subset of the class of stage-level predicates) must obligatorily be bound. The other approach found in the literature (see, for example, Higginbotham 1985 and Stowell 1994, 1995) holds that all predicates have an event argument which must be bound. The asymmetries in behaviour of stative and eventive verbs can be derived from the different properties of the argument associated with each of these classes of verbs. This is the view I will adopt here.15
Movement of T to C results in the structure shown in (110) (ignoring irrelevant details).

\[
(110) \quad ... \quad [v_p \ e_i \ V \ [c_P \ [c_T_i] \ [i_P \ ... \ t_i \ [v_p \ e_i \ ... \] \ ...
\]

The infinitival T moves to C where it is bound by the matrix V, which may be assumed to share an index with its event argument. The effect of this is that the event argument of the embedded verb, which is bound by its local T, ends up being coindexed with the event argument of the matrix verb. The ungrammaticality of this configuration with eventive verbs is attributed in Enç (1985) to the fact that the anaphoric argument of these verbs is bound by an element which is itself bound, and in Kempchinsky (1992), who assumes that I is empty in these infinitives and the argument is bound by a temporal specifier in C, to the lack of a local binder for the anaphoric argument.

I would like to pursue a different alternative by adapting a suggestion made in Stowell (1994, 1995). Stowell assumes that T is a dyadic predicate, selecting an external argument ZP ('Zeit-Phrase'), which denotes the reference time, and an internal argument ZP, which denotes the event time. The event argument of the verb, represented by a temporal variable in VP, is bound by some element in the event time ZP. It is this ZP, rather than the event argument of the verb, which is assigned different properties with stative and eventive verbs. With stative verbs, Stowell assumes that the ZP is the temporal analogue of a definite DP, in that it refers to a time already mentioned; with eventive predicates, on the other hand, the ZP may have the semantics of either a definite or an indefinite DP, i.e. it may refer to a time already mentioned or introduce a new time.

I will assume here that what may be definite or indefinite is the event argument associated with the verb, not a functional projection which denotes the event time. Moreover, I will assume that the event argument of stative verbs is represented by a definite DP which has the properties of a pronominal element, whereas that of eventive verbs is represented by an indefinite DP, which functions as a variable that may be unselectively bound. In both cases, the event argument of the verb may be bound by its local T (Notice that this implies that T has quantificational force). It follows from their
different properties that in a configuration as (110) above only the event argument of stative verbs may be coindexed with the event argument of the matrix verb. Such a coindexation in the case of eventive verbs will lead to a Binding Condition C violation.

For those cases where no restrictions were found under inversion, we can assume that the event argument of the verb is bound by some quantificational expression in the infinitival clause. In contexts which are associated with a generic/habitual reading, the event argument of the verb may be assumed to be bound by an abstract generic operator or by an overt quantificational expression (as proposed by Enç 1991). This may also be extended to those cases where the event denoted by the infinitive is taken to be past with respect to the matrix in the presence of an overt or covert adverbial expression. The adverbial expression may be assumed to bind the event argument of the verb in these cases. Finally, in those cases which were shown to be associated with a modal interpretation, we can take the event argument of the verb to be bound by the modal operator.

4.2. Aux-to-Comp in Italian

I argued above that obligatory raising of T to C is found whenever C is empty. This is the case of inflected infinitival complements of declarative/epistemic verbs and factive complements and subjects dominated by a DP projection. I also proposed that this movement must be overt in virtue of the fact that the infinitival T is associated with strong Case features that have to be activated, which is done when T is temporally licensed (by satisfying the 'local binding' requirement).

In this subsection, I consider a phenomenon, namely Aux-to-Comp in Italian infinitival clauses, which appears to cast serious doubt on this proposal, assuming (as I will do) that it instantiates the same process as the Portuguese inflected infinitive.

According to Rizzi (1982), Aux-to-Comp is found in three infinitival contexts in Italian: in complements of verbs such as *ritenere* "believe" and *affermare* "assert" (see
These constructions have at least two properties in common with Portuguese inflected infinitival clauses. On the one hand, they exhibit Nominative subjects in infinitival contexts. On the other hand, the class of predicates allowed in these clauses appears to correspond roughly to the class of predicates which are admitted under inversion in Portuguese. Hence, we find not only the aspectual auxiliary *aver* "have" (as in (111a) and (113) above) and the copula *esser* "be" (as in (111b) and (112) above), but also modal auxiliaries (see (114) below) and certain lexical verbs (see (115)). Notice the contrast between (111a), for example, and (116a), and, on the other hand, between (115) and (116b), which is parallel to the contrast found in Portuguese between these types of verbs.16

(111) a Questa commissione ritiene [aver loro sempre ottemperato agli obblighi previsti dalla legge]
    "This commission believes [to-have they/them always fulfilled the legal duties]"
   b Mario afferma [non esser lui in grado di affrontare la situazione]
    "Mario asserts [not-to-be he/him able to face the situation]"

(112) L' [esser la situazione suscettibile di miglioramento] indica che non tutto è perduto.
    "The to-be the situation susceptible of improving shows that not everything is lost."

(113) Il giudice è stato sospeso per [aver suo figlio commesso una grave imprudenza]
    "The judge has been suspended for to-have his son made a heavy imprudence."

(114) ?Ritengo [dover tuo fratello/lui tornare a casa]
    "I believe [to-have your brother/he to come back home]"

(115) ?Ritengo [amare lui la linguistica ...]
    "I believe [to-love he linguistics ...]"
There are, however, some differences between the Italian and the Portuguese constructions. On the one hand, Italian Aux-to-Comp appears to be restricted to a smaller number of infinitival contexts. On the other hand, inversion is consistently obligatory in Italian, even in contexts, such as adjunct clauses, where it is impossible in Portuguese. This is the aspect that I would like to concentrate on.

The fact that inversion is always obligatory in Italian appears to constitute a problem for the analysis suggested above for the inflected infinitive. If the analysis suggested above for adjunct clauses is correct (see subsection 3.4 and also Starke 1993a for Italian), then the C position of the adjunct clause in (113) is not empty. Overt T-to-C movement should therefore be ruled out.

I would like to propose that although Italian shares with Portuguese the option of allowing infinitival T to be associated with Case features, it differs in the mechanism that it uses to license the Case features of the infinitival T. Before considering what this difference might be, let me first propose a modification of the analysis presented in section 4.1. Assume that the Case features of an infinitival T may only be licensed by C. In Portuguese, T is forced to raise to C in the overt syntax whenever C is empty. If C is filled or associated with some semantic content, T may license its Case features by establishing a dependency with C. In Italian, on the other hand, it appears that T must always raise to C in order to have its Case features licensed, regardless of whether C is associated with content or not. We may try to correlate this difference between Portuguese and Italian with the difference found with respect to the realisation of agreement morphology (which I am taking to be a spell-out of the Case features of T) between the two languages. Putting it in the terms of Chomsky (1993), the morphologically overt Case features of the Portuguese infinitival T could be described as weak features, whereas the abstract Case features of the Italian infinitival T could be characterised as strong. Given
that only strong features are visible at PF and must therefore be checked before Spell-out, only in Italian is overt raising of the infinitival T to C required and, by Procrastinate, possible. This raises a problem regarding inversion in Portuguese inflected infinitival clauses. Assuming that this analysis is correct, it will be necessary to explain why overt T-to-C raising is possible in contexts which I argued are characterised by the presence of an empty C. I shall return to this question in subsection 4.4.

4.3. The ungrammatical cases

As mentioned in chapter 2, there are three contexts in which inflected infinitives may not occur, namely in complements of subject control predicates such as querer "want" (see (117)), in interrogative clauses (see (118)) and in relative clauses (see (119)).

(117) *O Governo quer o relatório ser publicado.
the government wants the report to-be(3sg) published.
"The government wants the report to be published."
(118) *Não sabemos a quem darmos o livro.
not know(lpl) to whom to-give(lpl) the book
"We don’t know who to give the book to."
(119) *Nem têm uma caneta com que escreverem.
nor have(3pl) a pen with which to-write(3pl)
"They don’t even have a pen with which to write."

All the subject control verbs which do not allow inflected infinitives have in common the property of being restructuring verbs (cf. Rizzi 1982). This appears to be the property shared by the verbs which, although allowing infinitival complements, do not admit inflected infinitives. Assuming, as Rizzi (1982) does, that clitic climbing is only possible in restructuring contexts, notice, for example, the contrast between querer "want" and a subject control verb such as prometer "promise" which may take an inflected infinitival complement:
(120) O João quere-o ajudar.
the João wants-him(acc) to-help
"João wants to help him."

(121) *O João prometeu-o ajudar.
the João promised-him(acc) to-help
"João promised to help him."

There is one type of restructuring verb, namely raising verbs such as *parecer* "seem", which may take an inflected infinitival complement. However, this is possible only if no restructuring occurs, as illustrated in (122)-(123).

(122) a Eles parecem tê-la ajudado.
they seem to-have-her(acc) helped
"They seem to have helped her."
b Eles parecem-na ter ajudado.
they seem-her(acc) to-have helped

(123) a Parece terem-na eles ajudado.
seems to-have(3pl)-her(acc) they helped
"It seems that they have helped her."
b *Parece-a terem eles ajudado.
seems-her(acc) to-have(3pl) they helped

These facts may be explained if we adopt a theory of restructuring as proposed in Roberts (1994c), according to which restructuring involves raising of the embedded T to the matrix clause, resulting in the formation of an extended projection (cf. Grimshaw 1991) which includes both clauses.¹⁹ We may assume that one consequence of raising the infinitival T to the matrix clause is that both clauses end up sharing one tense dependency and, therefore, the infinitival clause is not associated with an autonomous T. If we further make the natural assumption that Nominative Case may only be checked by an independent T, we derive the impossibility of inflected infinitives in restructuring contexts. In other words, T may check Nominative Case only if it heads its own separate dependency.
One problem arises with respect to this proposal. Given that restructuring is an optional process, it would be predicted that, like raising verbs such as *parecer* "seem", verbs such as *querer* "want" should allow inflected infinitival complements whenever restructuring does not occur. However, this is not the case. As mentioned above, verbs such as *querer* "want" never allow inflected infinitives. I tentatively suggest that these verbs always trigger restructuring, whether or not its effects are visible (i.e. whether or not clitic climbing occurs).

If the above analysis is correct, then restructuring contexts provide further evidence for the view that T is crucially involved in the licensing of inflected infinitives or, more accurately, in the licensing of Nominative subjects in infinitival contexts and, in all likelihood, generally.

The other two cases of impossible inflected infinitive, on the other hand, appear to provide evidence for the view put forward in subsection 4.2, namely that the C-position is also involved in the licensing of inflected infinitives. Let us first consider interrogative clauses. It has been observed (see, for example, Stowell 1981 and Kempchinsky 1992) that verbs which select only a finite or only an infinitival clausal complement lose the ability to select the tense value of their complement when this is specified as [+wh]. This is illustrated in (124) for Spanish (examples from Kempchinsky 1992).

(124) a Me explicó [que teníamos que hacer los planes ahora]
"S/he explained to me that we had to make the plans now"

b *Me explicó [tener que hacer los planes ahora]
"S/he explained to me to have to make the plans now"

c Me explicó [cuándo teníamos que hacer los planes]
"S/he explained when we had to make the plans"

d Me explicó [cuándo hacer los planes]
"S/he explained to me when to make the plans"

Given Stowell’s (1981) and Kempchinsky’s (1992) view that tense features may be represented in C, the facts shown in (124) are argued by Kempchinsky to follow from the
fact that, in the presence of a [+wh] feature, these features, although still present, are no longer the head of C and, therefore, can not be selected by the matrix V.

It might therefore be assumed that a [+wh] C is somehow unable to license a temporal dependency between the embedded T and the matrix. In the case of infinitival clauses as in (124d), this would account for the fact that the only possible interpretation for the infinitive is a modal interpretation. However, this is not sufficient to exclude inflected infinitives. In section 2, we observed that inflected infinitives are compatible with a modal interpretation. The crucial difference between the grammatical cases that we considered there and the example in (118) above appears to be that the embedded C in (118) is associated with a [+wh] feature. Let us therefore propose that the impossibility of inflected infinitives in interrogative clauses follows from the inability of the [+wh] C to license the Case features of the infinitival T. This proposal receives some confirmation from a fact discussed by Stowell (1981). He observes that interrogative clauses seem to escape the effects of his Case Resistance Principle (see chapter 2), in that, unlike declarative clauses, they may occur in Case positions (see the contrast between (125a) and (125b)). He accounts for this fact by assuming that interrogative clauses are never headed by a Case-assigning element.

(125) a *The company president announced [that new mines would be opened in Pennsylvania] to the press.
   b The company president announced [where new mines would be opened in Pennsylvania] to the press.

Taken together, the facts shown in (118) and in (125) appear to indicate quite conclusively that an interrogative C is incompatible with Case. The same conclusion can be extended to the example in (119) above, which shows that inflected infinitives are also ruled out in relative clauses. The C of relative clauses appears to share the properties of the interrogative C with respect to its incompatibility with, and thus its inability to license, Case features.
4.4. Licensing Case features

I argued in subsection 4.2 that the Case features of the infinitival T are licensed by C. This means that either T raises to C in the overt syntax (as is the case in Italian and certain contexts in Portuguese) or a dependency must be established linking T to C (as is the case of most contexts in Portuguese). The view that C is crucially involved in the licensing of the Case features of the infinitival T was further confirmed by the observation that no such licensing occurs when C is associated with an operator feature which is incompatible with Case, as I argued is the case of interrogative and relative clauses, where inflected infinitives are ruled out. Assuming that this approach is correct, there are still some questions which must be addressed.

One question refers to the claim that if T does not raise to C in the overt syntax, its Case features can be licensed via a dependency linking T and C. An alternative approach would be to follow Chomsky (1993) and assume that T always raises to C, either overtly or abstractly. Such an approach, however, would fail to account for the fact that the stative/eventive asymmetry observed in contexts where T raises to C overtly is not found in contexts where T is in situ in the overt syntax. If the analysis suggested for this asymmetry in subsection 4.1.2 above is correct, we would expect the asymmetry to show up whenever T raises to C, whether overtly or covertly. I would therefore suggest that no abstract T-to-C raising occurs, and that the initial claim, i.e. that the creation of a dependency between T and C is sufficient to license the Case features of T, can be taken to be correct. Following an approach developed by Brody (to appear), I assume that T can be licensed in its root position via a chain which links T to C.

The question then arises as to why overt raising should ever be possible. In other words, why can't T have its Case features licensed in its root position in all contexts? I would like to propose, as I did in section 4.1, that whether or not this is possible is determined by the properties of the C-position. Let us assume that C must always be filled; otherwise, it can not receive an interpretation at LF, which will violate Full Interpretation. If C is lexically filled, as I argued to be the case in adjunct clauses, or if it is associated with some semantic content, as appears to be the case in factive
complements and subject clauses (not displaying inversion), then T can stay in its root position. In other words, a filled C acts as an expletive which forms a dependency with T, licensing it in its root position (cf. Brody to appear). The cases where T-to-C raising is obligatory are the cases which I argued contain an empty C. We may think of an empty C as some sort of ‘affixal’ category, in the terms of Pesetsky (1992), hence as a category which does not have the ability to license a contentive element in its root position via chain formation, but, on the contrary must be itself licensed by either incorporating into a higher contentive head (as is the case in English, if Pesetsky 1992 is correct) or by having some lower element incorporate into it. Full Interpretation is violated if at LF the empty C is not associated with a contentive element.

We may account for the contrast between Portuguese and Italian, where I argued that T must raise to C even when this is filled, by assuming, as I did in subsection 4.2, that the two languages differ in the ‘strength’ of the Case features of their infinitival T, which means that the infinitival T found in Italian Aux-to-Comp constructions is associated with more restricted licensing mechanisms than its Portuguese counterpart. On the other hand, we may explain the contrast between Portuguese/Italian and English, by assuming that the option of incorporating T into C is available only if T must independently raise to C to satisfy its own requirements (in the spirit of Chomsky’s 1993 principle of Greed). Alternatively, we may assume that C has the ability to attract T (cf. Chomsky 1995) only in languages (or in contexts) where it also has the ability to check some feature of T.

The view that I am taking here regarding the licensing of inflected infinitives represents a departure from the view taken in subsection 4.1, where licensing of the Case features of T was linked to the temporal licensing of T. That view was largely motivated by the observation that many of the contexts where inflected infinitives are found appear to be contexts characterised by a temporal interpretation which is wholly determined by the matrix, or in other words, they are contexts which are associated with what I defined as an anaphoric T. Furthermore, the analysis suggested for the impossibility of inflected infinitives with restructuring verbs appears to confirm this view, in that it shows that licensing of the Case features of T is only possible when the temporal features of T are
independently licensed (i.e. when T is licensed in its own independent temporal dependency).

However, there are some facts which indicate that the process of licensing the Case features of the infinitival T is actually dissociated from the process of temporal licensing. If the two processes were as closely linked as suggested in subsection 4.1, inversion would be predicted to be impossible in contexts where no temporal dependency is established with the matrix V. In other words, inversion should be ruled out in complements of declarative/epistemic verbs which are associated with a modal interpretation, and also in those where the anaphoric T is bound by some expression in the embedded clause. Moreover, it is clear that a temporal dependency can be licensed independently of the Case features of T, as can be concluded from the impossibility of inflected infinitives in interrogative and relative clauses, where a modal interpretation is seen not to be sufficient to license the Case features of the infinitival T. We may therefore conclude that temporal licensing and licensing of Case features involve in fact independent processes.

We might ask at this point what the status of the 'local binding' requirement proposed in subsection 4.1.1 is. The answer is that we can dispense with it. This requirement was intended to capture the 'dependent' status of the infinitival T, on the one hand, and, on the other hand, the link between temporal interpretation and Case licensing, allowing us to account for the contrasts found among the various inflected infinitival contexts with respect to inversion. We have now concluded that no such link exists. Moreover, we can explain the 'dependent' status of the infinitival T in a uniform way by assuming (following a suggestion by Rita Manzini p.c.) that the infinitival T has the properties of an indefinite element. This allows us to unify the two types of T found in infinitival clauses, i.e. the modal T and what I have been calling the 'anaphoric' T. As an indefinite, the infinitival T is licensed by being unselectively bound by a category associated with quantificational properties. This category may either be the matrix T, an abstract modal or generic operator, or some temporal expression in the infinitival clause. This infinitival T would be distinguished from the T found in subjunctive clauses, which Manzini (1995)
argues to be an indefinite T that must be bound by an intensional operator, in that it needs to be bound by an element endowed with temporal properties.

5. Conclusion

In this chapter I have argued that two functional heads play a crucial role in the licensing of inflected infinitives, namely T, the head which is associated with Nominative Case features, and C, the head which has the ability to license those Case features. I have attempted to find evidence for the presence of T in infinitival clauses, by investigating their temporal properties, which led me to the conclusion that the infinitival T may be characterised as an indefinite element which must be appropriately bound. I have proposed that overt T-raising to C occurs in contexts where C is empty, and that the stative/eventive asymmetry found in these contexts may be derived from the binding properties of the event argument associated with each of these classes of predicates. In contexts where C is either filled or bears semantically contentful features, creation of a dependency between T and C was argued to be sufficient to ensure the licensing of the Case features of the infinitival T. Finally, further evidence for the role of T and C in licensing inflected infinitives was provided, by considering Italian Aux-to-Comp in infinitival clauses and contexts where inflected infinitives are excluded in Portuguese.
Endnotes

1. This is a property that ECM complements share with gerundival clauses. Stowell (1981, 1982) notes that gerunds are also interpreted as having an unspecified tense. Hence, in (i) the event denoted by the embedded gerund is taken to be past with respect to the matrix tense.

(i) Jenny remembered [PRO locking the car]

This Stowell derives from the fact that, like ECM complements, gerundival clauses are not associated with a tense operator in Comp.

2. As mentioned in chapter 2 (see endnote 2), a sentence such as (11) would become grammatical if understood as conveying a generic interpretation.

3. ECM complements to verbs such as want also allow both stative and non-stative predicates, as expected. See (3) in the text and (i) below.

(i) John wanted [his wife to be a nurse]

4. Like the sentence in (11), the sentences in (16) would be grammatical on a generic reading.

5. This is true for (40b), but not necessarily for all adverbial clauses which denote cause. See (i), where the most natural interpretation for the adverbial clause is the unrealised one.

(i) Estou muito aborrecida [por vocês irem ao cinema juntos]

"I am very annoyed that you are going to the cinema together."

As argued by Roussou (1995), the semantic property which characterises constituents which denote a cause is existential presupposition. If this is correct, then what is stated in the text regarding the logical meaning of the preposition is not completely accurate. Although it is more natural to presuppose the existence of past situations, this is not the only possibility, as shown by (i) above.

6. The idea that infinitival complements to believe-type verbs are introduced by a null complementiser is due to Chomsky and Lasnik (1977). Chomsky (1981) later departed from this analysis and advocated a CP-deletion structure which allowed government of the embedded subject by the matrix V, hence deriving ECM. Kayne (1981) also argued for a full CP-structure for these complements, assuming that they are introduced by a prepositional complementiser.

7. Pesetsky (1992) proposes that the following distinction be drawn between null heads and traces:
An \( X^0 \) which is phonologically null at D-structure (i.e. a zero morpheme) is not a governor. Hence, empty pronominal elements do not count as governors but traces do. For the case at hand this means that, although the null complementiser does not govern the subject position, its trace does, and it is the trace that transmits its government capacity to the higher verb. Pesetsky accordingly proposes the following reformulation of Baker’s Government Transparency Corollary:

\[
\text{Government Transparency Corollary (trace version)}
\]

A category which has an item incorporated into it governs everything which the trace of the incorporated item governs.

8. See Roussou (1995) for arguments for the structure shown in (65b); see also Rouveret (1992), who proposes that factive clauses may be DPs or CPs.

9. This hypothesis appears to be problematic in face of the ungrammaticality of (61) in the text, which led me to argue that the definite determiner is a spell-out of definiteness features in C. However, the incompatibility of the determiner with a complementiser seems to be a peculiar property of Portuguese, not a general phenomenon. For example, the equivalent of (61) would be grammatical in Spanish, as shown in (i).

\[
\text{(i) Siento él que no hayas venido.}
\]

\[
\text{regret(Isg) the that not have(2sg) come}
\]

"I regret the (fact) that you haven’t come."

The example in (i) provides clear evidence for the structure in (65b) in the text. With respect to the ungrammaticality of (61), there are two possible explanations which would allow us to maintain the hypothesis formulated in the text regarding the two possible structures for factive complements. One possibility is that (61) can be excluded in an independent way, which has no bearing on the questions discussed here. The other possibility is that a two-tier structure, with a DP immediately above CP, is assigned a more marked status than the structure consisting of a ‘bare’ CP, and is only marginally tolerated if C is not filled by a complementiser. This would also explain the marginal status of inversion in these complements.

10. A similar view is argued for by Cinque (1988c) for German, and by Roberts (1988) for English.

11. Spanish appears to present a problem regarding the proposed complementiser status of the second prepositional element of a complex preposition, given that this may occur with a complementiser. See (i):

\[
\text{(i) Llegó después (de) que había comenzado la fiesta.}
\]

\[
\text{arrived(3sg) after of that had begun the party}
\]

"(S)he arrived after the party had begun."
Without a serious study of the properties and structure of complex prepositions in Spanish, which would be beyond the scope of this work, it is impossible to decide whether this constitutes a serious counterexample to the view taken in the text.

12. Starke (1993a) extends this analysis to cases where prepositional elements such as *de* select a DP complement. In his view, both nouns and verbs are associated with a clausal structure (or an extended projection, in the sense of Grimshaw 1991), and both nominal and verbal clauses may be introduced by a complementizer (for more details, see Starke 1993a).

13. Starke suggests for the French cases that only certain categories may be coordinated. Hence, CPs may be coordinated in French, but not the functional projection immediately below CP. This would account for the data in (89a) and (91) in the text, assuming that prepositions such as *de* are in C, just like the complementizer *que* "*that*". If Rouveret (1992) is correct in assuming that languages such as Portuguese have an extra functional projection below CP, which he labels W(ackernagel)P (see chapter 4), it might be possible to assume that this functional projection has in common with CP the ability to be coordinated. The fact that the equivalent of the sentences in (91) is grammatical in Portuguese if the complementizer is omitted in the second conjunct seems to add support to such an assumption (see also coordination facts in chapter 4). Cf. (i) and (ii):

(i) Tenho pena que ele se tenha ido embora e (que) ela não tenha vindo.  
"I am sorry that he has left and (that) she hasn’t come."

(ii) Tem havido muito barulho desde que eles chegaram e (que) a festa começou.  
"There has been a lot of noise since that they arrived and (that) the party began."

14. See also Rouveret (1992), who suggests that declarative/epistemic verbs may select either a CP-complement or an FP-complement.


16. As in Portuguese, the status of the example in (116b) would improve considerably if a generic reading was available. See (i):

(i) ??Ritengo [bocciare lui i suoi studenti tutti gli anni]  
"I believe [to-fail he his students every year]"

Thanks to Rita Manzini for providing me with some of these examples and with her judgements.
17. It is a well-known fact that Aux-to-Comp constructions are stylistically very marked. This fact clearly correlates with the obligatory inversion in these contexts. A similar stylistic markedness characterises inflected infinitival contexts with obligatory inversion in Portuguese, which are in clear contrast with the contexts not exhibiting inversion. The latter are fairly natural and even preferred to their finite counterparts in colloquial registers.

18. Notice that this implies that there is no necessary correlation between overt morphology and strong features, on the one hand, and abstract morphology and weak features, on the other.

19. See also Kayne (1989), who proposes that restructuring involves movement of the infinitival I to the matrix I.

20. At least two facts seem to cast doubt on this conclusion. On the one hand, Misi Brody (p.c.) informs me that inflected infinitives in Hungarian are possible in certain interrogative contexts. On the other hand, inflected infinitives appear to be possible in Portuguese in certain infinitival relatives, as shown in (i).

(i) [O fato para tu vestires] está em cima da cama. 
"[the suit for you to-dress(2sg)] is on the bed"

I will ignore these facts here, assuming that they might be accounted for in some way which renders them compatible with the conclusion reached in the text.

21. Notice that such a solution potentially raises a similar problem with respect to the stative/eventive asymmetry as a solution involving abstract T-raising to C. In both cases, the resulting configuration contains an infinitival T co-indexed with its local C, which in turn may be coindexed with the matrix V. One possibility would be to adopt a suggestion by Kempchinsky (1992) to the effect that the temporal index associated with tense should be distinguished from the index which is associated with the Case-features of a Case-licensing head. If this turned out to be correct, we could then assume that the dependency linking the infinitival T and its local C in non-inversion contexts is a Case-dependency, rather than a temporal dependency, which means that they share the same Case index, but not necessarily the same temporal index (and, if they do, the temporal index must be distinct from that of the matrix V). We would furthermore have to assume that raising of T to C results in T and C sharing all their indices and also sharing their temporal index with the matrix V. As it stands, this proposal is fairly ad hoc, but I will not try to elaborate on it further.
CHAPTER FOUR

CLITICS IN FINITE AND INFINITIVAL CLAUSES

1. Introduction

The purpose of this chapter is to consider the facts of pronominal clitic placement in European Portuguese (EP) and to show how an analysis along the lines of Kayne's (1991a) may account for them. Romance clitics may occur either in preverbal or in postverbal position. Although both orders are found in EP, the conditions which determine each order are apparently very different from those in most other modern Romance languages. I propose to show that, despite the different conditions which determine enclisis and proclisis in EP, clitic placement in EP is governed by the same principles and obeys the same mechanisms as in other modern Romance languages, and will provide arguments for the claim that all surface variation may be attributed to different properties of C.

The chapter is organised as follows. Section 2 considers the predominant patterns of clitic placement in Romance and discusses two analyses (Ouhalla 1988 and Kayne 1991a) which have been proposed to account for these patterns. In section 3, I consider the particular syntactic conditions which determine clitic placement in finite clauses in EP. In section 4, I review three different approaches which have been taken to explain these facts, and in section 5 I suggest an alternative analysis for them. In section 6, some problems raised by this account will be discussed, which will lead to a reformulation of the analysis. Finally, in section 7 I consider whether the analysis developed can account for clitic placement in infinitival clauses.
2. Enclisis and proclisis in modern Romance

2.1. Overview of the patterns

It is a well-known fact that pronominal clitics may occur either in preverbal or in postverbal position in most modern Romance languages. In Italian and Spanish, for example, the syntactic conditions which determine the position of the clitic are typically related to the tensed/untensed nature of clauses. As illustrated in (1) and (2) (for Italian and Spanish, respectively), proclisis is obligatory in tensed contexts, whilst only enclisis is allowed in infinitival contexts.

(1) a Gianni gli parlava / *parlavagli
   Gianni him(dat) spoke / *spoke-him(dat)
   "Gianni spoke to him."

b Parlargli / *gli parlare sarebbe un errore
   to-speak-him(dat) / *him(dat) to-speak would be a mistake
   "To speak to him would be a mistake."

(2) a Pedro le dio / *diole un regalo.
   Pedro him(dat) gave / *gave-him(dat) a present
   "Pedro gave him a present."

b Pedro pensó en darle / *le dar un regalo.
   Pedro thought to-give-him(dat) / *him(dat) to-give a present
   "Pedro thought of giving him a present."

A context where the tensed/untensed asymmetry does not hold are imperatives. The contrast in Spanish seems to be between negative imperatives, which display proclisis, and positive imperatives, which require enclisis. See the examples in (3):

A context where the tensed/untensed asymmetry does not hold are imperatives. The contrast in Spanish seems to be between negative imperatives, which display proclisis, and positive imperatives, which require enclisis. See the examples in (3):
Even languages such as French, which have proclisis in most contexts (see (4)), show a similar contrast in imperatives (see (5)).

(4)  a Jean le lut / *lut-le.
    Jean it(acc) read / *read-it(acc)
    "Jean read it."

    b Le lire / *lire-le serait un plaisir.
    it(acc) to-read / *to-read-it(acc) would be a pleasure
    "To read it would be a pleasure."

(5)  a Parlez-lui / *lui parlez
    speak-him(dat) / *him(dat) speak
    "Speak to him."

    b Ne lui parlez / *parlez-lui pas
    ne him(dat) speak / *speak-him(dat) not
    "Don’t speak to him."

However, there are some exceptions to this. For example, Italian negative imperatives (2sg), which use the infinitive, show both proclisis and enclisis. See (6):

(6)  Non le telefonare / telefonarle
    not her(dat) call / call-her(dat)
    "Don’t call her."

Unlike Italian, Spanish and French, Brazilian Portuguese exhibits proclisis in all contexts, including positive imperatives.¹
Another distinctive feature of Brazilian Portuguese is that clitics may associate with any verb independently of its inflectional specifications. This is illustrated in (8a), where the clitic is associated with a past participle, and in (8b), where it is associated with a gerund.\(^2\)

\[(8)\]  
a  Ela tinha me escrito.  
\begin{quote}  
\textit{She had written to me.}\n\end{quote}

b  Ela estava me escrevendo.  
\begin{quote}  
\textit{She was writing to me.}\n\end{quote}

Languages which allow postverbal clitics, on the other hand, may show restrictions on the co-occurrence of clitics with non-finite verb forms. Neither Spanish nor French, for example, allow clitics to attach to a past participle. See (9) and (10):
Italian, on the other hand, only allows a clitic to attach to a past participle in the absence of an auxiliary, in the so-called absolute construction (see, for example, Belletti 1981, 1989):

(11) a Maria ci ha parlato.
    Maria us(dat) has spoken
    "Maria has spoken to us."

b *Maria ha parlatoci.
    Maria has spoken-us(dat)

(11) c ogni persona presentataci ...
    every person introduced-us(dat)

2.2. Some analyses

In this subsection, I will consider two analyses that have been proposed to account for the facts described in the previous subsection. These are Ouhalla's (1988) and Kayne's (1991a) analyses. Both take clitics to be affixal head categories and clitic placement to
be an instance of head movement which adjoins the clitic to a functional head. Furthermore, both reject the possibility of adjunction to the V-position.

2.2.1. Ouhalla’s (1988) analysis

Ouhalla’s (1988) approach to clitic placement (see also Ouhalla 1989) is developed around the notion that clitic movement obeys the following (possibly universal) S-structure condition:

(12) **Clitic Placement Condition (CPC)**

Clitics must attach to the highest affixal head in a clause.

From this condition it follows that attachment to an empty head is not allowed; clitics must attach to heads filled with lexical material. It also follows that attachment to V is excluded; not only is V not affixal by nature, it is never the highest head in a clause either. In view of Ouhalla’s assumptions about the structure of Romance clauses (shown in (13)), three options are open to pronominal clitics: attachment to C, to Agr or to T.

(13) \[cP ^{C} [Agr _ {TP} [VP _ {V} ...] \] ]

Movement to T is the option chosen for non-inflected infinitival clauses. Since C is empty and Agr is assumed not to project at all, T, containing the infinitival morpheme, is the highest affixal head. Hence the clitic moves to T, attaching to the verbal complex. See (14) (examples from Ouhalla 1989):

(14) a Gianni vuole leggerle.
   Gianni wants read-them(acc)

b (Gianni vuole) [... [T _ {V} + T] + cl ... [V _ e] ....]
Finite clauses differ from infinitival clauses in that the Agr projection is present. Whenever the C-position is empty, Agr is the highest inflectional head and therefore the landing site for the clitic, which attaches to the verbal complex. See (15):

(15) a Jean les mangera demain.
    Jean them(acc) will eat tomorrow
    "Jean will eat them tomorrow."
    b ... cl + [Agr V + T + Agr] ... [\_T e] ... [V e] ...

Movement of the clitic to C is argued to occur in Spanish wh-questions, where C is the highest affixal head position in the clause. The clitic attaches to the verbal complex in C, as shown in (16).

(16) a Qué le dio Juan?
    what him(dat) gave Juan
    "What did Juan give to him?"
    b .. cl + [C V + T + Agr] .. [Agr e] .. [\_T e] .. [V e] ..

In all of these cases clitics are assumed to move directly to their target position. Ouhalla rejects a stepwise analysis on two grounds. On the one hand, clitics are usually found to be outside the domain of the inflectional morphology, which would not be the case if the clitic moved along with the verb (this would also predict a wrong order in the case of movement to T); on the other hand, independent stepwise movement of the clitic would mean that every intermediate head would dominate at least two distinct traces, in violation of the Head Opacity Condition (according to which the internal structure of X^0 categories is opaque to Move-alpha). Most importantly, all intermediate maximal projections being L-marked (Chomsky 1986b) by virtue of successive V-movement, direct movement of the clitic is allowed by the ECP; and since stepwise movement of the clitic is not independently motivated, there is no reason to assume that it takes place at all.

A few questions can be raised about Ouhalla's analysis of clitic placement. One question refers to the CPC. It has long been argued, following Williams (1981a), among
others, that affixes are generated at D-structure as independent heads and share the same type of features as free morphemes, the only difference between the two being that affixes are assigned morphological subcategorisation frames in the lexicon and must attach to the right type of head by S-structure. This is a morphological requirement generally known in the literature as Lasnik's Filter (Pesetsky 1989) or the Stray Affix Filter (Baker 1988). Ouhalla’s CPC seems to be a syntactic formulation of this filter referring solely to clitic words. What is disputable in his formulation of the condition is the claim that Lasnik’s Filter may be satisfied by attachment to an affixal category. There seems to be some agreement in the literature to the contrary, i.e. that affixes must attach to free morphemes. Moreover, considering Ouhalla’s account of Romance clitic placement, it does not seem to be the case that clitics attach to affixal categories. Rather, what clitics attach to is the whole verbal complex, i.e. a complex head which can’t be considered to be affixal by nature.

Another question raised by Ouhalla’s analysis refers to the different ordering of the clitic with respect to tensed and untensed verbs. Why should it be the case that clitics attach to the left of Agr and C to yield the order cl-V FIN, but attach to the right of T to yield the order V INF-cl? This is a problem ignored in Ouhalla’s analysis but it is undoubtedly something which needs to be accounted for.

2.2.2. Kayne’s (1991a) analysis

In his analysis of clitic placement in Romance embedded clauses, Kayne (1991a) seeks to provide an answer to this question. Adopting Williams’s (1981) hypothesis about right-headedness in morphology, Kayne assumes that clitics always left-adjoin to a functional head. The different surface orders found are made to result from the interaction between the scope of verb movement and the (un)availability of abstract functional nodes in the clause.

Two options are open to clitics: either they adjoin to the functional head into which the verb has moved, or they adjoin to an empty functional head, which is understood to
be a non-trace abstract I-node, the empty counterpart of a legitimate functional category, such as Agr or T. The first option yields the order clitic-verb found with finite verbs, on the assumption that in finite clauses there are no available empty I-nodes into which a clitic could move. See (17):

(17) ... cl + [Agr V + T + Agr] ... [T e] ... [v e] ...

This option also accounts for the case of French infinitival clauses, in which Kayne assumes both the verb and the clitic to move into the Infn-head containing the infinitival morpheme. See (18):

(18) ... T ...cl + [Infn V + INFN] ... [v e] ...

The second option yields the order verb-clitic, by virtue of the verb moving past the clitic and adjoining to the X'-projection of the abstract I-head into which the clitic has moved. This accounts for the case of Spanish and Italian infinitival clauses, where Kayne takes T to be the abstract I-head to which the clitic adjoins (the same is assumed for the Italian cases involving a past participle). See (19):

(19) ... [V + INFN] + [T [cl + T] ... [Infn e] ... [v e] ...]

This second option may also yield the order clitic-verb if the verb doesn’t move up to I', but instead stays in some lower I-head. According to Kayne, this is the case of infinitival clauses in Occitan and in literary French (see (20)), where certain adverbs may intervene between the clitic and the infinitive.

(20) a ... en bien parler ...
    ... of-it well to-speak ...

b ... cl + T ... Adv ... V + INFN ... [v e] ...
With respect to the Italian negative imperatives which use the infinitive and optionally exhibit the clitic-verb order, Kayne (1991b) argues that they contain an empty modal which is licensed by a negative morpheme. Proclisis results from raising of the clitic out of the infinitival clause up to the modal.

Although Kayne’s analysis is very successful in accounting for the differences in clitic-verb order, certain points remain unclear. For example, what motivates movement of the verbal complex into I’ in clauses showing verb-clitic order? Movement of a head to a non-head position is theoretically dubious and it is excluded, for example, in the theory developed in Kayne (1994). Moreover, it is not obvious what the motivation behind clitic movement is. In Ouhalla’s analysis, clitic movement is partly motivated by the need to satisfy Lasnik’s Filter. It is not so clear what the motivation for clitic movement into an abstract I-head is. This is nevertheless a very important question, which should be taken into account in any analysis of clitic placement, if a better understanding of the status and properties of clitic elements is to be reached.

2.3. Conclusions

In this chapter I adopt Ouhalla’s and Kayne’s assumptions in taking clitics to be heads and clitic placement to be an instance of head movement. These are fairly standard assumptions in the current literature. In the case of object clitics, they are taken to be base-generated as the head of a DP subcategorised for by the verb. I follow Kayne in assuming that their surface position is reached by left-adjunction to a higher functional head, and Ouhalla in assuming that clitics move in one step into their landing site. I will also assume with Kayne that the order verb-clitic results from movement of the clitic into an empty functional head, and the verbal complex moving past it, and the order clitic-verb from adjunction of the clitic to the functional head containing the verbal complex.
3. Clitics in finite clauses
3.1. Root vs embedded

European Portuguese (EP) is like Italian, French and Spanish, and unlike Brazilian Portuguese, in that it displays both clitic-verb and verb-clitic orders. Unlike Italian and Spanish, however, the position of the clitic in EP is insensitive to finiteness. Enclitics and proclitics are found both in tensed and untensed contexts (for clitic placement in infinitival clauses, see section 7). The typical contrast between enclisis and proclisis, which is shown in (21), has often been described in terms of the distinction root/embedded.

(21) a O Pedro deu-lhe / *lhe deu uma prenda.
the Pedro gave-him(dat) / *him(dat) gave a present
"Pedro gave him a present."

b Diz que ela lhe deu / *deu-lhe uma prenda.
says that she him(dat) gave / *gave-him(dat) a present
"He says that she gave him a present."

Enclisis appears to be a root phenomenon, as can be seen in (21a), while proclisis occurs typically in embedded contexts, as shown in (21b). However, consider the examples in (22), where enclisis and proclisis are found alternating in an embedded context.

(22) a Tivesse-me / *me tivesse ele ajudado, isto não teria acontecido.
had-me(acc) / *me(acc) had he helped this not would have happened
"Had he helped me, this wouldn't have happened."

b Se ele me tivesse / *tivesse-me ajudado, isto não teria acontecido.
if he me(acc) had / *had-me(acc) helped this not would have happened
"If he had helped me, this wouldn't have happened."

The relevant distinction seems to be rather the presence vs absence of a complementiser. If enclisis is to be characterised as a root phenomenon, 'root' must be understood in a somewhat extended sense, referring to clauses not introduced by a complementiser. I will
show below that the alternation between enclisis and proclisis, both in matrix and in embedded contexts, is consistently determined by the presence or absence, not just of complementisers, but of a whole class of functional elements in preverbal position.

3.2. Wh-questions

Another environment in which the order clitic-verb is found is wh-interrogatives, both root and embedded. The relevant examples are shown in (23).

(23)  
a  Onde a encontrou / *encontrou-a o João?  
where her(acc) met / *met-her(acc) the João  
"Where did João meet her?"

b  Diz-me onde a encontraste / *encontraste-a.  
tell-me(dat) where her(acc) met / *met-her(acc)  
"Tell me where you met her."

Notice from the sentences in (24) that the order verb-clitic is the only possible order in yes-no questions and in wh-questions where the wh-element is left in situ.

(24)  
a  O João encontrou-a / *a encontrou no cinema?  
the Joao met-her(acc) / *her(acc) met at+the cinema  
"Did João meet her at the cinema?"

b  O João encontrou-a / *a encontrou onde?  
the Joao met-her(acc) / *her(acc) met where  
"Where did João meet her?"

3.3. Other cases of impossible enclisis

Negative clauses are another context in which the order clitic-verb is obligatory. See (25) and (26):
Other cases of clitic-verb order are shown in (27). These are clauses containing preverbal focussed elements. Notice the contrast between focus and topicalisation in (28). While preverbal focussed constituents always trigger proclisis, topics occur with verb-clitic order.

(27) a Até o Pedro me deu / *deu-me uma prenda.
   even the Pedro me(dat) gave / *gave-me(dat) a present
   "Even Pedro gave me a present."

   b Só o Pedro me deu / *deu-me uma prenda.
   only the Pedro me(dat) gave / *gave-me-(dat) a present
   "Only Pedro gave me a present."

   c Também o Pedro me deu / *deu-me uma prenda.
   also the Pedro me(dat) gave / *gave-me(dat) a present
   "Also Pedro gave me a present."

   d Sempre me perguntam / *perguntam-me por ti.
   always me(dat) ask / *ask-me(dat) for you
   "They always ask me about you."

(28) a Isso lhe disse / *disse-lhe eu.
   that him(dat) told / *told-him(dat) I
   "That I told him."

   b Isso, disse-lhe / *lhe disse eu já.
   that told-him(dat) / *him(dat) told I already
   "That, I told him already."
Unlike lexical subjects in root environments, quantified subjects also trigger proclisis, as illustrated in (29).

(29)  

a Todos os rapazes me ajudaram / *ajudaram-me.  
all the boys me(acc) helped / *helped-me(acc)  
"All the boys helped me."

b Poucos rapazes me ajudaram / *ajudaram-me.  
few boys me(acc) helped / *helped-me(acc)  
"Few boys helped me."

c Alguém me ajudou / *ajudou-me.  
someone me(acc) helped / *helped-me(acc)  
"Someone helped me."

The order clitic-verb is not only obligatory with quantified subjects but also with other preverbal quantified NPs (see (30a)). Notice the contrast with (30b), where the quantified NP is in postverbal position and the order verb-clitic is again found.

(30)  

a A alguém as ofereceram / *ofereceram-nas.  
to someone them(acc) offered / *offered-them(acc)  
"To someone they offered them."

b Ofereceram-nas / *as ofereceram a alguém.  
offered-them(acc) / *them(acc) offered to someone  
"They offered them to someone."

On the other hand, not all preverbal quantified NPs seem to exclude the order verb-clitic. In fact, with the NPs in (31) and (32) below it is the order verb-clitic which is the most natural order. As shown in the (b) examples, proclisis is allowed only if the quantified NP receives focal stress and a focus interpretation.
3.4. Clitic-second effects

In the context of Romance languages, the facts described above are, as far I know, exclusive to EP (and also to Galician), but they are in no way exceptional. They were found in a number of old Romance languages, such as Old Spanish, Old French and Old Italian, and they have traditionally been described in terms of a condition which places weak, unstressed elements in the second position in the clause (Wackernagel’s Law) and a constraint which forbids the occurrence of unstressed pronominals in sentence-initial position (Tobler-Mussafia Law).

Whichever way one chooses to look at these two laws, it is clear that, within a generative framework, they cannot be considered as being phonological constraints on clitic placement. As Benincà (1991) observes, it is difficult to see how to implement any condition that takes a phonological factor (the lack of stress of weak elements) to be sensitive to and determine syntactic processes. Therefore, I would like to assume that clitic placement is essentially a syntactic process, and therefore "blind" to phonological considerations.
It is clear that Tobler Mussafia's Law is operative in EP. Clitics may never occur in the first position in a clause, be it a root or embedded clause, as illustrated in (33).

(33) a Telefonou-lhe o Paulo / *lhe telefonou.
   rang-him(dat) the Paulo / *him(dat) rang
   "Paulo rang him."

b Desses-lhe / *lhe desses tu isso, ...
   gave(subj)-him(dat) / *him(dat) gave(subj) you that
   "If you gave him that, ..."

The Tobler-Mussafia Law has often been taken to mean that a clitic is obligatorily postverbal if the preverbal position would place it in first position in the clause. However, examples such as the one in (34) provide evidence against this interpretation, at least for EP. The preverbal clitic is not in first position; nevertheless, it is obligatorily postverbal.10

(34) O Paulo telefonou-lhe / *lhe telefonou.
    the Paulo rang-him(dat) / *him(dat) rang
    "Paulo rang him."

If the clitic is in second position in (34) (the 'Wackernagel position'), it is clear that 'second position' for EP must be derived in structural, rather than in linear terms. Further evidence for the claim that the notion of "second position" should be interpreted as referring to structural rather than linear position is found in the contrast between clauses containing a lexical subject and those containing a preverbal operator (compare (34) and (35)).

(35) Alguém lhe telefonou / *telefonou-lhe.
    someone him(dat) rang / *rang-him(dat)
    "Someone rang him."
Another phenomenon which is marginally possible in EP, and was also found in Old Romance, is known as 'interpolation'. Interpolation refers to the possibility of certain elements intervening between the preverbal clitic and the verbal complex. In modern EP only elements which appear to be clitic-like in nature are allowed to intervene between the clitic and the verbal complex. See (36):

(36)  

a  Alguém não lhe contou / lhe não contou a verdade.  
someone not him(dat) told / him(dat) not told the truth 
"Someone didn't tell him the truth."

b  Mandou que lhe eu entregasse o dinheiro.  
ordered(3sg) that him(dat) I gave the money  
"He ordered me to give him the money."

3.5. Summary

In brief, the syntactic conditions which determine the alternation between enclisis and proclisis in European Portuguese appear to differ significantly from those in other Romance languages such as Italian and Spanish. Proclisis is triggered either by a filled C or by the presence of some operator-like element in preverbal position (such as a wh-phrase, negation or focus). Assuming that the same mechanisms are involved for clitic placement in the Romance languages here considered, it is necessary to determine how to account for the variation found.

Kayne's analysis of clitic-verb order in Spanish and Italian tensed clauses can be used directly to account for proclisis, i.e. the clitic can be assumed to left-adjoin to Agr, the functional head into which the verb has moved. The analysis of enclisis in root clauses, however, is not so straightforward. If enclisis is always derived from movement of the clitic into an empty functional head, and in tensed clauses there are no available empty functional heads, T and Agr being morphologically realised, in what position can the clitic be?
Kayne (1991a) suggests two possible answers for this question. One is that in languages with verb-clitic order in root contexts the clitic is allowed to move into a root C. Following Kayne’s analysis of Spanish and Italian infinitival clauses, this would mean taking the clitic to move into empty C and the verbal complex to move past it and adjoin to C'. This is the view taken up by Benucci and Poletto (1992). The other alternative suggested by Kayne is that in languages with root verb-clitic there is an extra functional node into which clitics may move. This possibility is taken up by Cardinaletti and Roberts (1991) for Old Romance, and also by Uriagereka (1993, 1994) and by Martins (1994) for Portuguese. These analyses are discussed in the next section. I also discuss Barbosa’s (1993) approach, which rejects the view of clitic movement as head movement for EP. In section 5, I will present my first attempt at a proposal to account for the facts described above.

4. Some previous analyses

Barbosa (1993), following a suggestion by Rivero (1986) for Old Spanish, argues that clitic placement in EP involves adjunction of the whole DP containing the clitic to Agr\textsuperscript{P}. Enclisis in root clauses is derived by moving the verbal complex past the clitic into C. Movement of the verbal complex to C (which is triggered by reasons independent from the clitic) is obligatory unless C is filled (as in finite embedded clauses) or Spec of CP is overtly filled (as in wh-questions). In this case, the verbal complex stays in Agr\textsubscript{S}, yielding clitic-verb order. Barbosa further argues that preverbal lexical subjects in root clauses occur in a left-dislocated position, which, following Cinque’s (1990) analysis of Clitic Left Dislocation in Italian, means that they are adjoined to CP. This accounts for the fact that the constituents which trigger proclisis are those which can not be left-dislocated. Hence, when they occur in preverbal position, they are taken to be in Spec of CP. This asymmetry between lexical subjects and quantified preverbal constituents would explain why only the former can precede a wh-phrase, as illustrated in (37) and (38) (Barbosa’s examples).
The fact that clitic placement in EP involves DP-movement, rather than head-movement as in other modern Romance languages, is taken to account for a number of properties which set EP apart among the Romance languages. One such property is interpolation (see 3.4 above). Barbosa suggests that the optionality of interpolation and the variation in word order that it gives rise to can be made to follow from the fact that both the clitic and the intervening constituent are adjoined to IP. However, this fails to account for examples such as (36b) (repeated below), which are possible in modern EP, where, according to Barbosa, adjunction of the subject to IP is not an option.

It is possible to account for interpolation without assuming that clitic placement involves adjunction of the DP containing the clitic to a functional projection. We have seen above that Kayne (1991a) accounts for cases in Occitan and literary French where the clitic is separated from the verb by an intervening adverb by assuming that they involve adjunction of the clitic to an empty functional head which is higher than the one containing the verbal complex. If such an analysis could be made to work for EP, it would be preferable, since it would allow us to maintain a uniform view of clitic placement across Romance as involving head movement. This is the approach taken by the analyses discussed below.
4.2. Clitic movement as head movement

4.2.1. Movement to C

Benincà's (1991) analysis concentrates on Old Romance, but she extends her conclusions to modern Portuguese, which shares many of the properties of Old Romance with respect to clitic placement. She argues that the ban on clitic-first found in these languages (see 3.4 above) can be derived from the fact that the verb, which typically occurs in C (assuming that these languages are strictly V2 languages), is sensitive to the content of Spec of CP. In clauses where Spec of CP is empty, the verb must raise to Spec of CP. If there is a clitic, the clitic attaches to the right of the verb in Spec of CP, yielding verb-clitic order. In clauses with a preverbal lexical subject, the subject is assumed to be in a TOP position outside CP. Contexts where enclisis is blocked correspond to contexts where Spec of CP is filled. In these cases, the verb remains in C (with the clitic presumably left-adjoined to it).

The most undesirable aspect of Benincà's analysis has to do with her proposal that the verb (and the clitic, if there is one) moves to Spec of CP. It is generally made to follow from the Structure-Preserving Hypothesis (see Emonds 1976) that heads cannot move into specifier positions (see also Kayne 1994). If an alternative analysis can be found which preserves the predictions made without appealing to V-movement to Spec of CP, then it would be preferable on theoretical grounds.

An alternative is suggested by Benucci and Poletto (1992). Like Barbosa (1993) and Benincà (1991), they assume that operators which block enclisis occur in Spec of CP. The verb raises to C, picking up the clitic which is left-adjoined to I on its way. This yields the structure in (39a), which is identical to the one suggested by Benincà (1991). In this structure, Spec of CP is characterised, as it standardly is, as an A'-position. However, Spec of CP can also function as an A-position if Case-licensing takes place inside CP. In this case, Spec of CP can host a lexical subject. Once the verbal complex raises to C, by Minimality (see Chomsky 1986b) it can only license Nominative Case on the subject if nothing intervenes between the two. Thus, when a clitic is present, the verbal complex excorporates from the clitic (on excorporation, see Roberts 1991) and adjoins to C' (see...
(39b)). The alternation between enclisis and proclisis is therefore viewed as a consequence of the dual status of CP, which can function as an A'- or an A-projection, according to what occupies its specifier position.

(39)  

a Proclisis (Benucci and Poletto 1992):  
.. Op cl + [c V + T + Agr] .. [%agr e] .. [% e] .. [% v e]..

b Enclisis (Benucci and Poletto 1992):  
.. DP [V + T + Agr] + [c cl + [c e] ... [%agr e] ...

Once again, this analysis has the theoretical drawback of assuming movement of a head to a non-head position. Moreover, if Kayne (1994) is correct in arguing that a head that has something adjoined to it cannot be moved further by itself, i.e. that only categories can be moved, not segments of categories, then excorporation of the verbal complex from the clitic should be impossible.

4.2.2. Movement to X

In Cardinaletti and Roberts' (1991) analysis for Old Romance, the order verb-clitic is derived from movement of the verbal complex into C, with the clitic staying in a lower position. This lower position is taken to be the head of an Agr1P, which intervenes between CP and the traditional AgrP, which they call Agr2P. The verb moves independently into C, skipping Agr1. Proclisis, on the other hand, is found whenever there is some constituent in first position in the clause; in this case, the verb moves into Agr1, forming a complex with the clitic. This complex may either stay in Agr1 or move to C. These two structures are shown in (40).

(40)  

a Enclisis in Old Romance (Cardinaletti and Roberts 1991):  
... [c V + T + Agr] ... [%agr1 cl] ... [%agr2 e] ...

b Proclisis in Old Romance (Cardinaletti and Roberts 1991):  
... (XP) [c Y] ... [%agr1 cl + [V + T + Agr]] ... [%agr2 e] ...

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This analysis clearly captures the fact that enclisis is a root phenomenon, "root" taken in the sense specified above. However, there is at least one fact which is not predicted by a V-to-C analysis taking the verb and the clitic to be under two different nodes for enclitic patterns. It is not clear how such an analysis accounts for the fact that no element is ever allowed to intervene between the verbal complex and the clitic, as interpolation is possible only in proclitic structures. Under this analysis, we would expect the sequence clitic-verb to form a tighter unit than the sequence verb-clitic, since only in the case of clitic-verb do both elements appear under the same node. This is clearly an incorrect prediction.\textsuperscript{12}

An alternative view which avoids this problem can be found in Uriagereka (1993, 1994). Uriagereka (1994) proposes that clitic placement is motivated by their properties as specific elements (see subsection 6.1). He argues that 'archaic Romance dialects' (which include European Portuguese and Galician) are associated with an affixal morphological F position (F stands for 'functional' not for 'focus') which needs to be licensed either by Spec-head agreement or by incorporation. Uriagereka understands F as encoding the speaker's or the subject's point of view. While the Spec of FP may host constituents such as topics, overt expletives and even wh-phrases, the head F may, among other things, function as the host for clitic placement. The presence of an active, morphological F in these 'archaic dialects' accounts for a number of contrasts (regarding for example, clitic placement) which set them apart from other Romance languages such as French which are not associated with an active F. There are two alternative ways in which the incorporation requirement of the morphological F may be satisfied: either a head incorporates into F or F incorporates into a 'governing' head. The first option yields enclisis, as shown in (41).

(41) \[ ... C \ldots [V \ldots] + F] + cl \ldots [Agr, e] \ldots \]

The second option, found in contexts where C is morphologically realised, yields proclisis. See (42):

(42) \[ ... C + [F + cl] \ldots \,[f, e] \ldots [V + T] + Agr \ldots [T, e] \ldots \]
Proclisis may also be derived whenever there is some phrase in Spec of FP which agrees with F. In this case, no incorporation is required.

Uriagereka assumes that in structures as (41) the verbal complex moves to F independently of the presence of clitics. Movement is forced by the fact that in these dialects the verb is associated with a strong F-feature which must be checked in F.\(^{13}\) He then suggests that in structure like (42), and whenever F can be licensed by Spec-head agreement, V-movement to F can be delayed till LF. This must mean, though, that in these cases the F-feature of V is weak. It is puzzling that the strength or weakness of the F-feature of V should be determined by the content of C or of Spec of FP. Notice furthermore that while the clitic is right-adjoined to F in the structures above, the verbal complex left-joins to F in (41). This Uriagereka derives from his assumption that Williams' (1981) hypothesis about right headedness in morphology should only apply to affixation, not to cliticisation.

With respect to interpolation, Uriagereka's proposal makes the right predictions, in that it predicts that it should only be possible in proclitic structures. No material should be able to intervene between the verbal complex and the postverbal clitic, as they constitute a tight unit, being adjoined to the same head.

Martins (1994) adopts a slightly different view. She takes the relevant head to be Laka's (1990) ΣP, which may be instantiated as Aff(irmation) or Neg(ation). Unlike Laka, however, she proposes that Aff is present in all affirmative clauses. She further suggests that in European Portuguese the verb is associated with an abstract Aff morpheme. In non-negative matrix clauses, Σ has strong features, thus triggering overt movement of the verb for feature checking. This yields the enclitic pattern, on the assumption that the clitic stays in Agr and the subject is moved to Spec of ΣP. See (43):

\[
(43) \ldots \text{DP} \ [V + T + \text{Agr}] + \Sigma \ldots \text{cl} + [_{\text{Agr}} e] \ldots
\]

Proclisis, on the other hand, is found in cases where the verbal complex does not raise (overtly or at all) to Σ. This may occur in negative clauses (because the verb is not
associated with Neg features), in embedded clauses (where the Aff features are assumed to be weak) and in clauses containing a preverbal operator. In this last case, Martins assumes that the presence of a CP or a F(ocus)P above ΣP somehow ensures that Σ is associated with weak features. This is illustrated in (44):

(44) ... C/F ... Σ ... cl + [Agr V + T + Agr] ...

Although the analyses in this section diverge in a number of ways, they have important properties in common. For example, they all view clitic placement as involving head movement and, with the exception of Cardinaletti and Roberts (1991), they all derive the alternation between proclisis and enclisis from verb movement which is triggered by reasons which have nothing to do with the clitic.

5. Accounting for clitic placement

This section attempts to define the most important syntactic conditions which determine each order, and to suggest an analysis for the phenomena observed, working on the assumptions spelt out in section 2. The analysis presented here is the one proposed in Madeira (1992, 1993). In section 6, I shall discuss some theoretical and empirical problems raised by this analysis, which will lead us to a reformulation.

5.1. The root/embedded asymmetry

Let us start by considering the contrast between root declarative clauses, which display enclisis, and embedded clauses, where proclisis is found. The relevant examples are repeated below.
(45) a O Pedro deu-lhe / *lhe deu uma prenda.
the Pedro gave-him(dat) / *him(dat) gave a present
"Pedro gave him a present."
b Diz que ela lhe deu / *deu-lhe uma prenda.
says that she him(dat) gave / *gave-him(dat) a present
"He says that she gave him a present."

On the assumption that the order verb-clitic results from movement of the clitic into an empty functional head, it is clear that in (45a) this head can be neither Agr nor T (assuming the Split-Infl Hypothesis proposed by Pollock 1989), since both heads are filled in tensed clauses. Moreover, evidence from the positioning of sentential adverbials shows clearly that the clitic occupies a position higher than Agr.

(46) a Com certeza a Joana deu-lhe um pontapé.
surely the Joana gave-him(dat) a kick
"Surely Joana kicked him."
b A Joana deu-lhe com certeza um pontapé.
the Joana gave-him(dat) surely a kick

Assuming that sentential adverbials can occur either at the CP-level, which I take to be the case in (46a), or at the AgrP-level, which seems to be the case in (46b), it appears that both the verb and the clitic occur in a position above AgrP but below CP. If we adopt a view of the configuration of clause structure as proposed by Belletti (1990) and Chomsky (1991), the only available position for the clitic appears to be the C-position. The analysis I would like to suggest here, therefore, takes the clitic to move into the empty C-node in root clauses. Moreover, I would like to propose that the verb also moves into C, adjoining to the left of the clitic and yielding the order verb-clitic.14 This is shown in (47).

(47) Root tensed clauses:

.. [V + T + Agr] + [c cl] .. [Agr e] .. [T e] .. [V e]
Empirically, it is not obvious how to separate this analysis from a solution which, following Kayne (1991a) takes the verb to adjoin to C' (as in Benucci and Poletto’s 1992 analysis), given that both proposals make the same sort of empirical predictions. However, theoretically the analysis provided here has the advantage of not assuming movement of the verbal complex to a non-head position.

Moreover, this analysis also provides a motivation for verb movement. While it is hard to understand what would syntactically trigger independent movement of the verb to root C in, for example, Cardinaletti and Roberts’s (1991) analysis, there is one clear reason why the verb must move up to C following clitic movement. Unlike inflectional affixes, clitics are free morphemes in that they do not have a morphological subcategorisation frame in the sense of Lieber (1980). However, due to their clitic nature they must be syntactically incorporated. It is not clear at this stage why clitic elements should be subject to such a syntactic requirement. Whatever the reason is, this requirement forces the clitic to move independently from the verb into an available functional head and ultimately to undergo incorporation with the verbal complex. Movement of the verbal complex to C is, therefore, triggered by the need to incorporate the clitic. The asymmetry in clitic placement found between root and embedded contexts would thus be explained. Whenever the C-position is lexically filled as in embedded clauses introduced by a complementiser, there are no empty functional heads in the clause. The incorporation requirement is therefore satisfied by adjunction of the clitic to the verbal complex in Agr. This gives the order clitic-verb, shown in (48).

(48) Embedded tensed clauses (introduced by a complementiser):

.. [c que] .. [cl + [Agr V + T + Agr] .. [T e] .. [V e]

What appears to be confirmation for the hypothesis that the clitic moves into C in finite clauses with the order verb-clitic comes from the observation that this order is not limited to root contexts. As mentioned above, it is also found in at least one type of embedded clause, namely in the protasis of a conditional not introduced by a complementiser. The relevant example is repeated below.
(49) Tivesse-me / *me tivesse ele ajudado, isto não teria acontecido.
    had-me(acc) / *me(acc) had he helped this not would have happened
    "Had he helped me, this wouldn't have happened."

It is commonly agreed that the auxiliary in (49) has undergone movement into C. This explains the fact that movement is blocked by the presence of a complementiser in C. As noted above, clitic placement appears to be sensitive, not to the distinction between root and embedded contexts, but rather to the presence or absence of a complementiser. This follows if the clitic is taken to move into the empty C-node in (45a) and in (49), but forced to adjoin to the verbal complex in Agr in sentences as in (45b) by the fact that the C-node is filled by a complementiser.

The question that arises is what the nature of this syntactic requirement imposed on clitics might be. Why should it force movement of the clitic into C in EP finite clauses, but not in Spanish and Italian? I shall leave these questions aside for the moment and proceed with the analysis of the syntactic conditions which determine clitic placement.

5.2. Other cases of impossible clitic-to-C

So far we have considered one case in which movement of the clitic into C is blocked, namely the case of embedded tensed clauses, where C is not available for the clitic due to the presence of an overt C. In this subsection I examine the remaining contexts exhibiting proclisis, and I argue that they represent cases where clitic movement to C is blocked by an intervening head.

5.2.1. Negative clauses

Let us start by considering negative clauses. The relevant examples are repeated below.
The presence of the negative marker in (50) seems to block raising of the clitic into C, thus making the order verb-clitic impossible. The idea that Neg heads its own projection was first proposed for Romance by Kayne (1989) to account for the blocking effect it has on clitic climbing. This blocking effect seems to be a generalised phenomenon; Ouhalla (1988), for example, has shown that movement of the clitic into C in Berber is also blocked by the presence of negation. Adopting Zanuttini’s (1991) view that in languages with preverbal negative markers NegP is structurally higher than TP, I will assume the clause structure of a negative clause in EP to be as represented in (52)\(^7\).

\[
(52) \quad \text{[CP C [NegP Neg [Agr [TP T [VP V ...]]]]]}
\]

NegP is headed by the negative marker *não* "not" in (50), while the negative quantifier in (51) is assumed to occupy the specifier position of NegP.

How does Neg block clitic movement? Following Chomsky (1986b), Kayne (1989) accounts for this fact by assuming that Neg is unable to L-mark its complement, which therefore becomes a barrier, blocking antecedent government of its trace by the clitic. However, Ouhalla (1988) shows that this does not account for the Berber case. Neg being affixal in Berber, some element must attach to it by S-structure if Lasnik’s Filter is to be satisfied. Nothing would seem to prevent movement of the verbal complex into Neg, after which the complement of Neg (which Ouhalla takes to be TP in Berber) would become L-marked, hence allowing the clitic in C to antecedent-govern its trace. On the other hand, if NegP is also a barrier, its barrierhood would be voided by movement of the clitic, which Ouhalla assumes to be an L-marker.
Kayne's explanation does not seem to be adequate for EP either. What would prevent a derivation in which the clitic moved into C, and the verbal complex moved in a stepwise fashion into C, picking up the Neg element on the way? This derivation is represented in (53a) and corresponds to a sentence as the one in (53b).

(53) a .. [Neg + [V + T + Agr]] + [C cl] .. [Neg e] .. [Agr e] .. 
   b *A Maria não viu-o. 
   the Maria not saw-him(acc)

Even if the clitic is not an L-marker, the verb, on moving upwards from head to head, should be able to L-mark not only NegP and AgrP, but also TP and VP. Whether the negative marker is assumed to be a clitic or not, there is evidence to believe that, at least in cases where the verb undergoes movement into C, it must attach to Neg and it is the resulting complex which moves into C. This is clear in wh-questions, as illustrated in (54).

(54) a A quem não deu o Pedro flores? 
   to who not gave the Pedro flowers 
   "To whom didn't Pedro give flowers?"
   b *A quem deu não o Pedro flores? 
   to who gave not the Pedro flowers

An alternative explanation for the blocking effect of negation on clitic movement may be found in Roberts' (1994a), who proposes a distinction between L-related (cf. Chomsky 1993) and non-L-related heads. L-related heads are heads which have the potential ability to check features of lexical heads, while non-L-related heads do not. For our purposes here, we may take L-related heads to have the essential properties of A-positions, and non-L-related heads to have the properties of A'-positions.

While it is clear that C in wh-questions is a non-L-related head, licensing a Spec position which is the landing site for a wh-operator, it is not obvious whether, as a potential clitic position, it is a non-L-related or an L-related head. Let us assume that C is invariably a L-related head. Movement of the clitic into C across Neg is excluded by
the Relativised Minimality Condition (cf. Rizzi 1990), assuming, as Roberts (1994a) proposes, that this condition may be taken to apply to heads in the same way that it applies to maximal projections. Given that Neg is a non-L-related head, it blocks government of the trace of the clitic by the clitic in C.

However, a derivation in which either the clitic or the verbal complex moved through Neg on their way to C would not be excluded by Relativised Minimality. That the verb can (and must) move through Neg on its way to C in interrogative contexts, for example, was shown in (54) above.

Let us therefore propose that C is an L-related head when it functions as a clitic position. We can assume that the clitic moves directly from its base position to C. Direct movement of the clitic is warranted by the assumption that the trace of the clitic is antecedent-governed. Since the verb must move stepwise to C in order to incorporate first the inflectional heads T and Agr and then the clitic, a well-formed dependency will be formed - the verbal complex in C properly governs the trace left in Agr, and so on down the tree, with the clitic trace being properly governed by the V-trace.

As for movement of the verbal complex to C, there are two possibilities whenever there is an intervening NegP. One is that it moves head to head. However, head-to-head movement is ruled out as an instance of improper movement (see Chomsky 1981), as it involves movement from Neg, a non-L-related head, to C, an L-related head. This derivation would correspond to a sentence as in (53b) above. The other possibility is that the verbal complex moves directly from Agr to C skipping the intervening non-L-related head. Under a rigid version of Minimality (Chomsky 1986b), direct movement is also ruled out, since it would induce an antecedent-government violation, as the intermediate head blocks government by the verbal complex of its trace in Agr. This would correspond to a sentence as in (55).

(55) *A Maria viu-o não.
   the Maria saw-him(acc) not
In short, whenever NegP is present, the C-head, although empty, is inaccessible for the clitic, which must therefore left-adjoin to the verbal complex. This structure is represented in (56).21

(56) Negative clauses:

... C ... Neg + [Agr cl + [V + T + Agr]] ... [Agr c] ...

5.2.2. Preverbal operators

Proclisis in clauses containing preverbal operators can be derived in the same way as in negative clauses, i.e. by assuming that movement of the clitic to C is blocked by an intervening head. The relevant examples are repeated below.

(57) Até o Pedro me deu / *deu-me uma prenda.
    even the Pedro me(dat) gave / *gave-me(dat) a present
    "Even Pedro gave me a present."
(58) Todos os rapazes me ajudaram / *ajudaram-me.
    all the boys me(acc) helped / *helped-me(acc)
    "All the boys helped me."

I suggest that the preverbal constituents in (57) and (58) must occur in an operator position. One hypothesis is that this position is the Spec of CP. The impossibility of obtaining the order verb-clitic would then have to be accounted for in the same way as the impossibility of having this order in wh-questions. The observation that a preverbal quantified object triggers subject-verb inversion (see (59)) and that a quantified subject interferes with wh-movement (see (60)) seems to support this hypothesis.
(59) a Todas estas flores me ofereceram eles.
    all these flowers me(dat) offered they
    "They offered me all these flowers."

b *Todas estas flores eles me ofereceram.
    all these flowers they me(dat) offered

(60) *A quem deu alguém flores?
    to who gave someone flowers
    "To whom did someone give flowers?"

An alternative would be to follow Brody (1990) in taking the focussed constituent in (57) to occur in the specifier position of a FocusP (FP). FP is taken to occupy a position between CP and AgrP, thus the same position occupied by NegP. Similarly, we could assume that the position occupied by the preverbal quantifiers in (58) and (59) may either be the Spec of FP, in the spirit of Brody’s proposal, or the Spec of a QuantifierP. Here I shall assume the former alternative.^^

The obligatory subject-verb inversion illustrated in (59) is consistent with Brody’s claim that the verb must move to the head F in order to assign a [+f] feature to the constituent in the Spec of FP (or to check a [+f] feature). Regarding the ungrammaticality of (60), it can be argued to be excluded by Relativized Minimality. If Spec of FP is an operator position (i.e. a non-L-related position), it will block antecedent government of the wh-trace by the wh-phrase in the Spec of CP.

Obligatory proclisis in clauses with preverbal operators may therefore be explained as for negative contexts. Given that F occupies a similar position in the structure to Neg, and that it is associated with similar properties, it can be assumed to block movement of the clitic (or of the verbal complex) to C in the same way as Neg.^^

Remember that not all quantified DPs block clitic movement. Some only do if they are focussed, as shown in (61).
(61) a Alguns rapazes ajudaram-me.
    some boys helped-me(acc)
    "Some boys helped me."

b AlgUNS RAPAZES me ajudaram.
    some boys me(acc) helped
    "SOME BOYS helped me."

We may assume from the position of the clitic that the subject in (61a) is not in Spec of FP. It is clear, therefore, that not all quantified DPs must undergo movement into the Spec of FP. In so far as the DP in (61a) does not block clitic movement, it behaves like a non-quantified DP. It can hence be assumed to occur in subject position, only raising into an operator position at LF. Also like a lexical DP, it may optionally be focussed, as in (61b), in which case proclisis occurs.

The contrast between focus and topicalisation noted in subsection 3.3 is expected, on the assumption that, unlike focussed or quantified constituents, topicalised constituents are outside CP and, therefore, do not interfere with clitic movement.

5.2.3. Wh-questions

Another environment in which the order clitic-verb is found is wh-interrogatives, both root and embedded. The relevant examples are repeated below.

(62) a Onde a encontrou / *encontrou-a o João?
    where her(acc) met / *met-her(acc) the João
    "Where did João meet her?"

b Diz-me onde a encontraste / *encontraste-a.
    tell-me(dat) where her(acc) met / *met-her(acc)
    "Tell me where you met her."
There are two ways in which the clitic-verb order found in wh-interrogatives can be accounted for. One way is by claiming that the order clitic-verb follows from what has been claimed about the status of C. So, whilst the empty C which may function as a clitic position is an L-related head, a [+wh] C is a non-L-related head, and therefore not an adequate host for the clitic. Since there are no other available empty functional heads in the clause, the clitic must left-adjoin to the verbal complex and hence the order clitic-verb.

An alternative way of accounting for the blocking effect of root [+wh] on clitic movement (only in root clauses) is to follow the analysis we presented for FP/NegP. Rizzi (1991b) argues that in matrix clauses the [+wh] feature is generated in I, rather than in C. The verb must move to C taking the [+wh] feature in order to satisfy the Wh-Criterion (cf. Rizzi 1991b). We might assume that a head where a [+wh] feature, which is an operator feature, is generated, is a non-L-related head. If the clitic moves into the empty C, movement of the verb from I to C will be ruled out as an instance of improper movement.

The position of the clitic in wh-questions is shown in (63):

(63) Wh-questions:
... wh [cl + [V + T + Agr]] + C ... [Agr e] ....

5.3. Explaining clitic-second effects

In this subsection I consider whether the analysis developed above predicts the clitic-second effects found in EP, as well as the ban on clitic-first.

It is clear that an analysis which takes clitics to move into C captures the fact that they occupy the second position in the clause. By formulating the notion of ‘second position’ in structural, rather than in linear terms, we predict that in a root declarative clause with a preverbal lexical subject, which is effectively a case of clitic-third in linear
terms, the clitic is postverbal, rather than preverbal. Moreover, we predict that, if some constituent blocks clitic movement into C, then the clitic should be preverbal, as it adjoins to the verbal complex in Agr, which typically places it in the second position in the clause.

Our analysis also predicts the ban on clitic-first sentences. Such a ban is found in languages where the clitic moves independently to the highest head in the clause. In order to satisfy the incorporation requirement, the verbal complex must move up, left-adjoining to the clitic in C. The representation is ruled out if the verbal complex fails to attach to the clitic in C. This also predicts that a clitic should be able to occur postverbally even in contexts (as in root declarative clauses with a preverbal lexical subject) where the preverbal position would not place it in first position in the clause. This is derived in the analysis above either from failure of the clitic to move up to the empty C in these contexts, or from failure of the verbal complex to incorporate into a clitic in C.

Notice, however, that this analysis does not appear to make the correct predictions with respect to the possibility of interpolation. No element should be able to intervene between the clitic and the verbal complex either in enclitic or in proclitic structures, given that in both cases the clitic and the verb appear to form a unit. Hence, the analysis does not seem able to take into account the possibility of interpolation in proclitic structures. I shall return to these question in section 6.

5.4 Characterising C

We still need to consider what position the preverbal lexical subject occupies in root declarative clauses. There does not seem to be any reason to believe that it might be topicalised. The only position inside the clause is the Spec of CP, which is standardly taken to be an A’-position, or a non-L-related position, and therefore not an appropriate position for a lexical subject. Nevertheless, here I would like to claim that the subject is in Spec of CP and, moreover, that this is an appropriate landing site for the subject.
Let us first consider briefly the conditions which allow movement of the clitic into C and the effects which such movement has on the CP-projection. In my analysis I followed Kayne (1991a) in his assumption that the only abstract functional categories allowed are the empty counterparts of legitimate functional categories. Assume that the feature specification for a given functional category may vary within a language and across languages. This is an idea that has frequently been proposed, for example, in the literature on V2 languages (see Vikner 1990 for a review).\(^{27}\) It is puzzling that if, following Kayne (1991a), clitics move into an empty functional head whenever there is one in the clause, they may not move into C in Spanish and Italian root declaratives, yielding the order verb-clitic. It is therefore clear that not all empty functional heads are appropriate landing sites for clitics, and that we need to define precisely what constitutes an 'abstract functional head' for the purposes of clitic placement. The difference between EP and other Romance languages could be due to variation in the feature make-up of C in these languages, which makes C an appropriate landing site for the clitic in EP, but not in other Romance languages. I would like to claim that the only empty heads into which clitics are allowed to move are L-related heads. Hence, clitics may move into an empty C in EP, but not in Italian and Spanish, because only in EP may an empty C function as an L-related position.

If the preceding analysis of EP is on the right track, the parameter dividing EP from other Modern Romance languages still remains to be formulated. Assume the generalisation in (64):

\[(64)\text{ Clitics move to the highest L-related head in the clause.}\]

I take this condition to be valid in all Romance languages. The difference between EP and other modern Romance languages concerns the status of the empty C, which may be an L-related head in EP but not in the other languages. So, in EP the order clitic-verb is found only when:

(i) C is not available for the clitic because of the presence of an overt C;
(ii) movement into C is blocked by an intermediate head; or
(iii) C has operator status.
In these cases, the clitic adjoins to the verbal complex, possibly in Agr, the highest head available to it.

With this in mind, let us return to the position of the subject in root declarative clauses. It has been proposed by Rizzi (1991b) that A-positions are, not only potential Θ-positions, but also specifier positions which are in a Spec-head relation with Agr. Furthermore, Rizzi suggests that in certain languages, namely V2 languages, the Spec of CP may behave either as an A or as an A'–position. Expanding on this idea, Cardinaletti and Roberts (1991) suggest that the nature of a specifier position is not set \textit{a priori}, but rather it is determined by the lexical content of its head. For example, if a head is a clitic position (a position which may host a clitic), its specifier will be a subject position. Using slightly different terms, we might say that the specifier of an L-related head is an L-related position, and the specifier of a non-L-related head is a non-L-related position. Therefore, if we take the empty C into which the clitic substitutes in EP to be an L-related head, we are predicting the Spec of CP to be an L-related position and, hence, a potential subject position.

6. Reformulating the analysis
6.1. Why do clitics move?

In this subsection, I would like to discuss the motivations for clitic movement. I argued above that clitics are subject to a syntactic requirement, which forces them, on the one hand, to move independently from the verb into an available functional head and, on the other hand, to undergo incorporation with the verbal complex. Movement of the verbal complex to C was assumed to be triggered by the need to incorporate the clitic.

This, however, appears to be highly problematic. On the one hand, it would be necessary to define precisely what requirements the clitic satisfies by moving into an empty C. This would tie up with a more precise definition of the properties of the ‘root’ empty C. If we characterise it as an L-related position, it is necessary to determine what features it is associated with which allow it to license the clitic.
On the other hand, we also need to specify what requirements are satisfied by incorporation of the clitic with the verbal complex. One hypothesis that comes to mind is that, following ideas by Baker (1988) and Rizzi and Roberts (1989), the clitic has Case features which must be checked in a configuration of incorporation. The verbal complex must therefore incorporate to the clitic in C to check those features. However, movement of the verb to satisfy requirements of the clitic runs counter to Chomsky's (1993) principle of Greed, according to which an element may only move to satisfy its own properties. Moreover, it does not seem to be a general requirement among pronominal clitics in Romance that they must (overtly) attach to the verbal complex. An illustration of this is the interpolation phenomena mentioned above. On the other hand, the assumption that verb movement is triggered by the need to satisfy the incorporation requirement of the clitic runs into problems in the face of a broader definition of incorporation as in Rizzi and Roberts (1989). In their theory of incorporation, movement into an empty head is assumed to be a type of incorporation. Under this view, the incorporation requirement on clitics is satisfied by movement into the empty C and, once again, we are left with no motivation for verb movement.

Two approaches to the motivations for clitic movement may be found in the literature. One approach, which we may call the morphological approach (see, for example, Kayne 1975), takes the view that clitics move in order to satisfy their morphological subcategorisation frames, which require them to attach to a specified host. The second approach, on the other hand, takes the view that clitic movement is triggered by some 'semantic' property of the clitic. This property is assumed to be definiteness by Manzini (1994b) and specificity by Sportiche (1992),29 Uriagereka (1994) and Corver and Delfitto (1993).

In this view, clitics are assumed to be associated with certain features which need to be checked against a functional head bearing the relevant features. In a word, clitics incorporate into a functional head for feature checking. Manzini (1994b) assumes that in EP C is the head where the [+definite] features of the clitic are checked. Sportiche (1992) and Uriagereka (1994), on the other hand, argue for the existence of an extra functional head where the [+specific] feature of the clitic can be checked.
An objection raised by Corver and Delfitto (1993) regarding a purely 'semantic' approach to clitic movement has to do with the contrast between clitics, on the one hand, and full pronouns and definite/specific lexical DPs, on the other hand. If clitic movement is triggered solely by the need to check a feature which is shared by other DPs, we are left without an explanation for the fact that only clitics have to move overtly (see Diesing 1992 for the proposal that all specific material has to be outside VP at LF). Although they assume that a 'semantic' account should be maintained, they argue that there must be some property which is not shared by other DPs which forces overt movement of the clitic. This property is, according to them, the degree of specification for the feature [+/human].

Corver and Delfitto build their analysis on two main assumptions. On the one hand, pronouns are taken to be transitive DPs which select a *pro* complement. On the other hand, they argue that while strong pronouns are fully specified as being [+human], clitic pronouns are underspecified for this feature. The obligatory overt movement of clitics is derived from this contrast. Following Roberts (1994c) and Sportiche (1992), clitic movement proceeds in two steps. The first step takes the whole DP to Spec of Agr₀ where the Case and agreement features of the DP are checked. Case licensing requires the DP (or its *pro* complement) to be visible, i.e. to have sufficient lexical content, where lexical content is defined in terms of the specification for the [+/human] feature. Hence, a DP headed by a clitic pronoun is not visible for Case checking. In order to become visible, the head D must incorporate into a higher functional head where its specificity feature is checked. This second movement step provides the DP with lexical content. Overt movement is forced because D (and the whole DP) is not sufficiently lexical to be visible for LF-movement.

Clitics in Italian are assumed by Corver and Delfitto to raise to Agr₅ for feature checking. This raises the following question: given that specificity is an operator feature, how can it be checked in Agr₅? An answer to this question is suggested by Manzini (1994b), who argues that Italian clitics behave overtly as agreement elements, which means that they are only compatible with agreement positions. Moreover, both Portuguese and Italian clitics are associated with a definiteness feature which needs to be licensed in
C. The difference between clitics in the two languages can be explained by assuming that the [+definite] feature of the clitic is strong in Portuguese, hence triggering overt raising to C, but weak in Italian, making it possible (and necessary) for the clitic to move abstractly to C.

Let us assume the view that clitics are associated with operator features, be they definiteness or specificity features. If we adopt this approach and assume that movement of the clitic to C is triggered by the need to check the operator feature, then we will have to change our assumptions regarding the status of C when it functions as a clitic position. We will have to assume that C is always an operator (hence non-L-related) position. This is the view taken by Manzini (1994b).

Manzini argues that verb movement to C is consistently triggered by the presence of an operator feature in C which must be checked by the verb. This feature may be [+wh], [+f] (for focus) or [+neg]. It is only when C is not specified for any of these features that it may optionally be associated with whatever feature (presumably definiteness, in Manzini’s view) allows it to check the corresponding feature of the clitic, hence licensing clitic movement. Otherwise, the clitic must adjoin to the verbal complex in I.

However, there appears to be empirical evidence which casts serious doubt on the adequacy of an analysis which, on the one hand, takes enclisis in EP to be derived from movement of the clitic to C, and on the other hand, takes proclisis to invariably involve adjunction of the clitic to I. Such evidence has led Rouveret (1992) to propose an alternative analysis for clitic placement in EP, which will be the subject of the next subsection.

6.2. Where do clitics move to?

Rouveret (1992) suggests an analysis for the facts of clitic placement in EP which also derives enclisis from left-adjunction of the verbal complex to the functional head hosting the clitic. With respect to proclisis, however, Rouveret provides evidence in support of the
idea that proclitic structures are derived from movement of the clitic into a different functional head from that hosting the verbal complex, rather than from adjunction to the verbal complex in I, as argued for Italian and Spanish by Kayne (1991a) and as argued above for EP. He proposes that the functional head into which the clitic moves is not C, but an independent head intervening between C and I which he labels W (for 'Wackernagel'). The differences between EP and other Romance languages may be made to follow from the presence of this head in the clausal structure only in EP among the group of Romance languages.

Rouveret provides two main arguments for a W-head in EP. Both arguments have to do with the different behaviour displayed by clitics in enclitic and proclitic structures with respect to certain phenomena, namely coordination and interpolation. With respect to coordination, Rouveret notes the asymmetry illustrated in (65) and (66). In coordination structures, the clitic may be omitted from the second conjunct only in proclitic structures.

(65) a Afirmando que ele me viu e (me) cumprimentou.
    maintain(1sg) that he me saw and (me) greeted
    "I maintain that he saw me and greeted me."

   b Até o Roberto me viu e (me) cumprimentou.
    even the Roberto me saw and (me) greeted
    "Even Roberto saw me and greeted me."

(66) Ele viu-me e cumprimentou*(-me).
    he saw-me and greeted*(-me)
    "He saw me and greeted me."

In root questions, however, the clitic may be omitted in the second conjunct only if the subject precedes the verbal complex. See (67) and (68):

(67) Perguntou onde ele o viu e (o) cumprimentou
    asked(3sg) where he him saw and (him) greeted
    "(S)he asked where he saw him and greeted him."
(68) Perguntou onde o viu ele e *(o) cumprimentou
    asked(3sg) where him saw he and *(him) greeted

The contrast shown between (67) and (68) follows from the assumption that in (68), where the verbal complex raises to C, it forms a unit with the clitic. Hence, both elements must be repeated in the second conjunct in coordination structures.

With respect to interpolation, it was observed above that certain elements are allowed to intervene between the clitic and the verbal complex only in proclitic structures. See (69) and (70):

(69) a Mandou que lhe eu entregasse o dinheiro.
    ordered(3sg) that him(dat) I gave the money
    "He ordered me to give him the money."

b Porque é que se não pronuncia assim?
    why is that se not pronounces like this
    "Why isn’t it pronounced in this way?"

(70) *Entreguei-eu-lhe o dinheiro.
    gave-I-him(dat) the money
    "I gave him the money."

What these two facts indicate is that in enclitic structures the verbal complex and the clitic behave as a unit (and so the clitic has to be repeated in the second conjunct in coordination structures, and nothing is allowed to intervene between it and the verbal complex), whereas in proclitic structures the clitic and the verbal complex behave as independent elements, occurring in separate positions (and so the clitic may be omitted in the second conjunct in coordination structures and it may be separated from the verbal complex by certain intervening elements).

Rouveret argues that in proclitic structures where the clitic and the verb behave as independent elements they are never in C. This would follow if it was assumed that the clitic occurs in an independent functional head above I, and that, therefore, the only way
it could be in C with the verb would be if the verb picked it up on its way to C. In this case, the two elements should behave as a single complex. This seems to be confirmed by the facts shown in (68). Rouveret further argues that in enclitic structures, where the verb and the clitic behave as a unit, they are never in C either. He presents some arguments against a clitic-in-C analysis such as the one proposed in section 5, of which I will mention two.

Firstly, he argues that such an analysis makes the prediction that, if the verb is taken to move to C only when there is a clitic in the clause (given that it moves to satisfy some requirement of the clitic), the presence of clitics should affect the status of root clauses. In other words, root clauses containing clitics are predicted to be CPs, whereas root clauses without clitics are expected to be IPs. In the former case, the subject must be assumed to appear in Spec of CP, while in the latter case it is in Spec of IP. That this prediction is incorrect is shown by the positioning of sentential adverbs, which reveals that while the subject occupies the same position in both root and embedded declarative clauses, whether or not there are clitics present (compare (71) and (72)), it does not seem to appear in the same position as wh-phrases, i.e. Spec of CP, in root declarative clauses containing clitics (see (73)).

(71) a O João provavelmente leu-o na semana passada.
   the João probably read-it(acc) last week
   b Eu digo que o João provavelmente o leu na semana passada
      I say that the João probably it(acc) read last week
(72) a O João provavelmente leu esse livro na semana passada.
   the João probably read that book last week
   b Eu digo que o João provavelmente leu esse livro na semana passada.
      I say that the João probably read that book last week
(73) a Aquele tema raras vezes foi bem tratado.
   that topic rarely was well treated
   b ¿*Que tema raras vezes foi bem tratado?
      which topic rarely was well treated
Secondly, Rouveret argues that a clitic-in-C analysis fails to predict the occurrence of enclisis in certain embedded clauses introduced by a complementiser followed by a topicalised (or left-dislocated) constituent, as illustrated in (74).

(74) Eu sei que à Maria, o José deu-o ontem.
I know that to+the Maria the José gave-it(acc) yesterday

Remember that above I accounted for enclisis in root topicalisation constructions by assuming that the topicalised constituent is outside CP. No such analysis is possible for embedded contexts as in (74), unless we assume a recursive CP in these contexts.

Rouveret proposes that enclisis in root declarative clauses is derived from movement of the clitic into a W-head, followed by adjunction of the verbal complex to the clitic in W, and by movement of the subject to Spec of WP. This is shown in (75).

(75) ... C ... [wp DPi [i V + I]j + [w cl]] ... [ip ti tj] ...

Following Chomsky (1993), Rouveret assumes that W is an L-related head, associated with strong D-features and V-features. Overt raising of the verb and of the subject to W and to Spec of WP, respectively, is triggered, not by the clitic in W, but rather by feature-checking requirements. This means that both the subject and the verb must raise to WP, even when there is no clitic present.

Proclisis, on the other hand, may be derived in one of two ways. In embedded clauses introduced by a complementiser, for example, Rouveret assumes that the presence of a filled C is sufficient to license the V-feature of W without V-raising to W. The structure would thus be as shown in (76).

(76) ... [C que] ... [wp DPi [w cl]] ... [ip ti [t V + I]] ...

A similar structure is assigned to embedded questions as in (67) above, where a [+wh] C has the ability to license the V-feature of W, allowing V to remain in I. No raising to
C is required in these embedded contexts, as the [+wh] feature of C may be identified by the matrix V. In embedded questions as in (68), however, and also in matrix questions displaying inversion, Rouveret assumes that the clitic adjoins to the verbal complex in I and together they raise to C, as shown in (77). Raising of the verbal complex to C ensures the licensing of the [+wh] feature of C in these cases.

(77) ... Wh- [cl + [V + I]], + C_{wh} ... [ip DP tj ...

Notice that in (77) WP is not projected. Rouveret argues that, since only a verbal complex may adjoin to a [+wh] C for feature-checking, the presence of WP would have the consequence that what raises to C would be W, whose head is the clitic, which cannot be analysed as a verbal element.

Rouveret suggests that the D-feature associated with W is a Topic feature, and that, therefore, topics may either occur in Spec of WP, or they may adjoin to W. This would explain the occurrence of enclisis in (74) above, on the assumption that the topic creates a barrier to licensing of the V-feature of W by the filled C. In focus structures, on the other hand, the focussed constituent is assumed to occupy the specifier of a Focus Phrase (cf. Brody 1990) which appears above WP. This is also the position occupied by quantified expressions which trigger proclisis. Two strategies are available for the licensing of the [+f] feature of F. It may be licensed by a co-indexed focussed or quantified subject in Spec of FP, in which case the [+f] F licenses the V-feature of W, allowing the verb to remain in I (this is illustrated by (65b) above; see the structure in (78a)). Alternatively, the [+f] feature of F is licensed by verb-raising (see (78b)). In this case, WP may not be projected for the same reasons as in (77), and the prediction is, therefore, that the clitic and the verb should behave as a unit. This seems to be correct, as shown in (79).

(78) a ... C ... [fp XP, F_i ... [w cl] ... [ip ... [V + I] 
b ... C ... [fp XP [cl + [i V + I]], + F ... [ip ... t_i ...
It is easy to see how empirically adequate Rouveret's (1992) analysis is, and how convincing his arguments are for assuming a functional category with the properties of his W-head in the structure of clauses in EP. Nevertheless, the analysis raises some questions which should be addressed. For example, it is not clear what the V-features of W may be. In Rouveret's view, the verb may raise to W in root declarative clauses only because it is associated with the relevant features (assuming the principle of Greed). How are these features checked when V does not raise to W? Of course, it is possible that either V raises abstractly, or that a W which has its V-features licensed by C or F has the ability to license the relevant features of V via a dependency which links it with I. However, it is not obvious how C or F, which are operator heads, could license (or check) the L-related features of W.

It is clear, therefore, that some aspects of Rouveret's proposal should be either clarified or reformulated. This is the purpose of the next subsection.

6.3 Licensing D

Let us assume, following Rouveret (1992), that EP differs from other modern Romance languages in that it has a special functional projection WP for clitic placement intervening between IP and CP. Let us also assume that W has some of the properties assigned to it by Rouveret, namely that it is not associated with operator features.

Notice that C appears to play an important role in the licensing of W and in determining enclisis or proclisis. Let us suggest that the role of C is, not to license the V-feature of W, but to license certain features of the clitic in W. We can assume the relevant features to be the operator features discussed in subsection 6.2 (i.e. either definiteness or specificity). Let us further suggest that, whenever C is filled (as in embedded declarative
clauses) or associated with semantic content (as in interrogative clauses), the creation of a dependency between C and W is sufficient to ensure the licensing of the operator features of the clitic. The empty C in root declarative clauses not containing a preverbal operator, on the other hand, appears not to have the ability to license the operator features of the clitic in W. One possible explanation for this would be that an empty C is not associated with the relevant features. In this case, I raises to W to license the clitic.

Last Resort I-raising to W appears, however, to violate the principle of Greed of Chomsky (1993), given that it does not serve to satisfy any requirements of I itself, but simply to license the clitic. We can, however, assume, following Chomsky (1995), that W, of which the clitic, a specific/definite element, is the head, attracts elements which may license specificity/definiteness. Licensing appears to be subject to a c-command requirement, in that the licenser must c-command the licensee. Hence, if C is unable to license the operator features of the clitic in W, I is attracted to W.

I am assuming here, following Chomsky (1995), that I reduces to T. I-raising to W is therefore T-raising to W. T and C have in common the property of being associated with operator features. As operator heads, both can be taken to have the potential ability to license the specificity/definiteness features of the clitic.

F would also have to be assumed to be a proper licenser. This would correspond to the cases shown by Rouveret to involve proclitic structures where the clitic and the verb behave as independent elements. However, in those cases where T has to raise to C or to F, movement through W would result in improper movement (see section 7). The clitic can then use the other strategy available to it, namely it can adjoin directly to T. This results in a proclitic structure where the clitic and the verb behave as a unit.

The question raised by this proposal refers to the inability of C to host the clitic. If C plays such an important role in licensing features of the clitic, why can't the clitic raise directly to a licensing C? The same question may be asked for F. Notice that, while W is being assumed to be a clitic position, although in itself it does not have the ability to
license the clitic, C and F, which have such an ability, appear to be unable to host the clitic. I will leave this question as an open problem.

Unless it can be argued that W can independently check some other features of the clitic, its presence in the structure appears to be exclusively required to provide a position where the clitic can have its operator features licensed by C, given that raising of the clitic to C is not allowed. If this turns out to be correct, the difference between EP and Italian or Spanish could still be derived from different properties of their C-position, in that only in EP does C have the ability to license specificity/definiteness features, whereas in Italian and Spanish this function is invariably performed by T.

7. Clitics in infinitival clauses

The purpose of this section is to examine how the analysis sketched in subsection 6.3 may account for the facts of clitic placement, by considering infinitival contexts, which have been overlooked in the discussion so far. This gives us the opportunity to bring together the two phenomena which are the subject of this work.

As mentioned above, clitic placement in EP is insensitive to the finite/non-finite distinction. Enclisis and proclisis are found both in tensed and in untensed contexts, and they appear to be determined by the same conditions in both contexts. In this section I consider clitic placement in one class of untensed clauses, infinitival clauses. I shall take into account both inflected and non-inflected infinitives.

The prohibition against the occurrence of clitics in the first position in the clause that was observed in finite contexts also appears to be operative in infinitival clauses, as shown in (80).

(80) Pensam convidá-la / *a convidar.
    think(3pl) to-invite-her(acc) / *her(acc) to-invite
"They are thinking of inviting her."
The enclitic structure in (80) can be explained as for finite contexts. The empty C does not have the ability to license the operator features of the clitic, which forces movement of T to W.

Precisely the same order is found in inflected infinitives under inversion. This is illustrated for complements to declarative/epistemic verbs in (81), for factive complements in (82) and for subject clauses in (83) (remember that the question mark in (82) and (83) indicates the marginality of inversion in these contexts).

(81) Eu penso terem-na convidado / *a terem convidado.
    I think to-have(3pl)-her(acc) / *her(acc) to-have(3pl) invited
    "I think that they invited her."

(82) ?Lamento terem-na / *a terem eles convidado.
    regret(lsg) to-have(3pl)-her(acc) / *her(acc) to-have(3pl) they invited
    "I regret that they invited her."

(83) ?É estranho terem-na / *a terem eles convidado.
    is strange to-have(3pl)-her(acc) / *her(acc) to-have(3pl) they invited
    "It is strange that they invited her."

Enclisis can be explained along the same lines as for (80). In these cases, however, the auxiliary is assumed to raise to C. This is surprising, given that it was suggested in section 6 above that movement of T to C is excluded whenever W is present in the structure. There is, however, one crucial difference between the empty C in the infinitival contexts shown above and the C which triggers T-raising in finite contexts. In finite contexts T must move to C only in wh-questions. Given that the [+wh] C is an operator, or a non-L-related, position, movement of T to C through W, is excluded as an instance of improper movement. In the contexts above, however, C may be taken to be an L-related position, since it has the ability to license the Case features of the infinitival T. Hence, movement through W is possible.

The possibility of enclisis in the examples in (84) and (85), however, is unexpected. Remember that it was argued that factive clauses not displaying inversion have a 'bare'
CP-structure, where the factive C is associated with either a definiteness or a familiarity feature. Moreover, it is assumed that a contentful C can license the clitic in W. Hence, no T-raising to W should be required, contrary to the facts. I shall leave this as an open problem. It appears that a factive C can only marginally license the clitic in W, as can be seen from the marginal possibility of proclisis (in fact, proclisis is rejected by many speakers). That the clitic is in W in the proclitic structures, and not adjoined to T, is shown by the coordination facts in (86).

(84) Lamento eles terem-na / ?a terem convidado.
regret(1sg) they to-have(3pl)-her(acc) / ?her(acc) to-have(3pl) invited

(85) É estranho eles terem-na / ?a terem convidado.
is strange they to-have(3pl)-her(acc) / ?her(acc) to-have(3pl) invited

(86) ?Lamento eles o comprarem e (o) venderem tão depressa.
regret(1sg) they it to-buy(3pl) and (it) to-sell(3pl) so quickly
"I regret that they bought it and sold it so quickly."

The same preverbal operators which trigger proclisis in finite contexts are found to trigger it in infinitives. See the infinitival interrogative clause in (87):

(87) Não sei como lhe dizer / *dizer-lhe isto.
not know(1sg) how him(dat) to-tell / *to-tell-him(dat) this
"I don’t know how to tell him this."

Remember that, following the insight of Rouveret’s (1992) analysis, there are two possibilities open to finite interrogative clauses: either the verbal complex raises to C, in which case the clitic must adjoin to the verbal complex in T, or there is no movement of the verbal complex to C, in which case the clitic is licensed in W by the [+wh] C. In the latter case, the subject precedes the verb, and in the former, there is subject-verb inversion. The proclitic structures resulting from each of these possibilities can be distinguished with respect to coordination, for example. It is impossible to determine whether these two options are also available in infinitival interrogatives, as these are always non-inflected. However, the most natural assumption would be that both options
are available. The coordination facts shown in (88) could then be viewed as follows: when
the clitic is repeated, either option could have been taken; when the clitic is omitted, on
the other hand, the only possibility is that the clitic is in W.

(88) Não sei a quem o dar ou (o) vender.
not know(lsg) to whom it to give or (it) to sell
"I don't know whom to give it or sell it to."

With respect to other preverbal operators, i.e. focussed (see (89)) or quantified constituents
(see (90)), it can be seen that they trigger proclisis as in finite contexts. Similarly, those
quantified DPs which were seen to occur with enclisis in finite contexts, display the same
behaviour in infinitives (see (91)).

(89) Lamento até os filhos a terem / *terem-na abandonado.
regret(lsg) even the children her(acc) to-have(3pl) / *to-have(3pl) her(acc)
abandoned
"I regret that even her children abandoned her."

(90) É necessário todos os amigos a ajudarem / *ajudarem-na.
is necessary all the friends her(acc) to-help(3pl) / *to-help(3pl)-her(acc)
"It is necessary that all her friends help her."

(91) É surpreendente alguns amigos ajudarem-na / *a ajudarem.
is surprising some friends to-help(3pl)-her(acc) / *her(acc) to-help(3pl)
"It is surprising that some of her friends help her."

As in finite contexts, we can assume that the clitic may be licensed in W by F, and hence
T does not need to raise. This is confirmed by the coordination facts in (92), showing that
the clitic may be omitted in the second conjunct.
(92) É necessário todos a verem e (a) cumprimentarem.
    is necessary everybody her to-see(3pl) and (her) to-greet(3pl)
    "It is necessary that everybody sees her and greets her."

Proclisis is again the only possibility in negative clauses, both non-inflected (see (93)) and inflected (see (94)).

(93) Pensam não a convidar / *convidá-la.
    think(3pl) not her(acc) to-invite / *to-invite-her(acc)
    "They are thinking of not inviting her."

(94) Lamento eles não a terem / *terem-na convidado.
    regret(lsg) they not her(acc) to-have(3pl) / *to-have(3pl)-her(acc) invited
    "I regret that they didn’t invite her."

That the clitic in this case has adjoined to T is shown by the fact that in coordination structures it must be repeated in the second conjunct (see (95)). The same applies to the negative marker não "not". This suggests that proclisis in negative clauses can be derived in the same way as in interrogative clauses where the verbal complex raises to C. The presence of Neg also appears to trigger T-raising. The fact that the clitic must adjoin to T follows, therefore, from the fact that, if W was present, movement of T through W to Neg would be improper movement. Notice that the other option available in wh-questions and in focus constructions, where the clitic may be licensed by a [+wh] C or a [+f] F to which T does not raise, is not available in negative clauses. This might be due to the fact that the Neg-head, which appears to have clitic-properties, must be checked by overt verb raising.

(95) Lamento eles não a convidarem e *(não a) ajudarem.
    regret(lsg) they not her to-invite(3pl) and *(not her) to-help(3pl)
    "I regret that they didn’t invite her and didn’t help her."

In adjunct clauses, proclisis is also the only possibility, both for inflected (see (96)) and for non-inflected infinitives (see (97)).
Notice that these facts provide strong evidence for the structure proposed for infinitival adjuncts in chapter 3, which assumes that these clauses are introduced by a prepositional complementiser which may be overt (as in (96a)) or not morphologically realised (as in (96b) and (97)). Proclisis can, therefore, be explained as for embedded finite clauses. The presence of the complementiser ensures that C can establish a dependency with W, through which it licenses the operator features of the clitic in W, allowing T to remain in its root position. This analysis predicts that the clitic and the verbal complex should behave as independent elements, which is confirmed by the coordination facts shown in (98).\footnote{172}

(98) Vieram cá para me verem e (me) cumprimentarem.
    came(3pl) here for me to-see(3pl) and (me) to-greet(3pl)
    "They came here to see me and greet me."

8. Conclusion

In summary, clitic placement can be argued to be determined by uniform conditions across Romance languages. Clitic pronouns must move into a functional head for licensing of features with which they are associated. I adopted the idea that these features are operator features, either definiteness or specificity features. Furthermore, I suggested that the differences found among Romance languages may be attributed to the fact that only in EP does C have the ability to license the operator features of the clitic, together with the
possibly related fact that EP has a special functional head for clitic placement, as argued by Rouveret (1992). In other Romance languages such as Spanish and Italian, T is the only head with such an ability, hence the only option available to clitics is adjunction to T. In EP, on the other hand, both T and C have this ability. Hence two options are available to the clitic: licensing by C, yielding proclisis, or licensing by T, which yields either proclisis, if the clitic adjoins to T, or enclisis, if T adjoins to the clitic.
Endnotes

1. Although proclisis is the preferred option in Brazilian Portuguese, enclitic structures are also possible, but they appear to be used fairly inconsistently. It is very likely that clitic placement in Brazilian Portuguese is moving away from the patterns typical of other varieties of Portuguese to generalised proclisis, but it appears that this process is still not complete.

2. Evidence that the clitic is attached to the lower verb rather than to the auxiliary in both examples in (8) is provided by the fact that the auxiliary may be separated from the clitic by an intervening element, as illustrated in (i) and (ii) (thanks to Heloisa Salles for providing me with these examples).

(i) Ela tinha também me escrito.
    she had also me(dat) written
    "She had also written to me."

(ii) Ela estava também me escrevendo.
    she was also me(dat) writing
    "She was also writing to me."

As mentioned below in the text, interpolation (see subsection 3.4) in Romance is strictly restricted to proclitic structures.

3. For instance, Pesetsky (1989) claims that an affix must occur as "sister to a non-empty category marked [-affix]" and Baker (1988) argues that affixes "must affix to stems rather than to other affixes".

4. Kayne (1994) restricts the options available to the clitic to only one, namely, adjunction to an empty functional head.

5. Extending Kayne's (1991a) to Brazilian Portuguese, it might be suggested that the clitic adjoins to a functional head which is fairly low in the structure, such as, for example, Agr₀ (see, among others, Chomsky 1991). This would account for the unrestricted attachment of clitics to non-finite verbal forms in Brazilian Portuguese. Such an hypothesis, however, would require the verb not to move into a higher functional head in Brazilian Portuguese (on verb movement in Brazilian Portuguese, see, for example, Figueiredo Silva 1991 and Galves 1991a).

6. Exceptions can be found, for example, in Barbosa (1993), who takes Old Romance and European Portuguese clitics to be NPs and move as such, and in Sportiche (1992) and Roberts (1994c), who argue that clitic movement operates in two stages. In the first stage, the whole DP moves to Spec of Agr₀P. Evidence for phrasal movement is provided, for example, by participle agreement facts in languages such as French. In the second stage, the clitic moves as a head to a higher functional head. Although this view is possibly correct, here I will take the simplified view that
clitics consistently move as heads, since this has no consequences for the analysis proposed in this chapter.

7. There is only one case in which the position of the clitic appears to be sensitive to the inflectional make-up of the verbal complex: with future and conditional tenses the clitic, rather than being postverbal, occurs between the verbal stem and the inflectional affixes. See (i) and (ii):

(i) Visitar-te-emos no domingo.
    visit-you(acc)-FUT(1pl) on+the Sunday
    "We will visit you on Sunday."
(ii) Ajudar-te-iam se pudessem.
    help-you(acc)-COND(3pl) if could
    "They would help you if they could."

For more details and for an analysis for this phenomenon, see Lema and Rivero (1990, 1991).

8. It is conceivable that yes-no questions in EP do not contain a null interrogative operator in Spec of CP. This would explain why they look like declarative clauses, not exhibiting subject-verb inversion and displaying obligatory enclisis. This hypothesis might be extended to another type of clause which has been argued to involve an operator triggering movement of the verb to C, the case of positive imperatives, which also have obligatory enclisis.

9. Unlike in English, wh-questions with the wh-phrase in situ are not necessarily interpreted as echo questions. At least in colloquial Portuguese, they may be interpreted as 'real' non-echo questions.

10. Unlike in Old Portuguese, where in sentences as in (34) the clitic was free to appear in preverbal or postverbal position (see Martins 1994).

11. Cases of interpolation between the preverbal clitic and the verbal complex were fairly common in Portuguese up to the 16th century. The following examples (taken from Lobo 1990) are found in texts from the 15th century. Notice the intervening adverb in (i) and the full DP in (ii).

(i) ja nunca podia achar homem que a tanto amasse,
    never could find man who her(acc) so much loved
    "Never again could she find a man who would love her so much."
(ii) dar bom gualardom aaqueles que nos bons serviços fezerom,
    to-give good reward to those who us(dat) good services did
    "To give good reward to those who rendered us good services"

The most striking fact regarding these interpolation phenomena in Old Portuguese is that the clitic is found to move over elements which typically block clitic movement in modern EP, such as,
for example, negation, focussed constituents and preverbal quantifiers (see Martins 1994).

12. It is possible that this argument may be circumvented if one assumes that both adjunction to Agr1P and movement into Spec of Agr1P are independently ruled out. Under this view, AgrP cannot act as a host for adjunction in Romance (hence the absence of, for example, scrambling phenomena) and a lexically filled Spec of AgrP is incompatible with an Agr head occupied by a clitic. This latter assumption, however, seems hard to maintain in view of Cardinaletti and Roberts' (1991) claim that the specifier of an Agr1P is a subject position (i.e., a position to which Nominative Case may be assigned) whenever Agr1 is a clitic position.

13. This strong F-feature may be morphologically spelt-out. This, Uriagereka argues, is what the agreement morphology associated with inflected infinitives is.

14. In the case of multiple-clitic sequences, we may adopt Kayne's (1994) proposal that sequences of clitics may involve adjunction of one clitic to another, rather than successive adjunctions to a functional head. Under the analysis suggested in the text, it could either be assumed that the clitic complex is formed in C, or that it is formed lower down in the tree and then moves up to C.

15. If we adopt the proposed ban on multiple adjunction (see Kayne 1994), we can assume either that the clitic adjoins to V, as illustrated in (i), or that it adjoins to Agr, assuming the structure in (ii) (see Rizzi and Roberts 1989 and also Roberts 1993, who argue that a structural slot is created for the incorporated element in cases of morphologically selected (in the sense of Lieber 1980) incorporation). The structure in (ii) would be preferable, as it would allow us to maintain the claim that clitics may only adjoin to functional heads.

(i) \[ \begin{array}{c} \text{Agr} \\ \text{T} \\ \text{V} \\ \text{cl} \end{array} \]

(ii) \[ \begin{array}{c} \text{Agr}^0 \\ \text{cl} \\ \text{T}^0 \\ \text{V} \end{array} \]

\[ \begin{array}{c} \text{Agr}^0 \\ \text{T}^1 \end{array} \]

\[ \begin{array}{c} \text{Agr}^{-1} \\ \text{T}^{-1} \end{array} \]
16. Notice that in this analysis the verb is taken to be the head of the complex in clitic-verb sequences; in verb-clitic sequences, however, it is the clitic that is the head of the complex. As I am not aware of any facts which would confirm such an asymmetry, this is a problematic aspect of the analysis as it stands.

17. The position of NegP assumed here is not uncontroversial. An alternative proposal (Figueiredo Silva 1991) places NegP between AgrP and TP, as has been suggested for French by Pollock (1989). This would account for the facts in (i), assuming the polarity item mais "more" to occupy the Spec of NegP.

(i)a Nao sair mais de casa.
    not to leave more from house
    "No longer to leave the house."

b *?Nao mais sair de casa.
    not more to leave from house

However, an alternative analysis is available for these facts which is compatible with the view assumed in this paper. It is possible to assimilate negative polarity items to postverbal negative elements such as nunca "never". See (ii):

(ii)a Nunca sair de casa.
    never to leave from house
    "Never to leave the house."

b Nao sair nunca de casa.
    not to leave never from house
    "Never to leave the house."

c *Nao nunca sair da casa.
    not never to leave from house

Following Zanuttini (1991), the negative element nunca "never" is taken to occupy the specifier position of NegP in (iia). In (iib) it occupies a lower position, raising into Spec of NegP at LF to satisfy the Neg-Criterion of Haegeman and Zanuttini (1991), which requires negative heads and negative phrases to appear in a Spec-head configuration. It is conceivable that negative polarity items such as mais "more", which may only appear in postverbal position in the overt syntax, are also required to satisfy the Neg-Criterion and hence to move at LF into the specifier position of NegP.

18. Roberts (1994a) assumes that movement of the clitic to C in Long Head Movement constructions (see Lema and Rivero 1990, 1991) is movement to a non-L-related head, since such a movement is not m(orphologically)-selected (in the sense of Lieber 1980). However, although he assumes that L-related heads are typically m-selecting heads, he accepts that a head may be L-related without having an m-selection feature (as he argues is the case of I in modern English).

19. It might be argued that, if the clitic moves directly to C, a minimality violation will arise (both under rigid and Relativised Minimality), as the clitic has to get past the verbal
complex on its way to C at some point in the derivation, when the
verbal complex is still in an L-related position. However, this
does not constitute a problem, if minimality is viewed as a
condition on chains, rather than as a condition on derivations.

20. This account is problematic since a minimality violation is
created only under rigid Minimality. Under Relativised
Minimality, movement is predicted to be possible, as the
intervening non-L-related head does not constitute a potential
antecedent governor for the L-related chain. Possibly the reason
why this sentence is ungrammatical is that the negative marker,
which appears to behave like a clitic, is not picked up by the
verb.

21. Notice that adjunction of the verbal complex to Neg is an
instance of right-adjunction, unlike all the other cases of
adjunction discussed in this chapter. I have no proposal to make
as to why this should be the case.

22. Notice that if we assume that both preverbal focussed
constituents and preverbal quantifiers which trigger proclisis
appear in the specifier position of FP, we expect these elements
not to be allowed to co-occur. This seems indeed to be the case.
Cf. (i):

(i)a Ele deu só um presente a alguém.
   he gave only one present to someone
b Só um presente deu ele a alguém.
   only one present gave he to someone
c *Só um presente a alguém deu ele.
   only one present to someone gave he
d A alguém deu ele só um presente.
   to someone gave he only one present
e *A alguém só um presente deu ele.
   to someone only one present gave he

As we can see in (ia) these elements may co-occur in postverbal
position. We may assume that they are raised at LF into Spec of
FP undergoing a process of absorption as has been proposed for
wh-phrases by Higginbotham and May (1981). At S-structure,
though, only one element may be in Spec of FP. Negation, on the
other hand, seems to be allowed to co-occur with both preverbal
focussed constituents and preverbal quantifiers. See (ii):

(ii)a Alguém não chegou a tempo.
   someone not arrived-3sg in time
   "Someone didn't arrive in time."
b Isso não disse eu.
   that not said-1sg I
   "That I didn't say."

It might be possible to argue that FP and NegP are both
instantiations of the same category, call it FP. On this
assumption, Neg, rather than being a head, would be a feature on
a head (see, Laka's 1990 conception of a ΣF and Manzini's 1994b
proposal for the effect of negation in EP). This would explain
why the sentence in (iii) is excluded, on the assumption that both the focussed constituent and the negative element are competing for the same position.

(iii)a *?Isso nunca disse eu.

that never said-lsg I

"That I never said."

In this chapter, however, I shall assume that Neg heads its own distinct projection, which appears just below FP and above AgrP. The sentence in (iii) can be excluded under Relativised Minimality.

23. A similar problem arises as for negation, namely that a derivation in which the verbal complex moved directly to C, skipping F, would not violate Relativised Minimality. However, such a derivation may be excluded on the grounds that, if the verbal complex fails to move to F, the [+f] feature of F will remain unchecked.

24. The contrast between (58) and (61a) may be due to the status of the quantifier. DPs containing a universal quantifier appear to trigger proclisis, while DPs which embed an existential quantifier are compatible with enclisis. Following Heim (1982), Manzini (1994b) proposes to account for this contrast by taking the former to be real quantifiers which must raise ( overtly, in the case of EP) to an operator position, while the latter are in fact free variables which must be bound by some quantificational element. Notice, however, that all bare quantifiers, whether universal or existential, trigger proclisis (see (29c) in the text, where a bare existential quantifier is seen to trigger proclisis).

25. It might be more appropriate to think of this projection as an XP, rather than as an FP. XP would be a larger category of which FP and possibly NegP would be instantiations. Another instantiation would be the phrase into the specifier position of which those QPs which must undergo overt movement into an operator position would move.

26. Linking the ban on clitic-first to the requirement that clitics be incorporated by the verb appears to be an undesirable consequence of this analysis. There are non-Romance languages in which the ban on clitic-first is clearly independent from verbal attachment. Examples of this seem to be Slovak (see Rivero 1991 and Starke 1993b) and Serbo-Croatian (see Rivero 1991 and Čavar and Wilder 1992), where verb-clitic sequences are found only at the front of the clause; whenever there is any other constituent in first position, the clitic precedes the verb and may be separated from it by any number of constituents. Clearly, an analysis of clitic placement should attempt to provide a unitary account for all these languages, unless it turns out that the conditions which determine clitic placement in these languages are clearly different from those in Romance. However, even in Romance the clitic may appear unattached to the verbal complex,
as observed in cases of interpolation. For an alternative analysis, see section 6.

27. One example of variation in the feature make-up of a category has been suggested by Rizzi (1989) to account for the difference between V2 and non-V2 languages. Taking functional categories to be composed of two features, \([+/-C]\) and \([+/-I]\), an \(X^0\) with the feature \([+C]\) being the head of a proposition, and an \(X^0\) with the feature \([+I]\) the head of a predicate, Rizzi characterises \(C\) as being \([+C,+I]\) in V2 languages, and \([+C,-I]\) in non-V2 languages.

28. In subjunctive contexts with obligatory enclisis preverbal subjects are disallowed, as shown in (i). However, the analysis in the text predicts that they should be possible.

(i) Tivesse-me ele / *ele tivesse-me ajudado, isto não teria acontecido.
    "Had he helped me, this wouldn’t have happened."

This appears to cast doubt on the claim made in the text regarding the status of Spec of CP as a subject position in enclitic structures. For further evidence against this claim, see subsection 6.2.

29. Sportiche (1992) assumes that only some clitics, such as en and object clitics in French, are specific (or license specificity). Other clitics, such as the French dative lui, are taken to be pure agreement elements.

30. We must exclude a derivation in which \(T\) could raise to the \([+wh]\) \(C\) (or to \(F\)) skipping \(W\). In the same way that \(C\) can license the clitic through a dependency, there is no reason why \(T\) or the \([+wh]\) \(C\) could not license the clitic in \(W\) in such a configuration. If such a derivation was possible, enclisis would be allowed in wh-questions and in the presence of preverbal operators generally. It is likely that such a derivation is excluded by the requirement that head movement be strictly local, or in other words, that movement of heads obeys the Head Movement Constraint of Travis (1984). If this is correct, then movement of the clitic to its landing site cannot be assumed to proceed in one step, as was assumed in section 5.

31. Enclisis appears to be allowed in infinitival adjunct clauses only in the variety of Portuguese spoken in northern Portugal (see Barbosa 1993).

32. Although this works for the adjuncts, it does not work for another context where we assumed \(C\) to be filled by a null prepositional complementiser, namely the inverted ‘subjects’ of ergative adjectives. Notice that they behave precisely like the other subject clauses in the examples above, as illustrated in (i).

(i) É óbvio eles terem-na/?a terem ajudado.
I have no explanation for this fact. It may be that, as suggested regarding inflected infinitives, all subject clauses tend to be interpreted as a uniform class by speakers.
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