Subjunctive Obviation: an Interface Perspective

Tesi di dottorato di FRANCESCO COSTANTINI, matricola T00251

Coordinatore del dottorato
Prof. Lucia Omacini

Tutore del dottorando
Prof. Alessandra Giorgi
Contents

Acknowledgments iv

1 Introduction 1
  1.1 The problem 1
  1.2 Previous accounts (chapter 2) 3
  1.3 The empirical framework (chapter 3) 6
  1.4 Towards a hypothesis (Chapter 4) 10
    1.4.1 The de se reading 11
    1.4.2 Syntax-semantics interface properties of the subjunctive mood 13
    1.4.3 Long-distance Binding 14
    1.4.4 A hypothesis 14
  1.5 Some implications (Chapter 5) 15

2 A critical overview on the existing theories concerning subjunctive obviation 17
  2.1 “Competition” theories 17
    2.1.1 Bouchard (1983, 1984) 17
    2.1.2 Farkas (1992b) 19
    2.1.3 Schlenker (2005) 22
    2.1.4 Conclusive remarks on the “competition” approaches 22
  2.2 Binding-Theoretical approaches 26
    2.2.1 Picallo (1985) 26
    2.2.2 Raposo (1985) 37
    2.2.3 Everaert (1986) 40
    2.2.4 Rizzi (1986) 42
    2.2.5 Kempchinsky (1987) 43
    2.2.6 Progovac (1993, 1994) 47
2.2.7 Tsoulas (1996) 48
2.2.8 Avrutin (1994), Avrutin-Babyonshev (1997) 49
2.2.9 Kempchinsky (1998) 56
2.2.10 Manzini (2000) 58
2.2.11 Suñer (1986) 60
2.2.12 Conclusive remarks on the Binding-Theoretical approaches 62

3 Subjunctive obviation: the empirical framework 66

3.1 Basic data 67
3.2 Obviation and matrix predicates 69
  3.2.1 Matrix predicates and embedded mood 69
  3.2.2 Obviation and embedded mood 73
  3.2.3 Comparing Western Romance languages 77
  3.2.4 An aside on Latin 81
3.3 Obviation and subjunctive “tenses” 83
  3.3.1 “Past” forms and obviation weakening 86
  3.3.2 Another aside on Latin 89
3.4 Passive voice 90
3.5 Modal verbs 92
  3.5.1 Again an aside on Latin 96
  3.5.2 Combining auxiliaries and modals 97
3.6 Double embedding 98
3.7 Matrix arguments 101
3.8 Conclusion 105

Appendix A Noun complements in the subjunctive 108
Appendix B Obviation in adverbial clauses 110

4 An interface proposal for subjunctive obviation 111

4.1 Obviation as unavailability of de se (and non de se) reading 112
4.2 Towards an interface hypothesis: theoretical background 118
  4.2.1 Implicit arguments 119
  4.2.2 Double Access Reading Generalized (Giorgi-Pianesi 2001) 125
4.2.3 Long-distance Anaphors (Giorgi 2004a, b, c) 132
4.3 Intermediate summary 141
4.4 An interface hypothesis for subjunctive obviation and its predictions 144
4.5 Residual questions 153

5 Some implications concerning Control 157
  5.1 EC and PC 158
  5.2 Control as theta-identification and PC 164
  5.3 Overlapping reference and obviation 166
  5.4 LD-control and theta-identification 168

6 Conclusions 171

References 175
Acknowledgments

I would like to express my deepest gratitude to my supervisor, Alessandra Giorgi, who guided my studies during the last three years. I thank her for believing in me, dedicating me much of her time, for the insightful discussions, for carefully reading my papers, for supporting and helping me.

I am grateful to the head of the Dipartimento di Scienze del Linguaggio, Guglielmo Cinque, who also believed in me, gave me precious advice, and never failed to encourage me.

I thank Anna Cardinaletti, James Higginbotham, Gemma Rigau, Luigi Rizzi, Vieri Samek-Lodovici, for the time they dedicated to discussing some topics concerning my dissertation. I thank the audience of the students’ presentations at the Department of Linguistics in Venice, and especially Laura Brugè and Giuliana Giusti, for their observations and suggestions, I am thankful to Carme Picallo, Josep Quer, and Itziar San-Martin for their kindness.

I would like to thank Tim Stowell for allowing me to visit the UCLA Linguistics Department in one of the most exciting winters of my life, and for letting me attend his course. Nina Hyams hosted me at the Psycho-Lab, and Philippe Schlenker let me attend his course: I thank them a lot.

I am grateful to the audience of the 30th Incontro di Grammatica Generativa (Rome, February 2005) and to the audience of the linguistics seminars at the University of Padua. A special thank to Paola Benincà, Cecilia Poletto, and Federico Damonte.

A big thank also to my friends at the Dipartimento di Scienze del Linguaggio for their encouragement and help: Paolo Chinellato, Walter Schweikert, Debora Musola, Soon-Haeng Kang, Luigi Zennaro, Lina Bertone, Vesselina Laskova, Mara Manente, Marco Coniglio, Megan Rae, Maria Martínez Atienza, Jasper Roodenburg.

Thanks also to Lucia Innocente for her always-thoughtful observations on any topic concerning linguistics and for her friendship.

Finally, I would like to express my deepest gratitude to my parents, Maria Lucia and Luca, my grandparents and my brother Antonio for their support and for all they have done for me: grazie. Специални благодаряости to my wife Vesselina and to my parents-in-law, Ivanka and Anastas, for advice and encouragement.
1 Introduction

1.1 The problem

It is a well-known fact in Romance linguistics that, generally speaking, the null (or clitic) subject of a subordinate clause cannot be co-indexed with the subject of the related superordinate clause, if the subordinate clause has a subjunctive verb:

(1) a. Gianni vuole che _ legga un libro a settimana.
     Gianni wants that reads(subj) one book to week
     ‘Gianni wants him/her to read one book every week’.

b. *[_] = [Gianni]

c. [_] ≠ [Gianni]

Any Italian native speaker has a clear intuition about sentence (1), that is, he knows that the null embedded subject cannot refer to Gianni, as shown in (1)b.

She also knows that indicative embedded clauses behave differently – a null embedded subject can refer to the same individual the matrix subject in the same sentence refers to if the embedded clause has an indicative verb:

(2) a. Gianni ha detto che _ legge un libro a settimana.
     Gianni has said that reads(ind) one book to week
     ‘Gianni said he reads one book every week’.

b. [_] = [Gianni]

c. [_] ≠ [Gianni]

Finally, she knows that infinitival clauses depending on verbs like “to say”, “to want”, etc., behave differently both from subjunctive and indicative clauses, in that their implicit subject must refer to the same individual the superordinate subject refers to:
A theory having explicative power over the data in (1), (2), and (3), should be able to explain how these sentences are generated by the grammar of Italian. That is, what principles rule the interpretation in the above examples? And how does a child acquiring the grammar of subordination in Italian succeed in learning these principles?

The phenomenon illustrated in example (1) has been referred to using various terminology. The most common are “obviation” (or “subjunctive obviation”) and “subjunctive disjoint reference effect”. The French term “obviatif”, which the English words “obviative” and “obviation” stem from, was coined by J. A. Cuoq and used in his *Etudes Philosophiques sur Quelques Langues Sauvages de l’Amérique* (1866) to refer to a grammatical category of Algonquian languages. In Algonquian languages and in some other American Indian languages “animate” nouns, demonstratives, pronouns in the third person and verbs can be categorized as “proximate” or “obviative” – the obviative category is also sometimes referred to as “fourth person” or “second third-personal form”. In a sentence, or even in a whole discourse, one third person constituent is characterized as proximate and all the others as obviative. Constituents marked as obviative are referentially disjoint from the constituent characterized as proximate, which in general is «the person from whose point of view events are described, the protagonist in narratives, the focus of the speaker’s empathy» or the «discourse topic» (Mithun 1999). Obviation is in some North American languages a linguistic strategy to mark referential disjointness1.

In the generative literature, the term ‘obviation’ was introduced by Chomsky (1981), who employs the terms ‘proximate’ and ‘obviative’ in the following sense: «[...] pronouns are “proximate” if they are co-indexed with some other element and “obviative” if not co-indexed with any other element».

---

1 On obviation in North American languages, see Mithun (1999).
The fact that the phenomenon illustrated by example (1) is called “obviation” suggests that in sentence (1) there must be an obviative constituent. This constituent is indeed the embedded null subject – it must be obviative with respect to the matrix subject. Exploiting Chomsky’s idea of “proximate” and “obviative” as “co-indexed” and “not co-indexed”, the null subject of sentence (1) must carry an index different from the index of the matrix subject. Indexes are represented by natural numbers:

(4) Gianni\(_1\) vuole che \(\_2\) legga un libro a settimana.
    Gianni\(_1\) wants that \(\_2\) reads(subj) one book to week
    ‘Gianni\(_1\) wants him\(_2\)/her to read one book every week’.

Different indexes refer to different individuals. Two formatives that carry different indexes are called “referentially disjoint”. Hence, the terms “obvation” and “disjoint reference effect” may be taken as synonymous.

I will assume that the null subject in pro-drop languages can be labeled as pro, following the traditional notation that has been introduced by Chomsky (1982)\(^2\). Sentence (1) can accordingly be represented as follows:

(5) Gianni\(_1\) vuole che pro\(_{1/2}\) legga un libro a settimana.
    Gianni\(_1\) wants that pro\(_{1/2}\) reads(subj) one book to week
    ‘Gianni\(_1\) wants him\(_{1/2}\)/her to read one book every week’.

Let us now turn to a summary of the topics included in this dissertation.

1.2 Previous accounts (chapter 2)

There are two main lines of investigation regarding obviation. The first, which has been supported in most of the literature on obviation, claims that the subjunctive disjoint reference effect is a consequence of the interaction between the interpretative

\(^2\) For recent discussions on pro see Alexiadou-Anagnastopoulou (1998), Cardinaletti (2002), Holmberg (2005), Uriagereka (1999), Holmberg (2005). Alexiadou-Anagnastopoulou and Uriagereka claim that pro can be dispensed with in a minimalist framework. The question whether pro is projected or whether it is not, is not relevant for the hypothesis that will be worked out. Notice, however, that in Italian pro is required in object position for independent reasons (see Rizzi 1987).
properties of the subjunctive mood (specifically, its nature of “anaphoric” mood) and the Binding Theory. According to Picallo’s (1985) account, for instance, the binding domain of the subject pronoun in a subjunctive clause is supposed to stretch over the matrix clause. Hence, since the distribution of pronouns is ruled by Principle B of Binding Theory, which states that a pronoun must be free in its binding domain, pro must be free in its binding domain, i.e. it cannot be co-indexed with a c-commanding noun within the sentence. If it were, a violation of Principle B would arise (exactly like in the sentence *John i hates him i). Given that the binding domain of pro includes the matrix clause, pro must be referentially disjoint from any c-commanding nominal.

Other theories appealing to Binding Theory (Avrutin 1994, Avrutin-Babyonyshev 1997, Kempchinsky 1987, 1997, Manzini 2000, Progovac 1993, 1994, Rizzi 2000, Tsoulas 1996) involve different linguistic devices, based on the Binding Theory, however, in order to explain the facts concerning obviation, but by and large they are able to explain the same set of data. This set of data turns out to be defective, however, in that it does not include the following examples, analogous to some discussed by Ruwet:

(6) a. Gianni sperava che pro avesse superato l’esame.  
Gianni hoped that had(subj) passed the exam  
‘Gianni hoped that he/she had passed the exam’.

b. Gianni₁ sperava che pro₁/₂ fosse autorizzato a partire il giorno dopo.  
Gianni hoped that pro₁/₂ was(subj) authorized to leave the day after  
‘Gianni hoped that he₁/₂/she would be allowed to leave on the following day’.

c. Gianniᵢ sperava che proᵢ potesse partire il giorno dopo.  
Gianni hoped that was-able(subj) leave(inf) the day after.  
‘Gianni hoped to be able to leave on the following day’.

The second line of investigation is based on the observation that in Romance languages subjunctive clauses and infinitival clauses are complementary – compare examples (1) and (3), repeated here:
Gianni_1 vuole che pro_{1/2} legga un libro a settimana.
Gianni_1 wants that pro_{1/2} reads(subj) one book to week
‘Gianni_1 wants him_{1/2}/her to read one book every week’.

Gianni_1 vuole PRO_{1/2} leggere un libro a settimana.
Gianni want PRO_{1/2} read(inf) one book to week
‘Gianni wants to read one book every week’.

Whereas subjunctive clauses instantiate obviation, infinitival clauses require the co-indexation between the understood embedded subject and the matrix subject.

Bouchard (1983, 1984) proposes that the contrast between the sentences (1) and (3) results from the Elsewhere Principle, which states that a syntactic position suitable for an anaphor, is not suitable for a pronoun, if an anaphoric relation between the constituent placed in that position and a c-commanding NP is to be expressed. Proposals in the same spirit, yet exploiting different principles, have been worked out by Farkas (1992b) and by Schlenker (2005).

Although all these theories are able to explain the contrast between (1) and (3), they do not explain why examples in (6) are grammatical despite the respective infinitival counterparts:

(7) a. Gianni sperava di PRO aver superato l’esame.
Gianni hoped of PRO have(inf) passed the exam
‘Gianni hoped to have passed the exam’.

b. Gianni sperava di PRO essere autorizzato a partire il giorno dopo.
Gianni hoped of PRO be(inf) authorized to leave the day after
‘Gianni hoped to be allowed to leave on the following day’.

c. Gianni sperava di PRO poter partire il giorno dopo.
Gianni hoped of PRO can(inf) leave(inf) the day after.
‘Gianni hoped to be able to leave on the following day’.

Therefore, it seems that there is a set of data that are unexpected both under Binding-Theoretical approaches, and under “competition” approaches. The hypothesis I will propose here will turn out to account for both the data that previous investigations predicted and also for the data that are unexpected under previous accounts.
To conclude, most of the previous accounts state that obviation occurs between the matrix and the embedded subject, in every subjunctive clause. Although this is true for most of the examples of obviation, it is not true for all. There are indeed cases in which the embedded subject needs not be obviative with respect to the matrix subject (when the form carrying the subjunctive morphology is an auxiliary or a modal); but there are also cases in which the embedded subject needs be referentially disjoint from the matrix direct or indirect object, and not from the matrix grammatical subject, such as the following example:

(8) A Giannisembra strano che pro½ parta domani.
To Gianniseems strange that pro½ leaves(subj) tomorrow
‘It seems strange to Gianni that he½/she will leave tomorrow’.

Hence, I argue that considering obviation as a phenomenon occurring in subjunctive clauses between the matrix and the embedded subject is in fact misleading.

1.3 The empirical framework (chapter 3)
Subjunctive obviation is generally claimed to hold between the null subject of a subjunctive clause and the matrix subject, as in sentence (1). This generalization is not complete however, as a more fine-grained analysis of the data from Italian shows. Such an analysis should take into account at least the following factors:

(a) the matrix verb in (1) is a volitional verb; it is a present indicative and in the third person form;
(b) the embedded verb is a present subjunctive and in the third person;
(c) the embedded subject is phonologically unrealized and cannot be interpreted as denoting the same individual that the matrix subject denotes – that is, Gianni.

The questions that will be addressed here are the following: with respect to point (a), do other verbs that select subjunctive clauses instantiate obviation? Do verbs that do not select subjunctive clauses instantiate obviation? Do verbs inflected in the present perfect indicative, in the imperfect, etc., instantiate obviation? It must be noticed that changing the tense of the matrix verb has consequences for the em-
bedded subjunctive verbs due to the *consecutio temporum* (that is, Sequence of Tense – henceforth, SOT). Finally, do verbs inflected in the first and second person instantiate obviation? With respect to point (b), do other subjunctive tenses instantiate obviation? With respect to (c), may phonologically unrealized pronouns be interpreted as co-referential to a matrix object? May phonologically realized pronouns be interpreted as co-referent with the matrix subject?

As for questions under (a), the generalization arises that obviation is strictly linked with the subjunctive mood (as partly shown by examples (1) to (3)). Obviation occurs in subjunctive clauses when the subjunctive is intensional (that is, selected by the superordinate predicate), be it desiderative (*to want, to wish*, etc.), epistemic (*to hope, to believe*, etc.), or emotive-factive (*to please, to regret*, etc.). Although the polarity subjunctive (that is, the subjunctive selected by a polarity item, be it a negative polarity item or an interrogative constituent) may instantiate obviation, the question of when the polarity subjunctive instantiates obviation will not be addressed here, and will be left for further investigation. Verbs that do not select for subjunctive clauses (that is, verbs selecting for indicative and conditional clauses) do not trigger the subjunctive disjoint reference effect. Moreover, no differences seem to arise depending either on the tense of the matrix verb, or on the person.

As for the question related to (b), obviation is weakened if the embedded subjunctive is in a composite tense (that is past and pluperfect subjunctive); in other words, an embedded null subject may be interpreted as co-referent with the matrix subject, if the embedded subjunctive is a past or pluperfect subjunctive, given the appropriate context. But a null embedded subject can never be interpreted as co-referent with the matrix subject if the embedded verb is in the present or in the imperfect subjunctive. For all Italian speakers there exists a contrast between the following sentences:

(9) a. Gianni sperava che pro superasse l’esame.
Gianni hoped that *pro* passed(subj) the exam
‘Gianni hoped that he/she would pass the exam’.

a'.  * [pro] = [Gianni]

a"  [pro] $\neq$ [Gianni]
b. Gianni sperava che pro avesse superato l’esame.
   Gianni hoped that had(subj) passed the exam
   ‘Gianni hoped that he/she had passed the exam’.
   (= (6)a)

b'. ? [pro] = [Gianni]

b" [pro] ≠ [Gianni]

It has already mentioned that the subjunctive clauses undergo SOT effects, so that the choice of present or imperfect tense, as well as that of past or pluperfect subjunctive, is totally determined by the tense of the matrix clause.

Obviation is weakened if the embedded verb is in a composite subjunctive tense (the past or perfect subjunctive, which are formed by an auxiliary – avere, ‘to have’ or essere, ‘to be’, the selection of which depends on the lexical semantics of the verb – followed by the past participle of the main verb):

(10) Subjunctive tenses (third person) of partire, ‘to leave’
   a. Present: che parta
   b. Past: che sia partito
   c. Imperfect: che partisse
   d. Pluperfect: che fosse partito

In other words, obviation is weakened if the verb carrying subjunctive morphology is not the full verb but an auxiliary.

An analysis along these lines may be supported even with respect to other cases in which an auxiliary is in the subjunctive (that is, if a passive auxiliary bears the subjunctive morphology), and even to those in which a modal is in the subjunctive. There is indeed a clear contrast between sentence (11)a and sentences (6)b and c, repeated here:

(11) a. Giannì sperava che pro\1/2 partisse il giorno dopo.
   Gianni hoped that pro\1/2 left(subj) the day after
   ‘Gianni hoped that he\1/2/she would leave on the following day’.

(6) b. Giannì sperava che pro\1/2 fosse autorizzato a partire il giorno dopo.
Gianni hoped that \( pro_{1/2} \) was (subj) authorized to leave the day after
‘Gianni hoped that he\(_{1/2}\)/she would be allowed to leave on the following day’.

c. Gianni\(_i\) sperava che \( pro_{ij} \) potesse partire il giorno dopo.
‘Gianni hoped that was-able(subj) leave(inf) the day after.
‘Gianni hoped to be able to leave on the following day’.

While in sentence (11)a co-indexation is ruled out, in sentences (6)b and c it might be allowed, given the appropriate scenario (although an infinitival clause is preferred over the subjunctive clause).

The generalization therefore arises that obviation occurs only if the verb carrying subjunctive morphology is a full verb.

As for the questions related to (c), it seems that an embedded null subject may be co-referent with a matrix object depending on the theta-role of the matrix object. If the matrix object is assigned the goal role, the co-reference may occur – this is the case for directive verbs:

(12) \( ^7 \)Gianni\(_1\) chiese a Maria\(_2\) che \( pro_{1/2} \) partisse il giorno dopo.
‘Gianni\(_1\) asked Maria\(_2\) that \( pro_{1/2} \) left(subj) the day after
‘Gianni\(_1\) asked Maria\(_2\) PRO\(_{1/2}\) to leave on the following day’.

However, if the matrix object is assigned the experiencer role, however, obviation occurs (unless the embedded form carrying subjunctive morphology is an auxiliary or a modal):

(13) \( ^7 \)Lo\(_1\) preoccupa che \( pro_{1/2} \) parta domani.
‘It worries him\(_1\) that he\(_{1/2}\)/she will leave tomorrow’.

The experiencer role can be assigned to three types of arguments (see Belletti-Rizzi 1988): arguments serving as the grammatical subject (see examples (1), (9), for instance), arguments serving as the grammatical direct object (see example (13)), and arguments serving as the grammatical indirect object (e.g. the indirect objects of verbs like sembrare, ‘to seem’). From a semantic viewpoint, the individual denoted
by an argument discharging the experiencer role can be conceived as the individual having an attitude towards a certain propositional content. This individual will be referred to as the subject of the attitude (or attitude bearer). The notion of attitude bearer will turn out to be crucial in implementing a theory of obviation within a wider theory of subjunctive complementation.

Comparative considerations from Catalan, Portuguese, and Spanish confirm the analysis sketched here. As for French, the condition of referential disjointness affecting null subjects in subjunctive clauses in Italian, affects clitic subjects in French. Null pronouns, which belong to the weak pronoun class and clitic pronouns belong to the same category of pronominal deficiency. They are deficient pronouns, as opposed to strong pronouns (see Cardinaletti-Starke 1999, Cardinaletti 2002). Hence, obviation can be supposed to affect only the class of deficient pronouns. This seems to be confirmed by the fact that strong pronouns can in fact be interpreted as co-referent with the argument referring to the attitude holder, given the appropriate context.

The following generalization seems to answer the question of where obviation occurs in Romance languages:

(14) Obviation occurs only between the subject of a subjunctive clause and the relative subject of the attitude iff the form carrying subjunctive morphology is a full verb.

Considering the syntax-semantics interface properties of the subjunctive mood, generalization (14) can be modified in order to get a deeper insight into the problem at issue. This will be one of the topics of chapter 4.

1.4 Towards a hypothesis (Chapter 4)

The descriptive generalization that I will try to account for is generalization (14), repeated here:
(11) Obviation occurs only between the subject of a subjunctive clause and the relative subject of the attitude iff the form carrying subjunctive morphology is a full verb.

A hypothesis explaining generalization (14) should be able to explain the following facts: (a) subjunctive, but not indicative and infinitive argument clauses instantiate obviation; (b) full verbs carrying the morphology of the subjunctive mood, but not functional (modal, auxiliary, etc.) verbs carrying the morphology of the subjunctive mood instantiate obviation; (c) the deficient pronoun serving as the embedded subject must be obviative with respect to a matrix argument referring to the bearer of the attitude, but not to other matrix arguments.

I will argue the mechanism implemented by the Generalized Double Access Reading (henceforth, DAR) approach (Giorgi-Pianesi 2001), which proved to be strong enough to explain other facts concerning binding in subjunctive clauses (i.e. Long Distance Anaphors – henceforth, LDAs) is the only theoretical apparatus that is needed to explain the facts shown above under (a), (b), and (c). In order to show the connection between obviation and this approach, however, I will first (i) reformulate the definition of obviation (in a way that, moreover, will allow us to do away with the referential indexes – a desirable result, since this reduces the number of conceptual items in the theory. I will then show that (ii) this new definition and the Generalized DAR hypothesis allow us to reformulate generalization (14), so that it will be possible to connect property (a) and property (c). Finally (iii), I will show that the hypothesis proposed by Giorgi (2004) to account for LDAs can be easily extended to obviation.

1.4.1 The de se reading

Obviation may be defined as the unavailability of either the de se interpretation (Lewis 1979, or “first-personal” interpretation – Castañeda 1966, 1968), or the non-de se interpretation. An attitude is de se if the person having the attitude towards some propositional content knows that this proposition concerns herself. The attitude in sentence (15)a, analogous to (1), for example, cannot be de se – that is, sentence
(15)a is not an appropriate attitude report if, for instance, Gianni has been heard telling sentence (15)b (assuming that this is an expression of Gianni’s will):

(15)  a. Gianni vuole che vinca le elezioni.
Gianni wants that wins(subj) the elections
‘Gianni wants him/her to win the elections’.

b. Vincerò le elezioni!
Win(ind, fut, 3sg) the elections
‘I will win the elections!’

But sentence (15)a can neither be non-*de se* – suppose that Gianni is a candidate and he is listening to the radio. He listens to a candidate, who is actually Gianni himself, actually, and without realizing that it is himself he is listening to, he says: “this candidate should win the elections”.

However, if the form carrying the subjunctive morphology is an auxiliary or a modal, the *de se* reading is available again:

(16)  a. Gianni pensa che pro possa vincere le elezioni.
Gianni thinks that pro can(subj) win(inf) the elections
‘Gianni man thinks he/she can win the elections’.

b. Posso vincere le elezioni.
Can(1sg) win(inf) the elections
‘I can win the elections’.

Even though an infinitival clause would be more natural to report a *de se* attitude, sentence (16)a has a *de se* reading – it may be appropriate to report sentence (16)b, uttered, thought, etc., by Gianni.

Accordingly, generalization (14) can be reformulated as follows:

(17) A subjunctive clause cannot be interpreted *de se*, nor non-*de se*, if the form carrying subjunctive morphology is a full verb.
1.4.2 Syntax-semantics interface properties of the subjunctive mood

I have said that an attitude is *de se* if the person having the attitude towards some propositional content, that is, the attitude bearer, is aware that this proposition concerns herself. The role of the attitude bearer is crucial in the Generalized DAR approach. On the basis of the Italian data, Giorgi-Pianesi (2000, 2001) hypothesize that the temporal coordinates of the attitude episode (that is, the temporal coordinates of the attitude bearer (indicated by ‘Subject-τ’ – after “subject of the attitude”, a synonym of “attitude bearer”) are always represented in an embedded clause. This is to say that the time of an embedded eventuality must always be evaluated with respect to the time of the attitude episode. The temporal coordinates of the speaker (‘Speaker-τ’) are instead represented in an embedded clause only when the DAR obtains – that is, only when the embedded eventuality must be evaluated with respect to the temporal coordinates of the speaker (the utterance time). In Italian, indicative clauses trigger DAR, whereas subjunctive clauses do not.

Moreover, analyzing the data concerning Complementizer Deletion (henceforth, CD) in Italian, they propose that the temporal coordinates of the subject of the attitude may be located in the embedded T, whereas the temporal coordinates of the speaker appear in the complementizer:

\[(18) \quad \begin{align*}
&\text{a. Indicative: } V [\text{CP } C_{\text{speaker}-\tau}] \ldots [\text{TP } T_{\text{subject}-\tau}] \\
&\text{b. Subjunctive: } V [\text{MOODP}] \ldots [\text{TP } T_{\text{subject}-\tau}] 
\end{align*}\]

I will accordingly argue that generalization (17) may be more adequately stated as follows:

\[(19) \quad \text{A subjunctive clause cannot be interpreted } de \text{ se (nor non-} de \text{ se) if the form carrying subjunctive morphology is a full verb.}\]
1.4.3 Long-distance Binding

LDAs have two well-known properties: (a) they are strictly *de se*; (b) they appear only in subjunctive clauses (in a Generalized DAR approach, in clauses where the coordinate of the speaker is not represented). Property (b) defines the same syntactic environment of obviation. As for property (a), LDAs and obviative subjects have opposite properties in that the former formatives are strictly *de se*, whereas the latter cannot be so.

Giorgi proposes the following hypothesis to account for the interpretative properties and the distribution of LDAs:

(20) Long distance anaphoric binding:
   a. a LDA is the spell-out of an implicit argument;
   b. a LDA can be saturated either
      i. by a co-argument, or
      ii. by the bearer of the attitude.

This hypothesis exploits the notion of “unsaturated position”, which may be considered analogous of “implicit argument” (in the sense of Higginbotham 1997 – that is, an open theta-position in a theta-grid) and theta-identification with the attitude holder. The mechanism of theta-identification is local. We have seen, however, that the attitude holder, is present in the embedded clause by means of its temporal coordinates, as Giorgi and Pianesi (2001) suggest. Hence, theta-identification between an implicit argument and the attitude bearer can obtain within the embedded clause.

1.4.4 A hypothesis

The hypothesis that I will work out, given the above assumptions, can be formalized as follows:

(21) In an environment devoid of the speaker’s coordinate, a *de se* reading is achieved iff there is an implicit argument that is theta-identified with the attitude bearer.
This hypothesis is able to explain the data in Chapter 2. Firstly, it can explain the “prototypical” instances of obviation, as in sentence (1). The subject of the subjunctive clause is not actually an implicit argument, although it is phonetically unrealized. By definition implicit arguments are devoid of any feature characterizing overt formatives, that is phonetic features, categorial features and ϕ-features (Chomsky 1995). The pronominal pro, however, is not devoid of these features, since it enters indeed in agreement relations with the verb in the subjunctive. Given that there is no implicit argument in the subjunctive clause in sentence (1), the attitude cannot be de se.

As for sentences (9)b, (6)b and (6)c, I will suppose that any non-finite verb is associated with an implicit external argument. The de se interpretation is expected to be available for these sentences, since a non-finite form occurs in any of them. Furthermore, the fact that pro is in the specifier of [AgrSP] and that an implicit argument may be theta-identified with a co-argument (as proposed by Giorgi 2004), predicts that the null subject of the subjunctive clause may refer to someone other than the attitude bearer. This seems to be a correct prediction, given that sentences (9)b, (6)b and (6)c are systematically ambiguous between the co-referential reading and the disjoint one.

1.5 Some implications (Chapter 5)
The hypothesis proposed here also predicts that infinitival clauses are de se. They are indeed devoid of the speaker’s coordinate. Furthermore, if any non-finite verbal form carries an implicit argument, the external argument of an infinitive verb must be implicit, and may be identified with the attitude bearer. This idea implies that PRO may be conceived as an implicit argument, which can be identified with the attitude bearer. This is in fact what Higginbotham (1997) proposes.

A problem concerning this hypothesis on PRO is that the phenomenon of Partial Control (Landau 2001, henceforth PC) do not seem to be compatible with the hypothesis that PRO is an implicit argument. Although in all these cases PC has the property of being obligatorily de se, PC is in fact an instantiation of overlapping (de
se) reference, and not a case of strict (de se) reference. I will consider the question more in detail and show that no substantial issues arise for the hypothesis discussed here from the facts on Control discussed by Landau. In doing this I will resort to the technical apparatus Landau himself developed, and no further assumption will be proposed.
In this section we will illustrate some theories on the disjoint reference effects in subjunctive clauses. In general, two kinds of an approach can be singled out: the first stems from the tenet that obviation is the consequence of the “competition” between subjunctive and infinitive moods in the relevant contexts. This viewpoint has been held by Bouchard (1983, 1984), Farkas (1992b), and Schlenker (2005).

The second type of approach is based on the idea that the binding domain for the embedded subject, the null pronoun pro, is the whole sentence. Hence, Principle B of Binding Theory prevents pro from being bound by the subject of the main clause, because the latter is included within the binding domain of pro. The causes of the binding domain extension are generally attributed to the properties of the subjunctive: Manzini (2000), Picallo (1985), Rizzi (1986) argue that the binding domain extension is due to the subjunctive inflection, which is claimed to be “anaphoric”. Kempchinsky (1987, 1998), Raposo (1985), Progovac (1993, 1994), Avrutin (1994), Tsoulas (1996) and Avrutin-Babylonyshev (1997) claim that the properties of the subjunctive complementizer are responsible for the extension of the binding domain. A third type of Binding-Theoretical approach (Everaert 1986) among those based on the Binding Theory relies on the property of the matrix predicate, which specifies Associations (in the sense of Williams 1985) between its arguments and their internal argument structures.

2.1 “Competition” theories

2.1.1 Bouchard (1983, 1984)

The Elsewhere Principle (Bouchard 1983, 1984) rules the distribution of anaphors and pronouns. It states that, in a given environment, a reflexive interpretation cannot be obtained by means of a pronoun if it can be obtained by means of an anaphor:
(1) *Elsewhere Principle*

Don’t put a pronoun in a position where an anaphor is possible, that is, in a position where the pronoun will be interpreted as co-referential with an NP that can bind it.

Bouchard argues that the Elsewhere Principle can be applied to the following examples in French:

(2) *Je veux que j’aille voir ce film.*  
*I want that I go(subj) see(inf) this movie.*

He observes that in sentence (2) the matrix and the embedded subjects cannot be co-referential. They must be co-referential, however, when the argument clause is infinitive:

(3) *Je1 veux PROj aller voir ce film.*  
*I1 want PROj go(inf) see(inf) this movie.*  
‘I want to go and see this movie’.

If a pronoun cannot convey an anaphoric reading when appearing in a position where an anaphor is possible, it follows that sentence (2) is ruled out by the Elsewhere Principle. In cases of local control constructions like (3), indeed, PRO is an anaphor, since it is bound by the antecedent je. Thus, the contrast between (2) and (3) can be interpreted in terms of Elsewhere Principle, given that the same position (the one of the subject) is occupied by a pronoun in the former sentence and by an anaphor in the latter. Therefore, the pronoun must be used to express disjoint reference, whereas the anaphor must be used to express co-reference.

Bouchard’s theory also predicts that when PRO is pronominal, the Elsewhere Principle does not determine any contrast between subjunctive and infinitive clauses. According to Bouchard, this prediction is borne out. Take, for instance the following sentences:
(4)  a.  \[ \text{PRO1 d’être menacé de mort ne me1 fera pas changer d’idée.} \]
    \[ \text{PRO1 be(inf) menaced with death not me1 makes(fut) NEG change(inf) of idea} \]
    ‘Being menaced with death will not make me change my mind’.

    b.  Que je sois menacé de mort ne me fera changer d’idée.
    That I be(subj) menaced with death not me makes(fut) NEG change(inf) of idea
    ‘Being menaced with death will not make me change my mind’.

Bouchard claims that in (4)a PRO is pronominal, since it is not bound by an NP that c-commands it. In (4)b the embedded subject is pronominal as well. Therefore, the subject of the embedded clause is pronominal both in (4)a and in (4)b, and there is no contrast between the two sentences in terms of the Elsewhere Principle. In fact, this principle predicts a difference between the two sentences only when a pronominal and an anaphor compete for the same position, which is not the case in (4).

2.1.2  \textit{Farkas (1992b)}

Farkas proposes that obviation follows from the competition between the subjunctive and the infinitive moods. She observes that obviation occurs only in those languages in which the infinitive competes with the subjunctive – Romance languages, for instance. In Balkan languages there is no such modal competition and they do not show disjoint reference effects.

The relevant generalization arising from the data that she analyses is that obviation occurs in contexts having the following requirements:

(5)  a.  Obviation obtains in volitional and desiderative complements between the embedded and the matrix subject;
    b.  The embedded subject argument is assigned the Agent theta-role.

The analysis Farkas proposes for the generalization (5) resorts to the following tenets:

(6)  a.  Volitional and desiderative verbs are verbs selecting for “world-
dependent complements” – complements whose semantic content is evaluated with respect to the actual world;

b. An individual has a “relation of responsibility” (“RESP”, see Farkas 1988) with respect to a certain “situation” (in the sense of Barwise-Perry 1984 – that is, individuals having some property and standing in some spatio-temporal location) if that individual brings about the situation. This notion may be considered analogous to that of agentivity here, even though the two concepts overlap only partially (see Farkas 1988);

c. An argument is “subject dependent” if it inherits the reference from the matrix subject;

d. The “canonical control case” is the configuration in which both the matrix subject and the “subject dependent” embedded subject bear the “RESP” relation with the situation denoted by the complement. A sentence like (3) is an example of “canonical control case”.

In the light of the assumptions in (6), Farkas proposes that the following principle rules the data generalization (5) describes:

(7) In world-dependent complements that conform to the canonical control case, the form used to mark subject dependency blocks the form used for world dependency.

In other words, Farkas argues that if in the contexts that conform to the “canonical control case”, both an infinitival clause and a subjunctive clause are available, the infinitival clause, which marks subject dependency blocks the subjunctive clause, which marks world dependency.

The term “blocking” is used in a sense habitual in lexical semantics and morphology (see Aronoff 1976) – that is, a more specific construction, if any, blocks a more general one: infinitive constructions are more specific than subjunctive constructions in that they express “subject dependency” and “world dependency”, whereas subjunctive constructions express only “world dependency”. Hence, subject dependency cannot be expressed by a subjunctive clause.
According to Farkas, the principle in (7) is able to explain generalization (5). In particular, in Bouchard’s examples (2) and (3), and in Picallo’s examples (9)a and b, the matrix verb is volitional, thus selecting for a “world-dependent complement”. This complement conforms to the “canonical control case”. Therefore, the infinitival clause blocks the subjunctive clause. In Bouchard’s examples (4)a and b, the complement of any of the two sentences is a “world-dependent complement”. But the complements do not conform to the “canonical control case” – the matrix and embedded subject do not have a “RESP” relation with the situation of the complement (radically simplifying Farkas’ thought, but without lacking the kernel of it, they are not assigned the agent theta-role). Hence, no “blocking” effect takes place between the two sentences. In Ruwet’s examples (11)a and b, the complement clauses are “world-dependent complements”. These are not cases of “canonical control” – the embedded subject does not have a “RESP” relation with the situation denoted by the complement clause. Hence, the infinitival clause does not “block” the subjunctive clause. In Picallo’s examples (8)a and b, the complement of any of the two sentences is a “world-dependent complement”. But the complements do not conform to the “canonical control case” – the matrix object does not have a “RESP” relation with the situation of the complement. Hence, no “blocking” effect takes place between the two sentences. In Suñer’s examples (10)a-c the complements are not “world-dependent complements”. Farkas claims that verbs such as think, believe, know select for complements denoting situations that are independent of the actual world. Hence, blocking is not predicted to occur in these contexts. In languages without the competition between subjunctive clauses and infinitival clauses, no “blocking” is supposed to obtain – that is, no disjoint reference effects occurs. Farkas claims that this is the case for Balkan languages like Romanian and Serbo-Croatian.

---

1 Terzi (1992) claims that the fact that Balkan languages lack disjoint reference effects, is not in itself due to the absence of the so-called “subjunctive-infinitive rivalry”. She argues that subjunctive complements in Greek and other Balkan languages are indeed ambiguous: they may have PRO or pro as their subject:

(i)  a. O Yiannis theli na fai to rizogalo.
    The Yiannis wants PRT eats the rice pudding
    ‘John wants (him/her) to eat the rice pudding’.
2.1.3  Schlenker (2005)
Schlenker (2005) extends the idea that obviation is due to the competition between subjunctive and infinitive. He argues that subjunctive mood is a semantic default—that is, it has no semantics or has vacuous semantics (meaning that subjunctive mood bears no presuppositions), and due to some pragmatic principles, such as “Maximize Presupposition!”, it must be used just in case its competitor (imperative, infinitive) causes a semantic failure. On the other hand, the infinitive is a semantically non-null element—that is, it does not bear any presupposition and may determine a semantic failure if the presupposition it introduces is not satisfied. In particular, Schlenker observes that PRO is always interpreted as first-personal or de se, in the sense of Castañeda (1966, 1968) and Lewis (1979). He interprets this property as a presupposition introduced by PRO\(^2\). Infinitive mood is semantically non-null in that PRO introduces a presupposition, whereas the subjunctive is semantically vacuous. Hence, the subjunctive must be used only if an infinitival clause would give rise to a semantic failure—that is, if the situation to be reported is non-de se.

2.1.4  Conclusive remarks on the “competition” approaches
The three proposals described here share the prediction that in some contexts the infinitive and the subjunctive compete, and if the infinitive is available to convey a de se attitude, the subjunctive conveys a de se attitude as well. It follows from this claim that the infinitive and the subjunctive should be in complementary distribution. The infinitive should appear only in those contexts in which the subjunctive is unavai-

b. [O Yiannis], theli [CP [C na fai [MP pro-1/2 [M ...]]]

c. [O Yiannis], theli [CP [C [MP PRO1 [M na fai]]]

In the first case, the coreferential interpretation obtains, in the second case the obviative interpretation obtains. See Terzi (1992) for more details. For a more recent analysis in the same spirit, applied also to Hebrew data, see Landau (2005).

\(^2\) We refer to Schlenker (2004) for details, here irrelevant.
able, and vice versa. It has been observed in the literature, however, that there exist counterevidence to this claim.

Picallo (1985) observes that Bouchard’s proposal implies that the pronominal subject of a subjunctive clause cannot be co-indexed with the matrix subject if the anaphoric subject of an infinitival clause co-refers with the matrix subject. In Catalan this prediction is not borne out if sentences where the matrix predicate is a directive verb are considered:

(8)  a. En Pere va convèncer [en Jordi] que pro\textsubscript{1} anés a Nova York.
    The Pere persuaded [the Jordi] that pro\textsubscript{1} went(subj) to New York
    ‘Pere persuaded Jordi to go to New York’

    b. En Pere va convèncer [en Jordi] de PRO\textsubscript{1} anar a Nova York.
    The Pere persuaded [the Jordi] of PRO\textsubscript{1} go(inf) to New York
    ‘Pere persuaded Jordi to go to New York’.

It must be noticed that the contrast between sentences (2)-(3) in French also holds for Catalan:

(9)  a. *Jo\textsubscript{1} vull que jo/pro\textsubscript{1} vagi a veure aquesta pel·lícula.
    I want that I/pro go(subj, 1sg) to see(inf) this movie

    b. Jo\textsubscript{1} vull PRO\textsubscript{1} anar a veure aquesta pel·lícula.
    I\textsubscript{1} want PRO\textsubscript{1} go(inf) to see this movie
    ‘I want to go and see this movie’.

According to Picallo the grammaticality of sentence (8)a is unexpected under an Elsewhere Principle account.

Suñer (1986) finds the same kind of objection to the Elsewhere Principle account as Picallo, taking into account data from Spanish – directional verbs do not instantiate disjoint reference effects. Moreover, she notices that in Spanish a pronoun in the subject position of a subjunctive embedded clause can even co-refer with a matrix subject in examples involving denial, doubt, and emotive-factive verbs:

(10)  a. Pedro\textsubscript{1} negó que pro\textsubscript{1/2} supiera la verdad.
    Pedro\textsubscript{1} denied that pro\textsubscript{1/2} knew(subj) the truth
    ‘Pedro\textsubscript{1} denied that he\textsubscript{1/2}/she knew the truth’.
a'. Pedro negó PRO₁ saber supiera la verdad. 
Pedro₁ denied PRO₁ know(inf) the truth
‘Pedro₁ denied knowing the truth’.

b. Pro₁ dudo que pro₁/₂ lo hubiera pagado.
Pro₁ doubt that pro₁/₂ him had(subj, 1/3sg) paid
‘I doubt having that I/he/she had paid them’.

b'. Pro₁ dudo PRO₁ haberlo pagado. 
Pro₁ doubt have(inf)-him paid
‘I doubt having paid him’.

c. Yo₁ sentí mucho que pro₁/₂ no lo haya visto. 
I₁ regret much that pro₁/₂ not him have(subj, 1/3sg) seen
‘I deeply regret that I/he/she have/has not seen him’.

c'. Yo₁ sentí mucho PRO₁ no haberlo visto.
I₁ regret much PRO₁ not have(inf)-him(cl) seen
‘I deeply regret not having seen him’.

The sentences in (10) are therefore unpredicted under an Elsewhere Principle account – the fact that an anaphor is available in the subject position to express coreference with the matrix subject should automatically rule out the possibility of coreference between a pronominal embedded subject and the matrix subject.

Moreover, Ruwet (1984) observes that there is a series of contexts in French that are “weakly” obviative in spite of the fact that they involve subjunctive clauses. In these contexts the co-referential interpretation is available, although it is not the preferred one. They involve a passive subjunctive, a modal subjunctive and a perfective subjunctive:\footnote{I will limit the present notes to the cases in which pro (or a clitic pronoun in French) occurs in the subject position of subjunctive complement clauses. Other examples mentioned by Ruwet show a reduced degree of disjoint reference effect, even cross-linguistically; crucially, though, they involve overt pronouns. For these examples we refer to Ruwet’s article.}
These data are also unpredicted under the Elsewhere Principle hypothesis, since an alternative in the infinitive with an anaphoric subject PRO is available for any of the examples (11)a-c.

As for Farkas’ proposal, her generalization does not include examples involving epistemic or emotive-factive predicates, which are included under the predicates that select for complements denoting situations independent of the actual world. In Catalan, French, Italian, Portuguese, however, these examples do trigger obviation, given certain conditions. Take for instance the following examples from Italian:

Moreover, given certain conditions, in some cases of “canonical control” no “block” occurs – consider, for instance, one of the examples discussed by Ruwet, (11)c: the complement clause in sentence (11)c is “world-dependent”, and both the matrix and the embedded subject are in the “RESP” relation with the situation of the complement. The infinitival form, however, does not “block” the subjunctive form, which is
available (although marginally) under the co-referential interpretation.

Hence, on one hand, there is evidence that \textit{it is not always the case} that in “world-dependent” complements that conform to the “canonical control case”, the form used to mark “subject dependency” blocks the form used for “world dependency”. On the other hand, there is evidence that \textit{it is not always the case} that only in world-dependent complements that conform to the “canonical control case”, the form used to mark “subject Dependency” blocks the form used for world dependency.

Finally, Schlenker’s proposal predicts that a subjunctive clause cannot be \textit{de se} if a “rival” infinitival clause is. In other words, it predicts that there are no cases in which both a subjunctive clause and an infinitival clause are \textit{de se}. As we have seen, however, and as Schlenker himself observes, such cases do exist (see, for instance, examples (10)).

\section*{2.2 Binding-Theoretical approaches}

\subsection*{2.2.1 Picallo (1985)}

Picallo proposes that obviation in subjunctive clauses follows from Principle B of Binding Theory:

\begin{equation}
\text{(13) Principle B}
\end{equation}

\text{A Pronominal is free in its Governing Category (henceforth, GC).}

The terms “free”, “bound”, and “Governing Category” are defined as follows (Chomsky 1980):

\begin{equation}
\text{(14) a. Binding}
\end{equation}

\begin{itemize}
  \item \text{\(\alpha\) is bound by \text{\(\beta\)} iff \text{\(\alpha\)} and \text{\(\beta\)} are co-indexed and \text{\(\beta\)} c-commands \text{\(\alpha\)}; \text{\(\alpha\)} is free iff it is not bound.}
\end{itemize}

\begin{equation}
\text{b. Governing Category (GC) (Chomsky 1980)}
\end{equation}

\begin{itemize}
  \item \text{\(\alpha\) is the GC for \text{\(\beta\)} iff \text{\(\alpha\)} is the minimal category containing \text{\(\beta\)} and a governor of \text{\(\beta\)}, where \text{\(\alpha = \text{NP or S}\).}}
\end{itemize}
In Chomsky (1981) the definition of Governing Category is the following:

(15) **Governing Category** (Chomsky 1981)

β is the GC for α iff β is the minimal category containing α, a governor of α, and a SUBJECT accessible to α.

Finally, “SUBJECT” is defined as follows (Chomsky 1981):

(16) SUBJECT: AGR in tensed clauses, the subject of infinitival clauses, NPs or small clauses.

It follows from definition (15) that complement clauses are GCs. This claim correctly predicts the following English example:

(17) John₁ said he₁/₂ likes Mary.

The above definition of GC, however, does not explain the sentences in Romance languages in which the matrix and the embedded subject cannot be co-indexed – if a clause is a binding domain of a pronominal, an embedded subject should be *always* free to co-refer with the matrix subject, which is not the case in some subjunctive clauses, as the following one in Catalan:

(18) [En Jordi]₁ espera que pro₁/₂ vingui.
    [The Jordi]₁ hopes that pro₁/₂ comes(subj).
    ‘Jordi₁ hopes that he₁/₂/she will come’.

Picallo suggests that if the binding domain of pro in sentence (18) were the whole sentence, the obviative interpretation of pro would be expected – pro would be co-indexed by a c-commanding NP in its Governing Category, thus violating Principle B of Binding Theory:
According to Picallo, subjunctive clauses are not “opaque domains” – that is the clause boundary of a subjunctive clause does not coincide with the boundary of the binding domain of nominal constituents within the clause). This property distinguishes Catalan subjunctive clauses (but French, Italian, Portuguese, Spanish have the same behavior in this respect) from English argument clauses or Romance indicative argument clauses, which do not show disjoint reference effects. Hence, the binding domain of pro in the subject position extends to the whole sentence and includes the matrix subject.

Picallo claims that the reason of the binding domain extension is to be identified in the interface properties of the subjunctive mood. The subjunctive mood is claimed to be “anaphoric” in that it fails to denote an autonomous time frame, rather it is assigned a value in relation to the time frame of its superordinate clause. On the other hand the indicative mood, which does not show disjoint reference effects, has an autonomous tense specification. SOT effects are supposed to be a test to demonstrate whether a mood has autonomous referential properties or whether it is “anaphoric”: the embedded subjunctive is sensitive to SOT (this property is common to the Romance languages mentioned here\(^4\)), whereas the embedded indicative is not.

\(^4\) See section 3.3 for an illustration of SOT in Italian.
She also argues that forms lacking autonomous tense specification, such as the subjunctive, must enter into a binding relation with forms having an autonomous tense specification, such as the indicative – she calls this binding relation a “Tense-chain”. The domain containing the governor of a nominal constituent $\alpha$ and the “Tense-chain” containing $\alpha$ is called “Tense-governor” (“T-governor”):

(20)  \textit{T-governor}

A T-governor of $\alpha$ is the maximal Tense-chain containing $\alpha$ and the governor of $\alpha$.

Given these definitions, she defines Binding Domain as follows:\footnote{The notion of “accessible subject” in the following definition is to be understood as a c-commanding subject.}:

(21)  \textit{Binding domain (version 1)}

$\beta$ is a binding domain for $\alpha$ iff $\beta$ is the minimal subchain of the T-governor of $\alpha$ containing a subject accessible to $\alpha$, if there is one. If there is no accessible subject, the T-governor is the binding domain.

Within a clause, Picallo’s definition of binding domain makes the same predictions about the distribution of anaphors and pronouns as Chomsky’s definition does. In a non local domain, it correctly predicts the obviative examples, which are unexpected under the previous definition of binding domain: in sentence (17) (as well as in Romance indicative complements), the matrix and the embedded clauses constitute two separate “Tense-chains”, since both are in the indicative. Thus, they constitute two different “T-governors” – that is, the embedded subject is an “opaque domain”.

In (18) (as well as in its correspondent sentences in other Romance languages) the matrix and the embedded verb form a “Tense-chain” – the subjunctive verb is “anaphoric” and is “bound” by the matrix verb in the indicative. Therefore, the binding domain of $pro$ is “the minimal subchain of the “T-governor” of $pro$ containing a
subject accessible to pro, if there is one”; the “T-governor” is the maximal “Tense-chain” containing pro and its governor.

Remember that the “Tense-chain” includes only the matrix and embedded verb (see diagram (22)), and the “T-governor” contains the matrix T (and what it governs) the embedded T and pro, and the matrix subject, which is accessible to pro. Hence, the minimal subchain of the “T-governor” of pro containing a subject accessible to pro is the whole sentence. Hence, the binding domain of pro is the whole sentence – given Principle B of Binding Theory, pro cannot be co-indexed with a c-commanding NP in its binding domain. Hence, co-indexation between en Jordi and pro in (18) is ruled out, as the following diagram shows:

(22)

```
TP
  /\  
DP₁  T'
    /\  
  T  CP
    /\  
  C  TP
   /\   
|  que  
|DP₁  T
   \   
    \  
      pro₁

T-chain
```

Picallo’s definition of binding domain also explains the fact that an object in the embedded clause is free to co-refer with the matrix subject:

(23)  [En Joan]₁ esperava que [en Jordi]₂ ₁/²/³ invités a la reunió.  
[The Joan]₁, hoped that [the Jordi] him₁/²/³ invited(subj) to the meeting.  
‘Joan₁ hoped that Jordi would invite him₁/²/³ to the meeting’.
The embedded clause is the binding domain of the clitic object pronoun – it is “the minimal subchain of the T-governor containing an accessible subject” (en Jordi). Thus, the object pronoun is free to co-refer with the subject of the matrix clause:

(24) [En Joan]\textsubscript{1} esperava que [en Jordi]\textsubscript{2} volgués que pro\textsubscript{1/*2/3} hi anés.

Picallo’s definition of binding domain is also able to explain why a doubly embedded subject is able to co-refer with the matrix subject, but must be referentially disjoint from the intermediate subject:

(25) [En Pere]\textsubscript{1} esperava que [en Jordi]\textsubscript{2} volgués que pro\textsubscript{1/*2/3} hi anés.

In sentence (25) the binding domain of pro is the intermediate embedded clause – this clause is “the minimal subchain of the T-governor containing an accessible subject to pro”. Hence, pro cannot co-refer with the intermediate subject (en Jordi), but it is free to co-refer with the matrix subject (en Pere).
Moreover, the interpretative properties of pro in the following sentence are also explained under Picallo’s definition of binding domain:

(26) Li$_1$ agradava que pro$^{1/2}$ llegís el diari.
Him/her was-pleasant that pro$^{1/2}$ read(subj) the newspaper.
‘[He/she]$_1$ liked that [he/she]$^{1/2}$ used to read the newspaper’.

In example (26) the “T-governor” includes the matrix sentence. Hence, pro cannot be co-indexed with a c-commanding NP within the matrix clause.

Other examples, however, are not straightforwardly accounted for under the definition of binding domain given in (21). Take for instance the following examples:

(27) En Joan esperava que li agradés que pro anés a Nova York.
The Joan hoped that him/her pleased (subj) that pro went(subj) to New York.
‘Joan hoped that it pleased him/her to go to New York’.

The following possibilities of indexation are available:

(28) a. [En Joan]$_1$ esperava que li$_1$ agradés que pro$^{1/2}$ anés a Nova York.
b. [En Joan]$_1$ esperava que li$_2$ agradés que pro$_{1/2}$ anés a Nova York.

The first possibility of co-indexation is expected under definition (21). The second possibility is problematic: according to the definition in (21), pro should not be able to co-refer with the subject of the matrix clause, given that there is no accessible subject intervening between pro and en Joan – that is, “the minimal subchain of the T-governor containing an accessible subject to pro” coincides with the whole sentence.

However, interpretation (28)b shows that pro and en Joan can be co-indexed. Therefore, Picallo proposes to revise the definition in (21) as follows:

(29) Binding domain (version 2)

$\beta$ is a binding domain for $\alpha$ iff $\beta$ is the minimal subchain of the T-governor of $\alpha$ containing an argument accessible to $\alpha$, if there is one. If there is no accessible argument, the T-governor is the binding domain.
It follows that in (27) the binding domain of pro is the intermediate clause. In fact, it is “the minimal subchain of the T-governor containing an accessible argument for pro” – i.e. the clitic object pronoun:

(30)

Another prediction follows from the definition in (29): since the binding domain for a pronominal subject in a subjunctive complement clause is the matrix clause, one might expect that the subject position in a subjunctive clause is an available position for anaphors, which may be bound by the matrix subject. This is an incorrect prediction, however:

(31) *[En Pere] espera que si mateix arribi.
    [The Pere] hopes that himself arrives(subj).
But the ungrammaticality of sentence (31) may actually be due to independent reasons related to the licensing of lexical anaphors in the subject position of finite clauses.\(^6\)

Another set of data that are unexpected under the definition of binding domain given in (29) is exemplified by sentences like (8), repeated here:

(32) En Pere va convèncer [en Jordi] que \(pro\) anés a Nova York.
    The Pere persuaded [the Jordi] that \(pro\) went(subj) to New York
    ‘Pere persuaded Jordi to go to New York’

In this sentence \(pro\) is co-indexed with the object of the main clause – this shows that the binding domain of \(pro\) is the embedded clause, despite the subjunctive verb. But if the embedded clause is an opaque domain, one would expect that the embedded and the matrix subjects could be co-referent. This does not seem to be the case:

(33) *[En Pere], va convèncer en Jordi que \(pro\) anés a Nova York.
    [The Pere] persuaded the Jordi that \(pro\) went(subj) to New York

Moreover, the fact that \(pro\) may be co-referent with the object in the matrix clause in (32) contrasts with the fact that it cannot co-refer with the object in the matrix clause in sentences like (26). Picallo claims that the contrast between sentences (32) and (26) follows from the structural position that the subordinate clause occupies at S-structure in sentences like (32), due to some conditions on Case assignment to sentential arguments. In particular, “Case Resistance Principle” (Stowell 1981) prevents clausal arguments from occupying a position where Case is assigned:

(34) \textit{Case Resistance Principle}
    Case cannot be assigned to a category bearing a Case-assigning feature.

Picallo suggests that sentential arguments cannot remain in a Case-assignment position, due to this principle. Hence, they have to adjoin to VP:

\(^6\) I refer to Picallo (1985) for the complete discussion on this problem. See also Rizzi (1986).
In the above structure, both the matrix subject and object c-command pro. But after the CP movement, the following S-structure results:
In the above diagram, only the matrix subject c-commands pro. Accordingly, the binding domain of pro will include the matrix subject, but it will not contain the matrix object, which is no longer an accessible argument.

Moreover, Picallo suggests that the Case Resistance Principle applies to internal clausal arguments of transitive predicates (like persuade, convince, etc.) but it does not apply to clauses subcategorized for by ergative-type verbs (like please, etc.). This would explain why the Case Resistance Principles applies to sentence (32) but not to sentence (26) – if it did, sentence (26) would have the same status as sentence (32) with respect to the matrix object.

Not all subjunctive clauses, however, are open domains. Picallo observes, indeed, that modal verbs determines opacity. Consider for instance the following contrast:

(37) a. \( \text{Pro}_1 \) sentien que \( \text{pro}^{*1} \) produissin una falsa impressió.
\( \text{Pro}_1 \) regretted(3pl) that \( \text{pro}^{*1} \) produced(subj, 3pl) a false impression
‘They\(_1\) regretted that they\(_{*1}\) give a false impression’
b. \textit{Pro}₁ sentien que \textit{pro}₁ deguessin produir una falsa impressió.
\textit{Pro}₁ regretted(3pl) that \textit{pro}₁ must(subj, 3pl) produce(inf) a false impression
\textit{‘They}₁ regretted that they₁ must give a false impression’

In sentence (37)a, in which obviation obtains, the form carrying the subjunctive morphology is a full verb, whereas in (37)b, in which obviation does not obtain, it is a modal verbs.

Picallo argues that modal verbs may appear in the embedded I. Though being part of a T-chain, however, they are supposed to be operators and, as operators, to raise to C. She finally stipulates that sentential operators, such as [+Tense], or modal verbs, delimit a binding domain.

This proposal will be proposed again and enlarged by Raposo (1985).

\section*{2.2.2 Raposo (1985)}

Raposo observes that from the viewpoint of Chomsky’s (1981) definition of binding domain, the following contrast in Portuguese is unexpected:

(38)  
\begin{itemize}
  \item a. \hspace{1em} [O Manel]₁ pensa que \textit{pro}₁/₂ lê bastantes livros.
    \textit{‘Manel}₁ thinks he₁/₂ reads(ind) enough books
  
  \item b. \hspace{1em} [O Manel]₁ deseja que \textit{pro}₁/₂ leia mais livros.
    \textit{‘Manel}₁ wishes that he₁/₂ reads(subj) more books
\end{itemize}

If a clause is a binding domain, as according to Chomsky, it is unexpected that sentence (38)a is grammatical under the co-referential interpretation, whereas (38)b is not.

The explicative theory he works out for the facts above, crucially relies on the properties of the subjunctive mood – the subjunctive mood cannot express a time reference that is autonomous relative to the time reference in the matrix clause. To characterize this property, Raposo postulates the existence of a “verbal operators” in
C, “[TENSE]”. He supposes that verbs in the indicative are able to denote a time reference, whereas verbs in the subjunctive are not. Hence, indicative argument clauses have a [+TENSE] operator in C, whereas subjunctive argument clauses have a [–TENSE] operator in C.

Raposo assumes that in Romance languages there are two kinds of domain counting as a binding domain:

(39) Binding Domain in Romance languages:
   a. the c-commanding domain of a subject counts as a binding domain;
   b. the c-command domain of a “verbal operator” – modals, auxiliaries, and the operator [+TENSE] – counts as a binding domain.

Given these assumptions, he proposes that in complement clauses of “W-predicate” (will predicates), like (38)b, pro cannot co-refer with the subject of the matrix clause – there is no verbal operator in C°, and so the embedded clause is not an opaque domain. Hence, the binding domain of pro is the matrix clause. In complement clauses of “E-predicate” (epistemic predicates), like (38)a, on the other hand, the binding domain of pro of the embedded clause is the embedded clause itself, due to the presence of the operator [+TENSE] in the embedded C.

The second factor involved in the creation of an opaque domain is the presence of a subject. This accounts for the fact that the object of a subjunctive complement clause co-refer freely outside the clause itself:

(40) [O Manel]₁ desea que a Maria o₁/₂ insulte.  
[The Manel]₁ wishes that the Maria him₁/₂ insults(subj)  
‘Manel₁ wishes that Maria insulted him₁/₂’.

Raposo argues that the presence of the subject in the embedded clause closes the binding domain for the embedded object, which is therefore free to co-refer with the matrix subject (see structure (24)).

The presence of the subject closes the binding domain even for a subject in a doubly embedded clause:
(41) [O Eduardo]₁ deseja que [o Manel]₂ queira que ele₁ᵣₛ₂/₃ compre um automóvel novo.
    [The Eduardo]₁ wishes that [the Manel]₂ wants(subj) that he₁ᵣₛ₂ buys(subj) a car new.
    ‘Eduardo₁ wishes that Manel₂ wanted him₁ᵣₛ₂ to buy a new car’.

The intermediate subject creates an opaque domain for the most embedded subject, which is therefore free to co-refer outside its binding domain.

Raposo also observes that the characterization of a binding domain in terms of c-commanding domain of a subject and of the operator [+TENSE] in an embedded C° is not sufficient to account for the cases in which pro can co-refer despite the subjunctive. The examples Raposo discusses are the Portuguese equivalents to some of the French sentences that Ruwet (1984) noticed:

(42) a. [O Manel]₁ deseja que pro₁ᵣₛ₂ seja admitido no concurso.
    [The Manel]₁ wishes that pro₁ᵣₛ₂ is(subj) admitted in-the contest
    ‘Manel₁ wishes that he₁ᵣₛ₂/she was admitted in the contest’.

b. [O Manel]₁ exige que pro₁ᵣₛ₂ possa ver o seu advogado.
    [The Manel]₁ requires that pro₁ᵣₛ₂ can(subj) see(inf) the his lawyer.
    ‘Manel₁ wants that he₁ᵣₛ₂/she will be able to leave’.

c. [A Maria]₁ prefere que pro₁ᵣₛ₂ não tivesse encontrado o Manel.
    [The Maria]₁ preferred that pro₁ᵣₛ₂ not had(subj) met the Manel.
    ‘Maria₁ wished she₁ᵣₛ₂/he had not met Manel’.

Raposo supposes that auxiliary verbs in a complement clause need to not be bound to a [+TENSE] operator in C° – he argues that “tense” auxiliaries are able to refer to a time specification and are not dependent on the time frame of the matrix predicate. He also claims that the same is true for modal verbs and passive auxiliaries – this is due to the fact that the operator [+TENSE] in C°, tense auxiliaries, passive auxiliaries, and modals are verbal operators that induce opacity.
2.2.3 Everaert (1986)

Everaert argues that the claim that obviation follows from an extension of the binding domain is unwarranted, and proposes an approach that relies on William’s (1985) Association theory.

According to Williams, a verb is able to specify “Associations” between its arguments and their internal argument structures. Let us consider, for instance, the following sentence:

(43) *John\textsubscript{1} performed his\textsubscript{1} autopsy,

The verb *perform* is supposed to associate its agent with the actor role of the event expressed by the object. Moreover, he claims that Condition B of Binding Theory is sensitive to implicit arguments – that is, unassigned theta-roles (see section 4.2.1).

Specifically, an implicit argument binds a DP if the verb (or noun) of which it is an implicit argument c-commands that DP and it is co-indexed with that DP. Given these principles, the following Association is supposed to hold for sentence (43) – dashed lines indicates theta-marking:

(44) John \textit{performed [DP his autopsy]}  
\hspace{1cm} (agent, theme) \hspace{1cm} (actor, patient)  
\hspace{1cm} Association

Moreover, the index of thematic roles must be uniformly linked to the referential index of the constituent it is assigned to:

(45) John\textsubscript{1} \textit{performed [DP his\textsubscript{2} autopsy]}  
\hspace{1cm} (agent\textsubscript{1}, theme) \hspace{1cm} (actor\textsubscript{1}, patient\textsubscript{2})  
\hspace{1cm} Association
Williams claims that the patient argument of *autopsy* cannot in fact be co-indexed with the implicit actor argument, because the latter binds the former, which is pronominal. Hence, if *his* has the index “1”, like in (43), a Condition B violation arises.

Given this mechanism, Everaert argues that obviation can be explained in terms of Association. He compares the two following sentences in Dutch:

(46) a. Jan\(_1\) wil dat hij\(_{1/2}\) het boek leest.
   Jan\(_1\) wants that he\(_{1/2}\) the book reads
   ‘Jan\(_1\) wants him\(_{1/2}\) to read the book’.

   c. Jan\(_1\) wil van Karel\(_2\) dat hij\(_{1/2}\) het boek leest.
   Jan\(_1\) wants of Karel\(_2\) that he\(_{1/2}\) the book reads
   ‘Jan\(_1\) wants Karel to read the book’.

He assumes that in (46)a the verb *wollen* ‘want’ has an implicit argument, which is explicit in (46)b – *van Karel*, ‘of Karel’. Hence, the following Associations are supposed to hold in sentences (46):

(47) a. Jan\(_1\) wil van Karel \[CP dat hij\(_2\) [het boek] leest\]
   <th\(^1\), th\(^2\), th\(^3\)> [CP dat hij\(_2\) [het boek] leest]

   b. Jan\(_1\) wil \[\emptyset \[CP dat hij\(_2\) [het boek] leest\]
   <th\(^1\), th\(^2\), th\(^3\)> [CP dat hij\(_2\) [het boek] leest]

Thus, if *hij* was co-indexed with the matrix subject *Jan*, a violation of the Association required by the verb *wollen* and would arise; alternatively the condition of uniformity on the indexes illustrated by example (45) would be violated.

Everaert’s theory predicts that if the embedded subject is not assigned the theta-role that is generally assigned to the external argument of the embedded verb, no disjoint reference effect should arise. Everaert argues that modal verbs assign a “secondary theta-role” to their subject. Furthermore, Association is assumed to be sensitive to this “secondary theta-role”. Hence, if the verb of the embedded clause is
modal, obviation should not arise. This prediction seems to be borne out: in sentence (48)a \textit{hij} cannot be co-referent with \textit{Peter} (supposedly due to the matrix verb Association), whereas in sentence (48)b the matrix and the embedded subjects co-refer:

(48) a. Peter\textsubscript{1} eiste van Jan\textsubscript{2} dat hij\textsubscript{1/2} meewerkt.
    Peter\textsubscript{1} demanded from Jan\textsubscript{2} that he\textsubscript{1/2} cooperates
    ‘Peter\textsubscript{1} asked Jan\textsubscript{2} that he\textsubscript{1/2} would cooperate’.

c. Peter\textsubscript{1} eiste van Jan\textsubscript{2} dat hij\textsubscript{1/2} mee mocht werken.
    Peter\textsubscript{1} demanded from Jan\textsubscript{2} that he\textsubscript{1/2} can cooperate
    ‘Peter\textsubscript{1} asked Jan\textsubscript{2} that he\textsubscript{1/2} would be allowed to cooperate’.

2.2.4 \textit{Rizzi (1986)}

A similar viewpoint on obviation in subjunctive clauses to that worked out by Picallo (1985) has been further supported by Rizzi (1986). His proposal stems from the following tenets:

(49) a. The subjunctive tense is anaphoric;
    b. \textit{Governing Category}
    \hspace{1em}Z is a GC for X iff Z is the minimal category with a subject, containing
    \hspace{1em}X, a governor G for X, and where the binding requirements of X and G
    \hspace{1em}are satisfiable.

Assumptions (49)a and b implies that the Governing Category of a pronominal in the subject position of a subjunctive clause is the entire sentence (the minimal category where the binding requirements of G – the subjunctive T, which is anaphoric – are satisfied is the matrix clause.

This account predicts the following Italian sentences, analogous to the examples from Catalan discussed by Picallo (see (18), (25))\textsuperscript{7}:

\textsuperscript{7} Rizzi does not make any other prediction – his article is not specifically on subjunctive obviation, but on the anaphor-agreement effect (anaphors are fundamentally incompatible with AgrS). Rizzi’s
(50) a.  *Gianni₁ vuole che [lui/pro]₁ scriva un libro.
Gianni₁ wants that [he/pro]₁ writes(subj) a book
b.  Gianni₁ spera che Maria voglia che [lui/pro]₁ scriva un libro.
Gianni₁ hopes that Maria wants that [he/pro]₁ writes(subj) a book
‘Gianni₁ hopes that Maria wants him₁ to write a book’.

2.2.5  *Kempchinsky (1987)*

Kempchinsky (1987) argues that in Spanish, the subjunctive disjoint reference effect is due to the interaction of LF requirements on subcategorization and the syntax of the subjunctive.

She (1987) proposes that volitional verbs select for a subjunctive operator in C. In languages in which the subjunctive mood is marked by a set of inflectional endings on the verb, the subjunctive I serves as such an operator and must raise to C at Logical Form in order to satisfy the subcategorization requirements of the matrix predicate:

account on obviation is able to make the same predictions as Picallo’s: sentences like (18), (25) and (26) derive directly, but others would need some refinement:

- in (23) and its Italian counterparts the embedded object can be co-indexed with the matrix subject; the binding requirements of the subjunctive I, however, are not satisfiable within the embedded clause. Then, in principle, the Governing Category for the embedded object should be the matrix clause;
- in (32) the embedded subject can be co-indexed with the matrix object; here, again, the binding requirements of the subjunctive I are not satisfiable within the embedded CP, and the coindexation between the embedded subject and the matrix object (and of the matrix subject as well) should not be available.

Notice, finally, that Rizzi’s definition of Governing Category is not able to account for the data discussed by Ruwet.
Moreover, she assumes Chomsky’s (1986) definition of binding domain in terms of “Complete Functional Complex”:

(52) a. **Governing Category**
   The Governing Category of \( x \) is the least complete functional complex containing the governor of \( x \).

b. **Complete Functional Complex**
   A least complete functional complex is the smallest category in which all grammatical functions are satisfied.

By the definition of Complete Functional Complex, a Governing Category must contain a subject – one of the grammatical functions that must be satisfied. Exploiting these notions, Kempchinsky argues that the subjunctive I is the governor of the subject in an embedded clause in the subjunctive. Given that the subjunctive I moves to C at Logical Form, she proposes that the Governing Category of \( pro \) is no longer the embedded IP – the embedded IP is no longer the “smallest category in which all grammatical functions are satisfied” (“Complete Functional Complex” – henceforth, CFC) containing the governor of \( pro \) (the subjunctive I), since the embedded IP contains the governor of \( pro \) anymore.
Thus, the Governing Category of *pro* is the immediately dominating clause. The immediately dominating clause is now the CFC containing the governor of *pro*. The pronominal embedded subject must therefore be free in its Governing Category, provided Condition B of Binding Theory. If the Governing Category for the embedded subject is the matrix clause, *pro* must be referentially disjoint from the matrix subject.

As for the possibility of *pro* being co-referent with a matrix object (the Spanish counterpart to (32)):

(54) Forcé a Ana₁ a que *pro₁* visitara al médico.
    Forced(1sg) to Ana₁ to that *pro₁* visited(subj) to-the doctor
    ‘I forced Ana to visit the doctor’

Kempchinsky assumes the theory proposed by Picallo (1985) – that is, because of the Case Resistance Principle, the embedded CP adjoins to the matrix VP, so that *pro* is c-commanded by the matrix subject, but not by the matrix object. Hence, *pro* and the matrix subject cannot be co-indexed – this would give rise to a Principle B violation; but *pro* and the matrix object can indeed be co-indexed.

Moreover, Kempchinsky’s proposal predicts that the verb in the subjunctive should not move to C in languages in which the subjunctive morphology does not differ from indicative morphology – that is, the subjunctive morphology does not serve as the subjunctive operator, under her hypothesis. Hence, in these languages the Governing Category for a pronominal embedded subject should not include the matrix clause. Balkan languages are such languages, according to Kempchinsky.
In particular, she consider the case of Romanian. In this language the subjunctive mood does not differ from indicative with respect to inflection. Rather, it is marked by the preverbal element să:

\[(55)\] Vreau ca Ana să vină cu noi.
Want(1sg) that Ana SĂ come with us.
‘I want Ana to come with us’.

Kempchinsky suggests that in Romanian the subjunctive operator moving to C is să – the subjunctive I does not differ from indicative I and remains *in-situ*:

\[(56)\]

```
CP
  C
  IP
    DP I'
    I FP
      vină F VP
        să V
```

This proposal predicts that if the embedded subject is *pro*, it should be free to co-refer with the matrix subject, since its governor does not move to C. Hence, the embedded IP *is* a “Complete Functional Complex” containing the governor of *pro*. That is, the embedded IP is the Governing Category of *pro*. This prediction seems to be correct\(^8\):

\(^8\) Kempchinsky observes that in Romanian the complementizer *ca* does not appear, if *pro* is the subject of the embedded clause.
(57) Vreau să merg.  
Want(1sg) SĂ leave(1sg).  
‘I want to leave’.  

Sentence (57) is indeed grammatical under the co-referential interpretation.

2.2.6 Progovac (1993, 1994)

Like Picallo (1985), Rizzi (1986), Manzini (2000) Progovac claims that tense in subjunctive clauses is anaphoric. Moreover, she claims that the absence of tense makes it possible for Infl/Comp projections to become invisible (is deleted) at LF. In her opinion, this can account for the following generalizations:

(58) A subject pronoun in a subjunctive clause must be disjoint in reference from the subject of its matrix clause in certain Romance languages.

She then defines a Governing Category for an element $x$ as in Chomsky (1981) (see definition (15)). If Infl is the governor of pro in the sentences at issue, and if Infl (as well as subjunctive Comp), which is the governor of pro, is deleted at LF, the subjunctive clause is not a Governing Category for pro.

Progovac’s proposal is also able to account for the following generalization:

(59) The disjointness effect holds only between the subjunctive subject and the subject of the immediately dominating clause.

She claims that in sentences like (50)b or (41), which involve double embedding, the intermediate IP contains all the relevant items in order to be a Governing Category – that is, the pronoun, the governor of the pronoun, and a SUBJECT⁹.

⁹ Notice, however, that the “Infl/Comp deletion” should apply to the intermediate clause as well, so that the binding domain of pro should extend to the matrix clause, and it should be obviative with respect to the matrix subject, contrary to fact.
2.2.7  Tsoulas (1996)

Tsoulas argues that the problem of obviation may be stated in the following terms: the embedded subject comes to be part of the same binding domain as the matrix subject, and consequently, of the matrix object as well. This domain does not include the embedded object. He then tries to implement an account of the phenomenon in minimalist terms.

According to Chomsky (1995) Condition B of Binding Theory can be formulated in these terms:

(60) If $\alpha$ is a pronominal, interpret it as disjoint from every c-commanding phrase in $D$, $D$ is the relevant local domain.

Tsoulas proposes to define the local domain “$D$” in terms of Chomsky’s (1995) “minimal domain” – that is, the minimal subset of categories locally related to a head. Moreover, Chomsky maintains that a minimal domain is defined derivationally, not representationally: if a head moves, the minimal domain is defined when the chain is formed by moving the head to its landing site.

Given Chomsky’s definition of Principle B and of minimal domain, Tsoula supposes that obviation involves some extension of the minimal domain containing the embedded subject, which will include the arguments of the higher verbs. In particular, he proposes that the embedded C moves to V:

(61)  

\[
\begin{array}{c}
\text{VP} \\
\text{Arg} \\
\text{V}' \\
\text{V} \\
\text{CP} \\
\text{C} \\
\text{AgrSP} \\
\text{Subj} \\
\ldots
\end{array}
\]
The resulting minimal domain of C includes both the matrix argument and the embedded subject. Finally, given Principle B, the pronominal embedded subject must be interpreted as disjoint from the matrix argument.

Tsoulas also claims that postulating a C-to-V movement can be supported due to selectional reasons – that is, at least some selectional features of subjunctive clauses must be checked. In particular, he argues that the subjunctive mood has an indefiniteness feature, which must be checked by V (Tsoulas 1994a, b).

This hypothesis is able to predict that in subjunctive complements the subject cannot be co-indexed with a matrix c-commanding argument, but that in indicative complements no such effects arise – the indicative mood does not present the indefiniteness feature triggering the C-to-V movement. Moreover, it predicts that embedded objects co-refer freely with a matrix argument, since they do not belong to the minimal domain of C:

(62)

2.2.8 Avrutin (1994), Avrutin-Babyonyshev (1997)
Avrutin and Babyonyshev’s theory of obviation is based on data from Russian,
which parallel the data from Romance languages. The paradigm they analyze is the following:

(63) a. Volodja₁ xočet čtoby on₁/₂ pocelovala Nadju. Volodya₁ wants that(subj) he₁/₂ kissed Nadya
    ‘Volodja wants to kiss Nadya’.

b. Volodja₁ skazal čto on₁/₂ poceloval Nadju. Volodya₁ said that he₁/₂ kissed Nadya
    ‘Volodja₁ said that he₁/₂ kissed Nadya’.

c. Volodja₁ xočet čtoby Nadja pocelovala ego₁/₂. Volodya₁ wants that(subj) Nadya kissed him₁/₂
    ‘Volodja₁ wants Nadja to kiss him₁/₂’.

d. Volodja₁ xočet čtoby emu₁ bylo veselo. Volodya₁ wanted that(subj) him(dat)₁ was(sg, neut) fun
    ‘Volodya wants to be having fun’.

e. Volodja ugovoril Nadju₁ čtoby ona₁ poexala v Evropu. Volodya persuaded Nadya₁ that(subj) she₁ went to Europe
    ‘Volodya persuaded Nadya to go to Europe’.

The generalizations emerging from the data in (63) and that they aim to account for are the following:

(64) The disjoint reference effect obtains between the nominative matrix and the
    nominative embedded subject of subjunctive clauses (in Russian, introduced by
    the complementizer čtoby).

The subjunctive disjoint reference effect does not occur, indeed, if the embedded
clause is in the indicative (introduced by the complementizer čto – see example
(63)b), between the matrix subject and the embedded object (see example (63)c), be-
tween the matrix subject and the embedded quirky (non-nominative) subject (see
(63)d), and between the matrix object and the embedded nominative subject (see
(63)e).

The basic assumptions of their proposal are the following:
(65)  a. V moves to I (that is, to T and to AgrS) and (covertly in Russian) to C, with no cross-linguistic variation;

b. Volitional verbs are “future oriented”: «the event described in the subjunctive clause is necessarily interpreted as taking place later than the event of the matrix clause» (Avrutin-Babyonychev 1997, 241);

c. An event operator that co-binds the events of the embedded and of the matrix clause is responsible for the temporal ordering, and that the embedded clause C is such an operator.

d. The subjunctive operator C moves at LF to the matrix C, from where it can c-command and binds both the matrix VP and the embedded VP, passing through any head up above;

e. VPs are EventPs. This movement is claimed to pass through any X above the embedded CP;

f. AgrS (but not AgrO) is pronominal;

g. AgrS is co-indexed with constituents standing in a specifier-head relation with them.

Assumption (64)a implies the following movement of V:

(66) a. TP
    / \
   T  VP
   /       V ...
  /  \
 V   ...

According to assumption (64)d the following configurations are supposed to hold:
(67) a. 

```
(\text{TP})
```

```
\text{T} \quad \text{CP-subj}
```

```
\text{C} \quad \text{AgrSP}
```

```
\text{AgrS} \quad \text{C-subj}
```

```
\text{T} \quad \text{AgrS}
```

```
\text{V} \quad \text{T}
```

b. 

```
(\text{AgrSP})
```

```
\text{AgrS} \quad (\text{TP})
```

```
\text{T} \quad \text{CP}
```

```
\text{C-subj} \quad \text{T}
```

```
\text{AgrS} \quad \text{C-subj}
```

```
\text{T} \quad \text{AgrS}
```

```
\text{V} \quad \text{T}
```
This theoretical apparatus is able explain the data in (63). In sentences like (63)a obviation is predicted to take place at LF between the matrix and the embedded AgrS. In a configuration like (67)a, indeed, the matrix AgrS c-commands the embedded AgrS. According to assumption (65)g, moreover, the matrix and the embedded AgrS are co-indexed:

Finally, according to assumption (65)g, AgrS is pronominal. Therefore, it undergoes Binding Principle B. In structure (68) the matrix AgrS c-commands and is co-indexed with the embedded AgrS. Thus, the matrix AgrS binds the embedded AgrS. But this is a violation of Principle B, which requires that a pronominal be free in its binding domain. It must be noticed that obviation does not involve the matrix and the embedded subject in themselves, rather the matrix and the embedded AgrS. It must be also noticed that no binding domain extension is claimed to occur, differing from any of the other Binding-Theoretical hypotheses.

The grammaticality of the co-referential interpretation of sentences (63)b to (63)e under the co-referential reading of the matrix and the embedded subject is pre-
dicted straightforwardly: in example (63)b the embedded C does not raise to the matrix C, because declarative predicates do not impose any requirements on the temporal ordering of the matrix and the embedded event. In example (63)c the embedded AgrO is not pronominal. In sentence (63)d the quirky subject does not agree with the verb; thus, *emu* and the embedded AgrS are not co-indexed. Finally, in sentence (63)e the matrix AgrO is not pronominal.

2.2.9 *Kempchinsky (1998)*

Kempchinsky (1998) works out a theory of subjunctive obviation exploiting some minimalist notions. In particular, she argues that subjunctive obviation may be due to the Case-checking. The basic generalization of her new hypothesis is the following:

(69) *Generalization (Kempchinsky 1998: 144)*

A pronominal subjunctive subject cannot be bound by a DP in the higher clause if the subjunctive clause is a complement to a volitional predicate [….] and the higher DP is the subject of its clause. Pronominal subjunctive subjects can be bound by a DP in the higher clause if the subjunctive clause is a complement to a (negated) epistemic or factive-emotive predicate, or the higher DP is the object of its clause.

This generalization does not differ from her (1987) previous one. This generalization, however, turns out to be inadequate, despite being able to capture a cross-linguistically robust set of data, since it excludes the possibility of obviation in non-volitional contexts.

Given the above generalization, however, Kempchinsky works out the following hypothesis:

(70) The binding domain of a DP argument is the domain in which Case-checking is licensed.

Hypothesis (70) exploits the following assumptions:
(71) a. C is the ultimate licenser of Nominative Case;
    b. The functional structure of a subjunctive clause contains at least two levels: MP (“Mood Phrase”) and TP;
    c. The functional structure of a subjunctive clause lacks the CP.

The assumption (71)a is implied by a proposal of Watanabe (1993), further developed by Koizumi (1995). It claims that Case checking consists of three steps (“three-layered Case Theory”); Nominative Case-checking obtains in the following steps:

(i) the subject DP must raise to [Spec; AgrS], and T must raise to AgrS:

(72) \[
\begin{array}{c}
\text{AgrSP} \\
\text{DP} \\downarrow \\
\text{[AgrS'] [AgrS T AgrS] [TP t_T [VP t_Dp …}} \\
\end{array}
\]

(ii) a new feature [F] is then created in AgrS:

(73) \[
\begin{array}{c}
\text{AgrSP} \\
\text{DP} \\downarrow \\
\text{[AgrS [F] T AgrS] …}} \\
\end{array}
\]

(iii) the feature [F] raise to C in order to be checked:

(74) \[
\begin{array}{c}
\text{CP} \\
\text{[C [F] [AgrS[F] T AgrS] [AgrSP DP [AgrS' t_AgrS …}} \\
\end{array}
\]

Hence, C is the ultimate licenser of Nominative Case.

Given these assumptions, the Nominative Case of the embedded subject pro undergoes checking when pro moves to [Spec; AgrSP], and T to AgrSP; the new feature [F] is then created in AgrS; it must now be checked against C; but subjunctive clauses lack the CP – thus, the [F] feature must be checked against the C of the superordinate clause. If the binding domain of a DP argument is the domain in which Case-checking is licensed, the matrix clause is the binding domain of pro. Consequently, pro must be obviative with respect to the matrix subject.
Similarly to Picallo (1985) and Rizzi (1986), Manzini suggests that the subjunctive is an indefinite tense bound by an intensional operator in a “syntactic dependency”. To expound, the subjunctive is licensed within “dependencies” connecting the embedded tense, which is placed in I, and an operator in the higher sentence (the negative operator, the question operator, for instance) or a lexical predicate.

I contains is assumed to contain [Tense] and [Agr]. Given that it can enter a dependency with the matrix I, the matrix and the embedded [Agr] are supposed to belong to the same dependency. Moreover, Manzini proposes that if [Agr] is pronominal, it is supposedly disjoint in reference from other [Agr] that c-commands it locally (where “locally” means within the same syntactic dependency), due to Principle B of Binding Theory.

Given these considerations, Manzini’s approach is able to predict the basic data:

(75) *Voglio che io vada.
Want(1sg) that I go(subj, 1sg)

In example (75) the matrix and the embedded subject agree with the matrix and the embedded verb respectively. They are supposed to belong to the same “dependency”. Hence, they cannot be co-indexed.

It is also able to generate the following sentence:

(76) Mi chiedono che io vada.
Me ask(3pl) that I go(subj, 1sg)
‘They ask me to go’.

The embedded object does not agree with the matrix verb. Hence there is no restriction on the referential properties of the embedded subject, which is allowed to co-refer with the matrix object.

It correctly predicts the status of sentences involving rationale clauses:

(77) *Vengo perché ti aiuti.
Come(1sg) in-order-that you help(subj, 1sg)
‘I’m coming in order to help you’.
Manzini indeed assumes that a rationale clause embeds an “abstract volitional predicate” – hence, sentence (77) can be paraphrased in the following way (still rendering an ungrammaticality):

(78)  *Vengo perchè voglio che ti aiuti.
Come(1sg) because want(1sg) that you help(subj, 1sg)

Finally, she assumes that a subjunctive dependency connects a matrix sentence to its complement, and to an adjunct embedded in its complement. For instance, in a sentence with the following simplified structure the matrix I is supposed to instantiate two dependencies (shown by the dashed lines): one with the complement I, and one with the adjunct I:

(79)

```
IP
  / \    
I   CP (argument)
  / \    
CP (arg.) CP (adjunct)
  / \    
IP   IP
  / \    
I   I
```

Given that there is no dependency between the adjoined CP and the core argument CP, Manzini’s account predicts that there is no disjoint reference effect between the subjects of the argument CP and that of the adjoined CP (example (80)) – there is no c-command between the argument clause subject and the adjoined clause subject; but

1 Notice that intuitively the subject of this “abstract volitional predicate” refers to the subject of the matrix clause, although it could be the case that it refers to someone else:

(i)  Vengo perché Gianni vuole che (io) ti aiuti.
Come(1sg) because Gianni wants that (I) you help(subj, 1sg)
‘I come because Gianni wants me to help you’.
there is between the matrix subject and any of the two embedded subjects – the matrix subject c-commands both the argument clause subject and the adjoined clause subject:

(80) a.  Pro vuole che io vada dopo che pro$_{1s}$ gli abbia parlato.
    Pro wants that I go(subj) after that pro$_{1s}$ him have(subj) talked
    ‘He/che wants me to leave after I have talked with him’.

b.  Pro$_{1}$ vuole che io vada dopo che pro$_{1/2}$ mi abbia parlato.
    Pro$_{1}$ wants that I go(subj) after that pro$_{1/2}$ me has(subj) talked
    ‘[He/she]$_{1}$ wants me to go after [he/she]$_{1/2}$ has talked with me’.

2.2.11  Suñer (1986)

Suñer’s (1986) proposal occupies a particular position among the Binding-Theoretical theories on obviation, since she gives a peculiar interpretation of Binding Theory in volitional contexts. Similar to Kempchinsky’s (1987) and Raposo’s (1985) theories, Suñer’s crucially relies on a lexical property of the subjunctive clauses complementizer in order to account for the disjoint reference effect.

She claims that the theories that try to explain obviation in terms of a violation of Principle B, and even those exploiting the notion of mood competition cannot be sufficient on an empirical basis. As for the Binding-Theoretical proposals, she argues that the property of being the complement clauses with a tense-less subjunctive verb is contradicted by many data of this sort in Spanish:

(81)  La$_{1}$ invitamos a que pro$_{1}$ defienda su hipótesis.
    Her$_{1}$ invited(past, 1pl) to that pro$_{1}$ defends(subj, pres) her hypothesis.
    ‘We invited her to defend her hypothesis’.

Example (81) does not follow the SOT. Hence, that subjunctive verbs are tense-less cannot be taken for granted, as all the theories so far have done.
As for Bouchard’s theory, Suñer discusses some data in which complementarity between subjunctive and infinitive is lacking\(^2\).

The alternative proposal worked out by Suñer is that obviation is due to a lexical feature in C, “WILL”, which is selected by volition and influence predicates (the only verbs showing the disjoint reference effect, according to Suñer). She assumes that indexing of nominal constituents has no restrictions – that is, there is nothing in itself that prevents \textit{pro} from being co-referent with the matrix subject. Binding Theory is reinterpreted as a device that checks at LF that the pronouns not be co-indexed with an antecedent within their Binding Domain. Finally, she postulates that the feature \textit{WILL} prevents the embedded and the matrix subjects from being co-referent.

The feature \textit{WILL}, however, does not require that the embedded subject and the matrix \textit{object} be referentially disjoint, as the following examples illustrate:

\begin{enumerate}
\item[(82)] José lo\(_1\) animó a que \textit{pro}_{1} apagara la TV.
   \begin{itemize}
   \item José him\(_1\) encouraged to that \textit{pro}_{1} turned-off(subj) the TV
   \item ‘José encouraged him to turn off the TV’.
   \end{itemize}

   Moreover, the feature \textit{WILL} prevents the matrix and the embedded subject from being \textit{strictly} co-referent only, but it does not prevent \textit{overlapping reference}:

\item[(83)] Lía\(_1\) animó Julián\(_2\) a que \textit{pro}_{1+2} escribieran algo juntos.
   \begin{itemize}
   \item Lía\(_1\) encouraged Julián\(_2\) to that \textit{pro}_{1+2} wrote(subj) something together.
   \item ‘Lía encouraged Julián to write something together’.
   \end{itemize}

Suñer’s proposal has the same inadequacies as Kempchinsky (1985, 1998) and Raposo (1985) proposals: it crucially relies on the tenet that obviation occurs only in volitional contexts.

\footnotesize
\(^2\) See examples (10). However, examples (10)b–c’ involve an auxiliary bearing the subjunctive morphology. Then, they are included among the cases discussed by Ruwet, in which the coreferential reading is available albeit the subjunctive complement clauses.


2.2.12 Conclusive remarks on the Binding-Theoretical approaches

Some of the Binding-Theoretical approaches are able to explain a large amount of data. Though, some observations may be advanced for any of them and for this approach as a whole.

Picallo’s (1985) approach labels as ungrammatical some of the data discussed by Ruwet (1984). Take for instance examples (11)a and c, repeated here:

(11) a. ?Je veux que je sois autorisé à partir demain.
     I want that I am(subj) authorized to leave(inf) tomorrow.
     ‘I want to be allowed to leave tomorrow’.

c. ?Je veux (absolument) que je sois parti dans dix minutes.
     I want (absolutely) that I am(subj) left in ten minutes.
     ‘I want to leave in ten minutes’.

Although sentences (11)a and c are rather marginal, still they are preferred to je veux que je parte, and cannot be considered ungrammatical. This fact is mysterious for Picallo’s proposal, as well as for most of the other theories based on the Binding Theory, with the only exception of Raposo’s (1985). The theory Raposo (1985) works out, however, explains sentences (11)a and c, but only by means of ad hoc assumptions. As for other theories, namely Rizzi (1986), Suñer (1986), Kempchinsky (1987, 1998), Progovac (1993, 1994), Tsoulas (1996), Avrutin (1994), Avrutin-Babyonyshev (1997), Manzini (2000), it is not clear why sometimes pro in the subject position of a subjunctive clause is obviative, and sometimes it is not, like in sentences (11)a and c, and in sentence (11)b repeated here:

(11) b. ?Je veux que je puisse partir dès demain.
     I want that I can(subj) leave(inf) by tomorrow.
     ‘I want to be able to leave by tomorrow’.

It must be observed that sentences (11) have a large correspondence in all Romance languages showing subjunctive obviation, as we will see in the following chapter. This fact cannot be accidental and must be explained.

Furthermore, the theories that argue that the binding domain of pro extends to the matrix clause if the embedded clause is in the subjunctive, like Picallo’s, predict
that the embedded subject should be obviative with respect to any of the matrix arguments. Therefore, examples with directive verbs in which the embedded subject can be co-indexed with the embedded object are problematic.

Another common problem to all theories based on Binding Theory (noticed by Schlenker 2005) concerns some facts on overlapping reference. He observes that Binding Condition B prohibits not only co-reference, but also overlapping reference:

(84)  #Tu vous admireras.

You(sg) you(pl) will-admire.

If obviation were a consequence of Binding Theory, one would expect that the effect in (84) should occur even in embedded subjunctive clauses. But this prediction is not borne out:

(85)  a.  *Tu voudras que tu te rases à 7h.

You(sg) will-want that you(sg) you(sg) shave(subj) at 7am

b.  Tu voudras que vous vous raisez à 7h.

You(sg) will-want that you(pl) you(pl) shave (subj) at 7am

‘You will want for you to shave at 7am’.

Shlenker takes these facts as a piece of counterevidence against the Binding-Theoretical analysis of obviation.

Some of the Binding-Theoretical approaches, furthermore, are too powerful in some other respect. Some of them, namely Avrutin (1994), Avrutin-Babyonyshchev (1997), Manzini (2000), predict that obviation obtains only between the matrix and the embedded subjects. There are data, however, that show that the embedded subject can be obviative even with respect to constituents that do not serve as grammatical subjects – see, for instance, the following sentences:

(86)  a.  Lo1 Preoccupa che pro*1/2 parta domani.

Him1 Worries that pro*1/2 leaves(subj) tomorrow

‘It worries him1 that he*1/2/she will leave tomorrow’.
b. A Gianni\textsubscript{1} sembra strano che \textit{pro}\textsubscript{1/2} parte domani.
   To Gianni\textsubscript{1} seems strange that \textit{pro}\textsubscript{1/2} leaves(subj) tomorrow
   ‘It seems strange to Gianni\textsubscript{1} that he\textsubscript{1/2}/she will leave tomorrow’.

Sentences in (86) are unexpected under the mentioned theories. Given that the matrix object does not agree with the matrix verb, there should be no restriction on the referential properties of the embedded subject with respect to a matrix argument. Hence, the ungrammaticality of co-indexation between the matrix object and the embedded subject is unexpected. Hence, the mentioned theories overgenerate.

Moreover, as for the proposals elaborated by Avrutin (1994) and Avrutin-Babyonyshev (1997), there is another type of counterevidence against them. It regards sentences with double embedding. Let us consider an example of double embedding in Italian:

\begin{itemize}
\item[(87)] [ Gianni\textsubscript{1} voleva [ che Maria\textsubscript{2} desiderasse [ che \textit{pro}\textsubscript{1/2/3} partisse]]],
   [Gianni\textsubscript{1} wanted [ that Maria\textsubscript{2} wished(subj) [ that \textit{pro}\textsubscript{1/2/3} left(subj)]]]
   ‘Gianni\textsubscript{1} wanted that Maria\textsubscript{2} wished that he\textsubscript{1/3}/she\textsubscript{2/3} left’.
\end{itemize}

Under Avrutin’s and Babyonyshev’s hypothesis, one would expect that the most embedded subject was not co-referent either with the intermediate subject, or with the matrix subject. The following LF structure of the matrix C should indeed obtain:
Since both the matrix and the intermediate AgrS c-commands the most deeply embedded AgrS, if the most embedded AgrS was co-indexed with any of the two c-commanding AgrS’s, it should be obviative with respect to it. This prediction, however, is not borne out, because the most embedded subject can be co-indexed with the matrix subject.

Finally, some of the theories, namely Raposo (1985), Kempchinsky (1987, 1998), Suñer (1986), are not able to generate obviative clauses under epistemic and emotive-factive predicates. They predict that only volitional and desiderative verbs trigger the disjoint reference effect. The data from Italian and from some other Romance languages in which even epistemic predicates select for subjunctive complements, which will be examined in the next chapter, show that obviation is not connected exclusively with volitional and desiderative predicates.
3 Subjunctive obviation: the empirical framework

In this chapter I will describe the phenomenon of obviation in subjunctive clauses as shown by data from Italian. The question which will be addressed is the following:

(1) When does obviation occur?

What is common to all the existing analyses on obviation is the observation that clausal complements in the subjunctive trigger the obviative interpretation of their subject with respect to the subject of the matrix clause. But this is not the whole story.

First, not all the subjunctive argument clauses determine obviation between their subject and a matrix argument. Ruwet (1984) observes that in French there exist subjunctive clauses selected by volitional predicates whose subject is not obligatorily disjoint in reference from the matrix one. As we will see, the examples discussed by Ruwet are not isolate among the Romance languages.

Second, Manzini (2000) observes that the obviative interpretation can occur even in adverbial clauses – i.e. in clauses that are not part of the argument structure of the matrix predicate, for instance, purpose clauses.

Finally, the subject of an embedded clause can be obviative even with respect to a matrix subject that does not comply with the syntactic function of subject.

Hence, to ask when does obviation occur is to ask the following questions:

(2) a. In which subordinate clauses does obviation occur?

b. Which type of subjunctive triggers obviation?

c. Which matrix argument must the embedded subject be disjoint from?
In order to answer the preceding questions we will proceed as follows. In section 3.1 we will consider the basic data (even from a cross-linguistic perspective), and analyze it. In section 3.2, we will try to understand which mood triggers obviation. To do so, we will consider the mood selection in Italian and other Romance languages. In section 3.3, 3.4, 3.5, 3.6, we will consider some factors that seem to affect the interpretative properties of the embedded subject – subjunctive tense, passivization, modalization, double embedding. In section 3.7 we will consider question (2)c and show that obviation does not necessarily involve the subject of the matrix clause, as generally supposed – at least, not the grammatical subject, that is, the DP which agrees with the matrix verb.

This analysis will allow us to formulate a generalization, in which at least one factor is involved which has been ignored by previous accounts on obviation, that is the argument referring to the attitude bearer (the individual who has an attitude – will, belief, hope – towards a certain propositional content). The generalization is the following:

(3) Obviation occurs only between the subject of a subjunctive clause and the relative bearer of the attitude iff the form carrying subjunctive morphology is a full verb.

The term “functional verbs” is to understand here in the sense of Cinque (1999, 2004) – that is, verbs directly inserted in the head position of a functional projection, for instance modal verbs, aspectual verbs, etc.

### 3.1 Basic data

It is well established in the literature that in Romance languages a pronominal subject of a complement clause in the subjunctive cannot co-refer with the matrix subject:
(4) a. **Catalan** (Picallo 1985)

[En Jordi]₁ espera que pro₁/₂ vingui.
[The Jordi]₁ hopes that pro₁/₂ comes(subj).
‘Jordi₁ hopes that he₁/₂/she will come’.

b. **French** (Farkas 1992)

Pierre₁ veut qu’il₁/₂ parte.
Pierre₁ wants that he₁/₂ leave.
‘Pierre₁ wants him₁/₂ to leave’.

c. **Portuguese** (Raposo 1985)

[O Manel]₁ deseja que pro₁/₂ leia mais livros.
[The Manel]₁ wishes that pro₁/₂ reads(subj) more books.
‘Manel₁ wishes that he₁/₂/she read more books’.

d. **Spanish** (Suñer 1986)

Paco₁ quiere que pro₁/₂ estu dice latín.
Paco₁ wants that pro₁/₂ studies(subj) Latin.
‘Paco₁ wants him₁/₂/her to study Latin’.

Italian is no exception:

(5) Gianni₁ vuole che pro₁/₂ legga il libro.
Gianni₁ wants that pro₁/₂ reads(subj) the book.
‘Gianni₁ wants him₁/₂/her to read the book’.

Here and there, the existing hypotheses on obviation consider some examples in which a subjunctive clause does not trigger the disjoint reference effect. The question therefore arises, when does obviation occur. In particular, the following properties are generally identified in any of the above sentences in the literature:

(6) a. the matrix verb is volitional;
b. the embedded verb is in the subjunctive;
c. the embedded subject is obviative with respect to the matrix subject;

Property $a$ and property $b$ are strictly connected, since volitional verbs select for subjunctive embedded clauses. As for these two properties, the question must be an-
swered whether obviation occurs even in complements of predicates that are not volitional in nature. Do all propositional predicates trigger obviation? It will be shown that obviation is connected to the subjunctive mood. Yet, not all embedded predicates in the subjunctive trigger the disjoint reference effect, as observed by Picallo (1985), by Raposo (1985), and by Ruwet (1984), who showed that tense and voice auxiliaries and modal verbs “weaken” the disjoint reference effect. We will see that the generalizations that the mentioned linguists formulated with respect to Catalan, Portuguese, and French respectively, are present even in Italian.

As for property $c$, we will show that it is not always the case that obviation occurs between the embedded and the matrix grammatical subjects. Although the embedded weak pronoun subject is always involved, the argument from which it must be obviative need not be the matrix grammatical subject, rather the argument assigned the experiencer theta-role, or, from a syntax-semantics interface viewpoint, the argument referring to the attitude bearer.

3.2 Obviation and matrix predicates

3.2.1 Matrix predicates and embedded mood

In her comparative study on the subjunctive mood, Farkas (1992a) identifies the following types of predicates whose argument structure presents a clausal arguments: desideratives (for example, ‘to want’, ‘to desire’), directives (‘to order’), modals (‘it is possible’, ‘it is necessary’), epistemic predicates expressing neutral/negative commitment (‘not to believe’, ‘to doubt’), factive-emotives (‘to regret’), categorical epistemics (‘to think’), declaratives (‘to say’), predicates of certainty (‘to be sure’), predicates of likelihood (‘it is probable’), “commissives” (‘to promise’), fiction verbs (‘to dream’, ‘to imagine’).

Comparing French and Romanian, she observes that these predicates can be grouped into three classes by way of the mood of the predicate in the embedded clause that they select. The first class comprises predicates selecting for subjunctive clauses both in French and in Romanian – desideratives, directives, modals, epistemic predicates expressing neutral/negative commitment; the second class groups the predicates selecting for a subjunctive or an indicative clause in French, and for an
indicative clause in Romanian – factive-emotives\(^1\); the third class comprises the predicates that selects for an indicative clausal argument both in French and in Romanian – categorical epistemics, declaratives, predicates of certainty, predicates of likelihood, commissives, and fiction verbs.

An analogous treatment of the predicates that select for an argument clause is given by Giorgi-Pianesi (1997). They distinguish among the following types of predicate: volitionals, desideratives, directives, belief verbs, verba dicendi, factives, fiction verbs. Furthermore, they observe three other factors affecting the choice of the mood in an argument clause: negation, the interrogative operator, and dislocation.

They also observe that volitional verbs select for subjunctive argument clauses in Catalan, French, Italian, Spanish, Portuguese, Romanian, and that verba dicendi select for indicative argument clauses in the same languages. Romance languages differ with respect to emotive-factive verbs and to belief verbs: in Italian and Spanish, emotive-factive predicates require the subjunctive mood, in French and Catalan they can trigger both the indicative and the subjunctive; in Italian and Portuguese belief verbs can select for subjunctive argument clauses, whereas Catalan, French, and Spanish require the indicative. However, there is an intra-linguistic variation is present in (non-standard) Italian and Portuguese, so that indicative argument clauses can even be selected by belief verbs. Finally, they observe that in Italian and in French the subjunctive is required in the embedded clause when the matrix predicate is in the scope of the negation (this holds for Catalan (see Quer 1997), and Spanish, as well – see, for instance, Kempchinsky 1987). Furthermore, in Italian the interrogative operator can trigger the subjunctive (this holds for Catalan as well – see Quer 1997). In addition, the clitic left dislocation and indirect questions select a subjunctive clause, as well.

Integrating Farkas’ and Giorgi’s and Pianesi’s classifications, we obtain the following paradigm of argumental subordination in Italian:

\(^1\) Another class of predicates included within this group is that of control predicates, such as ‘to try’, which select for a subjunctive in Romanian, and an infinitive in French. These predicates, however, differ from the ones listed by Farkas (1992a) in that they do not express an attitude towards a proposition. Hence, they will be ignored.
(7) a. **Volitional verbs**
Gianni vuole che Maria parta/*parta.
Gianni wants that Maria leaves(subj/*ind)
‘Gianni wants Maria to leave’.

b. **Desiderative verbs**
Gianni desidera che Maria parta/*parta.
Gianni wishes that Maria leaves(subj/*ind)
‘Gianni wishes Maria left’.

c. **Directive verbs**
Gianni ha ordinato che Maria partisse/*partirà.
Gianni has ordered that Maria left(subj/*ind, fut)
‘Gianni ordered Maria to leave’.

d. **Modal predicates**
È possibile che Maria parta/*parte domani.
Pro is possible that Maria leaves(subj/*ind) tomorrow
‘It is possible that Maria will leave tomorrow’.

e. **Epistemic verbs**
Mario crede che Andrea abbia/*ha mangiato.
Mario thinks that Andrea has(subj/*ind) eaten
‘Mario thinks that Andrea has eaten’.

f. **Emotive-factive verbs:**
A Maria dispiace che Paolo sia/*è partito.
To Maria displeases that Paolo has(subj/*ind) left
‘Maria regrets that Paolo has left’.

g. **Predicates of certainty**
Mario sa che Giuseppe è/*sia arrivato.
Mario knows that Giuseppe is(ind/*subj) arrived
‘Mario knows that Giuseppe has arrived’.

h. **Declarative verbs**
Gianni ha detto che Mario ha/*abbia scritto la lettera.
Gianni said that Mario has(ind/*subj) written the letter
‘Gianni said that Mario wrote the letter’.
i. *Fiction verbs*

Gianni ha sognato che Pietro ha/*abbia ricevuto il premio Nobel.
Gianni has dreamt that Pietro has(ind/*subj) received the Nobel prize
‘Gianni dreamt that Pietro received the Nobel prize’.

j. *Performative verbs*

Maria ha promesso che partirà/*parta presto.
Maria has promised that [e] will-leave(ind/*subj) soon
‘Maria promised that she will leave soon’.

k. *Negative polarity subjunctive*

Mario non sapeva che Gianni era/fosse arrivato.
Mario not knew that Gianni was(ind/subj) arrived
‘Mario didn’t know that Gianni had arrived’.

l. *Interrogative polarity subjunctive*

Sai se Gianni è/sia partito?
[e] know(2sg) if Gianni is(ind/subj) left?
Do you know if Gianni has left?

m. *Clitic left dislocation*

Che Gianni è/sia partito, Mario me l’ha detto.
That Gianni is(ind/subj) left, Mario me it has said
‘Mario told me that Gianni has left’.

n. *Indirect questions*

Gianni non sapeva chi fosse partito.
Gianni not knew who was(subj) left
‘Gianni didn’t knew who had left’.

As for subjunctive clauses, Wandruszka (1991) distinguishes three types of predicates selecting the subjunctive: volitional predicates, dubitative (or epistemic) predicates (which includes negative epistemic predicates), and thematic, or factive predicates.

Another classification of the types of subordinate subjunctive is the one proposed by Quer (1997). He distinguishes two classes of subjunctive, following Stowell (1993): “intensional” and “polarity” subjunctive. The former type is triggered by
intensional verbs, whereas the latter is licensed by some operator, such as negation or the interrogative operator.

We summarize the data concerning mood selection in Italian in the following table:

<table>
<thead>
<tr>
<th></th>
<th>Indicative</th>
<th>Subjunctive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volitional</td>
<td>–</td>
<td>+</td>
</tr>
<tr>
<td>Desiderative</td>
<td>–</td>
<td>+</td>
</tr>
<tr>
<td>Directive</td>
<td>–</td>
<td>+</td>
</tr>
<tr>
<td>“Modal verbs”</td>
<td>–</td>
<td>+</td>
</tr>
<tr>
<td>Epistemic</td>
<td>–</td>
<td>+</td>
</tr>
<tr>
<td>Emotive-factive</td>
<td>–</td>
<td>+</td>
</tr>
<tr>
<td>Negative operator</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Interrogative operator</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Clitic left dislocation</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Indirect questions</td>
<td>–</td>
<td>+</td>
</tr>
<tr>
<td>Performative/commissive</td>
<td>+</td>
<td>–</td>
</tr>
<tr>
<td>“Predicates of certainty”</td>
<td>+</td>
<td>–</td>
</tr>
<tr>
<td>Declarative</td>
<td>+</td>
<td>–</td>
</tr>
<tr>
<td>Fiction</td>
<td>+</td>
<td>–</td>
</tr>
</tbody>
</table>

Tab. 1. The typology of the matrix predicates and the mood selection in Italian.

3.2.2 Obviation and embedded mood

In Italian obviation is sensitive to the mood of the embedded clause. The possibility of co-indexation between the embedded and the matrix subject distinguishes subjunctive clauses, which do not allow for co-indexation, from indicative clauses, which do2:

2 Neither the tense of the matrix verb nor that of the embedded verb affect the availability of co-indexation between the matrix and the embedded subject:
If the matrix verb is indicative, the availability of co-indexation between the two subjects does not depend on what type the matrix predicate is. It can be declarative, as in (8)b, but also a fiction or performative predicate:

(8) a. Gianni$_1$ vuole che pro$_{1/2}$ legga il libro.
    Gianni$_1$ wants that pro$_{1/2}$ reads(subj) the book.
    ‘Gianni$_1$ wants him$_{1/2}$/her to read the book’.

    b. Gianni$_1$ ha detto che pro$_{1/2}$ leggerà il libro.
    Gianni$_1$ has said that pro$_{1/2}$ will-read(ind) the book
    ‘Gianni$_1$ said he$_{1/2}$/her will read the book’.

Moreover, co-indexation is also allowed when the embedded verb is in the conditional mood:

(10) Gianni$_1$ aveva detto che pro$_{1/2}$ sarebbe partito il giorno dopo.
    Gianni$_1$ had said that pro$_{1/2}$ would-be left on the following day
    ‘Gianni$_1$ said he$_{1/2}$/she would have left on the following day’.

Finally, co-indexation is obligatory when the embedded verb is in the infinitive:

(11) Gianni$_1$ vuole PRO$_{1/2+}$ leggere il libro.
    Gianni$_1$ wants PRO$_{1/2+}$ to read the book.
    ‘Gianni wants to read the book’.

(i)    Gianni$_1$ ha detto/dirà che pro$_{1/2}$ legge/ha letto/leggerà il giornale.
    Gianni$_1$ has said/will-say that pro$_{1/2}$ reads/has read/will-read(ind) the newspaper
    ‘Gianni$_1$ said/will say that he$_{1/2}$/she reads/has read/will read the newspaper’.
In (11) Gianni obligatorily controls PRO. Hence, they co-refer.

In Italian obviation occurs only within subjunctive clauses. However, it does not occur exclusively within volitional complement clauses. Epistemic predicates and emotive-factive predicates, which select for subjunctive clauses, instantiate the disjoint reference effect as well:

\[(12)\]
\[\begin{align*}
\text{a. } & \text{Gianni} \textsubscript{1} \text{ pensa che } \text{pro} \textsubscript{1/2} \text{ legga molti libri.} \\
& \text{Gianni} \textsubscript{1} \text{ thinks that } \text{pro} \textsubscript{1/2} \text{ reads(subj) many books} \\
& \text{‘Gianni} \textsubscript{1} \text{ thinks that he/she reads many books’}. \\
\text{b. } & \text{Gianni} \textsubscript{1} \text{ teme che } \text{pro} \textsubscript{1/2} \text{ faccia molti errori.} \\
& \text{Gianni} \textsubscript{1} \text{ fears that } \text{pro} \textsubscript{1/2} \text{ makes(subj) many mistakes} \\
& \text{‘Gianni} \textsubscript{1} \text{ is afraid he/she will make many mistakes’}. \\
\text{c. } & \text{Gianni} \textsubscript{1} \text{ si rammarica che } \text{pro} \textsubscript{1/2} \text{ legga pochi libri.} \\
& \text{Gianni} \textsubscript{1} \text{ regrets that } \text{pro} \textsubscript{1/2} \text{ reads(subj) few books} \\
& \text{‘Gianni} \textsubscript{1} \text{ regrets that he/she reads few books’}.
\end{align*}\]

It seems that the disjoint reference effect is strictly linked to the subjunctive mood.

When a verb can select either a subjunctive complement clause or an indicative complement clause, obviation occurs only within the subjunctive complement clause\(^3\):

\[(13)\]
\[\begin{align*}
\text{a. } & \text{Gianni} \textsubscript{1} \text{ pensa che } \text{pro} \textsubscript{1/2} \text{ legga il libro.} \\
& \text{Gianni} \textsubscript{1} \text{ thinks that } \text{pro} \textsubscript{1/2} \text{ reads(subj) the book} \\
& \text{‘Gianni} \textsubscript{1} \text{ thinks he/she is reading the book’}. \\
\text{b. } & \text{Gianni} \textsubscript{1} \text{ pensa che } \text{pro} \textsubscript{1/2} \text{ leggerà il libro.} \\
& \text{Gianni} \textsubscript{1} \text{ thinks that } \text{pro} \textsubscript{1/2} \text{ will-read(ind) the book} \\
& \text{‘Gianni thinks that he/she will read the book’}.
\end{align*}\]

\(^3\) Sentences (13)a and b are different not only in that the former has an obviative interpretation of pro, whereas the latter does not have, but also with respect to the temporal interpretation of the embedded predicate. The embedded event in sentence (13)a can either be interpreted as contemporary or posterior to the attitude episode, whereas the one in sentence (13)b can only be interpreted as posterior. This fact is irrelevant for the purpose of this chapter and will not be considered any further.
Polarity subjunctive is taken to not instantiate obviation (Kempchinsky 1987, Quer 1997). Quer (1997) even considers obviation as a diagnostic to distinguish the intensional and the polarity subjunctive.

However, evidence from Italian shows that polarity subjunctive can also instantiate obviation. Let us consider the following sentence:

(14) Gianni non sapeva che Maria comprasse la casa accanto alla sua.  
Gianni not knew that Maria bought(subj) the house next to-the his  
‘Gianni didn’t knew that Maria would buy the house next to his’.

In this sentence the subjunctive is triggered by the negative operator in the main clause. If negation were not there, the subjunctive would be ungrammatical, and an indicative would be acceptable:

(15) Gianni sapeva che Maria comprava la casa accanto alla sua.  
Gianni knew that Maria bought(ind) the house next to-the his  
‘Gianni knew that Maria was buying the house next to his’.

Now, in the following sentence pro can only be interpreted as obviative with respect to Gianni:

(16) Gianni non sapeva che pro*1/2 comprasse la casa accanto a quella di Maria.  
Gianni not knew that pro*1/2 bought(subj) the house next to that of Maria  
‘Gianni didn’t knew that he*1/2/she was buying the house next to Maria’s’.

The polarity subjunctive clitic left dislocation instantiates, trigger obviation:

(17) Che pro*1/2 partisse il giorno dopo, Gianni1 lo sapeva già.  
That pro*1/2 left(subj) the following day, Gianni1 it knew already  
‘Gianni1 already knew that he*1/2/she was leaving on the following day’.

Finally, in Italian indirect questions may trigger obviation:

(18) Gianni1 si chiede quanti libri pro*1/2 legga in un mese.  
Gianni1 himself asks how-many books pro*1/2 reads(subj) in a month  
‘Gianni1 wonders how many books he*1/2/she reads in a month’.
3.2.3  Comparing Western Romance languages

In Italian obviation is strictly linked to subjunctive mood. The same holds in other Romance languages. Yet, some differences arise, mainly due to the distribution of the subjunctive mood in the Italian clausal complementation. We will consider here the occurrence of obviation in Catalan, French, Portuguese, and Spanish.

Catalan

(19) a.  [En Jordi]₁ espera que pro₁/₂ vingui.  (Picallo 1985)
     [The Jordi]₁ hopes that pro₁/₂ comes(subj)
     ‘Jordi₁ hopes that he₁/₂/she will come’.

b.  [En Joan]₁ ha decidit que pro₁/₂ telefonarà al Pere.  (Picallo 1985)
     [The Joan]₁ has decided that pro₁/₂ call(ind, fut) to-the Pere
     ‘Joan has decided that he₁/₂/she will call Pere’.

The co-indexation between the matrix and the embedded subject is available when the embedded clause is in the indicative, whereas it is not when the embedded clause is in the subjunctive. Moreover, Quer (1997) observes that in Catalan the intensional subjunctive triggers obviation (see example (19)a), whereas the polarity subjunctive does not⁴:

(20)  Pro₁sg no crec que pro₁sg la convidi.
     Pro₁sg not think(1sg) that pro₁sg her invite(subj, 1sg)
     ‘I don’t think I will invite her’.

⁴ The fact that example (20) involves the first person pronoun does not affect the phenomenon at issue. The example of obviation Quer (1997) mentions involves also the first person pronoun:

(i)  *Pro₁sg vull que pro₁sg la convidi.
     Pro₁sg want(1sg) that pro₁sg her invite(subj, 1sg)
Hence, Quer claims that in Catalan obviation can be considered as a test to distinguish between intensional and polarity subjunctive\(^5\). This claim also predicts that emotive-factive predicates, which lexically select for a subjunctive clause, trigger obviation. This seems to be the case:

(21) *M\(_1\)’empipa que pro\(_1\) arribi tard. \(\text{Me}_1\) annoys that pro\(_1\) arrives(subj) late

Lexically selected subjunctive clauses also contrast with infinitival clauses, in which PRO is controlled by the matrix subject and accordingly co-refer with it:

(22) [En Jordi]\(_1\) espera PRO\(_1\) venir. \(\text{[The Jordi]}_1\) hopes PRO\(_1\) come(inf).

‘Jordi hopes to come’.

**French**

(23) a. Pierre\(_1\) veut qu’il\(_{1/2}\) parte. \(\text{(Farkas 1992b)}\)

Pierre\(_1\) wants that he\(_{1/2}\) leaves(subj)

‘Pierre\(_1\) wants him\(_{1/2}\) to leave’.

b. Pierre\(_1\) a promis qu’il\(_{1/2}\) partira. \(\text{(Farkas 1992b)}\)

Pierre\(_1\) has promised that he\(_{1/2}\) will-leaves(ind)

‘Pierre\(_1\) promised that he\(_{1/2}\) to leave’.

In French obviation is sensitive to mood. The subjunctive triggers obviation, whereas the indicative does not. In infinitival clauses the embedded subject co-refers with the matrix subject (via control):

\(^5\) Quer (1997: 38 n. 25) reports that Carme Picallo actually points out that there are some cases of polarity subjunctive triggering obviation:

(i) *Creus que la convidis?

believe(2sg) that her invite(subj, prs, 2sg)?

This fact can be observed even in Italian (see section 3.2.2).
(24) Pierre\textsubscript{1} veut $PRO\textsubscript{1}$ partir.
    Pierre\textsubscript{1} wants $PRO\textsubscript{1}$ leave(inf)
    ‘Pierre wants to leave’.

*Portuguese*

(25) a.  [O Manel]\textsubscript{1} deseja que $pro\textsubscript{1/2}$ leia mais livros.  (Raposo 1985)
    [The Manel\textsubscript{1}] wishes that $pro\textsubscript{1/2}$ reads(subj) more books
    ‘Manel\textsubscript{1} wishes that he\textsubscript{1/2}/she read more books’.

b.  [O Manel]\textsubscript{1} pensa que $pro\textsubscript{1/2}$ lê bastanetes livros.  (Raposo 1985)
    [The Manel\textsubscript{1}] thinks that $pro\textsubscript{1/2}$ reads(ind) enough books
    ‘Manel\textsubscript{1} thinks that he\textsubscript{1/2}/she reads enough books’.

c.  [O Manel]\textsubscript{1} deseja $PRO\textsubscript{1}$ ganhar a corrida.  (Raposo 1985)
    [The Manel\textsubscript{1}] wishes $PRO\textsubscript{1}$ win(inf) the race
    ‘Manel wishes to win the race’.

In Portuguese obviation depends on the mood of the embedded predicate, in the same way as in Catalan and French.

*Spanish*

Kempchinsky (1986) claims that in Spanish not all subjunctive argument clauses instantiate the disjoint reference effect. Only the volitional and desiderative subjunctives do, whereas the (negative) epistemic subjunctives (see examples (26)b and c), and the emotive-factive subjunctives do not (example (26)d):

(26) a.  Paco\textsubscript{1} quiere que $pro\textsubscript{1/2}$ estudie latín. (= example 0)
    Paco\textsubscript{1} wants that $pro\textsubscript{1/2}$ studies(subj) Latin.
    ‘Paco\textsubscript{1} wants him\textsubscript{1/2}/her to study Latin’.

b.  Ana\textsubscript{1} duda que $pro\textsubscript{1/2}$ sea la persona más apta para el puesto.
    Ana\textsubscript{1} doubts that $pro\textsubscript{1/2}$ is(subj) the person most fit for the job
    ‘Ana\textsubscript{1} doubts that she\textsubscript{1/2}/he is the fittest person for the job’.
c. Ana\textsubscript{1} no creía que pro\textsubscript{1/2} fuera la mayor candidata.
Ana\textsubscript{1} not believed that pro\textsubscript{1/2} was(subj) the best candidate
‘Ana didn’t think she\textsubscript{1/2}/he was the best candidate’.

d. Ana\textsubscript{1} lamenta que pro\textsubscript{1/2} tenga tanto trabajo.
Ana\textsubscript{1} regrets that pro\textsubscript{1/2} has(subj) so-much work
‘Ana regrets that she\textsubscript{1/2}/he has so much work’.

However examples (26)b-d involve a stative predicate in the embedded clause. In the
examples in which there is an epistemic subjunctive expressing negative commit-
ment, if an eventive predicate appeared in the embedded clause, co-indexation would
be allowed between the matrix and the embedded subject:

(27) Ana\textsubscript{1} duda/no cree que pro\textsubscript{1/2} salga mañana.
Ana\textsubscript{1} doubts/not thinks that pro\textsubscript{1/2} leaves(subj) tomorrow
‘Ana\textsubscript{1} doubts/doesn’t think she\textsubscript{1/2}/he will leave tomorrow’.

These data are compatible with Quer’s (1997) generalization that the polarity sub-
junctive does not trigger obviation.

On the other hand, in the examples involving an emotive-factive subjunctive,
the presence of an eventive predicate causes obviation (Luján 1999):

(28) *(Tú) lamentas que (tú) vengas.
(You) regrets that (you) come(subj)
‘You regret that you come’.

Hence, it seems that the claim that in Spanish only the volitional subjunctive triggers
obviation does not seem to be quite accurate.

In infinitival clauses, finally, the co-referential reading is not only possible, but
obligatory:

(29) Paco\textsubscript{1} quiere PRO\textsubscript{1} estudiar latín.
Paco\textsubscript{1} wants PRO\textsubscript{1} study(inf) Latin.
‘Paco wants to study Latin’.

From the above data concerning the Western Romance languages, it seems that
cross-linguistically there is a strict relation between disjoint reference effects of an
embedded subject and the subjunctive mood. This seems to be a sound generalization in Romance languages.

(30) **Generalization 1**

Obviation can occur only in subjunctive clauses.

Since the class of predicates that selects for a subjunctive clause most uniformly across Romance languages is the class of volitional and desiderative predicates, obviation occurs mainly in volitional contexts. But we have also seen that in Italian the entire class of intensional subjunctive, including volitional and desiderative, epistemic and emotive-factive subjunctive, trigger obviation. This seems to be true of Catalan and Spanish as well – verbs lexically selecting for subjunctive clauses, that is volitional and emotive-factive verbs, trigger obviation.

3.2.4 **An aside on Latin**

In Latin, obviation seems to occur in a limited set of contexts, mainly in subjunctive clauses selected by volitional and desiderative verbs (‘verba voluntatis’). In Catalan, French, Italian, Portuguese, and Spanish, volitional verbs can select for two types of clausal arguments: the infinitival clause, and the subjunctive clause. In the second type of clause the obviative interpretation of the subject generally obtains.

The Latin *verba voluntatis* (*volo*, ‘I want’, *nolo*, ‘I do not want’, *malo*, ‘I prefer’, *cupio*, ‘I desire’, etc.) can select three types of clausal complements: an infinitival clause (which is also sometimes called ‘infinitival complement’, the construction *accusativus cum infinitivo* (*AcI* – sometimes called infinitival proposition), and a subjunctive clause:6

6 A subjunctive clause occurs more often when the matrix verb is in the optative subjunctive (*vellem*, ‘I would like’, *nollem*, ‘I would not like’, *mallem*, ‘I had rather’, etc.). This embedded clause may be introduced by the subjunctive complementizer *ut*, but more frequently it is not. Compare, for instance, sentence (31)c, where the argument clause is introduced by the subordinating conjunction, with the following example, where the complementizer is omitted)
Want(1sg) be(inf) free
‘I want to be free’.

b. Senatus te voluit mihi nummos, me tibi frumentum dare. (Cic. *II Verr*. 3,197)
The-senate you(acc) wanted me(dat) money, me(acc) you(dat) wheat
give(inf)
‘The senate wanted you to give me money, and me to give you the wheat’.

c. Volo ut mihi respondeas tu. (Cic. *Vatin*. 14)
Want(1sg) that me(dat) answer(subj, 2sg) you
‘I want you to answer me!’.

In the ‘infinitival complement’ the understood subject of the embedded clause is
obligatorily interpreted as co-referential to the matrix subject. In the ‘infinitival
proposition’ the subject optionally co-refers with the matrix subject. Finally, in a
subjunctive clause the embedded subject is generally obviative with respect to the
matrix subject.

(i) tu vellem ego vel cuperem adesses (Cic. *Att*. 2,18,4)
you(nom) want(subj, impf, 1sg) or desire(subj, impf, 1sg) come(subj, impf, 2sg)
‘I wish – I desire you to come here’.

A limited series of exceptions will be considered below. Notice that both in *Accusativus cum Infini-
tivo* (*AcI*) structures and in the subjunctive clause, the embedded subject can be obviative with respect
to the matrix subject. It is not clear, however, what the exact difference is between the two type of
constructions. Moreover, the alternance between *AcI* and subjunctive was remarked by the Latin
grammarians Priscianus and Macrobius: «sciendum tamen, quod in hoc sensu frequenter invenimus
pro infinito verbo subjunctivum poni, ut ‘iubeo facias; iubeo dicas; impero venias; hortor legas’, in
quibus deest ‘ut’, quod licet vel addere vel non» (Priscianus, *Institutionum grammaticarum libri*, 18,
45 – «it must be known, however, that in this sense we often find that the subjunctive mood can be put
in spite of the infinitive, as ‘iubeo facias; iubeo dicas; impero venias; hortor legas’, where ‘ut’, which
can be adjoined or not, is omitted»). «[Latini] aliquotiens [infinitum] pro coniunctivo ponunt: Cicero
pro Sestio ‘rei publicae dignitas me ad se rapit et haec minora relinquere hortatur’ pro ‘hortatur ut
relinquam’, Vergilius ‘hortor amare focos’ pro ‘hortor ut ament’» (Macrobius, *Excerpta de differentiis
et societatibus greci latinique verbi*, 164 – «Latins sometimes put the infinitive in spite of the subjun-
cutive: Cicero pro Sestio ‘rei publicae dignitas me ad se rapit et haec minora delinquere hortatur’ in spite
of ‘hortatur ut relinquam’, Vergilius ‘hortor amare focos’ in spite of ‘hortor ut ament’»).
It seems that the volitional subjunctive is the only type of subjunctive triggering obviation. The epistemic subjunctive do not trigger obviation:

(32) Metuo ne sero veniam (Plaut. *Men*. 989)
Fear(1sg) that-not late come(subj, 1sg)
‘I am afraid I will come late’.

Indirect questions do not trigger obviation, as well:

(33) Homo quid ageret, taceret responderet, nesciebat (Cic. *Verr*. II, 3, 62)
[The-man]1 what pro1/2 makes(subj, imp, 3sg), pro1/2 keep-quiet(subj, impf, 3sg) pro1/2 answer(subj, impf, 3sg), not-knew(impf, 3sg)
‘That poor man didn’t know what to do, whether to keep quiet or to answer/[That poor man]1 didn’t know what he1/2/she had to do, whether he1/2/she had to keep quiet or to answer’.

Furthermore, emotive-factive predicates generally do not trigger obviation:

(34) [Haec urbs] mihi laetari videtur, quod tantam pestem evomuerit (Cic. *Cat*. 2, 2)
[This town]1 me(dat) rejoy(inf) seems, that pro1/2 so-great disaster rejected(subj, pf)
‘It seems to me that [This town] rejoices for rejecting such a great disaster/[This town]1 seems to rejoice that he/she/it1/2 rejected such a great disaster’.

### 3.3 Obviation and subjunctive “tenses”

In this section the question will be addressed whether in Italian obviation is sensitive to the “tense” of a subjunctive verb, as it was observed in French by Ruwet (1984) and in Portuguese by Raposo (1985).

In Italian the subjunctive mood has four “tenses”: present, past, imperfect and pluperfect.
(35) **Subjunctive of leggere (‘to read’), third person:**

- **Present:** legga
- **Past:** abbia letto
- **Imperfect:** leggesse
- **Pluperfect:** avesse letto

The distribution of these forms in subordinate contexts depends on the rules of SOT. In a context of primary subordination, the SOT is sensitive to the mood and the time of the matrix predicate and to the time relation between the matrix event and the embedded event – simultaneity (the matrix and the embedded event are simultaneous), anteriority (the embedded event precedes the matrix event), posteriority (the embedded event succeeds the matrix event). The following scheme holds for predicates selecting for a subjunctive clause⁸:

<table>
<thead>
<tr>
<th>Mood</th>
<th>Tense</th>
<th>A. Simultaneity</th>
<th>B. Anteriority</th>
<th>C. Posteriority</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Future</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b¹. Indicative</td>
<td>Past</td>
<td>Impf. subj.</td>
<td>Ppf. subj.</td>
<td>Impf. subj</td>
</tr>
<tr>
<td>Imperfect</td>
<td></td>
<td></td>
<td></td>
<td>Past cond.</td>
</tr>
<tr>
<td>Past</td>
<td></td>
<td></td>
<td></td>
<td>Past cond.</td>
</tr>
</tbody>
</table>

Tab. 2. Sequence of Tense in Italian.

The present subjunctive can appear in the embedded clause when the matrix verb is present or future indicative and when the event of the embedded clause is simultaneous or posterior with respect to the event of the matrix clause:

(36) a. Gianni spera/spererà che Maria arrivi. (a/A)
    Gianni hopes/will-hope that Maria arrives(subj)
    ‘Gianni hopes/will hope that Maria is arriving’.

---

b. Gianni spera/spererà che Maria arrivi. (a/C) (=a/A))
Gianni hopes/will hope that Maria arrives (subj)
‘Gianni hopes/will hope that Maria is arriving’.

The imperfect subjunctive can appear in the embedded clause when the matrix verb is past indicative, imperfect indicative, present conditional or past conditional and when the embedded event is simultaneous or posterior with respect to the matrix event. The following examples illustrate the SOT when the matrix predicate is in the imperfect indicative:

(37) a. Gianni sperava che Maria arrivasse. (b/A)
Gianni hoped that Maria arrived (subj)
‘Gianni hoped that Maria was arriving’.

b. Gianni sperava che Maria arrivasse il giorno dopo. (b/C)
Gianni hoped that Maria arrived on the following day (subj)
‘Gianni hoped that Maria was arriving on the following day’.

Past subjunctive appears in the embedded clause when the matrix verb is in the present or future indicative, and the embedded event is anterior with respect to the matrix one:

(38) Gianni spera che Maria sia arrivata. (a/B)
Gianni hopes that Maria is (subj) arrived
Gianni hopes that Maria has arrived.

Finally, pluperfect subjunctive can appear in the embedded clause when the matrix verb is past indicative, imperfect indicative, or conditional, and the event of the embedded clause is anterior to the event of the matrix clause:

(39) Gianni sperava che Maria fosse arrivata. (b/B)
Gianni hoped that Maria was (subj) arrived
‘Gianni hoped that Maria would have arrived’.

In the above sentences the form of the subjunctive cannot be different from what it is, due to SOT:
The form of the subjunctive verb is completely determined by the tense of the matrix predicate. However, there are some apparent exceptions:

(41) Gianni ritiene che Maria lavorasse come infermiera dieci anni fa.
Gianni thinks that Maria worked(subj) as a nurse ten years ago
‘Gianni thinks that Maria used to work as a nurse ten years ago’.

The question why example (41) does not follow the SOT will not be addressed here. I will only observe that the embedded predicate in (41) has a habitual interpretation and belong to the class of predicates denoting an “activity” in the sense of Vendler (1967). Thus, it seems that the SOT obtains only when the embedded eventuality is included in the aspectual classes of achievement or accomplishment. Further investigations are required in this respect.

3.3.1 “Past” forms and obviation weakening
If the matrix verb is in the present, the embedded verb in the subjunctive can be in the present or in the past. For most Italian native speakers, co-indexation between the matrix and the embedded subject is not available in the former case (see examples (8), (12)a-c), but if the verb is a past subjunctive co-indexation results possible, although the obviative reading is the more natural option:
a. Gianni1 pensa che pro_{1/2} abbia letto molti libri.
   Gianni1 thinks that pro_{1/2} has(subj) read many books
   ‘Gianni1 thinks that he_{1/2}/she has read many books’.

b. Gianni1 teme che pro_{1/2} abbia fatto molti errori all’esame.
   Gianni1 fears that pro_{1/2} has(subj) made many mistakes
   ‘Gianni1 is afraid he_{1/2}/she has made many mistakes’.

c. Gianni1 si rammarica che pro_{1/2} abbia letto pochi libri.
   Gianni1 regrets that pro_{1/2} has(subj) read few books
   ‘Gianni1 regrets that he_{1/2}/she has read few books’.

If the matrix verb is in the past, the embedded verb in the subjunctive can be imperfect or pluperfect. Co-indexation is impossible if the embedded verb is imperfect subjunctive (exactly as it is when the verb is in the present):

(43) a. Gianni1 voleva che pro_{1/2} leggesse il libro.
   Gianni1 wanted that pro_{1/2} read(subj) the book.
   ‘Gianni1 wanted him_{1/2}/her to read the book’.

b. Gianni1 pensava che pro_{1/2} leggesse molti libri.
   Gianni1 thought that pro_{1/2} read(subj) many books
   Gianni1 thought that he_{1/2}/she used to read many books.

c. Gianni1 temeva che pro_{1/2} facesse molti errori.
   Gianni1 feared that pro_{1/2} made(subj) many mistakes
   ‘Gianni1 was afraid he_{1/2}/she was making many mistakes’.

d. Gianni1 si rammaricava che pro_{1/2} leggesse pochi libri.
   Gianni1 regretted that pro_{1/2} read(subj) few books
   ‘Gianni1 regretted that he_{1/2}/she used to read few books’.

If the embedded subjunctive is pluperfect, according to most Italian speakers, co-indexation is available, even though the obviative interpretation is preferred:

(44) a. Gianni1 pensava che pro_{1/2} avesse letto molti libri.
   Gianni1 thought that pro_{1/2} had(subj) read many books
   Gianni1 thought that he_{1/2}/she had read many books.
b. Gianni temeva che pro\textsubscript{1/2} avesse fatto molti errori.
    Gianni feared that pro\textsubscript{1/2} had(subj) made many mistakes
    ‘Gianni was afraid he\textsubscript{1/2}/she he had made many mistakes’.

c. Gianni si rammaricava che pro\textsubscript{1/2} avesse letto pochi libri.
    Gianni regretted that pro\textsubscript{1/2} had(subj) read(subj) books
    ‘Gianni regretted that he\textsubscript{1/2}/she had read few books’.

A parallelism can be therefore noticed between the past and the pluperfect subjunctive in that they both allow co-indexation between the matrix and the embedded subject.

The Western Romance languages parallel the behavior of Italian:

(45) *Catalan* (Gemma Rigau, p.c.)

a. [En Joan]\textsubscript{1} està sorprès que pro\textsubscript{1/2} hagi fet molts errors.
    [The Joan]\textsubscript{1} stays surprised that pro\textsubscript{1/2} has(subj) made many mistakes.
    ‘Joan\textsubscript{1} is surprised that he\textsubscript{1/2}/she has made many mistakes’.

b. [En Joan]\textsubscript{1} estava sorprès que pro\textsubscript{1/2} hagué fet molts errors.
    [The Joan]\textsubscript{1} stayed surprised that pro\textsubscript{1/2} had(subj) made many mistakes.
    ‘Joan\textsubscript{1} was surprised that he\textsubscript{1/2}/she had made many mistakes’.

(46) *French* (Ruwet 1984)

'Je veux (absolument) que je sois parti dans dix minutes. (Ruwet)
I want (absolutely) that I am(subj) left in ten minutes.
‘I want to be gone in ten minutes’.

(47) *Portuguese* (Raposo 1985)

a. [O António]\textsubscript{1} receia que pro\textsubscript{1/2} tenha bebido a água envenenada.
    [The António]\textsubscript{1} fears that pro\textsubscript{1/2} keeps(subj) drunk the water poisoned
    ‘António fears that he\textsubscript{1/2}/she has drunk poisoned water’.

b. [A Maria]\textsubscript{1} preferia que pro\textsubscript{1/2} não tivesse encontrado o Manel.
    [The Maria]\textsubscript{1} preferred that pro\textsubscript{1/2} not kept(subj) met the Manel
    ‘Maria\textsubscript{1} preferred she\textsubscript{1/2}/he had not met Manel’.
The above data from Italian, Catalan, French, Portuguese, and Spanish seem to point to the same direction – when the subjunctive verb is in a “simple” tense (in Italian, present and imperfect), the co-indexation is not available; when it is in a “composite” (in Italian, past and pluperfect), the co-indexation is possible. Thus, beside generalization (30), the following generalization seems hold:

(49) **Generalization 2**

Obviation occurs only in clauses in which the subjunctive verb is in a “simple” tense.

The fact that, obviation does not seem to obtain in all Western Romance languages, when the embedded subjunctive predicate is in a “composite” tense, cannot be accidental and needs an explication.

3.3.2 **Another aside on Latin**

Although the volitional subjunctive does not allow the co-indexation between the matrix and the embedded subject, there are some cases in which the co-indexation is nonetheless admitted. In one of these cases, the subjunctive verb is pluperfect\(^9\).

---

\(^9\) The manuscript tradition is not uniform with regard to the following examples, and the examples in which the subjunctive occurs are generally textual variants of forms in the infinitive. (50)a is the only sentence accepted by the most prominent edition. As for sentence (50)b, both the *Les Belles Lettres* and the *Oxoniensis* critic edition accept the textual variant *tacuisse* instead of *tacuissem*. As for (50)c, the *Oxoniensis* edition accept *dixisse* instead of *dixissem*. 
a. Vellem non costituissem me hodie venturum esse L. Aelio (Cic. De or. 1, 265)
   Want(subj, impf, 1sg) not decide(subj, ppf, 1sg) me today come(part, fut) be(inf) L. Aelius(dat)
   ‘I had rather I did not decide to go to L. Aelius today’.

b. Hoc ipsum tacuissem mallem (Cic. Quinct. 30)
   This(acc) same(acc) be-silent(subj, ppf, 1sg) prefer(subj, ppf, 1sg)
   ‘I had rather I had been silent about this same fact’.

c. Nollem dixissem (Cic. Verr. 4, 43)
   Not-Want(subj, impf, 1sg) say(subj, ppf, 1sg)
   ‘I would like I did not say it’.

3.4 Passive voice

In this section the question will be investigated whether Italian parallels French (Ruwet 1984) and Portuguese (Raposo 1985) in the phenomenon of obviation weakening when the embedded subjunctive verb is passive.

If the embedded predicate is passive, the co-indexation between the matrix and the embedded subject is generally available

(51) a. Gianni\textsubscript{1} spera che pro\textsubscript{1/2} venga promosso.
   Gianni\textsubscript{1} hopes that pro\textsubscript{1/2} comes(subj) promoted
   ‘Gianni\textsubscript{1} hopes that he/she will pass the exam’.

b. Gianni\textsubscript{1} sperava che pro\textsubscript{1/2} fosse promosso.
   Gianni\textsubscript{1} hoped that pro\textsubscript{1/2} was(subj) promoted
   ‘Gianni\textsubscript{1} hoped that he/she would pass the exam’.

\textsuperscript{10} Very surprisingly, the first of the following sentences is perceived as less acceptable than the second. This could be related to the choice of the auxiliary, or to the subjunctive tense involved in the two sentences – present and imperfect. It does not seem to be the case that the choice of the auxiliary matters – Gianni spera che sia promosso (‘Gianni hopes he/she will pass the exam’) does not seem to have any appreciable difference with respect to sentence (51)b. Thus, the second possibility is the only one that seems to be tenable, although in some obscure way.
The co-indexation is even more natural if the embedded passive verb is in the past or pluperfect subjunctive:

(52) a. Gianni\textsubscript{1} spera che pro\textsubscript{1/2} sia stato promosso.
    Gianni\textsubscript{1} hopes that pro\textsubscript{1/2} is(subj) been promoted
    ‘Gianni\textsubscript{1} hopes that he\textsubscript{1/2}/she has passed the exam’.

    b. Gianni\textsubscript{1} sperava che pro\textsubscript{1/2} fosse stato promosso.
    Gianni\textsubscript{1} hoped that pro\textsubscript{1/2} was(subj) been promoted
    ‘Gianni\textsubscript{1} hoped that he\textsubscript{1/2}/she had passed the exam’.

If the matrix predicate is emotive-factive rather than epistemic, the judgments do not change\textsuperscript{11}.

The phenomenon at issue has been observed in other Romance languages as well.

(53) a. Catalan (Picallo 1985)\textsuperscript{12}
    Que pro\textsubscript{1sg} sigui amenaçat de mort no m’impressiona.
    That pro\textsubscript{1sg} am(subj) menaced of death not me(cl) impresses.
    ‘It does not impress me that I am menaced with death’.

\footnotesize
\textsuperscript{11} Consider the following sentence:

(i) Gianni\textsubscript{1} si rammarica che pro\textsubscript{1/2} venga ingannato in quel modo.
    Gianni\textsubscript{1} regrets that pro\textsubscript{1/2} comes(subj) cheated in that way
    ‘Gianni\textsubscript{1} regrets that he\textsubscript{1/2}/she is being cheated in that way’.

However, if the embedded verb is a passive past subjunctive, then the degree of grammaticality rises:

(ii) Gianni\textsubscript{1} si rammarica che pro\textsubscript{1/2} sia stato ingannato in quel modo.
    Gianni\textsubscript{1} regrets that pro\textsubscript{1/2} is(subj) been cheated in that way
    ‘Gianni\textsubscript{1} regrets that he\textsubscript{1/2}/she was cheated in that way’.

\textsuperscript{12} The fact that the matrix argument involved in the referential relation with pro is not the subject will be discussed at section 6 of the present chapter.
b. *French* (Ruwet 1984)

> Je veux que je sois autorisé à partir demain.
> I want that I am(subj) authorized to leave(inf) tomorrow.
> ‘I want to be allowed to leave tomorrow’.

c. *Portuguese* (Raposo 1985)

> [O Manel]1 deseja que pro1/2 seja admitido no concurso.
> [The Manel]1 wishes that pro1/2 is(subj) admitted in-the contest.
> ‘Manel1 wishes he1/2she was admitted in the contest’.

d. *Spanish* (Quer 2005)

> Pro1sg espero que pro1sg sea autorizado a ir.
> Pro1sg hope that pro1sg am(subj) authorized to go(inf).
> ‘I hope I will be allowed to leave’.

The data considered here show still further that not all subjunctive clauses trigger obviation – only the ones whose verb is in the active voice do, whereas the passive voice allows the co-indexation between the matrix and the embedded subject. Thus, a third generalization can be formulated:

(54) **Generalization 3**

Obviation occurs only in clauses in which the subjunctive verb is in the active voice.

The data described by generalization 2 and by generalization 3 share one property – that is, the form carrying subjunctive morphology is not a lexical (or full) verb: as for the data under generalization 2, a tense auxiliary bears the subjunctive morphology; as for data under generalization 3, a passive auxiliary carries the subjunctive morphology. In both cases the full verb is in a non-finite form – the past participle.

### 3.5 Modal verbs

If the form carrying the subjunctive morphology in an argument clause is a modal verb, the co-indexation between the matrix and the embedded argument is not ruled out:
(55) a. Gianni₁ spera che pro₁/₂ possa partire domani.
   Gianni₁ hopes that pro₁/₂ can(subj) leave(inf) tomorrow
   ‘Gianni₁ hopes that he₁/₂/she will be able to leave tomorrow’.

b. Gianni₁ sperava che pro₁/₂ potesse partire il giorno dopo.
   Gianni₁ hoped that pro₁/₂ could(subj) leave(inf) the day after.
   ‘Gianni₁ hoped he₁/₂/she would be able to leave on the following day’.

Emotive-factive verbs show an analogous behavior as epistemic verbs:

(56) a. Gianni₁ si rammarica che pro₁/₂ debba partire domani.
   Gianni₁ regrets that pro₁/₂ must(subj) leave(inf) tomorrow
   ‘Gianni₁ regrets that he₁/₂/she must leave tomorrow’.

b. Gianni₁ si rammaricava che pro₁/₂ dovesse partire il giorno dopo.
   Gianni₁ regretted that pro₁/₂ had-to(subj) leave(inf) the day after
   ‘Gianni₁ regrets that he₁/₂/she had to leave on the following day’.

The data from the other Western Romance languages is similar to those in Italian:

(57) a. **Catalan** (Picallo 1985)
   Pro₁ sentien que pro₁ deguessin produir una falsa impressió.
   Pro₁ regretted that pro₁ must(subj) produce a false impression
   ‘They regretted they had to produce a false impression’.

b. **French** (Ruwet 1984)
   *Je veux que je puisse partir dès demain.*
   I want that I can(subj) leave(inf) by tomorrow.
   ‘I want to be able to leave by tomorrow’.

c. **Portuguese** (Raposo 1985)
   [O Manel]₁ exige que pro₁/₂ possa ver o seu advogado.
   [The Manel]₁ requires that pro₁/₂ can(subj) see(inf) the his lawyer.
   ‘Manel₁ requires that he₁/₂/she be able to see his/her lawyer’.

d. **Spanish** (Quer 2005)
   Pro₁sg espero que pro₁sg pueda ir.
   Pro₁sg hope that pro₁sg can(subj) go(nf).
   ‘I hope to be able to go’.
The data in the present section, as well as the data discussed in section 3.3 and 3.4, lead us to conclude that obviation is sensitive to the nature of the subjunctive form verb. It seems that full verbs trigger obviation, whereas functional verbs (in the sense of Cinque 1999, 2004), such as tense auxiliaries, voice auxiliaries, and modal verbs, allow the co-indexation between the matrix and the embedded subject. Thus, the following generalization may be stated:

(58) **Generalization 4**

Obviation occurs only in clauses in which the form carrying subjunctive morphology is a full verb.

Generalization 4 includes generalization 2 and 3, since in Western Romance languages the past and pluperfect subjunctive and the passive voice are “analytic” forms, that is, they involve the presence of an auxiliary followed by the full verb in the participle.

Generalization 4 suggests that obviation does not occur if the form carrying subjunctive morphology is not a full verb – obviation does not occur if that form is a functional verb. This seems to be true of tense and passive auxiliaries, and of modal verbs. This seems also to be true of the continuative aspect auxiliary, *stare* (literally, ‘to stay’):

(59) a. Gianni$_1$ teme che *pro$_{1/2}$* stia facendo molti errori.
Gianni$_1$ fears that *pro$_{1/2}$* stays(subj) making many mistakes
‘Gianni$_1$ is afraid that he/she is making many mistakes’.

b. Gianni$_1$ temeva che *pro$_{1/2}$* stesse facendo molti errori.
Gianni$_1$ feared that *pro$_{1/2}$* stayed(subj) making many mistakes
‘Gianni$_1$ was afraid that he/she was making many mistakes’.
As observed by Picallo (1985) with respect to Catalan, however, other functional verbs do trigger obviation:  

(60)  

a. *Aspectual verbs*  
Gianni\(_1\) vuole che \(\text{pro}^{0.5}\) cominci a leggere il libro.  
Gianni\(_1\) wants that \(\text{pro}^{0.5}\) begins(subj) to read(inf) the book  
‘Gianni\(_1\) wants him\(_{1/2}\)/her to begin to read the book’.

b. *Motion verbs*  
Gianni\(_1\) vuole che \(\text{pro}^{0.5}\) vada a prendere il libro.  
Gianni\(_1\) wants that \(\text{pro}^{0.5}\) goes(subj) to take(inf) the book.  
‘Gianni\(_1\) wants him\(_{1/2}\)/her to go and get the book’.

c. *Conative verbs*  
Gianni\(_1\) vuole che \(\text{pro}^{0.5}\) provi a leggere il libro.  
Gianni\(_1\) wants that \(\text{pro}^{0.5}\) tries(subj) to read(inf) the book.  
‘Gianni\(_1\) wants him\(_{1/2}\)/her to try to read the book’.

The presence of a tense auxiliary or that of a modal verb considerably improves the possibility of the co-referential reading (especially if the matrix verb is in the imperfect – a surprising fact, as we have already noticed):

(61)  

a. Gianni\(_1\) sperava che \(\text{pro}^{0.5}\) avesse cominciato a leggere il libro giusto.  
Gianni\(_1\) hoped that \(\text{pro}^{0.5}\) had(subj) begun to read(inf) the book right  
‘Gianni\(_1\) hoped that he\(_{1/2}\)/she had begun to read the right book’.  
(Scenario: Gianni is not sure about the book his teacher advised him to read)

a'. Gianni\(_1\) sperava che \(\text{pro}^{0.5}\) potesse cominciare a leggere il libro.  
Gianni\(_1\) hoped that \(\text{pro}^{0.5}\) can (subj, impf) to began(inf) to read(inf) the book  
‘Gianni\(_1\) hoped that he\(_{1/2}\)/she could begin to read the book’.  
(Scenario: Gianni is not sure whether he is authorized to read a certain book)

---

13 In the following sentences the matrix verb is volitional and has present tense. Grammaticality judgments would not be different if it was epistemic or emotive-factive and if it had imperfect tens.
b. Gianni1 sperava che pro1/2 fosse andato a prendere il libro giusto.  
Gianni1 hoped that pro1/2 was(subj) gone to bring(inf) the book right.  
‘Gianni1 hoped that he1/2/she had gone and bring the right book’.  
(Same scenario as a)

b’. Gianni1 sperava che pro1/2 potesse andare a prendere il libro.  
Gianni1 hoped that pro1/2 could(subj) go(inf) to bring(inf) the book.  
‘Gianni1 hoped that he1/2/she could go and bring the book’.  
(Same scenario as a’)

c. Gianni1 sperava che pro1/2 potesse provare a leggere il libro.  
Gianni1 hoped that pro1/2 could try(subj) to read(inf) the book.  
‘Gianni1 hoped that he1/2/she could try to read the book’.  
(Same scenario as a’ and b’)

Moreover, according to some Italian native speakers, implicative verbs (riuscire, ‘to manage’, etc.) are not as strict as aspectual, motion, and conative verbs in triggering obviation. In a sentence like the following, the co-reference between the two subjects can be established, even though the most natural interpretation is the obviative one:

\[
\text{(62) Gianni1 sperava che pro1/2 riuscisse a leggere il libro entro domani.}
\]
\[
\text{Gianni1 hoped that pro1/2 managed(subj) to read(inf) the book by tomorrow.}
\]
\[
\text{‘Gianni1 hoped that he1/2/she would manage to read the book by tomorrow’}.  
\]

Thus, the implicative verbs show a different behavior than the aspectual, motion, and conative verbs. The behavior of the implicative verbs resembles that of “functional” verbs more than that of full verbs, whereas the behavior of the aspectual, motion, and conative verbs look like that of full, rather than that of “functional” verbs.

3.5.1 Again an aside on Latin

At least two examples in Latin show that the co-referential interpretation is possible when the form carrying subjunctive morphology is a modal verb\(^{14}\):

\[\text{\textsuperscript{14} The following examples do not present any particular problem of tradition.}\]
(63) a. Vellem prae sentem possem P. Helvidium Rufum [...] nominare (Cic. Cluent. 198)
Want(subj, impf, 1sg) present(acc) can(subj, impf, 1sg) P. Helvidius(acc) Rufus(acc) [...] mention(inf)
‘I would like to have mentioned P. Helvidius Rufus in front of himself’.

b. Vellem equidem idem possem gloriari (Cic. Sen. 32)
Want(subj, impf, 1sg) surely it-himself(nom) can(subj, impf, 1sg) praise(inf) that Cyrus(nom)
‘I would like I praised myself about this’.

3.5.2 Combining auxiliaries and modals
The combination of at least two of the factors discussed above (tense auxiliaries, voice auxiliaries, modal verbs) generally increases the availability of co-indexation between the matrix and the embedded subject.

The possible combinations are summarized in the following table:

<table>
<thead>
<tr>
<th>Subjunctive form</th>
<th>Non-finite form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past passive</td>
<td>Participle</td>
</tr>
<tr>
<td>Pres/Impf modal</td>
<td>Past infinitive</td>
</tr>
<tr>
<td></td>
<td>Passive present infinitive</td>
</tr>
<tr>
<td>Past/ppf Modal</td>
<td>Passive past infinitive</td>
</tr>
<tr>
<td></td>
<td>Present infinitive</td>
</tr>
</tbody>
</table>

Tab. 3. Combinations of auxiliaries and modal verbs.

Among the above combinations, the first has already been discussed (section 3.4). Let us consider the remaining four combinations:

(64) a. Present/imperfect modal + past infinitive
Gianni₁ pensa/pensava che pro₁/₂ possa/potesse aver fatto molti errori. Gianni₁ thinks/thought that pro₁/₂ can(subj, pres/impf) have(inf) made many mistakes
‘Gianni thinks/thought it is/was possible he₁/₂/she has/had made many mistakes’.
b.  *Present/imperfect modal + passive present infinitive*

Gianni pensa/pensava che pro₁/² possa/potesse essere promosso.

‘Gianni thinks/thought that it is possible that he/she passes/passed the exam’.

c.  *Present/imperfect modal + passive past infinitive*

Gianni pensa/pensava che pro₁/² possa/potesse essere stato promosso.

‘Gianni thinks/thought that he/she could have passed the exam’.

d.  *Past/pluperfect modal + present infinitive*

Gianni si rammarica/rammaricava che pro₁/² sia/fosse dovuto partire cosi presto.

‘Gianni regrets/regretted that he/she has/had had to leave so early’.

3.6  **Double embedding**

The data discussed so far present only one level of embedding:

(65)  \[ DP₁ V [CP pro_{(∗)}₁/² ⋯ ] \]

But let us consider sentences with more than one level of embedding:

(66)  \[ DP₁ V [CP₁ pro_{(∗)}₁/² V [CP₂ pro ⋯ ] \]

The more embedded subject is not obviative with respect to the matrix subject, but it is with respect to the intermediate subject:

(67)  Gianni₁ sperava che Maria₂ desiderasse che pro₁/*₂/³ partisse.

‘Gianni₁ hoped that Maria₂ wished(subj) that he/she left(subj)’. 

98
Moreover, there are no relevant differences depending on the type of the predicate (volitional, desiderative, epistemic, etc.) or on the matrix tense. Unsurprisingly, if in the more deeply embedded clause the form carrying subjunctive morphology is an auxiliary or a modal, the co-indexation between the most embedded subject and the intermediate subject is readily available:

(68) a. Gianni\textsubscript{1} pensava che Maria\textsubscript{2} temesse che pro\textsubscript{1/2/3} avesse fatto molti errori.  
Gianni\textsubscript{1} thought that Maria\textsubscript{2} feared(subj) that pro\textsubscript{1/2/3} had(subj) made many mistakes  
‘Gianni\textsubscript{1} thought that Maria\textsubscript{2} was afraid that he\textsubscript{1/3}/she\textsubscript{2/3} had made many mistakes’.

b. Gianni\textsubscript{1} pensava che Maria\textsubscript{2} sperasse che pro\textsubscript{1/2/3} venisse promossa.  
Gianni\textsubscript{1} thought that Maria\textsubscript{2} hoped(subj) that pro\textsubscript{1/2/3} came(subj) promoted  
‘Gianni\textsubscript{1} thought that Maria\textsubscript{2} hoped that he\textsubscript{1/3}/she\textsubscript{2/3} would pass the exam’.

c. Gianni\textsubscript{1} pensava che Maria\textsubscript{2} sperasse che pro\textsubscript{1/2/3} potesse leggere il libro.  
Gianni\textsubscript{1} thought that Maria\textsubscript{2} hoped(subj) that pro\textsubscript{1/2/3} could(subj) read the book  
‘Gianni\textsubscript{1} thought that Maria\textsubscript{2} hoped that he\textsubscript{1/3}/she\textsubscript{2/3} could read the book’.

The co-indexation between the most embedded subject and the matrix subject is available even when the intermediate predicate is “modal” (‘to be possible’, ‘to be necessary’, etc.):

(69) Gianni\textsubscript{1} pensava che fosse indispensabile che pro\textsubscript{1/2} telefonasse.  
Gianni\textsubscript{1} thought that was(subj) indispensable that pro\textsubscript{1/2} called(subj).  
‘Gianni hoped that it was indispensable that he\textsubscript{1/2} would call’.

\[15\] The combination of auxiliaries and modals can increase the degree of acceptability even further. Consider the following examples:

(i) Gianni\textsubscript{1} pensava che Maria\textsubscript{2} sperasse che pro\textsubscript{1/2/3} fosse stata promossa.  
Gianni\textsubscript{1} thought that Maria\textsubscript{2} hoped(subj) that pro\textsubscript{1/2/3} was(subj) been promoted  
‘Gianni\textsubscript{1} thought that Maria\textsubscript{2} hoped that he\textsubscript{1/3}/she\textsubscript{2/3} passed the exam’.

(ii) Gianni\textsubscript{1} pensava che Maria\textsubscript{2} sperasse che pro\textsubscript{1/2/3} potesse essere stata promossa.  
Gianni\textsubscript{1} thought that Maria\textsubscript{2} hoped(subj) that pro\textsubscript{1/2/3} could (subj) be been promoted  
‘Gianni\textsubscript{1} thought that Maria\textsubscript{2} hoped that he\textsubscript{1/3}/she\textsubscript{2/3} could have passed the exam’.
Other Western Romance Languages behave like Italian:

(70)  
a.  **Catalan** (Picallo 1985)  
En Pere₁ esperava que en Jordi₂ volgué que pro₁*/2/₃ hi anèsid.  
[The Pere₁ hoped that [the Jordi₂ wanted(subj) that pro₁*/2/₃ there went(subj)].
‘Pere₁ hoped that Jordi₂ wanted him₁*/2/₃/her to go there’.

b.  **French** (Progovac 1993, 1994)  
Jean₁ veut qu’il₁*/2 desioe qu’il₁*/2 aime Marie.  
Jean₁ wants that he₁*/2 wishes(subj) that he₁*/2 Marie  
‘Jean₁ wants him₁*/2 to wish he₁*/2 loved Marie’.

c.  **Portuguese** (Raposo 1985)  
[O Eduardo₁ deseja que [o Manel₂ queira que ele₁*/2/₃ compre um automóvel novo.  
[The Eduardo₁ wishes that [the Manel₂ wants(subj) that he₁*/2/₃ buy(subj) a car new.  
‘Eduardo₁ wishes that Manel₂ wanted him₁*/2/₃ to buy a new car’.

From the above data from Italian, Catalan, French, and Portuguese, the conclusion follows that obviation can involve the embedded subject and the subject of the immediately dominating clause. Hence, in the instances of double embedding, the subject of the most embedded clause cannot be co-indexed with the subject of the intermediate clause, but it is free to co-refer with the matrix subject. Thus, another generalization, which has been already observed in the literature, can be formulated as follows:

(71)  **Generalization 5**  
Obviation occurs only between the embedded subject and the subject of an immediately dominating clause.
3.7 Matrix arguments

Among the properties of sentences (4)-(5), property (6)c regards the syntactic functions of the arguments involved in the disjoint reference effect. It has been generally argued in the literature that the embedded subject is obviative with respect to the matrix subject. However, some data suggest that the embedded subject may be obviative even with respect to arguments that do not serve as the subject of the immediately dominating clause. The question therefore arises as to obviation can occur even between arguments that do not comply with the syntactic function of subject. The following combinations are available:

<table>
<thead>
<tr>
<th>Matrix clause</th>
<th>Embedded clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. subject</td>
<td>subject (obviative)</td>
</tr>
<tr>
<td>b. subject</td>
<td>object</td>
</tr>
<tr>
<td>c. object</td>
<td>subject</td>
</tr>
<tr>
<td>d. object</td>
<td>object</td>
</tr>
</tbody>
</table>

Tab. 4. Relations between matrix arguments and embedded arguments.

Let us consider whether the disjoint reference effects obtain in cases b, c, and d of the above table.

As for the combination b, there are no restrictions on the reference of the embedded object with respect to the matrix subject:

(72) Gianni₁ desidera che Maria lo₁/2 invitì alla riunione.
Gianni₁ wishes that Maria him₁/2 invites(subj) to the meeting
‘Gianni₁ wishes that Maria invited him₁/2 to the meeting’.

This is be true also for the other Western Romance languages:

(73) a. Catalan (Picallo 1985)

[En Joan₁] esperava que [en Jordi] l₁/2 invitès a la reunió.
[The Joan₁] hoped that the Jordi him₁/2 invited(subj) to the meeting
‘Joan₁ hoped that Jordi would invite him₁/2 to the meeting’.
b.  *French* (Mara Manente, p.c.)

Jean\textsubscript{1} veut que Marie l\textsubscript{1/2} invite au colloque.
Jean\textsubscript{1} wants that Marie him\textsubscript{1/2} invites(subj) at the meeting
‘Jean\textsubscript{1} wants Marie to invite him\textsubscript{1/2} to the meeting’.

c.  *Portuguese* (Raposo 1985)

[O Manel]\textsubscript{1} deseja que Maria o \textsubscript{1/2} insulte.
[The Manel]\textsubscript{1} wishes that the Maria him\textsubscript{1/2} insults(subj)
‘Manel wishes that Maria insulted him’.

d.  *Spanish* (Suñer 1986)

Paco\textsubscript{1} quiere que María lo \textsubscript{1/2} invite a la fiesta.
Paco wants that Maria him invites(subj) at the party
‘Paco wants Maria to invite him to the party’.

In Italian, the embedded subject of a directive verb argument clause is obviative with respect to the matrix subject, but it can be proximate with respect to the matrix object (combination c):

(74)  Gianni\textsubscript{1} chiese a Maria\textsubscript{2} che pro\textsubscript{1/2} partisse il giorno dopo.
Gianni\textsubscript{1} asked to Maria\textsubscript{2} that pro\textsubscript{1/2} left(subj) the day after
‘Gianni\textsubscript{1} asked Maria\textsubscript{2} PRO\textsubscript{1/2} to leave on the following day’.

Analogous data can be found also in other Romance languages:

(75)  a.  *Catalan* (Picallo 1985)

[En Pere]\textsubscript{1} va convèncer en Jordi\textsubscript{2} que pro\textsubscript{1/2} anés a Nova York.
[The Pere]\textsubscript{1} goes persuade(inf) [the Jordi]\textsubscript{2} that pro\textsubscript{1/2} went(subj) to New York
‘Pere\textsubscript{1} persuaded Jordi\textsubscript{2} PRO\textsubscript{1/2} to go to New York’

b.  *Spanish* (Suñer 1986)

José\textsubscript{1} lo\textsubscript{2} persuadió a que pro\textsubscript{1/2} apagara la TV.
José\textsubscript{1} him\textsubscript{2} persuaded to that pro\textsubscript{1/2} turned-off(subj) the TV
‘José\textsubscript{1} persuaded him\textsubscript{2} PRO\textsubscript{1/2} to turn off the TV’.

In Italian, if the embedded verb is passive, pro can be co-referent with the matrix subject. This is expected under generalization 5:
(76) Gianni₁ chiese a Maria che pro₁/₂ fosse autorizzato a partire.
Gianni₁ asked to Maria that pro₁/₂ was(subj) authorized to leave
‘Gianni₁ asked Maria that he₁/₂ would be authorized to leave’.

Some psych-verbs, like preoccupare ‘to worry’, and some epistemic verbs, like sembrare ‘to seem’ trigger the disjoint reference effect between the matrix object, to which the experiencer theta-role is assigned, and the embedded subject:

(77) a. Lo₁ Preoccupa che pro₁/₂ parta domani.
   Him₁ Worries that pro₁/₂ leaves(subj) tomorrow
   ‘It worries him₁ that he₁/₂/she will leave tomorrow’.

   b. A Gianni₁ sembra strano che pro₁/₂ parta domani.
      To Gianni₁ seems strange that pro₁/₂ leaves(subj) tomorrow
      ‘It seems strange to Gianni₁ that he₁/₂/she will leave tomorrow’.

The same status holds for the corresponding examples in Catalan (Picallo 1985):

(78) Li₁ agradava que pro₁/₂ llegís el diari.
    [To-Him/her₁]₁ was-pleasant that pro₁/₂ read(subj) the newspaper.
    ‘He/she₁ found it pleasant that he/she₁/₂ used to read the newspaper’.

However, if the matrix predicate has imperfect tense and the form carrying subjunctive morphology is a tense or passive auxiliary, or a modal, co-reference is marginally acceptable:

(79) a. A Gianni₁ sembrava strano che pro₁/₂ avesse fatto molti errori.
    To Gianni₁ seemed strange that pro₁/₂ had(subj) made many mistakes
    ‘It seemed strange to Gianni₁ that he₁/₂/she had made many mistakes’.

   b. Lo₁ preoccupava che pro₁/₂ non fosse ammesso all’università.
      Him₁ worried that pro₁/₂ not was(subj) admitted to the university
      It worried him₁ that he₁/₂/she would not be admitted to the university’.

   c. Lo₁ preoccupava che pro₁/₂ dovesse partire così presto.
      Him₁ worried that pro₁/₂ must(subj, impf) leave(inf) so early
      ‘It worried him₁ that he₁/₂/she had to leave so early’.
Moreover, if the form carrying subjunctive morphology is a modal, and if the infinitive it precedes is in the past, the co-referential interpretation is even more acceptable:

(80) Lo_{1} preoccupava che pro_{1/2} potesse aver fatto molti errori.  
Him_{1} worried that pro_{1/2} could(ubj) have(inf) made many mistakes  
‘It worried him_{1} that it was possible that he_{1/2}/she had made many mistakes’.

As for the relation between the matrix and the embedded objects, there are no restrictions on the referential relations between a matrix and an embedded object:

(81) A Gianni_{1} sembra strano che Maria lo_{1} ammiri.  
To Gianni_{1} seems strange that Maria him_{1} admires(subj)  
‘It seems strange to Gianni_{1} that Maria admires him_{1}’.

The above data show that obviation can involve matrix arguments that do not serve as the subject – or, to be more precise, the grammatical subject, i.e., the DP in [Spec, AgrSP]. However, in any of the examples in which obviation obtains, the argument from which the embedded subject has to be referentially disjoint, refers to the individual that holds an attitude towards some propositional content. We will call this argument as “attitude bearer” (or “attitude holder”):

(82) **Attitude bearer**  
The individual having an attitude towards some propositional content.

Hence, the following generalization seems to be true for Romance languages:

(83) **Generalization 6**  
Obviation occurs between the subject of an embedded clause and the relative argument referring to the attitude bearer.

Given generalization 6, generalization 5, repeated here, cannot be maintained as such:
(74) **Generalization 5**

Obviation occurs only between the embedded subject and the subject of an immediately dominating.

Generalization 5 puts indeed some conditions only on the referential properties concerning the matrix and the embedded subjects, but obviation may occur even between the embedded subject and the matrix *object*. Moreover, it requires that the matrix subject with respect to which the embedded subject must be interpreted as obviative, must be the subject of the *immediately dominating* clause. This requirement decays if the notion of attitude-holder is involved. For any clausal argument, indeed, there is one and only one attitude bearer. Hence, in examples involving double embedding the attitude bearer with respect to the intermediate clause is referred to by a matrix argument. The attitude holder with respect to the more deeply embedded clause, moreover, is referred to by an argument of the intermediate clause. But a matrix argument cannot be the bearer of the attitude with respect to the more deeply embedded clause. In fact, if a sentence like *John thinks that Mary wants Bill to study more than he does* is true, John does not have any attitude towards the proposition expressed by the more embedded clause – he does he think that Bill is going to study more than he does, nor does he want Bill to study more than he does.

### 3.8 Conclusion

In this chapter I tried to answer three questions:

(2) a. In which subordinate clauses does obviation occur?

b. Which type of subjunctive triggers obviation?

c. Which matrix argument must the embedded subject be disjoint from?

We came to conclude that the following generalizations seem to hold for the data from Italian:
Generalization 4
Obviation occurs only in clauses in which the form carrying subjunctive morphology is a full verb.

Generalization 7
Obviation occurs between the subject of an embedded clause and the relative argument referring to the attitude bearer.

We may even sum up generalization 4 and 7 in a new, more general, generalization, which can be stated as follows:

Obviation occurs only between the subject of a subjunctive clause and the relative bearer of the attitude iff the form carrying subjunctive morphology is a full verb.

The complete paradigm that generalization (86) is able to describe in Italian is as follows:

a. Gianni₁ pensava che pro₁/₂ leggesse molti libri.  
Gianni₁ thought that pro₁/₂ read(subj) many books  
Gianni₁ thought that he₁/₂/she used to read many books.

b. Gianni₁ pensava che pro₁/₂ avesse letto molti libri.  
Gianni₁ thought that pro₁/₂ had(subj) read many books  
Gianni₁ thought that he₁/₂/she had read many books.

c. Gianni₁ sperava che pro₁/₂ fosse promosso.  
Gianni₁ hoped that pro₁/₂ was(subj) promoted  
‘Gianni₁ hoped that he₁/₂/she would pass the exam’.

d. Gianni₁ sperava che pro₁/₂ potesse partire il giorno dopo.  
Gianni₁ hoped that pro₁/₂ could(subj) leave(inf) the day after.  
‘Gianni₁ hoped he₁/₂/she would be able to leave on the following day’.

e. Gianni₁ pensava che pro₁/₂ potesse aver fatto molti errori.  
Gianni₁ thought that pro₁/₂ can(subj, impf) have(inf) made many mistakes
‘Gianni thought it was possible he\textsubscript{1/2}/she has/had made many mistakes’.

f. Gianni\textsubscript{1} pensava che pro\textsubscript{1/2} potesse essere promosso.  
Gianni\textsubscript{1} thought that pro\textsubscript{1/2} can(subj, impf) be(inf) promoted  
‘Gianni\textsubscript{1} thought that it is possible that he\textsubscript{1/2}/she had passed the exam’.

g. Gianni\textsubscript{1} pensava che pro\textsubscript{1/2} potesse essere stato promosso.  
Gianni\textsubscript{1} thought that pro\textsubscript{1/2} can(subj, impf) be(inf) been promoted  
‘Gianni\textsubscript{1} thought that it is possible that he\textsubscript{1/2}/she had passed the exam’.

h. Gianni\textsubscript{1} rammaricava che pro\textsubscript{1/2} fosse dovuto partire così presto.  
Gianni\textsubscript{1} regretted that pro\textsubscript{1/2} be(subj, impf) must(prt) leave(inf) so early  
‘Gianni regretted that he\textsubscript{1/2}/she had had to leave so early’.

i. Gianni\textsubscript{1} sperava che Maria\textsubscript{2} desiderasse che pro\textsubscript{1/*2/3} partisse.  
Gianni\textsubscript{1} hoped that Maria\textsubscript{2} wished(subj) that pro\textsubscript{1/*2/3} left(subj)  
‘Gianni\textsubscript{1} hoped that Maria\textsubscript{2} wished that he\textsubscript{1/3}/she\textsubscript{2/3} left’.

(88) a. Gianni\textsubscript{1} chiese a Maria\textsubscript{2} che pro\textsubscript{1/2} partisse il giorno dopo.  
Gianni\textsubscript{1} asked to Maria\textsubscript{2} that pro\textsubscript{1/2} left(subj) the day after  
‘Gianni\textsubscript{1} asked Maria\textsubscript{2} PRO\textsubscript{1/2} to leave on the following day’.

b. Lo\textsubscript{1} Preoccupa che pro\textsubscript{1/2} parta domani.  
Him\textsubscript{1} Worries that pro\textsubscript{1/2} leaves(subj) tomorrow  
‘It worries him\textsubscript{1} that he\textsubscript{1}/she will leave tomorrow’.

(74) a. Gianni\textsubscript{1} ha detto che pro\textsubscript{1/2} leggerà il libro.  
Gianni\textsubscript{1} has said that pro\textsubscript{1/2} will-read(ind) the book  
‘Gianni\textsubscript{1} said he\textsubscript{1}/her will read the book’.

b. Gianni\textsubscript{1} aveva detto che pro\textsubscript{1/2} sarebbe partito il giorno dopo.  
Gianni\textsubscript{1} had said that pro\textsubscript{1/2} would-be left on the following day  
‘Gianni\textsubscript{1} said he\textsubscript{1}/she would have left on the following day’.

c. Gianni\textsubscript{1} vuole PRO\textsubscript{1/*2} leggere il libro.  
Gianni\textsubscript{1} wants PRO\textsubscript{1/*2} to read the book.  
‘Gianni wants to read the book’.

In chapter 4 we will try to work out a hypothesis that should be able to account for generalization (86).
Appendix A  Noun complements in the subjunctive

When a subjunctive clause is the argument of a deverbal noun expressing an attitude (for instance, volontà, ‘will’, desiderio, ‘desire’, speranza, ‘hope’), obviation can occur between the subject of the subjunctive clause and a constituent referring to the attitude-holder:

(89)  Il suo desiderio che pro\textsuperscript{1/2} parta domani svanirà presto.
The [his/her] wish that pro\textsuperscript{1/2} leaves(subj) tomorrow will vanish soon.
‘[His/her] wish that [he/she]\textsuperscript{1/2} left tomorrow will vanish soon’.

Obviation within clausal complements of nouns has the same distribution of obviation within argument clauses of verb. Indicative, conditional, and infinitive mood do not trigger obviation. And if the form carrying subjunctive morphology is an auxiliary or a modal, obviation does not occur:

(90)  a.  La sua affermazione che pro\textsuperscript{1/2} partirà domani ha sorpreso tutti.
The [his/her] statement that pro\textsuperscript{1/2} will-leave(ind) tomorrow has surprised all
‘[His/her] statement that [he/she]\textsuperscript{1/2} will leave tomorrow has surprised everyone’.

b.  La sua affermazione che pro\textsuperscript{1/2} sarebbe partita il giorno dopo sorprese tutti.
The [his/her] statement that pro\textsuperscript{1/2} would-leave(ind) the day after surprised all
‘[His/her] statement that [he/she]\textsuperscript{1/2} would leave on the following day surprised everyone’.

c.  La sua decisione di PRO\textsubscript{1} partire sorprese tutti.
The [his/her]\textsubscript{1} decision of PRO\textsubscript{1} leave(inf) surprised all
‘[His/her]\textsubscript{1} decision to leave surprised everyone’.

d.  La sua speranza che pro\textsuperscript{1/2} avesse fatto pochi errori svanì ben presto.
The [his/her] hope that pro\textsuperscript{1/2} had(subj) made few mistakes vanished
‘[His/her] hope that [he/she]\textsuperscript{1/2} had made few mistakes vanished quickly’.
Given these data, it seems that the generalization we have met so far can be easily extended to clausal complements of nouns. This implies that attitude nouns carry an implicit argument referring to the attitude bearer.

It can be also noticed that the predicate of a subjunctive clause within an NP is constrained by the same rules of SOT that determines the verbal form in clausal arguments of verbs.

(91) a. La speranza di Gianni che Maria **parta** domani/sia già **partita** svarirà presto.
The hope of Gianni that Maria leaves**(pres, subj)** tomorrow/has already left**(past, subj)** will-fade away soon.
‘Gianni’s hope that Maria would leave tomorrow/has already left will fade away soon’.

a’. *La speranza di Gianni che Maria **partisse** domani/**fosse** già **partita** svarirà presto.*
The hope of Gianni that Maria left**(impf, subj)**/had already left**(ppf, subj)** tomorrow will-fade away soon.

b. La speranza di Gianni che Maria **partisse** il giorno dopo/**fosse** già **partita** svarì presto.
The hope of Gianni that Maria left**(impf, subj)** the day after/was already left**(ppf, subj)** faded away soon.
‘Gianni’s hope that Maria would have left on the following day/had already left faded away soon’.

b’. *La speranza di Gianni che Maria **parta** il giorno dopo/**sia** già **partita** svarì presto.*
The hope of Gianni that Maria leaves**(pres, subj)** the day after/has already left**(past, subj)** faded away soon.
Appendix B  Obviation in adverbial clauses

Manzini (2000) observes that in some adverbial clauses in the subjunctive the subject cannot be co-indexed with the matrix subject. Rationale clauses, for instance, instantiate obviation:

(92) *Pro_{1sg} vengo perché pro_{1sg} ti aiuti.
    Pro_{1sg} come(1sg) in-order-that pro_{1sg} you(obj. cl.) help(subj, 1sg)

According to Manzini (2000), sentence (77) can be paraphrased as follows: ‘I come because I want that I help you’ (on the semantics of rationale clauses, see von Fintel-Iatridou 2005 and the relative bibliography). The fact that rationale clauses include a will attitude is probably connected with the obviative interpretation of the null subject of a rationale clause.

What is more obscure, however, is that obviation is instantiated even in adverbial clauses that do not involve an attitude. Take for instance the following clause:

(93) Gianni_{1} legge il giornale prima che pro_{1/2} faccia colazione.
    Gianni_{1} reads the newspaper before that pro_{1/2} makes(subj) breakfast
    ‘Gianni_{1} reads the newspaper before he_{1/2}/she has breakfast’.

These data will be object of further investigation.
In this chapter I will try to work out a proposal to account for the facts I discussed in chapter 2. In particular, I will try to elaborate a hypothesis that should be able to explain generalization (86), chapter 3, repeated here as (1):

(1) Obviation occurs only between the subject of a subjunctive clause and the relative bearer of the attitude iff the form carrying subjunctive morphology is a full verb.

The above generalization is able to describe the distribution of the subjunctive disjoint reference effect in Italian. Accordingly, obviation can obtain only in subjunctive clauses. Indicative, conditional, and infinitival clauses do not trigger obviation. It can involve only the subject (null, in Italian) of a subordinate clause and the argument of the superordinate clause referring to the person to whom a certain attitude towards the proposition denoted by the embedded clause is attributed. Finally, obviation can obtain only if the form carrying subjunctive morphology is a full verb. If the form carrying subjunctive morphology is a tense, a passive auxiliary, or a modal verb, obviation tends not to occur.

Given these considerations, the following desiderata for a hypothesis on obviation in subjunctive clauses arise:

(2) A hypothesis on obviation should be able to explain:
   a. why subjunctive clauses are different from indicative, conditional and infinitive clauses with respect to the referential properties of their subject;
   b. why functional verbs (that is, modal verbs, tense and voice auxiliaries) are different from full verbs with respect to the referential properties of the subject of a subjunctive clause;
c. why obviation involves only matrix arguments referring to the attitude holder.

In this chapter I will propose a hypothesis which should be able to answer these requirements.

This chapter is organized like so: I will firstly reanalyze the phenomenon of obviation in itself and show that it can be restated as a constraint against the first-personal (in the sense of Castañeda 1966, 1968) or de se (in the sense of Lewis 1979) interpretation. I will therefore introduce the theoretical apparatus that will allow us to formulate a hypothesis on subjunctive obviation. This apparatus will include the concept of ‘implicit argument’ (Higginbotham 1997, Williams 1987, 1989), and the Double Access Reading generalized approach (Giorgi-Pianesi 2001). The mechanisms connected to these two notions will allow us to hypothesize that in environments devoid of the speaker’s assignment sequence, a de se interpretation can be conveyed only if an implicit argument can be theta-identified with the attitude bearer. It will be shown that this theory is more powerful than previous theories.

4.1 Obviation as unavailability of de se (and non de se) reading

We have seen that obviation can be defined, with respect to the phenomena investigated here, as a disjointness condition between the embedded subject and a matrix argument, generally the one serving as subject. I will now introduce another notion, originally discussed by Castañeda (1966, 1968) and known as “first-personal interpretation” or de se interpretation, following Lewis’s (1979) terminology. Let us consider the following scenario (see Castañeda 1966, Higginbotham 1992):

(3) Scenario: a certain war hero suffers from amnesia and does not remember anything of his deeds in wartime. Suppose that this unfortunate person reads a book about the war he fought in. He also reads about a soldier’s heroic exploits. The soldier the unfortunate is reading about, is actually himself, but he is amnesiac and does not realize that it is himself the war hero. He finally
comes to have some belief about the soldier he is reading about. In particular, he believes that that soldier, who is the unfortunate himself, is a hero.

Let us now consider the following sentences:

(4)  a. The unfortunate man believes he is a hero.
     b. The unfortunate man believes that he himself is a hero.
     c. The unfortunate man believes himself to be a hero.

Given the above scenario, sentence (4)a is true, whereas sentences (4)b and (4)c are not.

However, let us imagine another scenario, one in which the war hero is completely aware of his experience in the wartime, and consider the following sentences:

(5)  a. The war hero knows that he is the hero.
     b. The war hero knows that he himself is the hero.

Both sentences are true in a scenario in which the war hero remembers his actions during the war. A sentence like the following is therefore ambiguous:

(6)  John thinks he is a war hero.

In uttering it, the speaker might say that John has a \textit{de re} belief about a certain person, who is John himself. But John might have two distinct thoughts. In a scenario in which he is amnesiac, like (3), he might think: “this man is a war hero!”, without realizing that it is himself the person he is talking about. But John might also be aware of who he is and consciously think “I am a war hero”. The latter interpretation has been called \textit{first-personal} (Castañeda 1966, 1968) or \textit{de se} (Lewis 1979)$^1$.

Sentences (4)b, (4)c, and (5)b are not ambiguous, in that they can only be \textit{de se}. In fact, they would not be true in a scenario in which the war hero is amnesiac.

---

$^1$ Of course, another sense is also available, the one according to which John, consciously, has a thought about someone else. This is true for all the sentences discussed in this section.
Let us go back to the scenario in (3), the one in which the war hero is amnesiac, and consider a moment in which he begins to suspect that the actions performed by someone he is reading about would turn out to be heroic – he is not still sure of it, but he has an expectation about how the story he is reading will turn out to be. Consider the following sentences:

(7) a. The unfortunate man expects that he will turn out to be a hero.
    b. The unfortunate man expects himself to turn out to be a hero.
    c. The unfortunate man expects PRO to turn out to be a hero.

Sentence (7)a can be considered true in the given scenario. Sentences (7)b and (7)c, however, cannot. Furthermore sentence (7)a is ambiguous between the *de se* interpretation and the non-*de se* interpretation, whereas sentences (7)b and c are unambiguous – they can only be *de se*.

In Italian a scenario in which a war hero is amnesiac would give the following results:

(8) Lo sfortunato pensa che lui sia l’eroe di guerra.
    The unfortunate thinks that he is(subj) the hero of war
    ‘The unfortunate man thinks he is the war hero’.

Sentence (8) *cannot* be first-personal. That is, by means of it, the speaker cannot report a situation in which the unfortunate man had the following thought:

(9) Sono un eroe di guerra.
    Am a hero of war
    ‘I’m a war hero’.

Interestingly, the non-*de se* reading available for sentence (8) is not available for the following sentence, in which the embedded subject is unrealized:

(10) Lo sfortunato pensa che pro sia l’eroe di guerra.
    The unfortunate thinks that *pro* is(subj) the hero of war
    ‘The unfortunate man thinks he/she is the war hero’
Sentence (10) could be considered true in a scenario in which the unfortunate man is amnesiac and the speaker is not aware that the person the unfortunate man is reading about is actually the unfortunate himself.

Finally, let us consider the following sentence:

(11) Gianni pensa che pro sia l’eroe di guerra.
    Gianni thinks that pro is(subj) the hero of war
    ‘Gianni thinks he/she is the war hero’.

Sentence (11) could not be considered true in a scenario like (3). It can only mean that Gianni thinks that someone else than himself is the war hero. Hence, sentence (11) cannot be interpreted de se (and neither can it be interpreted non-de se). It can only be interpreted de re, provided that the subject of the attitude report and the subject of the clause denoting the proposition towards which a certain attitude is expressed, do not refer to the same individual. Thus, form the contexts at issue obviation can be redefined as the property of being a syntactic structure unable to support either the de se or the non-de se interpretation.

Moreover, in Italian the subjunctive mood contrasts with the indicative and the infinitive moods in that the latter moods do allow the de se reading. Imagine, for instance, that the unfortunate suddenly recovers his memory and says: “I’m a war hero”. The following sentences could be considered true – it can be observed that conditional clauses can also be de se as well:

(12) a. Lo sfortunato sostiene che (lui) è/sarebbe un eroe di guerra.
    The unfortunate claims that (he) is/would-be a hero of war
    ‘The unfortunate claims that he is/would be a war hero’.

b. Lo sfortunato sostiene di essere un eroe di guerra.
    The unfortunate claims of be(inf) a hero of war
    ‘The unfortunate claims to be a war hero’.

The difference between sentences (12)a and b is that the latter is strictly de se, whereas the former can be de se or non-de se.

We have seen in chapter 3, however, that not all clauses in the subjunctive instantiate obviation. This is to say that there are some subjunctive clauses that allow
the *de se* reading, if obviation can be defined as the unavailability of *de se* reading (and of non-*de se* as well). This seems to be correct. Let us consider the following sentence:

(13) Gianni pensava che *pro* avesse vinto le elezioni.  
    Gianni thought that *pro* had(subj) won the elections  
    ‘Gianni thought that he had won the elections’.

By uttering this sentence, the speaker might want to say that Gianni has a *de re* attitude towards someone else than himself, but he might also want to say that Gianni has a *de re* attitude towards someone that is Gianni himself. Under the latter possibility Gianni might have two distinct thoughts. He might have thought: “I won the elections” (*de se* reading). Or he might be amnesiac. He is, say, reading about a candidate for the elections. The candidate is actually Gianni himself, but Gianni does not realize that he is reading about himself, and might have thought: “I think this candidate has won the elections”.

Hence, sentence (13) seems to have the same properties as sentence (6) in English and (12)a in Italian, but not as sentence (11). Thus, the same contrast holds between sentences (12)a and b and between (13) and the following sentence, which is strictly *de se*:

(14) Gianni spera di *PRO* aver vinto le elezioni.  
    Gianni hopes of *PRO* have(inf) won the elections  
    ‘Gianni hopes to have won the elections’.

The observations for sentence (13) also hold for clauses in which an auxiliary or a full verb carries subjunctive morphology. Let us consider, for instance, a sentence with a passive auxiliary in the subjunctive:

(15) Gianni sperava che *pro* fosse eletto presidente.  
    Gianni hoped that *pro* was(subj) elected president  
    ‘Gianni hoped that he/she would be elected president’.

According to most Italian native speakers, sentence (51) can have the *de se* interpretation, albeit less naturally than one with the infinitive such as the following:
Gianni sperava di essere eletto presidente.
Gianni hoped of be(inf) elected president
‘Gianni₁ hoped to be elected president’.

A clause with a subjunctive modal can also be interpreted de se:

Gianni sperava che pro potesse diventare presidente.
Gianni hoped that pro could(subj) become(inf) president
‘Gianni hoped that he could become president’.

By uttering sentence (17) the speaker may in fact want to say that Gianni has an attitude de se.

We can treat indicative clauses and subjunctive clauses with an auxiliary or a modal carrying subjunctive morphology together – they can be de se, non-de se, and (generally) de re². On the other hand, subjunctive clauses with a full verb carrying subjunctive morphology, on the other hand, cannot be de se (although they can be non-de se if the subject is expressed by a phonologically realized constituent (see sentence (8)), and can always be de re). Finally, infinitival clauses can be only de se. These considerations are summed up in the following table:

<table>
<thead>
<tr>
<th></th>
<th>De re</th>
<th>De se</th>
<th>Non-de se</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indicative</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auxiliary/Modal</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Subjunctive</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full verb</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Lexical subject</td>
<td></td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td>Null subject</td>
<td>✓</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td>Infinitive</td>
<td>*</td>
<td>✓</td>
<td>*</td>
</tr>
</tbody>
</table>

Tab. 1. Attitude reports and de se reading.

---

² Only by convention, I will use the term de se and de re as distinct types of attitudes, even though de se attitudes may be understood as a particular case of de re attitudes (see Higginbotham 1989).
Given that above discussion, and in particular the observation that obviation can be defined as the unavailability of the *de se* and non-*de se* interpretation, generalization (1) can be reformulated as follows (limited to Italian):

(18) A subjunctive clause cannot be interpreted *de se* (nor non-*de se*) if the form which carries subjunctive morphology is a full verb.

As a corollary of generalization (18), it follows that if the form carrying subjunctive morphology is not a full verb, the subjunctive clause can be interpreted *de se* or non-*de se*.

Notice that from a theoretical viewpoint, generalization (18) has a relevant advantage with respect to generalization (1). The latter generalization, indeed, describes the environments in which obviation obtains. In chapter 1 the adjective ‘obviative’ was taken as a synonym of “not co-indexed”. To do away with the notion of obviation therefore means to do away with the notion of index in the domain of syntax, which seems to be possible, at least for the present purposes. From a minimalist viewpoint, this would be a welcome result. Indeed, Reuland (2001) observes that the Minimalist Program (Chomsky 1995, 1998, 1999) proposes that indexes are not available within the computational system of human language (C_HL), and that binding conditions apply only at the Conceptual-Intentional (C-I) interface.

4.2 Towards an interface hypothesis: theoretical background

In this section the theoretical framework will be introduced, which should lead us to work out an explicative hypothesis for generalization (18). I will exploit the following notions:

(19) a. *Implicit arguments*
   i. Implicit arguments are theta-positions that are not assigned by theta-marking (Higginbotham 1997, Williams 1987, 1989);
   ii. Implicit arguments may be satisfied via theta-identification (Higginbotham 1997);
b. **Double Access Reading Generalized** (Giorgi Pianesi 2001)
   i. In indicative clauses the assignment sequence of the speaker and of the attitude bearer are both present;
   ii. In subjunctive clauses only the assignment sequence of the attitude bearer is present;

c. **Long Distance Anaphors**
   i. LDAs appear only in subjunctive clauses (Giorgi 1983);
   ii. LDAs are *de se* (Chierchia 1989, Cole-Hermon-Sung 1990, Giorgi 1983, 2004a, 2004b, Pica 1987, Sells 1987);
   iii. LDAs are the spell-out of an implicit argument that can be theta-identified either with a co-argument or with the attitude bearer (Giorgi 2004a, b, c);
   iv. The speaker’s assignment sequence ‘closes’ the binding domain of anaphors (Huang-Liu 2001, Giorgi 2004b and c);

4.2.1 **Implicit arguments**

The Theta-criterion (Chomsky 1981) states a narrow correlation between predicates and their arguments: predicates assign thematic roles to their arguments, and arguments carry the thematic roles:

\[(20)\] **Theta-criterion**

a. Every argument is assigned one and only one thematic role;

b. Every thematic role is assigned to one and only one argument.

Higginbotham (1985) observes, however, that a series of examples show that part *b* of the Theta-criterion is too simple as it stands:
(21)  

a. The boat was sunk [PRO to collect the insurance] (Manzini 1983)  
b. the dog  
c. This is a big butterfly  

Example (21)a means, by and large, that whoever sank the boat, did it in order to collect the insurance. The passive was sunk specifies two theta-roles, of which only the one discharged by the subject the boat is assigned. This apparently violates part b of the Theta-criterion.  

As for example (21)b, in many language nouns can serve as predicates. Hence, the noun dog is supposed to have a theta-grid in its lexical entry, containing one position, which Williams (1980) calls it “R” (referential). When it forms a nominal phrase, that position is not assigned to any argument. This also seems to violate part b of the Theta-criterion.  

Finally, example (21)c does not simply mean “this is a butterfly and this is big”. Rather, it can be paraphrased as “this is a butterfly and this is big for a butterfly”. The adjective big grades the noun butterfly with respect to butterflies, not in general terms (even a big butterfly is not a big thing). The adjective big is supposed to have two thematic positions: like any other predicate, it has one position. But it must have an additional position, the one which must be satisfied by the attribute the adjective grades. Part b of the Theta-criterion does not help in explaining how this theta-role is assigned.  

To fill these gaps in the Theta-criterion, Higginbotham (1985) proposes that theta-marking is not the only way of discharging a theta-role. He argues that there are three more ways of discharging a theta-role: “theta-binding”, “theta-identification”, and “autonomous theta-marking”.  

Example (21)b illustrates the first procedure of discharging a theta-role. The determiner the is supposed to “bind” the theta-position of the noun and, in this way, to discharge the theta-position. This way of discharging a theta-role is named “theta-binding”. Example (21)c illustrates the second and the third way of discharging a theta-role. Both the adjective and the noun can be predicates, and must accordingly have a theta-position any. However, the whole constituent a big butterfly is a predicate and, consequently, must have a unique theta-position. Therefore, the theta-
position of the noun and that of the adjective are supposed to be “identified” and passed to the whole constituent. This way of discharging a theta-role is named “theta-identification”. Moreover, the adjective presents a second theta-position, because it grades the noun it modifies with respect to the attribute the noun denotes. Hence, the second theta-position of the adjective is discharged by the noun it modifies. This way of discharging a theta-role is named “autonomous theta-marking”.

Notice that the mechanisms of theta-binding, theta-identification, and autonomous theta-binding have as a consequence that the Theta-criterion cannot be preserved as such. In particular, the second statement of the Theta-criterion (“every thematic role is assigned to one and only one argument”) seems to be infelicitous, since there is evidence that thematic roles need not be assigned to an argument. Hence, Higginbotham substitutes the second statement with the following, more general, one:

(22) Every thematic position is discharged.

Higginbotham (1997) calls a thematic position that is not discharged through theta-marking, implicit argument\(^3\). Implicit arguments are therefore involved in the instances of theta-binding, theta-identification, and autonomous theta-marking. Moreover, they are involved in the instances of implicit control, exemplified by (21)a, in which the agent implicit argument of the verb to sink is supposed to be discharged simply through existential closure.

Example (21)a shows that implicit arguments are visible to the syntax, because PRO is controlled exactly by an implicit argument. There is a series of evidence, however, that prove the interaction between implicit arguments and syntax. The intervention of implicit arguments in the Binding Theory is shown by the following examples (see Williams 1987):

---

(23) a. Respect for oneself is important.
    b. Admiration of him.
    c. The realization that John was unpopular.

In any of the sentences in (23) the noun has a theta-grid containing two positions. The first theta-position is discharged by existential closure and is an implicit argument, accordingly. The second position is discharged respectively by an anaphor, by a pronoun and by a clause. Sentence (23)a show that an implicit argument is able to bind an anaphor. As for sentence (23)b, it cannot be the case that the individual who feels admiration is also the individual who is admired. Hence, him cannot be bound by an implicit argument. This is what one would expect if implicit arguments were visible to syntax and could enter the computation of binding relations. Indeed, him cannot be co-referent with the implicit argument because of Binding Principle B. Finally, in (23)c the external implicit argument of realization cannot be interpreted as John, due to Binding Principle C.

Notice also that it can be proved that the external argument in the above examples is an implicit argument, rather than a phonologically null formative, like PRO. Let us consider the following contrast discussed by Higginbotham (1997):

(24) a. Bets against him\(_1\) bother John\(_1\).
    b. Betting against him\(_1\) bothers John\(_1\).

In sentence (24)a the availability of co-indexation between him and John implies that it is not John who is betting; in sentence (24)b, however, him cannot be interpreted as co-referential with John, because John controls PRO. Let us suppose that the external argument of the noun bet in sentence (24)a was discharged by PRO; thus one should expect that John obligatorily controls PRO (if not, why does it not?), and him and John could not be co-indexed, as in example (24)b; but this is contrary to the facts.

If an implicit argument can be a binder, one would expect that it could also be bound. Some case at point is illustrated by Higginbotham (1997). He argues that apart from anaphoric relations between explicit constituents, there are also cases of
implicit anaphora (the binder and the anaphora are both implicit arguments) and mixed anaphora (the binder is a linguistic formative, the anaphora is implicit).

Incorporated anaphors are an instance of implicit anaphora:

(25) A self-starting motor

The theta-grid of the adjective self-starting can be represented as follows:

(26) [[self-starting, ⟨1, 2⟩, 2=1] [motor, ⟨3⟩], 3=1]

The structure in (26) may be paraphrased as follows: “an x such that x is a motor and x starts x”. The second clause of this paraphrase, “x starts x” illustrates an “implicit anaphora”. Self-starting, hence, contains two theta-positions, which are theta-identified. This is indicated by the symbols ‘2=1’). Secondly, these two positions are theta-identified with the unique position of motor.

An example of mixed anaphora is given by the following sentence:

(27) Every participant had to defeat an enemy.

Sentence (27) can be interpreted as “every participant x had to defeat someone who was an enemy of x”. Hence, the theta-grid of the word enemy contains two positions. The second position is the one that can be assigned to the internal argument. This position is theta-identified with every participant, or even with the external position of defeat. It must be noticed that in the latter case example (27) would illustrate the phenomenon of implicit anaphora, rather than mixed anaphora, between the implicit external argument of defeat and the implicit internal argument of enemy. However, an instance of mixed anaphora would arise between every participant and the implicit external argument of defeat:

(28) [have ⟨1⟩ [‘ defeat ⟨2, 3⟩, 2=1 [an enemy ⟨4, 5⟩, 4=3, 5=2]]]
Furthermore, Higginbotham (1997) claims that control itself may be understood as implicit anaphora. Let us consider the following sentence:

(29) John tried PRO to go to London.

He suggests that an anaphoric relation, that is, a process of theta-identification, is established between the external theta-position of the embedded predicate and the external theta-position of the main predicate as part of the syntax (the symbol ‘^’ indicates intensional abstraction):

(30) [try ⟨1⟩[^go to London, ⟨2⟩, 2=1]]

A schematic semantics of sentence (29) is supposed to be as follows:

(31) For x=John, x tried [^x go to London]

If things were so, PRO would be a consequence of control, in the sense that PRO is supposed to be selected in contexts where control, that is, theta-identification between two theta-roles, is already established.

It must be also noticed that according to some analysis, modal verbs and control verbs are supposed to have a thematic structure of their own, which is in no way dependent on the thematic structure of the full verb they govern. This is a delicate point. Although a similar view has been worked out by Roeper (1993) and Safir (1991) with respect to some modal verbs in English, namely need+gerund, other analysis proposed with respect to Romance languages argue that modal verbs, or, more generally, restructuring verbs, inherit the thematic structure of the lexical verb they govern (see for instance Cinque 2004), with only few exceptions (see Cardinaletti-Giusti 2001, 2003). In particular, Cinque (2004) claims that restructuring verbs are in fact functional verbs generated in the head of a dedicated projection within his hierarchy (Cinque 1999). This proposal predicts that restructuring sentences are not bi-clausal, because restructuring verbs, being functional and not lexical, would be devoid of a thematic structure and would “inherit” that of the lexical
verb in the infinitive. Thus, the subject of a restructuring verb is supposed to be generated and assigned a theta-role in the VP of the lexical verb and then to move to the subject position, analogously to what happens in raising structures.

This view has been partially re-dimensionalized by Cardinaletti and Giusti (2001, 2003), who argue that there is evidence that some restructuring verbs, namely motion verbs, do have a thematic grid of their own (and are accordingly named *semi-lexical*).

A detailed analysis of these problems is however beyond the scope of this dissertation and will be left for further research. In what follows, I will pursue the hypothesis that control may be viewed as an instance of theta-identification. More generally, Higginbotham’s proposal will be extended to a more general set of data, including periphrastic tense and voice, and it will be assumed (although this may be too strong an assumption and further research is needed) that any lexical verb inflected in a non-finite form discharges its external argument through theta-identification and *not* through theta-marking.

4.2.2  *Double Access Reading Generalized (Giorgi-Pianesi 2001)*

Giorgi and Pianesi (2001) investigate the nature of Double Accessibility Reading (henceforth, DAR) phenomena in Italian. DAR is illustrated by the following examples:

(32)  a.  Gianni ha detto che Maria è incinta.
     b.  Gianni said that Maria is pregnant.

Sentences (32)a and b can be considered true if the state of pregnancy holds both at the time of Gianni’s uttering the sentence and at the time of the utterance by the speaker (that is now, the speaker’s time). This type of interpretation, which consists in setting an eventuality with respect to the time of two events, the attitude event (the saying episode by Gianni), and the utterance time, has been named ‘Double Access Reading’ (henceforth, DAR). The embedded verb is present indicative. It has been argued (Abusch 1997, Stowell 1996) that only present tense yields the DAR. Giorgi
and Pianesi (2001), however, claim that DAR does not hold only with present embedded verbs but also with past and future ones. Let us consider the following sentences:

(33) a. Gianni ha detto che Maria ha chiamato.
    b. Gianni said that Maria called.
    c. Gianni ha detto che Maria telefonerà.
    d. Gianni said that Maria will call.

In examples (33)a and b the embedded event is past both with respect to ‘now’ and to the matrix event (the attitude episode). It cannot be the case that Maria’s calling precedes temporally the utterance time and follows Gianni’s saying:

(34) a. call(M) › say(G) › now
    b. *say(G) › call(M) › now

In examples (33)c and d the time of the embedded event follows both the time of the attitude episode (Gianni’s saying), and the moment of the utterance (now). It cannot be the case that Maria’s calling follows Gianni’s saying but precedes the present moment:

(35) a. say(G) › now › call(M)
    b. *say(G) › call(M) › now

It follows from the above data that indicative embedded verbs do not behave as mere indexicals, as indicative matrix verbs do. If they did, interpretation (34)b and (35)b should have been available – the only requirement would have been for the embedded event to precede the utterance time.

Let us now consider the case of subjunctive argument clauses:
(36) Gianni pensava che Maria fosse incinta.
   Gianni believed that Maria was(subj) pregnant
   ‘Gianni thought Maria was pregnant’.

Sentence (36) can be considered true if the state of pregnancy holds at the time of
Gianni’s saying, or if the state of pregnancy was anterior to Gianni’s saying; but
there is no direct time relation specified between the embedded eventuality and the
speaker’s temporal coordinates. In other words, the subjunctive mood does not give
access to the reading from the speaker’s point of view⁴.

   It must be noticed, moreover, that the “tense” of subjunctive clauses is totally
determined by the tense of the matrix clause (as we have seen at section 3.3.1):

(37) *Gianni pensava che Maria sia incinta.
   Gianni believed that Maria is(subj) pregnant

   Another piece of evidence confirming that the subjunctive clauses are not in-
terpreted with respect to the speaker’s coordinate, concerns the indexical adverbials.
Indexical adverbials (e.g. *ieri, ‘yesterday’, *oggi, ‘today’, *domani, ‘tomorrow’) can
modify events referred to both indicative embedded clauses, and subjunctive embe-
dded clauses. The crucial difference between the two cases is that past adverbials are
incompatible with embedded future indicative tenses, and future adverbials are in-
compatible with embedded past indicative tenses:

(38) a. Gianni ha detto che Maria ha chiamato *ieri/oggi/*domani.
   Gianni has aid that Maria has called yesterday/today/*tomorrow
   ‘Gianni said that Maria called yesterday/has called today/*tomorrow’.

   b. Gianni ha detto che Maria telefonerà *ieri/oggi/domani.
   Gianni has said that Maria will call(ind, fut) *yesterday/today/tomorrow
   ‘Gianni said that Maria will call *yesterday/today/tomorrow’.

   Such incompatibility does not arise if the embedded verb is subjunctive:

---

⁴ The verbs belonging to the class of ipotizzare (‘to hypothesize’) are an exception in that they can
instantiate a DAR despite the subjunctive embedded verb (see examples (44) and 0. This fact is not
relevant for the present purpose.
Giorgi and Pianesi (2003a, b) observe also that anaphoric adverbials (e.g. *il giorno prima*, ‘the following day’, etc.) cannot appear in DAR contexts if uttered out-of-the-blue:

(40) #Gianni ha detto che Mario partirà il giorno dopo.
Gianni has said that Mario leave(ind, fut) the day after

However, anaphoric temporal expressions are compatible with contexts where DAR does not obtain:

(41) Gianni pensava che Maria partisse il giorno dopo.
Gianni believed that Maria left(subj) the day after
‘Gianni believed that Maria would leave on the following day’.

Hence, the compatibility of indexical and anaphoric temporal adverbials with an embedded eventuality may serve as a test to understand if a certain embedded clause gives rise to DAR or it does not.

The proposal that Giorgi and Pianesi advance in order to explain the facts concerning the DAR resorts to the idea of Interpreted Logical Form (ILF) elaborated by Higginbotham (1991), Larson and Ludlow (1993), Larson and Segal (1995), according to which the object of an attitude verb is an ILF:

(42) *Interpreted Logical Form (ILF)*

ILFs are annotated constituency graphs or phrase-markers, whose nodes pair terminal and non-terminal symbols with a semantic value.

Partially following a proposal by Higginbotham (1995), Giorgi and Pianesi propose that in sentences where DAR occurs the ILFs on which the temporal interpretation of the embedded clauses takes place contains both the temporal coordinates of the speaker and those of the bearer of the attitude, which serves as the matrix clause in
most of the cases, if DAR obtains. The ILF of the embedded clause in DAR cases is therefore taken to include as the value of tense a pair \( \langle e, e_\_ \rangle \), where \( e \) is the embedded eventuality and \( e_\_ \) the matrix one (the attitude episode). Another pair, \( \langle e, u \rangle \), where \( e \) is the embedded eventuality and \( u \) the utterance, specifies the time relation existing between the embedded eventuality and the utterance\(^5\).

More in detail, following Larson-Segal (1995), they propose that a tense couple is associated to an assignment sequence, that is a context-dependent set \( \sigma \) of objects \( \langle a_1, a_2, \ldots, a_n \rangle \) arranged in a linear order, in which the indexes are a formal device to express the association between a given individual and a specific variable-reference term \( a \).

They distinguish between a speaker-oriented assignment sequence \( \sigma_{sp} \) and a subject-oriented assignment sequence \( \sigma_{sub} \) (that is oriented towards the attitude bearer), and propose that the temporal coordinates of the speaker (“now”) are associated with the 0-th position of the speaker assignment sequence \( (\sigma_{sp}(0)) \), whereas the temporal coordinates of the attitude bearer are associated with the 0-th position of the subject’s assignment sequence \( (\sigma_{sub}(0)) \). Hence, DAR complements contain both the \( \sigma_{sp} \) and \( \sigma_{sub} \), whereas complements that do not instantiate a DAR contain only \( \sigma_{sub} \).

From a syntax-semantics interface viewpoint, Giorgi and Pianesi propose that \( \sigma_{sp}(0) \) and \( \sigma_{sub}(0) \) are associated with different syntactic heads, C and Mood. In doing this they resort to their (1997, 2004) hypothesis on Complementizer Deletion (CD) phenomena.

They observe that only subjunctive clauses allow CD\(^6\):

\[\text{(i) Gianni si rammarica *(che) sia partito.} \]
\[\text{Gianni regerets *(that) is(subj) left} \]
\[\text{‘Gianni regrets that ha left’}.\]

\(^5\) Larson and Segal (1995) formalize tense as a relation of \( \tau \), the reference time of an event \( e \), to the moment of utterance – “now”.

\(^6\) Notice that CD does not affect the obviation phenomena at issue here. Hence sentence (43) can be marginally interpreted coreferentially. Notice that it is a necessary but not sufficient condition in order for CD to occur that the embedded verb should be subjunctive. Belief, volitional, and desiderative verbs admit CD, whereas emotive-factive verbs, which also select for subjunctive embedded clauses, do not.
They also observe that CD is not allowed in DAR contexts. The case of verbs like \textit{ipotizzare} (‘to hypothesize’) confirms this view. These verbs select the subjunctive but they do not require a rigid SOT:

(44) \begin{enumerate}
\item Gianni ha ipotizzato che Maria fosse incinta.
   Gianni has hypothesized that Maria was(subj) pregnant
   ‘Gianni hypothesized that Maria was pregnant’.
\item Gianni ha ipotizzato che Maria sia incinta.
   Gianni has hypothesized that Maria is(subj) pregnant
   ‘Gianni has hypothesized that Maria is pregnant’.
\end{enumerate}

In sentence (44)a the embedded eventuality is interpreted as simultaneous or anterior with respect to the attitude episode; in sentence (44)b the embedded clause gives rise to DAR – the time of the embedded eventuality is interpreted both with respect to the time of the attitude episode, and with respect to the utterance time. Hence, for sentence (44)b to be true, it must be the case that the embedded eventuality (Maria’s pregnancy) holds at the time when Gianni hypothesizes that \( p \) and at the time of the utterance.

\textbf{Only in example (44)a is CD available:}

(45) \begin{enumerate}
\item Gianni ha ipotizzato (che) fosse incinta.
   Gianni has hypothesized (that) was(subj) pregnant
   ‘Gianni hypothesized (that) she was pregnant’.
\end{enumerate}

Moreover, focused clauses, topicalized clauses, and subject clauses do not admit CD. Since these aspect of the distribution of CD in Italian are not relevant for the present discussion, we will leave them aside.
b. Gianni ha ipotizzato *(che) sia incinta.
    Gianni has hypothesized *(that) is(subj) pregnant
    ‘Gianni has hypothesized that she is pregnant’.

Hence, Giorgi and Pianesi argue for the following correlation between CD and DAR:

(46) DAR → *CD

Equation (46) states that if DAR occurs, then CD is ungrammatical.

Given these basic facts, they propose that the Italian complementizer _che_ lexicalizes two different sets of features: those of the C appearing in indicative clauses, which cannot be subject to CD:

(47) … \[ CP [C _che] [AgrP [Agr V+Agr]]… \]

Otherwise, _che_ can lexicalize the feature Mood, which appears in subjunctive clauses:

(48) … \[ MoodP [Mood _che] [AgrP [Agr V+Agr]]… \]

Only Mood can be “deleted” – that is, it can be realized together with Agr:

(49) … \[ Mood/AgrP [Mood/Agr V+Agr]]… \]

They propose indeed that “deletion” is actually a syntactic mechanism according to which more features are lexicalized in a single morpheme, consistently with their (1997) _Feature Scattering Principle_, according to which “each feature can head a projection”. Such a morpheme is named “syncretic”. CD is therefore supposed to be a case in which a head can be realized syncretically – subjunctive morphology can lexicalize both the feature Mood, and the \(\phi\)-features involved in subject-verb agreement. Hence, the following configuration is claimed to hold in cases of CD:
The following structure is instead supposed to be true of the cases in which CD does not obtain:

(51) a. Mario crede che sia partito. (=43a)
   b. ... crede... [MoodP che [AgrP sia...]

Since C cannot be omitted and is strongly connected with DAR phenomena, Giorgi and Pianesi propose that the interpretative properties that instantiate DAR reside in C. In particular, they argue that the set containing the features of the indicative tenses (τ-features), includes an indexical element which delivers the speaker’s temporal coordinates, and that these features are represented in C as well. Provided that the temporal coordinates of the speaker (“now”) are associated with the speaker assignment sequence \( \sigma_{sp} \), they argue that C is associated with \( \sigma_{sp} \). Hence, C includes the pair \( \langle e, u \rangle \).

Furthermore, the embedded T is supposed to contain the temporal coordinates of the bearer of the attitude, since an embedded clause must be anchored to the matrix clause. Hence, T is associated with the subject assignment sequence \( \sigma_{sub} \), and includes the pair \( \langle e, e_\cdots \rangle \).

The following structures are proposed for indicative and subjunctive clauses respectively:

(52) a. \([CP [C, e,u, che] [AgrP [TP [T, e,e_\cdots, V]]]\ldots]
   b. \([MoodP [Mood che] [AgrP [TP [T, e,e_\cdots, V]]]\ldots]

4.2.3 Long-distance Anaphors (Giorgi 2004a, b, c)

Giorgi (2004a, b, and c) investigates the phenomenon of long-distance binding of anaphors. She proposes that the mechanism of theta-identification of implicit argu-
ments sheds light on their nature (Giorgi 2004a) and that their distribution follows from the same apparatus ruling the temporal interpretation of subjunctive sentences, that is, SOT (Giorgi 2004b, c).

In Italian, Long-distance Anaphors (henceforth, LDAs) present two properties: they are sensitive to the mood of the embedded clause and are subject-oriented.

As for the first property, LDAs can appear in subjunctive and conditional clauses, but they are ruled out in indicative clauses (Giorgi 1983, 2004a, 2004b):

(53) a. [Quel dittatore]1 spera che i notiziari televisivi parlino a lungo delle proprie1 gesta.
   [That dictator]1 hopes that the TV news talk(subj) for a long time about self’s deed.
   ‘[That dictator]1 hopes that the TV news will talk about his1 deeds for a long time’.

   b. [Quel dittatore]1 ha detto che i notiziari televisivi avrebbero parlato a lungo delle proprie1 gesta.
   [That dictator]1 has said that the TV news would have talked for a long time about self’s deed.
   ‘[That dictator]1 hopes that the TV news would have talked about his1 deeds for a long time’.

   c. *[Quel dittatore]1 ha detto che i notiziari televisivi hanno parlato a lungo delle proprie1 gesta.
   [That dictator]1 has said that the TV news have(ind) talked for a long time about self’s1 deed.

Giorgi (2004b, 2004c) observes that apart from the sensitivity to mood (which she calls “verbal blocking effect”), LDAs are also sensitive to some nominal elements:

(54) a. Gianni pensa che tutti siano innamorati della propria moglie.
   Gianni1 believes that everybody are(subj) in love with self’s1 wife
   ‘Gianni1 believes that everybody is in love with his1 wife’.

   b. Gianni pensa che Mario sia innamorato della propria moglie.
   Gianni1 believes that Mario is(subj) in love with his1 wife
   ‘Gianni1 believes Mario is in love with his1 wife’.
c. *Gianni pensa che tu sia innamorato della propria moglie.
   Gianni believes that you are(subj) in love with his, wife
   ‘Gianni believes you are in love with his wife’.

d. *Gianni pensa che io sia innamorato della propria moglie.
   Gianni believes that I am(subj) in love with his wife
   ‘Gianni believes I am in love with his wife’.

Examples (54)a and b contrast with examples (54)c and d in that in the former sentences, which are grammatical under an LDA reading, the embedded subject is in the third person, plural or singular; in the latter sentences, which are almost ungrammatical, the embedded subject is in the second and in the first person, respectively.

As it was shown in the section 4.2.4, the indicative clauses carry the speaker’s temporal coordinate (in C), whereas the subjunctive clauses do not. Thus, the following generalization on LDAs arises for Italian (Giorgi 2004b):

(55) The speaker’s coordinate delimits the domain of LD-binding.

Notice that this generalization also includes the examples of LDAs in conditional clauses. Conditional clauses are not interpreted with respect to the utterance time framework and are supposed not to contain the speaker’s coordinate:

(56) Gianni ha detto che Maria sarebbe partita.
    Gianni has said that Maria is(cond) left
    ‘Gianni has said that Maria would have left’.

The embedded eventuality in sentence (56) is evaluated as future with respect to the matrix eventuality, but it does not specify any time ordering with respect to the time of the utterance. This is also shown by the fact that the embedded clause in sentence (56) can be modified by any indexical temporal adverbial and it is interpretable even when modified by means of an anaphoric temporal adverbial:

(57) a. Gianni ha detto che Maria sarebbe partita ieri/oggi/domani.
    Gianni has said that Maria is(cond) left yesterday/today/tomorrow
    ‘Gianni has said that Maria would have left/yesterday/today/tomorrow’.
b. Gianni ha detto che Maria sarebbe partita il giorno dopo.  
   Gianni has said that Maria is(cond) left the day after  
   ‘Gianni has said that Maria would have on the following day’  

Another well-known property of LDAs is that they are subject-oriented (Giorgi 1983,  

(58) Gianni$_1$ ha detto a Maria$_2$ che i notiziari televisivi avrebbero parlato del proprio$_{1/*2}$ libro.  
   Gianni$_1$ has told to Maria$_2$ that the TV news have(cond) talked of the self’s$_{1/*2}$ book.  
   ‘Gianni$_1$ told Maria$_2$ that the TV news would have talked of his$_{1/*2}$ book’.

Sentence (58) contrasts minimally with sentence (59) with respect to the *de se* interpretation:  

(59) Gianni$_1$ ha detto a Mario$_2$ che i notiziari televisivi avrebbero parlato del suo$_{1/2}$ libro.  
   Gianni$_1$ has told to Mario$_2$ that the TV news have(cond) talked of the his$_{1/2}$ book.  
   ‘Gianni$_1$ told Mario$_2$ that the TV news would have talked of his$_{1/2}$ book’.

In sentence (59) both Gianni and Mario may serve as antecedents for the pronominal suo, whereas in sentence (58) the only available antecedent for proprio is the matrix subject, which refers to the bearer of the attitude.

However, LDAs may be bound by arguments that do not serve as subject. Consider for instance the following sentence:  

(60) Che la propria$_1$ figlia sia andata in campeggio da sola preoccupa Gianni$_1$.  
   That the self’s$_1$ daughter is(subj) gone to camping by herself worries Gianni$_1$  
   ‘That his$_1$ daughter is camping by herself worries Gianni$_1$’.

Giorgi (2004a, 2004b) argues that subject-orientation is in fact a by-product and not an intrinsic property of LDAs. She observes indeed that LDAs can appear in embedded clauses selected for by psych-verbs whose argument binding the LDA does not
serve as subject. Hence, although LDAs are more often subject-oriented, they are not always so. Therefore, the notion of subject-orientation is not adequate.

An hint to solve this problem comes from Chierchia (1989), who considers the following sentence (originally discussed by Kaplan 1989):

(61) John believes that his pants are on fire.

Sentence (61) can be de se – that is, the speaker might be saying that John has a belief about himself; but it can also be considered true in a scenario in which John is looking at a mirror and is seeing a person whose pants are on fire. The person he is seeing is in fact John himself, but he does not realize it. Hence sentence (61) can also be non-de se. Of course, a third interpretation is also available, namely, John has a de re attitude which does not involve himself.

In Italian there are two possible sentences corresponding to sentence (61):

(62) a. Gianni crede che i suoi pantaloni siano in fiamme.
   Gianni believes that the his pants are on fire  
   ‘Gianni believes his pants are on fire’.

   b. Gianni crede che i propri pantaloni siano in fiamme.
   Gianni believes that the self’s pants are on fire  
   ‘Gianni believes that his own pants are on fire’.

Sentences (62)a and b contrast minimally whereby sentence (62)a presents a possessive adjective (suo), but sentence (62)b presents a reflexive adjective (proprio). Sentence (62)a is ambiguous in that it can be de se or non-de se – that is Gianni might have two different beliefs: he might be completely aware that the person whose pants are on fire is himself; or, he might not be aware that the object of his belief is himself. On the other hand, sentence (62)b is unambiguous in that it can only be de se. This observation leads Chierchia to conclude that proprio patterns just like the null

---

subject of infinitival clauses, *PRO*, and might be viewed as a phonologically realized counterpart of *PRO*\(^8\).

Given this empirical framework, the hypothesis Giorgi (2004a, 2004b) proposes can be substantiated as follows:

(63) Long distance anaphoric binding:
   a. a LDA is the spell-out of an unsaturated position;
   b. a LDA can be saturated either
      i. by a co-argument, or
      ii. by the bearer of the attitude.

“Unsaturated position” must be understood here as a position that has not been satisfied through theta-marking by a formative.

Since implicit arguments have been defined as theta-roles which have not been assigned through theta-marking (see section 4.2.1), hypothesis (63) can be reformulated as follows:

---

\(^8\) Giorgi (2004) observes this intuition seems to be too strong, since it predict that *proprio* is inherently *de se* – that is the first-personal interpretation is a lexical property of *proprio*. Consider, for instance the following sentence:

(i) Gianni spera che Maria recuperi i propri soldi.
   Gianni hopes that Maria recovers(subj) the self’s money
   ‘Gianni hopes Maria recovers his money’/’Gianni hopes Maria recovers her money’.

If *proprio* was strictly *de se*, it should corefer only with *Gianni*. But the interpretation that *propri* is bound by *Maria*, is also available. Hence, there are two possibilities: *propri* is necessarily *de se* only in certain syntactic configurations – when it is bound outside its clausal domain (LDA), but it is not in a local domain. Alternatively, there are two *propri*. One must be locally bound, and one is long-distance bound. Only the second is *de se*.  

137
Long distance anaphoric binding:

a. a LDA is the spell-out of an implicit argument;
b. a LDA can be saturated either
   i. by a co-argument, or
   ii. by the bearer of the attitude.

Giorgi claims that a LDA is an implicit argument within the DP containing it. This DP is unsaturated, since at least one of their theta-positions has not been satisfied. She proposes that this unsaturated constituent may be saturated in two ways, both resorting to the notion of theta-identification, that is, the identification of theta-roles belonging to different lexical entries under sisterhood.

In particular, an unsaturated position may be identified with a co-argument, or with the attitude bearer, if a co-argument is not available to be theta-identified with the unsaturated position. This determines a strict *de se* reading of LDAs.

The condition of sisterhood may be satisfied by means of percolation – that is, implicit arguments are passed up to the containing XP, if that XP is a predicative expression, until they are discharged (Williams 1987). The following structure is supposed to hold:

\[ \text{(65)} \]

```
  MoodP
     /\       \\
    /  \     /  \ \
   Mood TP VP DP
   /\   /\   /\   /\ \
   T, e, e_ VP, \_\ DP, \_\ \
   /\   /\   /\   /\ \
  V  D DP NP N \
```

\[ \text{(64)} \]

\[ (64) \] Long distance anaphoric binding:

a. a LDA is the spell-out of an implicit argument;
b. a LDA can be saturated either
   i. by a co-argument, or
   ii. by the bearer of the attitude.
Remember that the pair \(\langle e, e_\rangle\) represents the temporal coordinate of the attitude holder. Diagram (65) shows that the undischarged theta-position \(\langle 2 \rangle\) percolates until VP. Given that VP and T, where the coordinates of the attitude bearer are present, are sister nodes, theta-identification can occur between the unsatisfied theta position and the attitude bearer.

This mechanism could be implemented in some other way, depending on how one assumes the attitude bearer is represented in the embedded clause\(^9\). However, the results would not differ very much from those following from Giorgi’s proposal.

Notice that LDA binding rule (63) is sensitive to mood, as we have seen, according to generalization (55). Hence, if the MoodP contains an implicit argument, it is theta-identified with a co-argument, if there is a co-argument available; if there is no co-argument available, it is theta-identified with the attitude holder. This process is supposed to occur recursively and to stop when the speaker coordinate intervenes. At that point, all theta-positions must be filled up. The speaker’s assignment sequence is claimed to anchor an eventuality to the utterance time, so that the eventuality is evaluated with respect to the world the speaker thinks he is in. This idea seems to be intuitively correct. It would indeed explain various facts: first, it would explain why indicative matrix clauses are grammatical, whereas subjunctive matrix clauses are not (unless they express an order or a question):

\[
\begin{align*}
(66) \quad \text{a. Gianni è partito.} & \quad \text{Gianni is(ind) left.} \\
& \quad \text{‘Gianni has left’}. \\
\text{b. *Gianni sia partito.} & \quad \text{Gianni is(subj) left.}
\end{align*}
\]

\(^9\) In Cinque’s (1999) hierarchy of verbal functional projections (concerning the highest part of the IP-field), the highest projections, speech act mood, evaluative mood, and evidential mood, are related with the pragmatic roles associated with a sentence – speaker and attitude bearer. This is also what Speas (2002) suggests. According to these points of view, the speaker and the attitude holder would be contained in a dedicated head.
It must be observed that according to hypothesis (63), LDAs are generated by mechanism independently motivated in order to explain temporal anchoring phenomena.

Let us now consider some of the predictions of Giorgi’s hypothesis. Given hypothesis (63), the distribution of LDAs follows straightforwardly. Let us consider the following sentence:

(67) Gianni1 crede che Mario2 odi la propria1/2 moglie.
    Gianni1 believes that Mario2 hates(subj) self′s1/2 wife.
    ‘Gianni1 believes that Mario2 hates his1/2 wife’.

In sentence (67), proprio may be bound both by Gianni and by Mario. Mario is a co-argument of the (clause-bound) anaphor proprio; but if it is not the intended antecedent, the whole sentence has an unsatisfied theta-position, which may be discharged through theta-identification with the attitude bearer.

Because this mechanism may occur recursively, the following sentence is also generated:

(68) Gianni1 supponeva che Mario2 pensasse che Paolo3 odiasse la propria1/2/3 moglie.
    Gianni1 supposed that Mario2 believed that Paolo3 hated(subj) the self′s1/2/3 wife.
    ‘Gianni1 supposed that Mario2 believed that Paolo3 hated his wife’.

The anaphor proprio may be bound by Gianni, Mario, or Paolo. Paolo is locally available as an antecedent. If it is not the intended antecedent, the implicit argument may be theta-identified with the attitude bearer Mario. If Mario is not the intended antecedent, it is the intermediate clause that has an implicit argument that may be identified with the matrix argument referring to the attitude bearer.

Hypothesis (63) also excludes that LDAs may occur in indicative clauses:

(69) Gianni1 ha detto che Maria2 ama la propria1/2 madre.
    Gianni1 has said that Maria2 loves(ind) the self′s1/2 mother
    ‘Gianni1 said Maria2 loves her mother’.
Maria is an available local antecedent, whereas Gianni is not an available long-distance antecedent, because the speaker’s coordinate in the embedded C requires that all theta-position be satisfied within the embedded clause by a co-argument.

A contrast between sentence (68) and the following sentences is also predicted:

(70) a. Gianni₁ ha detto che Mario₂ pensi che Paolo₃ odi la propria₁/2/3 moglie.
   Gianni₁ has said that Mario₂ thinks(ind) that Paolo₃ hates(subj) the self₁/2/3 wife
   ‘Gianni₁ has said that Mario₂ thinks that Paolo₃ hates his₁/2/3 wife’.

   b. Gianni₁ ha detto che Mario₂ sa che Paolo₃ odia la propria₁/2/3 moglie.
   Gianni₁ has said that Mario₂ knows(ind) that Paolo₃ hates(ind) the self₁/2/3 wife
   ‘Gianni₁ has said that Mario₂ knows that Paolo₃ hates his₁/2/3 wife’.

In sentence (70)a, Mario and Paolo are available antecedents of proprio, whereas Gianni is not: the speaker’s assignment sequence intervenes in the intermediate C and ‘closes’ the binding domain for the anaphor proprio. In sentence (70)b, only Paolo is an available antecedent for proprio – if the most embedded clause contains an unassigned theta-position, it can only be discharged by a co-argument.

4.3 Intermediate summary

In section 4.3 I have illustrated the theoretical mechanism that I claim can be used to explain the facts concerning obviation. It includes the notions of “implicit arguments” (theta-positions which are not discharged through theta-marking), the rules generating the facts concerning the phenomenon of DAR, which are connected with the presence of the speaker’s assignment sequence inside an embedded clause. I have illustrated that the technology concerning implicit arguments and the mechanism ruling the DAR effects (which is responsible for a wide range of phenomena in Italian, such as temporal anchoring, SOT, and CD) are useful to account for the syntax and the semantics of LDAs.

The rules that have been formulated so far are the following:
a. Implicit arguments can be theta-identified;
   i. Theta-identification instantiates a strict de se reading;
   ii. Non-finite lexical verbs theta-identify their external argument with
       the subject of the clause;

b. i. Indicative clauses: \([\text{CP} \left[ C, \text{e,u} \right] \text{che} \text{ AgrP TP T, e, e_} \ V] \ldots \)
   ii. Subjunctive clauses: \([\text{MoodP Mood che} \text{ AgrP TP T, e, e_} \ V] \ldots \)

c. Long-distance anaphoric binding:
   i. a LDA is the spell-out of an implicit argument;
   ii. a LDA can be identified either with a co-argument, or with the
       bearer of the attitude.

Resorting to the above mechanism, I will now try to show that the same basic appa-
ratus can be exploited to explain the facts illustrated in chapter 3, which can be gen-
eralized as in statement (18), repeated here:

(18) A subjunctive clause cannot be interpreted de se (nor non-de se) if the form
    carrying subjunctive morphology is a full verb.

The complete Italian paradigm which generalization (18) is able to describe and
which a theory on obviation must be able to account for, is the following (see section
3.9). Asterisks and question marks refer to the de se reading):

(72) a. *Gianni pensava che pro leggesse molti libri.
    Gianni thought that pro read(subj) many books
    Gianni thought that he/she used to read many books.

b. ?Gianni pensava che pro avesse letto molti libri.
    Gianni thought that pro had(subj) read many books
    Gianni thought that he/she had read many books.

c. ?Gianni sperava che pro fosse promosso.
    Gianni hoped that pro was(subj) promoted
    ‘Gianni hoped that he/she would pass the exam’.
d. **Gianni** sperava che *pro* potesse partire il giorno dopo.
   Gianni hoped that *pro* could(subj) leave(inf) the day after.
   ‘Gianni hoped he/she would be able to leave on the following day’.

e. **Gianni** pensava che *pro* potesse aver fatto molti errori.
   Gianni thought that *pro* can(subj, impf) have(inf) made many mistakes
   ‘Gianni thought it was possible he/she has/had made many mistakes’.

f. **Gianni** pensava che *pro* potesse essere promosso.
   Gianni thought that *pro* can(subj, impf) be(inf) promoted
   ‘Gianni thought that it is possible that he/she passed the exam’.

g. **Gianni** pensava che *pro* potesse essere stato promosso.
   Gianni thought that *pro* can(subj, impf) be(inf) been promoted
   ‘Gianni thought that it is possible that he/she had passed the exam’.

h. **Gianni** rammaricava che *pro* fosse dovuto partire così presto.
   Gianni regretted that *pro* be(subj, impf) must(prt) leave(inf) so early
   ‘Gianni regretted that he/she had had to leave so early’.

i. Gianni sperava che **Maria** desiderasse che *pro* partisse.
   Gianni hoped that Maria wished(subj) that *pro* left(subj)
   ‘Gianni hoped that Maria wished that he/she left’

j. **Gianni** sperava che Maria desiderasse che *pro* partisse.
   Gianni hoped that Maria wished(subj) that *pro* left(subj)
   ‘Gianni hoped that Maria wished that he/she left’.

(73) a *Il suo* desiderio che *pro* parta domani svanirà presto.
    The [his/her] wish that *pro* leaves(subj) tomorrow will vanish soon.
    ‘[His/her] wish that [he/she] left tomorrow will vanish soon’.

b. **La sua** speranza che *pro* avesse fatto pochi errori svani ben presto.
   The [his/her] hope that *pro* had(subj) made few mistakes vanished vary
   soon
   ‘[His/her] hope that [he/she] had made few mistakes vanished very soon’.
c. La sua speranza che pro fosse (stato) ammesso all’università fu delusa. The [his/her] hope that pro was(subj) (been) admitted at the university was disappointed
‘[His/her] hope that [he/she] would be/have been admitted at the university was disappointed’.

d. La sua speranza che pro potesse partire il giorno dopo rimase delusa. The [his/her] hope that pro could(subj) leave(inf) the day after remained disappointed
‘[His/her] hope that it was possible for [him/her] to leave on the following day was disappointed’.

(74) a. *Gianni chiese a Maria che pro partisse il giorno dopo. Gianni asked to Maria that pro left(subj) the day after
‘Gianni asked Maria PRO to leave on the following day’.

b. Gianni chiese a Maria che pro partisse il giorno dopo. Gianni asked to Maria that pro left(subj) the day after
‘Gianni asked Maria PRO to leave on the following day’.

c. *Lo Preoccupa che pro parte domani. Him worries that pro leaves(subj) tomorrow
‘It worries him that he/she will leave tomorrow’.

(75) a. Gianni ha detto che pro leggerà il libro. Gianni has said that pro will-read(ind) the book
‘Gianni said he/her will read the book’.

b. Gianni aveva detto che pro sarebbe partito il giorno dopo. Gianni had said that pro would-be left on the following day
‘Gianni said he/she would have left on the following day’.

c. Gianni vuole PRO leggere il libro. Gianni wants PRO to read the book.
‘Gianni wants to read the book’.

4.4 An interface hypothesis for subjunctive obviation and its predictions
The technical apparatus in (71) makes it possible to work out the hypothesis that in environments devoid of the speaker’s assignment sequence, a de se interpretation can
be conveyed only if an implicit argument can be theta-identified with the attitude bearer.

(76) In an environment devoid of the speaker’s coordinate, a de se reading is achieved iff there is an implicit argument that is theta-identified with the attitude bearer.

Given the above analysis, hypothesis (76) is plausible. The formatives that may be considered as occurring in configurations where an implicit argument has been satisfied through theta-identification are indeed the null subject of infinitival clauses, *PRO* (see Higginbotham 1997, Giorgi 2004a, b, and c), and the LDA *proprio* in Italian (see Giorgi 2004a, b, and c). As we have seen, Chierchia (1989) shows that these two constituents are strictly de se (at least when they occur inside the object of a propositional predicate). Furthermore, they both appear in contexts devoid of the speaker’s assignment sequence. Notice, indeed, that infinitival clauses do not license the DAR. Take for instance the following sentence:

(77) Maria credeva di essere incinta.
    Maria believed of be(inf) pregnant
    ‘Maria believed she was pregnant’

Sentence (77) can be considered true only if the state of pregnancy holds at the time of Mary’s belief. Furthermore, infinitival predicates can be modified both by any indexical adverbial and by anaphoric temporal expressions:

(78) a. Gianni pensava di partire ieri/oggi/domani.
    Gianni thought of leave(inf) yesterday/today/tomorrow
    ‘Gianni thought he would leave yesterday/today/tomorrow’.

b. Gianni pensava di partire il giorno dopo.
    Gianni thought of leave(inf) the day after
    Gianni thought he would leave on the following day.

The data in (77) and (78) show that infinitival clauses do not allow DAR effects. Hence, coherently with Giorgi’s and Pianesi’s (2001) hypothesis, the temporal coor-
Hypothesis (76) directly accounts for the fact that infinitival clauses are (strictly) de se. The speaker’s coordinate, indeed, is not present in an infinitival clause. Hence, only an implicit argument is able to convey a de se reading. As we have seen (section 4.2.1), control may be claimed to be an instance of theta-identification (more precisely, a case of implicit anaphora, as in Higginbotham 1997) between the external argument of the matrix predicate and the external argument of the embedded predicate. The semantics of the matrix predicate of example (75)b may be accordingly represented as follows:

(79) \([\text{want}, \langle 1 \rangle [\text{\^{read} the book}, \langle 2 \rangle, 2=1]]\)

Notice that the theta-position \(\langle 1 \rangle\) is assigned to the argument referring to the attitude bearer. Hence, the schematic semantic representation in (79) may be reformulated as follows (‘subject’ – ‘subject of the attitude’ – indicates the bearer of the attitude):

(80) \([\text{want, \langle subject \rangle [\text{\^{read} the book}, \langle 2 \rangle, 2=\text{subject}]]}\)

A schematic semantics of sentence (75)b may be as follows:

(81) \([\text{want (Gianni, [\text{\^{\sigma_{\text{sub}}} read} the book}, \langle 2 \rangle, 2=\text{subject}]\)}\)

Since Gianni refers to the attitude bearer, theta-identification occurs between the external argument of the embedded clause and Gianni, thus conveying a de se reading.

As for subjunctive clauses, hypothesis (76) predicts that these clauses cannot be de se, unless they contain an implicit argument. I have supposed, on the basis of Higginbotham (1997), Roeper (1993), and Safir (1991), that the external argument of non-finite lexical verbs is implicit. Hence, if in a subjunctive clause the lexical verb is in a non-finite form, it is supposed to be allowed to be theta-identified with the attitude bearer. I propose that this is exactly what happens in the instances of obviation ‘weakening’, which crucially involves non-finite forms of lexical verbs.
More in detail, let us first consider the contrast between sentence (72)a and (72)b, c, and d, repeated here:

(72) a. Gianni$_1$ sperava che pro$_{1/2}$ leggesse quel libro.
Gianni$_1$ hoped that pro$_{1/2}$ read(subj) that book.
‘Gianni$_1$ hoped that he$_{1/2}$/she was reading that book’.

b. Gianni$_1$ pensava che pro$_{1/2}$ avesse letto molti libri.
Gianni$_1$ thought that pro$_{1/2}$ had(subj) read many books
Gianni$_1$ thought that he$_{1/2}$/she had read many books.

c. Gianni$_1$ sperava che pro$_{1/2}$ fosse promosso.
Gianni$_1$ hoped that pro$_{1/2}$ was(subj) promoted
‘Gianni$_1$ hoped that he$_{1/2}$/she would pass the exam’.

d. Gianni$_1$ sperava che pro$_{1/2}$ potesse leggere quel libro.
Gianni$_1$ hoped that pro$_{1/2}$ could(subj) read(inf) that book.
‘Gianni$_1$ hoped he$_{1/2}$/she would be able to read that book’.

While in sentence (72)a Gianni’s attitude cannot be de se (nor non-de se), in sentence (72)b, c and d, it can.

According to the hypothesis in (76), sentence (72)a cannot be de se. The phonologically unrealized subject pro is not an implicit argument. Implicit arguments are in fact devoid of any feature characterizing syntactic arguments – that is, arguments to which a theta-role has been assigned through theta-marking. Although implicit arguments are active from a syntactic viewpoint, since they enter the computation of Binding and Control relations, they are not syntactic formatives.

Syntactic formatives, on the other hand, are supplied with phonetic features, categorial features, formal features, and $\varphi$-features, that is, person, number, gender (Chomsky 1995).

Pro does present $\varphi$-features that must be checked:

(82) a. Pro$_{\{3sg, sing, masc\}}$ legge$_{\{sg.\}}$ molti libri.
Pro$_{\{3sg, sing, masc\}}$ reads$_{\{sg.\}}$ many books
‘He/she reads a lot of books’.
b. \[\text{*Pro}_{3, \text{sg., masc.}} \text{ leggeno}_{3, \text{pl.}} \text{ molti libri.} \]
Pro\_{3, \text{sg., masc.}} read\_{3, \text{pl.}} many books

c. \[\text{Pro}_{3, \text{sg., masc.}} \ \text{è}_{3, \text{sg.}} \text{ simpatico}_{\text{masc.}}.\]
Pro\_{3, \text{sg., masc.}} is\_{3, \text{sg.}} nice\_{\text{masc.}}.
‘He is nice’.

c. \[\text{*Pro}_{3, \text{sg., masc.}} \ \text{è}_{3, \text{sg.}} \text{ simpatica}_{\text{fem.}}.\]
Pro\_{3, \text{sg., masc.}} is\_{3, \text{sg.}} nice\_{\text{fem.}}.

Since pro does have \(\varphi\)-features, it must be a syntactic formative, and cannot be conceived of as an implicit argument. Hence, since no implicit argument is contained in the embedded clause of sentence (5)a, the \textit{de se} reading cannot be available.

As for sentences (5)b, c, and d, according to the third in assumption (71)a, non-finite lexical verbs trigger the theta-identification between their external argument with the subject of the clause. Hence, sentences (5)b, c, and d may be represented as follows:

\[(83) \quad \begin{align*}
\text{a. } & \quad [\text{Gianni sperava [che pro avesse-}\gamma_{\text{sub}} [\text{letto molti libri, (1), 1=subject]}] \\
\text{b. } & \quad [\text{Gianni sperava [che pro fosse-}\gamma_{\text{sub}} [\text{promosso, (1, 2), 1=subject]}] \\
\text{c. } & \quad [\text{Gianni sperava [che pro potesse-}\gamma_{\text{sub}} [\text{leggere quel libro, (1), 1=subject]}]
\end{align*}\]

Notice that in sentences (83)a-c the \textit{de re} reading towards someone else than John, is also available. I propose that an explanation may be drawn along the following lines: in sentences (83)a-c pro cannot be interpreted \textit{de se}, exactly like in sentence (5)a, because in this case a violation of rule (76) would arise. Remember however, that according to the rules of Long-distance Binding (64), an LDA, that is, an implicit argument, can be theta-identified either with the attitude bearer, or, if the attitude bearer is not the intended binder, with a co-argument, that is, a clause mate. If things were like this, the ambiguity of sentences (83)a-c may be due to the fact that the implicit argument, \(\langle 1 \rangle\), can be identified with the attitude bearer or with a co-argument; in the first case the \textit{de se} reading obtains, in the second case the obviative reading obtains.
The availability of a *de se* is even more clear when auxiliaries and modals are combined, as shown by examples (72)e-h, repeated here:

(72)  e.  Gianni pensava che pro potesse aver fatto molti errori.
Gianni thought that *pro* can(subj, impf) have(inf) make(make) many mistakes
‘Gianni thought it was possible he/she has/had made many mistakes’.

f.  Gianni pensava che pro potesse essere promosso.
Gianni thought that *pro* can(subj, impf) be(inf) promote(promote)
‘Gianni thought it is possible that he/she passed the exam’.

g.  Gianni pensava che pro potesse essere stato promosso.
Gianni thought that *pro* can(subj, impf) be(inf) been(promote)
‘Gianni thought that it is possible that he/she had passed the exam’.

h.  Gianni ramaricava che pro fosse dovuto partire così presto.
Gianni regretted that *pro* be(subj, impf) must(must) leave leave(inf) so early
‘Gianni regretted that he/she had had to leave so early’.

This may be due to the fact that any non-finite form carries an implicit argument and the possibility of *de se* reading improves accordingly.

The data concerning double embedding are also accounted for by the mechanism hypothesized here. Consider for instance sentences (72)i and j, repeated here:

(72)  i.  Gianni sperava che Maria desiderasse che pro partisse.
Gianni hoped that Maria wished(subj) that *pro* leave(subj)
‘Gianni hoped that Maria wished that he/she left’

j.  Gianni sperava che Maria desiderasse che pro partisse.
Gianni hoped that Maria wished(subj) that *pro* leave(subj)
‘Gianni hoped that Maria wished that he/she left’.

*Pro* cannot be *de se* with respect to the intermediate subject, *Maria*, as predicted by (76). However, it can be *de se* with respect to the matrix subject. This can be explained as follows: hypothesis (76) requires that a *de se* reading should be instantiated by an implicit argument. *De se* readings involve an attitude and the object of that attitude. In sentences (72)i an j, however, the most embedded clause does not refer to the object of a propositional attitude on the part of Gianni. Rather, it is Maria
who has an attitude towards the propositional content of the most embedded clause. The following semantic structure can be claimed to hold:

(84) Gianni sperava [che Maria desiderasse-σ_{sub1} [che pro partisse-σ_{sub2}]]

This seems to be correct. Indeed, if the most embedded clause were the object of the attitude on the part of the matrix subject, we would expect some morpho-syntactic implication. For instance, we would expect that if the matrix verb selected for a subjunctive clause, the most embedded clause would be in the subjunctive, whatever mood the intermediate predicate selected for. Hence, if the matrix predicate selected for a subjunctive clause, and the intermediate predicate selected for an indicative clause (when non-embedded), the verb of the most embedded clause should be in the subjunctive. Vice versa, if the matrix predicate selected for a subjunctive clause, and the intermediate predicate selected for a subjunctive clause, the verb of the most embedded clause should be in the indicative. But this does not seem to be the case:

(85) a. Gianni sperava che Maria affermasse che pro era/*fosse partito.
Gianni hoped that Maria told(subj) that pro was(ind/*subj) left
‘Gianni hoped that Maria told that he/she had left’.

b. Gianni ha detto che Maria voleva che pro *partiva/partisse.
Gianni has said that Maria wanted that pro left(*ind/subj)
‘Gianni said that Maria wanted him/her to left’.

It may be argued that the hypothesis in (76) does not put any condition on the referential properties of pro with respect to the matrix subject. Hence, pro is free to co-refer with the matrix subject.

Subjunctive clausal arguments of nouns behave in a parallel fashion with respect to subjunctive clausal arguments of verbs, as seen in examples (73)a. The same procedure that is responsible for obviation in clausal arguments of verbal predicates, may be invoked to explain the phenomenon at issue. The only difference between obviation in verb complements and noun complements concerns the realization of
the argument referring to the attitude bearer within a DP. This question is, however, beyond the scope of the present analysis and will not be addressed here.

Hypothesis (76) does not establish any constraint even on the referential properties of pro with respect to an argument that does not refer to the attitude bearer. A clausal argument of a directive verb is indeed obviative with respect to the matrix subject, but it can be proximate with respect to the matrix object, as shown by examples (74)a and b, repeated here:

(74)  a. *Gianni chiese a Maria che pro partisse il giorno dopo.
Gianni asked to Maria that pro left(subj) the day after
‘Gianni asked Maria PRO to leave on the following day’.

   b. Gianni chiese a Maria che pro partisse il giorno dopo.
Gianni asked to Maria that pro left(subj) the day after
‘Gianni asked Maria PRO to leave on the following day’.

Orders and requests can be viewed as a certain sort of attitude involving the will of the person who expresses an order or a request. Assuming that in sentences like (74)a and b the matrix subject refers to the attitude bearer, the fact that pro cannot refer to the attitude bearer is predicted under hypothesis (76). Pro can however refer to the indirect object in the matrix clause, since it does not refer to the attitude holder.

Notice that if the embedded form carrying subjunctive morphology is an auxiliary, the embedded clause may be first-personal10:

(86)  a. Gianni chiese al rettore che pro fosse ammesso all’università.
Gianni asked to the chancellor that pro was(subj) admitted at the university
‘Gianni asked the chancellor that he would be allowed to enter home’.

   b. ?Gianni chiese al professore che pro potesse frequentare i corsi.
Gianni asked to the chancellor that pro could(subj) attend the courses
‘Gianni asked the chancellor that he could attend the courses’.

10 Tense auxiliaries seem not to be compatible with the relevant contexts; this may be due to the fact that directive verbs are future-oriented – hence, incompatible with subjunctive tenses expressing anteriority.
The data in (86)a and b are predicted, under the hypothesis discussed here, since the implicit argument associated with the non-finite form can be theta-identified with the attitude bearer:

(87) a. Gianni chiese al rettore [che pro fosse-\(\sigma_{\text{sub}}\) ammesso all'università, \(\langle 1 \rangle, 1=\text{subject}\)]

b. Gianni chiese al professore [che pro potesse-\(\sigma_{\text{sub}}\) frequentare I corsi, \(\langle 1 \rangle, 1=\text{subject}\)].

The domain of application of hypothesis (76) includes the clauses devoid of the coordinate of the speaker. Apart from subjunctive clauses this hypothesis predicts that conditional clauses must be obviative, unless they contain an implicit argument. This prediction is apparently contradicted by the following sentence, which can be de se:

(88) Gianni ha detto che pro partirebbe (se pro solo potesse).

Gianni has said that pro leaves(odd), if pro can(subj, impf)

‘Gianni said that he would leave if he could’.

Notice, however, that full verbs carrying conditional morphology are part of (implicit) conditional sentences. The apparent counterevidence may be solved once the syntax and the semantics of an implicit conditional have been explained. However, this will be the object of further investigation.

No problem arises, however, when the embedded verb is past conditional as in sentence (75)b, repeated here:

(75) b. **Gianni aveva detto che pro sarebbe partito il giorno dopo.**

Gianni had said that pro would-be left on the following day

‘Gianni said he/she would have left on the following day’.

The following structure is indeed supposed to hold for this sentence:

(89) Gianni aveva detto [che [pro sarebbe-\(\sigma_{\text{sub}}\) partito, \(\langle 1 \rangle, 1=\text{sub}\)]...
Since a non-finite form appears in the embedded clause, the sentence is correctly predicted to be optionally *de se*, since the implicit argument can be theta-identified with the attitude holder.

Finally, the domain of application of hypothesis (76) does not include indicative clauses, which can indeed be *de se*. Consider, for instance, sentence (75)a, repeated here:

(75) **Gianni** ha detto che *pro* leggerà il libro.
    Gianni has said that *pro* will-read(ind) the book
    ‘Gianni said he/her will read the book’.

The embedded clause is in the indicative; hence, the speaker’s coordinate is represented in the embedded C.

(90) **Gianni** ha detto [che-**_σ**<sub>sp</sub> *pro* leggerà-**_σ**<sub>sub</sub> il libro]

Hence, there are no restrictions that prevent sentence (75)a from being *de se*.

Notice, finally, that rationale clauses are also supposed to instantiate obviation:

(91) *Pro* vengo perché *pro* ti aiuti.
    *Pro* come(1sg) in-order-that *pro* you(obj. cl.) help(subj, 1sg)

Given an analysis in the spirit of Manzini (2000) and von Fintel and Iatridou (2005), rationale clauses include a volitional attitude. Hence, they fall under the domain of hypothesis (76). A formative in the subject position of a rational clause cannot be *de se*.

### 4.5 Residual questions

Hypothesis (76) constraints the availability of the *de se* reading in embedded clauses that are devoid of the speaker’s coordinate. It stems from Giorgi’s (2004a, b and c) claim that when the speaker’s coordinate intervenes – that is, when the speaker’s assignment sequence intervenes – all theta-positions must be filled up. This claim was based on the assumption that the speaker’s assignment sequence anchors an
eventuality to the utterance time. If in a clause a theta-position is unsatisfied when the speaker’s coordinate intervenes, the clause is ungrammatical, due to a violation of the Theta-criterion.

Given these considerations, according to Giorgi a LDA cannot appear in an indicative clause, because the speaker’s coordinate intervenes and closes the binding domain of the anaphor. She also argues, however, that an LDA is bound exactly by the attitude bearer’s coordinate within the embedded clause, and not by the matrix argument referring to the attitude bearer itself.

One may ask why the subject coordinate within an embedded clause is not able to bind a LDA in an indicative clause. Remember indeed that according to Giorgi-Pianesi (2001) the following representation may be supplied for indicative argument clauses:

\[(92) \text{Indicative argument clause} \]

\[
[CP [C, _e, u], \text{che}] \ [\text{AgrP} [TP [T, _e, e_\_], V]...]
\]

Since the speaker’s coordinate is in C and the attitude bearer’s is in T, the attitude bearer’s coordinate c-commands an implicit argument within its domain without the intervention of the speaker’s coordinate. Therefore, why cannot an implicit argument be theta-identified with the attitude bearer?

A related problem concerning obviation is that hypothesis (76) implicitly assumes that embedded clauses are opaque domains. In other words, there is nothing concerning Binding Theory that prevents pro from being de se even in subjunctive clauses. Rather, pro cannot be de se due to a rule as (76). But why should there be a rule as (76)?

A tentative implementation of a system solving both problems may be worked out in the spirit of Schlenker’s (2002a, 2002b, 2005) hypothesis on ‘shiftable indexicals’.

Schlenker claims that in some languages the context of evaluation of an embedded pronoun is not the actual world, but the context of the attitude episode. Consider, for instance, the following contrast:
(93) a. John says that he is a hero.

b. Jon Ḗ̀gnà nō-ññ yil-all. (Amharic)
John hero be(pf)-1sO say(3m)-aux(3m)
‘John says he is a hero’
(lit. ‘John says I am a hero’).

In English the embedded subject is in the third person and may be interpreted first-personally. In Amharic the first person pronoun denotes the subject of the attitude report. This shows that the subject’s sequence of evaluation rather than the speaker’s is relevant in the embedded clause in (93)b.

Let us suppose that in Italian the presence of the speaker’s coordinate in a clause requires that the sequence of evaluation with respect to which a pronoun must be assigned a value should be that of the speaker. This implies that in an indicative embedded clause pro must be evaluated with respect to the speaker’s sequence, and it may turn out to pick the same value as the matrix argument referring to the attitude bearer.

As for the clauses devoid of the speaker’s coordinate, such as subjunctive and infinitival clauses, let us suppose that the assignment sequence of the attitude holder is somehow different from that of the speaker, including the attitude bearer’s assignment sequence. In this assignment sequence only an implicit argument may be evaluated as (strictly) de se. Syntactic formatives are instead interpreted de re with respect to an individual who cannot be the attitude bearer himself.

Therefore, let us define $\sigma$ as the speaker’s sequence of assignment. Following Larson and Segal (1995), $\sigma$ contains the speaker in its first place, the hearer in the second place, John in the third place and Mary in the forth place, and so on:

\[
\begin{align*}
\sigma = & \quad \text{1} \rightarrow \text{speaker} \\
& \quad \text{2} \rightarrow \text{hearer} \\
& \quad \text{3} \rightarrow \text{John} \\
& \quad \text{4} \rightarrow \text{Mary} \\
& \quad \text{n} \rightarrow \text{Bill}
\end{align*}
\]
Let us suppose that the attitude bearer’s assignment sequence $\sigma^*$ is a modified version of sequence $\sigma$ (the indexical pronouns are indeed evaluated with respect to the context of the utterance even when contained in an embedded clause). Let us suppose that $\sigma^*$ contains an additional position associated to the attitude bearer:

$$
\sigma^* = \\
1 \rightarrow \text{speaker} \\
2 \rightarrow \text{hearer} \\
3 \rightarrow \text{attitude bearer} \\
4 \rightarrow \text{John} \\
5 \rightarrow \text{Mary} \\
n \rightarrow \text{Bill}
$$

In any clause that contains an implicit argument, that argument is evaluated with respect to the third position of $\sigma^*$ and convey a de se reading, whereas explicit pronouns (including pro) can only be evaluated with respect to a position equal to or bigger than 4.

The solution sketched here would be able to explain in a uniform way the behavior of implicit arguments with respect to LDAs and non-obviative subjunctive clauses\textsuperscript{11}.

Further investigations are however required to implement such an analysis in a more general and principled way.

---

\textsuperscript{11} It would need extra assumptions, however, to account for examples of non-de se subjunctive clauses like the following one (see section 4.1):

(i) Lo sfortunato pensa che lui sia l’eroe di guerra.
    The unfortunate thinks that he is(subj) the hero of war
    ‘The unfortunate man thinks he is the war hero’.

I do not have any proposal concerning these cases and I leave the question open for further investigation.
If the hypothesis put forward in Chapter 4 is correct, it implies that control may be restated in terms of theta-identification between two arguments, one of which, the external argument of an infinitive verb, is taken to be an implicit argument. This is in fact what Higginbotham (1997) argues. According to him, \textit{PRO} can be merged only if the theta-role it discharges has already been theta-identified with a matrix argument – the controller. This view has also be supported by Giorgi (2004b), who proposes that the mechanism of theta-identification is responsible for the \textit{de se} reading of both \textit{PRO} and LDAs in argument clauses of propositional predicates. I further extended this analysis to external arguments of any non-finite verb, which I have argued is an implicit argument – such a mechanism would be able to predict the data illustrated in Chapter 2.

Giorgi (2004b) raises a problem with this hypothesis concerning \textit{PRO}. She argues, indeed, that some control facts may be accounted for under this analysis, but others are not. In particular, she observes that the phenomenon of Partial Control (Landau 2001, henceforth PC) does not seem to be compatible with the hypothesis that \textit{PRO} is an implicit argument, despite the fact that in all these cases it has the property of being obligatorily \textit{de se}. She therefore suggests that the problem may be solved by hypothesizing that \textit{PRO} has different properties in Exhaustive Control (henceforth, EC) than it does in PC, as Landau (2000) argues. More in detail, EC may be treated as involving theta-identification, as also originally proposed by Higginbotham (1997), whereas a different set of rules should be found for PC.

Notice, however, that PC is involved even in the cases where theta-identification is claimed to hold under the hypothesis presented in chapter 4 – that is, infinitival arguments of desiderative, propositional (epistemic and declarative), and factive predicates, as shown by Landau (2000). I will investigate this issue in more detail and show that no substantial issues arise for the hypothesis discussed here, tak-
ing into consideration the facts on Control discussed by Landau. Finally, I will show that some predictions concerning overlapping reference and Long-Distance control (henceforth, LD-control) that stem from the analysis of control proposed here require a further development of the present theory.

5.1 EC and PC

Landau (2000) proposes the following typology of Control:

\[
\begin{array}{c}
\text{Control} \\
\{ \begin{array}{c}
\text{Obligatory} \\
\{ \begin{array}{c}
\text{Exhaustive} \\
\text{Partial} \\
\end{array}
\end{array} \\
\text{Non-Obligatory} \\
\{ \begin{array}{c}
\text{Long-Distance} \\
\text{Arbitrary} \\
\end{array}
\end{array}
\end{array}
\]

Here, I will focus on the difference between EC and PC, which are both instances of Obligatory Control. EC includes those cases of Control where the reference of PRO must be exhausted by the reference of the controller. PC refers to those cases of Control where the reference of PRO includes the reference of the controller, but need not be identical to the reference of the controller. The following examples show the contrast between the two types of Control:

(2) EC
a. The chair managed to [PRO gather the committee at 6].

b. *The chair managed to [PRO to gather at 6].

c. Mary knew that John began [PRO to work (*together) on the project].

1 Following Landau, I will use the notation “PRO” to refer to PC.
(3)  \textit{PC}

a.  The chair$_1$ preferred [$\textit{PRO}_{1+}$ to gather at 6].

b.  *The chair$_1$ preferred [$\textit{PRO}_{1+}$ to gather without him$_1$].

c.  Mary$_1$ thought that John$_2$ didn’t know [where $\textit{PRO}_{1+2}$ to go together].

Let us consider the contrast between (2)a and (2)b, which illustrate the phenomenon of EC. In (2)a the intransitive \textit{gather} is a \textit{distributive} verb (that is, its subject can be singular). In (2)b the intransitive \textit{gather} is a \textit{collective} verb (that is, its subject cannot be singular). Given that in example (2)a the controller of \textit{PRO} is singular, and since \textit{gather} is compatible with a singular subject, the sentence is grammatical. In (2)b, however, \textit{gather} is not compatible with a singular subject; because the controller of \textit{PRO} is singular, the sentence is ruled out. Let us compare now sentence (2)b with sentence (3)a. In the latter, \textit{PRO} can be controlled by a singular DP, even though the embedded verb requires a plural subject. Example (3)b, moreover, shows that example (3)a does not involve Non-Obligatory Control, since Principle B requires that \textit{PRO} and \textit{him} must be disjoint. Finally, the contrast between (2)c and (3)c illustrates the distinction between EC and PC with the item \textit{together}, which requires a plural “antecedent”. Such an antecedent is not available in sentence (2)c, where the infinitive clause is an argument of an implicative verb, whereas it is available in example (3)c, where the infinitive clause is an argument of a desiderative verb.

Landau takes collective predicates (\textit{gather, meet}, etc.) and \textit{together} as a diagnost to divide all instances of Obligatory Control into the classes of EC and PC. The verbs that instantiate only EC are the implicatives (\textit{manage, dare}, etc.), the aspectuals (\textit{begin, continue}, etc.), and the modals (\textit{need, able}, etc.); the verbs that instantiate PC are the factives (\textit{hate, regret}, etc.), the propositionals (\textit{claim, believe}, etc.), the desideratives (\textit{want, prefer}, etc.), and the interrogatives (\textit{wonder, ask}, etc.).

EC and PC share four properties, which together distinguish Obligatory Control (henceforth, OC) from Non-Obligatory Control (henceforth, NOC):
Obligatory Control (Landau 2000: 31)

a. Arbitrary Control is impossible in OC;
b. Long-distance Control is impossible in OC;
c. Strict reading of PRO is impossible in OC;
   d. De re reading of PRO is impossible in OC (only de se);

The following examples illustrates the above properties:

Arbitrary Control is impossible in OC².

² Even interrogative infinitival clauses do not allow arbitrary control, even though most of the scholars claimed so (see Landau 2000: 39 for references). Landau shows that interrogative infinitivals are in fact PC cases. He proves this claim by means of the following examples:

(i) a. *John₁ wondered [who PRO to introduce him₁ to].
   b. *Mary₁ didn’t know [where PRO to hide her₁].
   c. *We contemplated [how PRO to promote us₁].
   d. *Sue₁ asked [what PRO to buy her₁ in Rome].

The violation of Binding Condition B shows that the pronouns in (i)a-d have a local c-commanding antecedent. On the contrary, in the same sentences as (i) an anaphor would be allowed instead of the pronoun:

(ii) a. John₁ wondered [who PRO to introduce himself₁ to].
   b. Mary₁ didn’t know [where PRO to hide herself₁].
   c. We contemplated [how PRO to promote ourselves₁].
   d. Sue₁ asked [what PRO to buy herself₁ in Rome].

This shows that PRO in (i) and (ii) must either co-refer with the matrix subject or include it. According to the former option, PRO binds the anaphor; according to the latter, a pronominal is excluded, exactly as it is excluded in the cases of overlapping reference:

(iii) *We voted for me.

In (iii) the antecedent of me is we, which, following Reinhart-Reuland (1993), at the relevant interpretative level, is analyzed as I+others. This yields the interpretation I voted for me, in which I binds me, causing a Principle B violation.
a. *John tried \([PRO_{arb} \text{ to be quiet}]. \) \( \text{EC} \)
b. *John wanted \([PRO_{arb} \text{ to be quiet}]. \) \( \text{PC} \)

\(PRO\) must be controlled by an argument in the matrix sentence, either explicit or implicit, and cannot be controlled by an operator.

(6) *Long-distance Control* is impossible in \(OC\);

a. *Mary\(_{1}\) knew that John dared \([PRO\text{ to perjure herself}]. \) \( \text{EC} \)
b. *Mary\(_{1}\) knew that John hoped \([PRO\text{ to perjure herself}]. \) \( \text{PC} \)

(7) *Strict reading of PRO* is impossible in \(OC\)

a. John tried \([PRO \text{ to leave early}]. \) and Bill did too.
b. John\(_{1}\) preferred \([PRO\(_{1+}\text{ to leave early}]. \) and Bill did too.

In (7)a and b, the \(PRO\) in the clause under ellipsis must be controlled by \(Bill\) (sloppy reading).

Finally, and most importantly, the *de re* reading of \(PRO\) is impossible both in \(EC\) and \(PC\) – moreover, all the verbs in both the \(EC\) and \(PC\) classes must express *de se* attitudes. I will briefly summarize the discussion on the distinction between *de se* and *de re* that I already mentioned in Chapter 4. Imagine that a certain war hero suffers from amnesia and does not remember anything of his deeds in wartime. Suppose that he (“the unfortunate”) reads a book about the war he fought in and about a soldier’s heroic exploits. The soldier that the unfortunate is reading about is actually himself, but he is amnesiac and does not realize that it is himself who is the war hero. Let us slightly modify the scenario as described in Chapter 4, and imagine that the unfortunate expects that the war hero will get a medal. Under this scenario, sentence (4)a is true and sentence (4)b is false:

(8) a. The unfortunate man expects that he will get a medal.
b. The unfortunate man expects to get a medal.
This is because the former can be satisfied by de re expectations about a certain individual (who by chance is the unfortunate himself), but the latter can only be satisfied by de se expectations, which are not compatible with the described scenario.

Notice that the matrix predicate in sentence (4)b may instantiate PC. Let us imagine, for instance, a scenario in which the unfortunate comes to know that the secretary of defense is supposed to meet the war hero that he read about and to give him a medal. Given such a scenario, sentence (9)a can be considered true, whereas sentence (9)b can be considered false:

(9)  a. The unfortunate man1 expected that he1 and the secretary of defense would meet soon.
     b. The secretary of defense thought that unfortunate1 man expected [PRO1+ to meet soon].

Sentence (9)b forces indeed a de se attitude on the part of the unfortunate man, although the unfortunate cannot be the exclusive controller of PRO since meet is a collective predicate.

Apart from these common properties, we have seen (in examples (2) and (3)) that EC and PC differ with respect to the diagnostic of collective predicates and together. Landau shows that it is not simply the case that PRO in PC is plural – if it were, plural anaphors should be allowed in PC contexts. But this does not seem to be correct. Compare, for instance, the following sentences:

(10)  a. John told Mary that he preferred to meet at 6 today.
     b. *John told Mary that he preferred to meet each other at 6 today.

In sentence (10)a, PRO is supposed to be plural, since the infinitival predicate is collective; but if it was plural, it should be an appropriate antecedent for the anaphor each other. The ungrammaticality of sentence (10)b shows that this prediction is incorrect.

Landau notices, however, that syntactic plurality and semantic plurality are quite different categories, following Munn (1998). There are certain nouns, espe-
cially group nouns (*committee, government*, etc.), which can be categorized as syntactically singular, but semantically plural. Collective predicates and predicates containing *together* can be predicated of syntactically singular nouns which are semantically plural. On the other hand, predicates with plural agreement, or predicates containing a plural anaphor can however be licensed by syntactically plural nouns, and not by semantically plural nouns:

(11)  
a. I saw the committee gathering.  
b. I approve of the population acting together against new regulations.  
c. *It is impossible for the committee to clear themselves.  
d. *I consider the delegation (to be) idiots.

Landau (2000: 50) therefore concludes that «*PRO* in PC contexts is essentially a group name – being semantically plural but syntactically singular. It should therefore exhibit the same behavior as nouns like *committee, government*, etc.». Hence, *PRO* in PC is semantically, but not syntactically, plural. In particular, he argues that syntactic number, and more generally, the phi-features on *PRO* in PC-complements are inherited from the controller, but semantic number is not.³

The analysis Landau works out in order to account for the above fact above starts from the claim that semantic number is a lexical property of DPs, whereas syntactic number results compositionally – the plurality of *committee* is part of the lexical meaning of this noun, whereas the plurality of *boys* is not part of its lexical meaning; rather it stems from the combination of *boy* with the plural morpheme *s*.

As for *PRO*, he proposes that *PRO* behaves exactly like all other DPs – that is, in a minimalist framework, *PRO* picks up its phi-features (including syntactic number) when it enters the derivation. As for the semantic number, Landau hypothesizes that *PRO* follows the same pattern of lexical nouns. Hence, it can be selected from the lexicon in two shapes: semantically plural [+SP], or semantically singular [−SP].

³ Another crucial property distinguishing EC from PC is that EC-complements are tense-less, whereas PC-complements are tensed. Since this difference is not relevant here, I will not consider it in detail.
The first option is that which is selected in PC, whereas the second is selected in EC\textsuperscript{4}.

5.2 Control as theta-identification and PC

We saw in Chapter 2 that the predicates involved in the phenomenon of obviation are desiderative, epistemic, emotive-factive predicates. According to Landau’s classification, these predicates are compatible with PC. Some examples show that his classification holds even for Italian:

\begin{quote}

4 In particular, Landau proposes that Obligatory Control may be viewed as an instantiation of the operation Agree (Chomsky 1998). Simplifying his ideas, the Agree relation is supposed to hold between the functional head that agrees with the controller (the “probe”) and, in PC, the infinitival AGR\textsuperscript{o} (which agrees with PRO and moves to C), or, in EC, PRO (which agrees with the infinitival AGR\textsuperscript{o}). Notice that he follows Pesetsky-Torrego (2000) in claiming that the infinitival Agr (T-Agr) moves to C. Moreover, he claims that only in PC it does – PC complements differ indeed from EC complements in that they are tensed. Hence, only in PC T moves to C – in EC T-to-C is blocked since EC complements are tense-less. This also allows T-Agr to escape the Phase Impenetrability Condition (henceforth, PIC – see Chomsky 1998, 1999):

(i) If HP and ZP are strong phases, and ZP the minimal one that dominates HP, the domain of H is not accessible to operations at ZP, but only H and its Edge.

T-Agr is not accessible to any operation from above CP if it remains in-situ, since this would violate the PIC. But if it moves to C, then it can enter operations involving items outside the CP phase.

Landau also assumes that any DP, including PRO, are [+SP] or [-SP] and that functional head may be [+SP], [-SP] (dependently on the specification of the DP they agree with), but they may even be underspecified. In PC if the controller is [+SP], the infinitival Agr must be [+SP] due to Agree, and PRO must be so as well. However, if the controller is [-SP], Agr may be [-SP] or it may remain unspecified with respect to the semantic plurality, since underspecification and [-SP] are two non-distinct options. This is supposed to allow PRO to be [+SP] in PC, even when the controller is semantically singular.

\end{quote}
I have claimed, following Higginbotham (1997) and Giorgi (2004a, b and c) that Control may be thought of as an instance of theta-identification. But if this is correct, one should expect that the controller and PRO in obligatory control should be referentially identical. However, the facts concerning PC show that the identity between the controller and PRO cannot be taken for granted.

Notice, however, that semantic plurality and semantic singularity do not affect the anaphoric nature of PRO or the de se interpretation it conveys. Moreover, Landau suggests that semantic singularity and plurality are lexical properties of PRO. Remember that according to Higginbotham PRO can be understood as a consequence, rather than the causer of control – that is, PRO is supposed to be «selected to occur in certain configurations where control has already been established» (Higginbotham 1997: 192). In particular, the configurations where PRO is allowed to occur are those where theta-identification has taken place. Hence, in the present view, control may be understood as follows: the external implicit argument of an infinitival verb is first theta-identified with a superordinate argument, which determines the de se reading in argument clauses of intensional predicates; therefore, it is spelled out as PRO, either [+SP] or [−SP], depending on the type of Control the matrix predicate instantiates.

To conclude, it seems that the fact that PRO can be [+SP] or [−SP] does not affect the proposal that PRO occurs in environments where theta-identification has already taken place.
5.3 Overlapping reference and obviation

Given the above view on PC and theta-identification a problem arises for the hypothesis proposed in the previous chapter, repeated here:

(13) In an environment devoid of the speaker’s coordinate, a *de se* reading is achieved iff there is an implicit argument that is theta-identified with the attitude bearer.

Given the facts on PC, and given that PC is *de se*, hypothesis (13) predicts that the overlapping reference relative to the subject of a subjunctive clause should be excluded. Examples of overlapping reference between the matrix subject and the embedded subject have been noted in the literature:

(14) *Lía animó Julián* a que *pro* escribieran algo juntos.
Lía encouraged Julián to that *pro* wrote(subj) something together.
‘Lía encouraged Julián to write something together’.
(Spanish, Suñer 1986)

Analogous examples may be constructed in Italian:

(15) *Gianni pretese da Maria che pro* partissero l’indomani.
Gianni require from Maria that *pro* left(subj) on the following day
‘Gianni asked Maria if they could leave on the following day’.

According to hypothesis (76), if the *de se* interpretation can be achieved in environments devoid of the speaker’s coordinate only by means of an implicit argument, one should expect that a plural null pronominal subject of an embedded clause could not overlap in reference with the argument denoting the attitude bearer in these environments. However, this prediction is not borne out:

(16) *Il presidente*$_1$ pensa che *pro$_{1+}$* siano riuniti inutilmente la notte scorsa.
The chair$_1$ believes that *pro$_{1+}$* are(subj) gathered in vain the night passed
‘The chair$_1$ believes that they$_{1+}$ gathered in vain last night’.
Notice that sentence (16) is ambiguous between the \textit{de se} and non-\textit{de se} reading (of course, a \textit{de re} reading involving someone else than the chair himself is also possible). However, sentence (12)b, repeated here, is not ambiguous:

\begin{enumerate}
\item[(12) b.] Il presidente crede di essersi riuniti inutilmente la notte scorsa.
\end{enumerate}

The chair believes of be\textit{(inf)} gathered in vain the night passed

‘The chair believes to have gathered in vain last night’.

Let us imagine, for instance, a scenario in which the chair is amnesiac. He watches the TV news and comes to know that the company council of directors of which he is the chair gathered the preceding night. He is amnesiac and he does not remember having gathered last night, neither that he is the chair of directors council of the company. Moreover, he comes to know that the council did not reach an important agreement, so that he thinks that the meeting was unsuccessful. Hence, sentence (16) would be considered true, but sentence (12)b would not. Notice that sentence (16) may be considered true even in a scenario in which the chair is completely aware of who he is – that is, even sentence (16) can be \textit{de se}.

A possible observation that may be raised against the question at issue is that examples (16) and (12)b involve two different types of plurality – syntactic and semantic plurality respectively. A diagnostic to discriminate between the two types of plurality is given by Landau himself. He observes, indeed, that collective predicates are compatible with singular nouns which are semantically plural, and that plural predicates and predicates containing a plural anaphora (e.g., \textit{themselves}, \textit{each other}, etc.) are not compatible with semantically plural singular nouns. This is why PRO under PC, which is semantically plural, is compatible with collective predicates, but it is not with predicates containing a plural anaphora. Examples (10), repeated here, illustrate this contrast:

\begin{enumerate}
\item[(10) a.] John told Mary that he preferred to meet at 6 today.
\item[(10) b.] *John told Mary that he preferred to meet each other at 6 today.
\end{enumerate}

A counterpart in Italian may be given by the following examples:
(17) a. Gianni ha detto a Maria che pro preferiva PRO incontrarsi alle 6 oggi.
Gianni has told to Maria that pro preferred PRO meet(inf)-each-other(cl) at-the 6 today
‘Gianni told Maria that he preferred to meet at 6 today’.

b. *Gianni ha detto a Maria che pro preferiva PRO guardare se stessi allo specchio prima di uscire.
Gianni told Maria that pro preferred PRO to look at themselves at the mirror before going out

In (17) PRO under PC is semantically plural. Hence, it is compatible with collective predicates (example a), but it is not with plural anaphors (example b).

Notice, however, that pro in a subjunctive clause may serve as the antecedent for a plural anaphora:

(18) Gianni ha detto che Maria preferiva che pro guardassero se stessi allo specchio prima di uscire.
John told Mary that pro preferred that pro look at themselves at the mirror before going out
‘John told Mary that he preferred that they check at themselves in the mirror before going out’.

Hence, it seems that the semantic contribution of pro under overlapping reference and PRO under PC does not seem to be identical. This difference may be of great relevance with respect to the problem raised in the present section.

The question as to why the hypothesis proposed in Chapter 4 apparently does not work with respect to overlapping reference remains open.

5.4 LD-control and theta-identification
A potential field of application of the current hypothesis concerns the phenomenon of Long-Distance Control, illustrated by the following example (from Landau 2000):

(19) Mary knew that it damaged John [PRO to perjure himself/herself].

The phenomenon can be illustrated by Italian examples as well:
Maria pensa che aiuterebbe Gianni [PRO parlare di se stesso/se stessa]. Maria thinks that help(_cond) Gianni [PRO talk(inf) about himself/herself] ‘Maria thinks that it would please Gianni to talk about himself/herself’.

In sentences (19) and (20) there are two available controllers of PRO, Mary and John. Notice that only the latter potential controller is contained in the immediately dominating clause as an argument. Following Giorgi’s and Pianesi’s (2001) hypothesis, the temporal coordinate of the attitude episode (that is, the temporal coordinate of Mary and, specifically, her assignment sequence) must be represented within the object of the attitude. Hence, if PRO appears in configurations involving theta-identification of an unsatisfied position, as supposed by Higginbotham (1997) and assumed here, one may suppose that the same mechanism responsible for LDAs may be applied to LD-control as well. Notice that this idea would be coherent with Landau’s view on the phenomenon, since he proposes that PRO in LD-control is a logophor (in the sense of Reinhart-Reuland (1993) – that is, a reflexive that is not syntactically licensed by condition A).

Notice, however, that if things were so, one should expect that LD-control would be sensitive to the embedded mood, exactly as LDAs (and obviation) are. In particular, one should expect that if the speaker’s assignment sequence were present in the embedded clause, LD-control would not be available. Although the judgments by Italian native speakers suffer from a certain variability, in general it seems that there exists a contrast between the following sentences:

(21) a. *Gianni1 ha detto che aiuta Maria [PRO1 parlare di se stesso].

Gianni1 has said that help(ind) Maria [PRO1 talk(inf) of himself]

b. Gianni1 pensa che aiuti Maria [PRO1 parlare di se stesso].

Gianni1 thinks that help(subj) Maria [PRO1 talk(inf) of himself] ‘Gianni thinks that it helps Maria to talk about himself’.

It seems that in (21)a the indicative mood ‘blocks’ the control relation between the matrix subject, Gianni, which refers to the attitude bearer, and PRO. This is proved by the fact that the anaphor se stesso has no appropriate antecedent. Indeed, it must be bound by PRO, and given that the anaphor is masculine, PRO must be masculine as well. The only available controller, however, seems to be Maria, which is femi-
nine. The fact that PRO and the anaphor have different gender may cause ungrammaticality. In sentence (21)b, on the other hand, the matrix subject seems to be an appropriate controller of PRO and, accordingly, an appropriate antecedent of the anaphor.

Notice, however, that if an analysis in the spirit of Giorgi (2004) may be able to account for the contrast in (21), some other facts do not seem to be easily explainable in the same light. Landau observes that LD-control is in fact sensitive to additional factors that are unpredicted under the hypothesis that Control may be explained in terms of theta-identification, such as the semantic nature of the embedded predicate. In particular, psych-predicates seem to block LD-control (examples from Landau 2000):

(22)  
\begin{align*}
a. \quad & \text{Mary knew that it was painful to John [PRO to perjure himself/*herself].} \\
\text{b.} \quad & \text{Mary knew that it was harmful to John [PRO to perjure himself/herself].}
\end{align*}

An analogous contrast can be illustrated in Italian. Compare, for instance, sentence (20), where PRO can be controlled either by Maria or by Gianni, and the following sentence (form landau 2000):

(23)  
Maria pensa che a Gianni piacerebbe parlare di se stesso/*se stessa.
‘Maria thinks that it would please Gianni to talk about himself/*herself’.

The unavailability of LD-control in (23) is not predicted if the hypothesis can be taken seriously that PRO can occur in environments where theta-identification has already taken place between an unsatisfied position and the attitude bearer. One should actually expect that PRO could be controlled by Maria in (23), contrary to the facts. I do not have any solution to this problem. Further investigation may however shed more light on this facet of the hypothesis proposed here.
6 Conclusions

In this dissertation I have illustrated the phenomenon of subjunctive obviation in Italian. I have shown that there is a set of data which previous accounts on obviation are not able to explain. I have argued that obviation may be interpreted as the unavailability of *de se* (and even of non-*de se*) reading (Chapter 4). The generalization – relative to subjunctive argument clauses in which the subject is a null or clitic pronoun – which a theory of obviation should be able to explain, is as follows (see Chapter 4):

(1) A subjunctive clause cannot be interpreted *de se*, nor non-*de se*, if the form carrying subjunctive morphology is a full verb.

Generally speaking, the relevant generalization for previous accounts was instead that the null or clitic (deficient, in the sense of Cardinaletti-Starke 1999) pronominal subject in a subjunctive clause must be obviative with respect to the matrix grammatical subject. In Chapter 3 I tried to show that generalization (1) is more appropriate than previous generalizations. The first reason is that previous generalizations were not able to derive examples of obviation between the embedded subject and arguments that do not serve as the grammatical subject of the matrix clause, which I illustrated in Chapter 2 and 3. On the other hand, generalization (1) states that the embedded subject must be obviative with respect to the superordinate argument denoting the attitude bearer, whatever may be the grammatical function of that superordinate argument. *De se* attitudes are indeed attitudes of an individual (the attitude bearer) towards a propositional item concerning herself.

The second reason is that not all subjunctive clauses instantiate obviation to the same extent: as I have shown in Chapter 2 and 3, when the form carrying the subjunctive morphology is not a full verb, obviation seems to be “weakened” – if the
embedded verb is perfective, passive, or it is a modal verb, a subjunctive clause may be *de se*, given an appropriate context. Previous accounts on obviation do not generally face this generalization, although it has already been noticed by Ruwet (1984) for French and by Raposo (1985) for Portuguese in the 1980s. Hence, previous accounts seem to be too powerful, in that they are not able to distinguish the obviative from the non-obviative subjunctive clauses.

Notice, furthermore, that the set of data generalization (1) describe is cross-linguistically uniform – it holds not only with respect to Italian, but even with respect to other Romance languages, Catalan, French, Portuguese, Spanish – as shown in Chapter 2 and 3. Accordingly, the hypothesis that I proposed is based on the analysis of the Italian data, but it can be easily extended to the other Western Romance Languages.

The approach I tried to support crucially resorts to the following claims:

(2)

a. *Implicit arguments*
   i. Implicit arguments are theta-positions that are not assigned by theta-marking (Higginbotham 1997, Williams 1987, 1989);
   ii. Implicit arguments may be satisfied via theta-identification (Higginbotham 1997);

b. *Double Access Reading Generalized* (Giorgi Pianesi 2001)
   i. In indicative clauses the assignment sequence of the speaker and of the attitude bearer are both present;
   ii. In subjunctive clauses only the assignment sequence of the attitude bearer is present;

c. *Long Distance Anaphors*
   i. LDAs appear only in subjunctive clauses (Giorgi 1983);
   ii. LDAs are *de se* (Chierchia 1989, Cole-Hermon-Sung 1990, Giorgi 1983, 2004a, 2004b, Pica 1987, Sells 1987);
iii. LDAs are the spell-out of an implicit argument that can be theta-
identified either with a co-argument or with the attitude bearer
(Giorgi 2004a, b, c);

iv. The speaker’s assignment sequence ‘closes’ the binding domain of
a LDA (Huang-Liu 2001, Giorgi 2004b and c);

I claimed that the mechanism based on the above claims can be exploited to explain
the facts concerning obviation I illustrated in Chapter 3.

In particular, I explored the following hypothesis:

(3) In an environment devoid of the speaker’s coordinate, a de se reading is
achieved iff there is an implicit argument that is theta-identified with the atti-
tude bearer.

I showed that the following predictions are implied, given the above hypothesis. Sub-
junctive clauses cannot be interpreted de se (that is, the deficient pronominal subject
must be obviative with respect to the attitude bearer), unless an implicit argument
appears within them. If one supposes that the external argument of a verb in a non-
finite mood is an implicit argument, a subjunctive clause in which a full verb is in a
non-finite mood may be de se. This mechanism applies recursively. Hence, the sub-
ject of a doubly embedded clause cannot be co-referent with an intermediate subject,
since it cannot be de se, but it is free to co-refer with the matrix subject.

Infinitive clauses which are object of intensional predicates (desiderative, epis-
temic, emotive-factive, etc.) are always de se, given the claim in (d) above.

Indicative clauses have no restrictions on the referential properties of the sub-
ject, since the speaker’s coordinate intervenes and supplies an assignment sequence
for any argument within the embedded predicate.

Furthermore, I speculated that pronouns in an embedded clause are evaluated
with respect to the speaker’s assignment sequence if that assignment sequence is pre-
sent (that is, in contexts instantiating the Double Access Reading), and with respect
to the subject’s assignment sequence (a modified version of the speaker’s sequence
in Italian), if the speaker’s assignment sequence is not present. This is supposed to
imply that subjunctive clauses are in fact opaque domains as any other clause. Further investigations are however needed in this respect and will be object of further investigation, as well as some other aspect connected with the main hypothesis (for instance, the referential properties of phonologically realized pronouns in the subject position of subjunctive clauses).

Finally, I tried to show that the apparatus hypothesized here could prove useful to analyze Control structures, such as Long-distance Control and secondary predication in embedded clauses. In both cases, indeed, the *de se* reading is sensitive to mood choice and the external argument of a non-finite predicate can co-refer with a non-local argument. Again, I argued that this argument can be viewed as an implicit argument which is identified with the attitude bearer. *PRO* is taken to be merged only in positions where theta-identification has already taken place, as argued by Higginbotham (1997).

Apparent problems to this view are represented by the facts on Partial Control discussed by Landau (2000). I showed, however, that the present view on Control does not contrast with the fact Landau describes. Some facets of this question, however, need further research.
References


Bhatt, Rajesh, and Roumyana Pancheva, 2004. Implicit arguments. Ms., University of Texas, Austin, and USC.


Joyce McDonough, Bernadette Plunkett (eds.): 483-499. Amherst: GLSA.


