

2. Control phenomena in English

0. Introduction

The purpose of this chapter is threefold. First of all, it aims at presenting the distribution of non-finite clauses in English. Secondly, it focuses on the typology of control in English. It is argued that alongside a traditional classification of control into OC and NOC, a new division within the class of OC is necessary, namely a distinction between Exhaustive Control and Partial Control (henceforth, EC and PC, respectively). Thirdly, an analysis of various types of control is attempted within the MP of Chomsky (2000, 2001a, b). The analysis of control presented here closely mimics that of Landau (2000), with only minor modifications. It is shown that Landau's analysis adequately handles control facts in English and is therefore superior to other available approaches outlined in Chapter I. The chapter closes with an examination of the licensing of overt subjects in English non-finite non-ECM clauses.

1.0. The distribution of non-finite clauses in English

English non-finite clauses contain one of the three non-finite forms present in the language, i.e. the infinitive, the present participle or the past participle. Infinitival clauses can either be used without any C or may be introduced by the C *for*. Only in the former case may PRO be used as the subject of the non-finite clause, whereas in the latter case the subject must be phonologically realised (the *for-to* filter of Chomsky and Lasnik (1977)).¹

Most commonly, non-finite clauses function as complements to verbs and adjectives. The non-exhaustive list of predicates taking non-finite complements is reproduced in (1) after Landau (2000):²

¹ However, there exist dialects, such as Irish English (cf. Henry (1992)), where *for* can co-occur with the PRO subject.

² Some of the predicates in (1) subcategorise infinitival complements and others gerundive complements. This distinction is irrelevant for the discussion carried out in this chapter. Non-finite clauses with past participles act only as adjuncts (cf. (5c)) but they can never function as complements.

(1)

- a. *implicatives*: dare, manage, make sure, bother, remember, condescend, forget, fail, etc.
- b. *aspectual*: begin, start, continue, finish, stop, resume, etc.³
- c. *modal*: have, need, may, should, must, etc.
- d. *factives*: glad, sad, regret, like, dislike, hate, loath, surprised, shocked, sorry, etc.
- e. *propositional*: believe, think, suppose, imagine, say, claim, assert, affirm, deny, etc.
- f. *desideratives*: want, prefer, yearn, arrange, hope, afraid, refuse, agree, plan, etc.
- g. *interrogatives*: wonder, ask, find out, interrogate, inquire, guess, grasp, understand, know, etc.

First, all the predicates listed in (1) can take C-less complements, while only desideratives and factives can take non-finite *for*-complements.^{4 5} The latter case is illustrated in (2):

(2)

- a. I prefer [for you to stay at home]. desiderative
- b. I'm sorry [for you to have done such a thing]. factive

Secondly, non-finite clauses can be used as complements of nouns, as shown in (3):

(3)

- a. He was driven by the desire [PRO to win].
- b. She showed no desire [for us to stay at her place].

³ Aspectual predicates are ambiguous between control and raising structures. Similarly modals constitute a heterogeneous class; while epistemic modals are raising predicates, dynamic (ability) modals are control predicates.

⁴ Kiparsky and Kiparsky (1970) use the term emotives to denote the class of predicates taking *for*-complements.

⁵ Erdmann (1997:70) notes that non-finite *for*-complements can also follow verbs of communication, such as *cry out*, *gesture*, *nod*, *radio*, *say* and *signal*.

Additionally, C-less non-finite clauses can be used as complements of prepositions, as in (4), whereas *for*-complements can never be so used.

- (4)
- a. She was thinking about [what PRO to do].
 - b. John thought about [PRO writing an essay].

Furthermore, non-finite clauses can act as adjuncts modifying nouns, as in (5), adjectives, as in (6), adverbs, as in (7), or verbs, as in (8):

- (5)
- a. He brought me the documents [PRO to sign].
 - b. The book [for you to read] is over there.
 - c. He came back home, [entirely PRO covered in dirt and dust].

- (6)
- a. It is too cold [PRO to go out].
 - b. The food is ready [for you to eat].

- (7)
- a. He spoke too silently [PRO to be heard].
 - b. He spoke too silently [for us to hear].

- (8)
- [PRO Having read the book], he switched off the light.

C-less non-finite clauses functioning as adjuncts can commonly serve as purpose clauses such as (9):

- (9)
- He went out [PRO to buy bread].

Finally, infinitival and gerundive clauses can be used as subjects. This is illustrated in (10) and (11), respectively:

- (10)
- a. [PRO To win this match] is important for us.
 - b. It would annoy her parents [for Mary to fail this exam].

(11)

[PRO winning this match] is important for us.

To recapitulate, English non-finite clauses, though most commonly found as complements to verbs and adjectives, can also serve as complements to nouns and prepositions. Additionally, they can be used as subjects and adjuncts.

2.0. Typology of control in English

This section focuses on re-drawing division lines between various types of control and is, to a large extent, based on Landau's (2000) work. The first distinction postulated here corresponds to two traditionally recognised classes of control, i.e. OC and NOC. It is argued that some commonly postulated criteria for distinguishing OC from NOC are inadequate and hence require rethinking. Additionally, a justification is presented for dividing the class of OC into EC and PC.

2.1. OC and NOC in English

Although two control types, i.e. OC and NOC, are commonly distinguished in the literature, there is no consensus as to what predicates belong to either class and what properties characterise them. Therefore it seems worthwhile to present the most important views on the OC/NOC distinction.

Hornstein's (1999, 2001) criteria for distinguishing OC from NOC have been outlined in Chapter I, section 2.2.1. To recall, Hornstein recognises the following characteristics of OC:

(12)

- a. the controller must be present
- b. the controller must be local
- c. the controller must c-command the OC PRO
- d. under VP Deletion, OC PRO allows only a sloppy reading⁶
- e. the controller cannot be split
- f. OC PRO allows only *de se* interpretation.

⁶ In OC, a sloppy reading is also possible if the DP modified by the QP *only* controls PRO. This is the seventh OC test used by Hornstein (1999, 2001) (cf. Chapter I, 2.2.1).

However, it seems that neither c-command by the controller nor the ban on a split antecedent constitute characteristics typical of OC. This claim is confirmed by the following data:

(13)

- a. It has helped Mary₁'s career [PRO_{1/*arb} to have a father on the board of directors].
- b. Mark₁ promised his daughter₂ [PRO₁₊₂ to watch TV together].

In (13a) PRO is obligatorily controlled, yet its controller, i.e. *Mary*, does not c-command it. In (13b), control by a split antecedent is possible with a prototypical OC verb *promise*. Consequently, it appears that c-command by an antecedent is not a necessary condition for OC to arise, and the possibility of control by a split antecedent does not necessarily imply NOC.⁷

Other linguists draw the division line between OC and NOC in a different way. For instance, Williams (1980) observes that OC PRO cannot alternate with a lexical NP, in contradistinction to NOC PRO.⁸ This makes him conclude that desiderative verbs like *want*, *prefer*, etc., are NOC predicates, as they allow an overt NP in the position of PRO, as shown in (14) below:

(14)

- a. Mary wanted [PRO to win the race].
- b. Mary wanted [for John to win the race].

However, there exist arguments against treating the possibility of having an overt subject replace PRO as a sign of NOC. The first such argument, adopted after Manzini (1983), relates to the fact that the possibility of having a *for*-

⁷ Hornstein (2003:65, footnote 13) argues that the majority of cases where PRO is controlled by a split antecedent are only marginally acceptable and consequently, do not indicate that control by a split antecedent is an instance of OC.

⁸ Williams' (1980:209) complete set of properties characteristic of OC is listed in (i) below:

(i) Properties of OC:

- a. Lexical NP cannot appear in the position of PRO.
- b. The antecedent precedes the controlled PRO.
- c. The antecedent c-commands the controlled PRO.
- d. The antecedent is thematically or grammatically uniquely determined.
- e. There must be an antecedent.

complement is sensitive to the semantics of the verb, not to its control possibilities. This point is illustrated in (15):

(15)

a. John signalled to Mary for Bill to shave himself.

b.*John signalled to Mary to shave himself.

(Manzini (1983), examples (66) and (67))

Sentence (15a) with the *for*-complement is grammatical, which, in accordance with Williams' (1980) analysis, indicates that *signal* is a NOC predicate. This treatment of *signal*, however, fails to rule out (15b), which should be acceptable if this predicate were a NOC verb.

Furthermore, cross-linguistically the presence of an overt C is not a prerequisite for NOC to arise. As noted by Petter (1998) for Dutch and, as we shall see in Chapter IV for Polish, the presence of an overt C is orthogonal to the OC/NOC distinction. This, again, argues against using Williams' test as relevant for distinguishing OC from NOC.

Manzini (1983) presents another argument undermining the usefulness of the concept of control as understood by Williams. She notes that sentential subjects differ from complements of desideratives in that they allow arbitrary and long-distance control. The contrast is illustrated in (16) below:

(16)

a. [To behave oneself in public] would help John.

b.*John wanted [to shave oneself].

c. Mary knows that [to behave herself in public] would help Bill.

d.*Mary knows that John wanted [to behave herself].

(Manzini (1983), examples (26), (62), (28), (63))

(16a) shows that arbitrary control is possible in sentential subjects, whereas (16b) demonstrates that arbitrary control cannot be found in complements of desideratives. Sentences (16c) and (16d) illustrate that the analogous contrast exists for long-distance control. Both sentential subjects and complements of desideratives allow the alternation between PRO and a lexical NP and therefore are regarded by Williams as instances of NOC. What remains mysterious within Williams' system is why these two cases of NOC exhibit the contrasts in (16).

Wurmbrand (2001) opts for an approach where the division line between OC and NOC is drawn by semantics. For her, OC obtains in case there occurs a

uniquely predetermined controller, otherwise NOC holds. Such an approach forces her to assume that OC is restricted to two cases, such as (17a) and (17b) below:

(17)

- a. John tried [PRO to leave].
- b. Mary knows that it would help Bill [PRO to behave herself in public].
(Wurmbrand (2001:237))

In (17a) PRO's controller, *John*, is uniquely predetermined, and so is the long-distance controller *Mary* in (17b). Therefore both these sentences represent OC in Wurmbrand's system. On the other hand, arbitrary, split and partial (or imperfect) control belong to NOC. These three cases are exemplified in (18a), (18b) and (18c), respectively:

(18)

- a. It is dangerous for babies [PRO_{arb} to smoke around them].
- b. John₁ persuaded Mary₂ [PRO₁₊₂ to leave together].
- c. We thought the chair₁ preferred [PRO₁₊ to gather at 6].⁹
(Wurmbrand (2001:237))

In (18a), the reference of the infinitival subject is left unspecified and thus represents an instance of arbitrary control. In (18b), PRO is controlled jointly by the matrix subject and object, giving rise to split control. In (18c), the reference of PRO includes, though is not entirely coextensive, with the reference of the matrix subject, yielding partial control.¹⁰ Since (18a), (18b) and (18c) do not exhibit a uniquely predetermined antecedent for PRO but allow various possibilities of its interpretation, they are classified by Wurmbrand under NOC. Implicit control, as in (19), requires a word of comment.

(19)

- It was difficult [PRO to leave]. (Wurmbrand (2001:237))

In this case PRO's controller corresponds to the implicit argument of *difficult*. Although the controller in (19) is implicit, it is uniquely predetermined, as the

⁹ The symbol PRO₁₊ is used to denote PC.

¹⁰ Partial Control will be examined in detail in section 2.2.

infinitival subject can refer only to the implicit argument and resists any other interpretation. Hence implicit control exemplifies OC.¹¹ However, Wurmbrand notes that at least in German there exist cases of implicit control which belong to NOC. One such example is given in (20):

(20)

Es wurde angeboten das Haus zu verkaufen. (Wurmbrand (2001:239))
 it was offered the house to sell
 'One has offered to sell the house.'

In (20) PRO may have two different interpretations; its controller may be either the person making the offer or the person receiving it. Hence, in accordance with Wurmbrand's criteria, it is a case of NOC. Consequently, implicit control may represent either control type, depending on the matrix predicate.¹²

Whereas Wurmbrand favours semantic criteria to determine the division line between OC and NOC, Landau (2000) argues for a syntactically-based distinction between OC and NOC. Landau's model will be presented in detail as it will be adopted for our analysis of control phenomena in English. For Landau, OC holds in all non-finite complement clauses, NOC being restricted to subject and adjunct clauses. According to him, the following properties are characteristic of OC and NOC:¹³

(21)

- a. Arbitrary Control is impossible in OC, possible in NOC.
- b. Long-distance Control is impossible in OC, possible in NOC.
- c. Strict reading of PRO is impossible in OC, possible in NOC.
- d. *De re* reading of PRO is impossible in OC (only *de se*), possible in NOC.

¹¹ By classifying implicit control under OC, Wurmbrand departs from Williams (1980) and Hornstein (1999, 2001), for whom OC arises only if the controller is overtly present.

¹² It is interesting to note that in cases of implicit control PRO can sometimes be arbitrary. One such case is given in (i) below, where PRO may either be controlled by the implicit argument of *shout*, or may be arbitrary, i.e. the person who calls the doctor may be distinct from the one to whom John shouted.

(i) John₁ shouted (to x₂) [PRO_{2/arb} to call him₁ a doctor].

¹³ The criteria in (21) are similar to the ones offered by Hornstein in (12). Landau, unlike Hornstein, does not consider the c-command by the antecedent (cf. (12c)) and the ban on split antecedent (cf. (12e)) as a prerequisite for OC to arise, for the reasons mentioned in the text (cf. sentences (13a) and (13b)).

If the criteria in (21) are applied to the data in (17), (18) and (19), there emerges a typology different from that of Wurmbrand. In Landau's system, (17a) is regarded as representing OC, whereas (17b) is an instance of NOC since it exhibits long-distance control. As for (17a), the predicate *try* disallows arbitrary control, as can be seen in (22a), does not tolerate long-distance control, as shown in (22b), and allows only sloppy reading under VP Ellipsis, as illustrated in (22c):¹⁴

(22)

- a. *John tried [PRO_{arb} to leave].
- b. *Mary₁ knew that John₂ tried [PRO_1 to behave herself in public]
- c. John₁ tried [PRO_1 to leave] and Mary₂ did too. (=Mary₂ tried to PRO_2 leave)

As for the sentences in (18), only (18a) can be treated in Landau's model as an instance of NOC, since it exhibits arbitrary PRO, a clear sign of NOC (cf. (21a)). On the other hand, split control, as in (18b), partial control, as in (18c), and implicit control, as in (19), are regarded by Landau as cases of OC, since they are sensitive to the OC diagnostics listed in (21). For one thing, they all disallow arbitrary PRO (cf. (21a)), as can be seen in (23):

(23)

- a. John₁ persuaded Mary₂ [$\text{PRO}_{1+2/*\text{arb}}$ to leave together].
- b. We thought the chair₁ preferred [$\text{PRO}_{1+/*\text{arb}}$ to gather at 6].
- c. It was difficult (for Mary₁) [$\text{PRO}_{1/*\text{arb}}$ to leave].

Secondly, they do not tolerate long-distance control (cf. (21b)), as shown in (24):

(24)

- a. Mark₁ said that John₂ persuaded Mary₃ [$\text{PRO}_{2+3/*1+2/*1+3}$ to leave together].
- b. The chair₁ said that the director₂ preferred [$\text{PRO}_{2+/*1+}$ to gather at 6].
- c. Doctors₁ say that it is difficult (for patients₂) [$\text{PRO}_{2/*1}$ to recover consciousness after an accident].

¹⁴ Test (21d) does not work well with *try*, as it is applicable only to verbs expressing belief, e.g. *believe*, *expect*, *hope*, etc. (cf. Chapter I, section 2.2.1).

Thirdly, strict reading is unavailable for PRO in these cases (cf. (21c)), as is made clear by (25):¹⁵

(25)

- a. John₁ persuaded Mary₂ [PRO₁₊₂ to leave together] and Mark did too.
(=Mark₃ persuaded Mary₂ PRO₂₊₃ to leave together)
- b. The chair₁ preferred [PRO₁₊ to gather at 6] and the director did too.
(=The director₂ preferred PRO₂₊ to gather at 6)

Test (21d) is not applicable to the three cases under scrutiny, since they do not make use of verbs of belief (cf. footnote 14). Thus, it has been shown that split, partial and implicit control represent OC in Landau's model, not NOC like in Wurmbrand's analysis.

As has already been noted, according to Landau, all non-finite complement clauses exhibit OC and they can never give rise to NOC. Thus, complements to all the predicates listed in (1) exhibit OC, as they satisfy all the properties typical of OC listed in (21). We will not reproduce all the tests for all the predicate classes in (1), but restrict our attention to two, i.e. desideratives and interrogatives, as they are commonly classified as NOC predicates (cf. Williams (1980), Manzini (1983), Bouchard (1984), Koster (1984), Kawasaki (1993), Hornstein (1999) and Manzini and Roussou (2000)). Let us first consider desideratives. Sentences (26a), (26b), (26c) and (26d) below demonstrate that these predicates disallow arbitrary PRO, resist long-distance control, require sloppy reading under VP Ellipsis, tolerate only *de se* interpretation and hence represent OC.

(26)

- a. Mark₁ expected [PRO_{1/*arb} to win].
- b. John₁ knew that Mark₂ expected [PRO_{2/*1} to win].
- c. Mark₁ expected [PRO₁ to win] and John₂ did too.
(=John₂ expected PRO₂ to win)
- d. The unfortunate₁ expected [PRO₁ to get a medal].

¹⁵ Test (21c) does not work well for instances of implicit control like (19), as the VP to be deleted contains the implicit controller, which functions as an internal argument within the VP.

As for interrogative complements, the fact that they can host the anaphor *oneself*, as in (27), might indicate that they represent NOC.

(27)

Mark wondered [how PRO to behave oneself].

Landau argues against this treatment of interrogative complements on the basis of Condition B effects attested in such clauses. If the PRO subject in interrogative complements were arbitrary in reference, it should not give rise to Condition B effects in cases like (28) below:

(28)

*Mark₁ wondered [what PRO to buy him₁ in London].

The ungrammaticality of (28) follows, according to Landau, from the fact that PRO includes in its reference *Mark* and therefore bears the same index as *Mark*. PRO has also the same index as the pronoun *him* co-indexed with *Mark*, hence binds it, in violation of Condition B.¹⁶ Thus, the unacceptability of (28) disconfirms the claim that PRO in interrogative complements is arbitrary and thus represents NOC PRO. A similar situation arises in sentences like (29) below:

(29)

a. John wondered [how PRO to talk to Mary about oneself].

b. *John₁ wondered [how PRO to talk to him₁ about oneself].

(Landau (2000:40))

What (29a) and (29b) demonstrate is that the possibility of using the anaphor *oneself* cannot always be taken as a diagnostic for NOC. The ungrammaticality of (29b) clearly indicates that, in spite of the presence of *oneself*, PRO is not arbitrary but controlled by the matrix subject. Consequently, it seems that English possesses two kinds of *oneself*: one whose reference is arbitrary and the other whose reference is determined by a particular antecedent.

What additionally supports the conclusion that interrogative complements require OC is the fact that they behave in a way typical of OC with respect to the tests listed in (21), as can be seen in (30):¹⁷

¹⁶ If the pronoun is replaced with the anaphor, (28) becomes perfectly grammatical, e.g.:

(i) Mark₁ wondered [what PRO₁ to buy himself₁ in London].

¹⁷ Test (21d) is inapplicable to interrogative predicates.

(30)

- a. John₁ wondered [where PRO_{1/*arb} to go].
- b. Mary₁ said that John₂ wondered [where PRO_{2/*1} to go].
- c. John₁ wondered [where PRO₁ to go] and Mark₂ did too.
(=Mark₂ wondered where PRO₂ to go)

One group of predicates that might cast doubts on Landau's claim that all non-finite complement clauses exhibit OC comprises verbs of declaring, which, under the classification in (1), belong to propositional predicates. These verbs apparently allow NOC in their complements, as shown in (31):

(31)

John₁ talked about [how best PRO_{*1} to please him₁].

However, one might argue that it is the implicit argument of *talk about* that controls PRO in (31) and hence it does not constitute an exception to the claim that all non-finite complements trigger OC. In fact, the controller of PRO in sentences like (31) must always be understood as identical with the implicit argument.

One might wonder whether verbs of declaring which do not readily allow implicit arguments behave in the same way. One such verb is *rave about*, as in (32):

(32)

John₁ raved about [how best PRO_{*1/2} to please him₁].

The above sentence is judged by the majority of the native speakers consulted to be grammatical, which indicates that truly arbitrary PRO, which is a subtype of NOC PRO, can in fact be found in non-finite complements of the verbs scrutinised. Another example of this type is given in (33):

(33)

Mark₁ commented on [how PRO_{*1/2} best to please him₁].

Again this sentence is perfectly grammatical with PRO_{arb}. The claim that PRO in (33) is non-obligatorily controlled is supported by the fact that this sentence allows strict reading under VP ellipsis, as demonstrated in (34):

(34)

Mark₁ commented on [how best to please him₁] and John did too.
(=John commented on how best to please Mark)

Additional support for the claim that PRO in cases like (33) is NOC PRO comes from sentences like (35):

- (35) Mark₁ talked about [PRO_{1/2} commenting on [how PRO_{*1/2/3} best to please him₁]].

In (35) both PRO's may have different antecedents. The first PRO can refer to Mark or to the implicit argument of the verb *talk about*. The second PRO must not refer to Mark, but may refer to an individual distinct from that referred to as the implicit argument of *talk about*.¹⁸ Since the second PRO may be disjoint in reference from the first one in (35) and since it cannot refer to the implicit argument of *comment on*, as the verb does not readily allow such an argument, we conclude that the second PRO in (35) is in fact NOC PRO, while the first one is OC PRO. Thus, it seems that propositional predicates like *rave about* and *comment on* constitute real counterexamples to the claim made by Landau (2000) that all non-finite complements host OC PRO only.

Another group of verbs behaving in a way similar to the two propositional verbs just mentioned comprises factives such as *condemn*, *criticise* and *approve*. These verbs take gerundive complements whose PRO can be arbitrary, as shown in (36):

- (36)
- a. ?? Mark₁ openly condemned/criticised [PRO_{*1/2} firing him₁ without any notice].
 - b. ?? Although Mark₁ approves of [PRO_{*1/2} correcting his₁ spelling mistakes], sometimes he₁ finds it annoying.

Although the above sentences are slightly degraded, they are not ungrammatical, which again allows us to conclude that they contain NOC PRO. Consequently, it appears that Landau's claim that all non-finite complements exhibit OC PRO is not unproblematic.

As for non-finite subject clauses, Landau (2000) argues that they give rise to NOC. This claim is supported by the fact that subject clauses can host PRO_{arb}, allow long-distance control, tolerate strict reading and are compatible with a *de*

¹⁸ This is the most natural interpretation for this sentence, although the second PRO may also refer to the implicit argument of *talk about*.

re interpretation. The application of these tests is illustrated in (37a), (37b), (37c) and (37d), respectively:

- (37)
- a. [PRO_{arb} To behave oneself in public] would help John. (Landau (2000:34))
 - b. John₁ said that Mary₂ thought that [PRO₁ shaving himself] would bother Sue.
(Landau (2000:35))
 - c. John thinks that [PRO feeding himself] will be difficult, and Bill does too.
(Landau (2000:35)) (=Bill thinks that John's feeding himself will be difficult)
 - d. The unfortunate₁ believes that [PRO_{1/2} getting a medal] would be boring.
(Landau (2000:36))

Likewise, extraposed subject clauses, which are adjoined to VP and hence function as adjuncts, trigger NOC.¹⁹ This is confirmed by the fact that they show the same behaviour as non-extraposed subject clauses with respect to the diagnostics in (21), as can be seen in (38):

- (38)
- a. It is dangerous for babies [PRO_{arb} to smoke around them].
(Landau (2000:34))
 - b. Mary₁ knew that it damaged John [PRO₁ to perjure herself].
(Landau (2000:35))
 - c. John thinks that it will be difficult [PRO to feed himself] and Bill does too.
(=Bill thinks that it will be difficult for John to feed himself)
 - d. The unfortunate₁ believes that it would be boring [PRO_{1/2} to get a medal].

(38a) shows that arbitrary PRO is possible in extraposed subject clauses, while (38b) demonstrates that these clauses allow long-distance control. (38c) and (38d) illustrate the respective possibility of strict reading and *de re* interpretation for PRO in the context scrutinised.

It seems that Landau's syntactically-based classification of OC/NOC is superior to Wurmbrand's (2001) semantically-rooted typology. The main

¹⁹ Control into other adjunct clauses is not thoroughly discussed by Landau (2000). He notes, however, that some adjunct clauses allow OC only, contrary to the predictions made by his analysis (cf. section 3.2).

advantage of Landau's approach is that it allows us to unite apparently distinct control types like split, implicit and partial control under the label of OC. Under Wurmbrand's approach, these control types are classified as instances of NOC, which does not account for the fact that these control types, like regular cases of OC, do not allow PRO_{arb}, long-distance control, strict reading and *de re* interpretation. Furthermore, by insisting on the link between OC/NOC and the position of the complement internal or external to VP respectively, Landau successfully handles not only control into various complement types, but also Super-Equi control facts, which have been regarded as mysterious since they were first noticed by Grinder (1970).²⁰ An issue problematic for Landau's typology of control, as stated in footnote 19, relates to adjunct control. Some adjuncts, though clearly attached outside the VP, allow OC only, contrary to the predictions of Landau's analysis. Additionally, it has been demonstrated that some propositional verbs and some factives can host NOC PRO in their complements, a fact not predicted by Landau's account. Finally, as Landau himself notes, there exist some predicates, such as, for instance, *kind*, *polite*, *irresponsible of*, *silly*, that require OC no matter what syntactic configuration they appear in.

2.2. Exhaustive and partial control

Within the class of OC, Landau (2000) distinguishes two subclasses, namely EC and PC. The former obtains wherever the reference of PRO is identical with that of its controller, whereas the latter is attested in case the reference of PRO contains the reference of its antecedent but is not identical with it. Since the distinction between these control types has received little attention in the literature (cf. Lawler (1972), Martin (1996), Petter (1998) and Wurmbrand (2001)) and since it is going to play an important role in our analysis of control carried out in section 3.1, it deserves detailed examination.

The environments in which PC appears involve collective predicates such as *gather*, *meet*, *together*. These predicates must typically co-occur with plural subjects. However, this condition can be relaxed for some control predicates, which exhibit a singular controller for PRO but nonetheless are compatible with collective predicates, thus yielding the PC effect. The predicates which allow PC comprise desideratives, interrogatives, factives and propositional predicates, whereas the remaining predicate types, i.e. modals, aspectuals and implicatives, exhibit only EC (cf. (1)). The contrast between these predicate classes is captured in (39) and (40):

²⁰ A detailed analysis of the Super-Equi facts is carried out in section 3.2.

(39)

- a. Mark₁ wants [PRO₁₊ to meet at 3].
- b. Mark₁ wondered [PRO₁₊ where to meet at 3].
- c. Mark₁ was glad [PRO₁₊ to meet at 3].
- d. Mark₁ claimed [PRO₁₊ to have met at 3].

(40)

- a.*Mark₁ must [PRO₁₊ meet at 3].
- b.*Mark₁ started [PRO₁₊ to meet at 3].
- c.*Mark₁ dared [PRO₁₊ to meet at 3].

In (39), PRO includes the matrix subject, *Mark*, in its reference together with other individuals salient in the context, and hence there is no mismatch between the collective predicate *meet* and PRO, controlled by the singular DP. No such possibility exists in (40), where the reference of PRO is co-extensive with the reference of its antecedent, and hence there arises a mismatch between the collective predicate and PRO, controlled by the singular DP.

Before turning to the question of why some predicates allow PC and some do not, let us demonstrate that both EC and PC are actually subtypes of OC. Both PC and EC obey the OC diagnostics provided by Landau in (21), that is, they disallow arbitrary PRO, long-distance control, strict reading and *de re* interpretation. That this is indeed the case can be seen for EC in (41) and for PC in (42).²¹

(41)

- a. Mark₁ started [PRO_{1/*arb} to read this book].
- b. John₁ said that Mark₂ started [PRO_{2/*1} to read this book].
- c. Mark₁ started [PRO₁ to read this book] and Bill₂ did too.
(=Bill₂ started PRO₂ to read this book)

²¹ For space reasons the OC diagnostics are applied only to one EC and one PC predicate, but they actually hold of other EC and PC predicates. Test (21d) is used only where applicable.

(42)

- a. Mark₁ expected [PRO_{1+/*arb} to meet at 3].
- b. Mary₁ said that Mark₂ expected [PRO_{2+/*1+} to meet at 3].
- c. Mark₁ expected [PRO₁₊ to meet at 3] and Bill₂ did too.
(=Bill₂ expected PRO₂₊ to meet too)
- d. The unfortunate₁ expected [PRO₁₊ to meet at 3].

Although in the case of PC we may have an impression of plural PRO appearing with a singular controller, in fact the situation is more complicated. Before examining PC PRO in detail, let us first focus on the contrast between syntactically vs. semantically plural expressions, as the distinction is crucial for PC PRO. Munn (1998) postulates a distinction between syntactically plural predicates and semantically plural ones. The former are predicated of syntactically plural entities, whereas the latter can be predicated of syntactically singular entities that are semantically plural. Semantically plural predicates include collective predicates, such as *gather*, *together*, etc. They can be predicated of collective nouns, which, in spite of being syntactically singular, can be plural semantically. Examples (43a) and (43b) show collective predicates co-occurring with collective nouns.

(43)

- a. The parliament gathered before the strikes.
- b. The family will be going for lunch together.

Although collective nouns can be semantically plural, they can never appear with expressions that are plural syntactically, as shown in (44):

(44)

- a.*The parliament supported themselves during the strikes.
- b.*They found this family to be troublemakers.

The behaviour of collective nouns just presented is very much similar to that of PC PRO. As has already been noted, PRO in PC contexts can co-occur with collective predicates (cf. (39) and (42)), but is banned from appearing with

predicates which are either actually inflected for plural, as in (45c), or contain plural anaphors, as in (45a) or (45b):²²

(45)

- a.*Mark wondered [when PRO to meet each other].
- b.*Mark wondered [how PRO to talk about themselves].
- c.*Mark wondered [how PRO to become students at this university].

The unacceptability of the above examples indicates that in the PC contexts PRO itself is not syntactically plural but rather semantically plural, in the same way that collective nouns are.

Thus, what seems to be happening in PC can be expressed as follows:

(46)

The PC-Generalisation

Syntactic number on PRO in PC-complements is inherited from the controller but semantic number is not. (Landau (2000:49))

However, the generalisation in (46) needs to be modified in order to incorporate the fact that in PC semantically plural PRO co-occurs with a semantically singular controller, as in (47), but never is it the case that a semantically singular PRO appears with the semantically plural controller, as in (48):

(47)

The chair₁ decided [PRO₁₊ to gather during the strike].

(48)

*The committee₁ decided [PRO₁₋ to wear a T-shirt].²³
(Landau (2000: 66))

²² The sentences in (45) become grammatical only when PRO is controlled by a plural antecedent, and hence is plural syntactically, as in (i):

(i) a. [Mark and Mary]₁ wondered [when PRO₁ to meet each other].
b. [Mark and Mary]₁ wondered [how PRO₁ to talk about themselves].
c. [Mark and Mary]₁ wondered [how PRO₁ to become students at this university].

²³ The symbol *I*- indicates the 'downwards' reading for PRO, that is, the case where PRO is semantically singular and its controller is semantically plural (cf. (63d)).

For this reason Landau (2000:53) suggests that the generalisation in (46) should be revised as in (49):

(49)

The PC-Generalisation (revised)

In PC-complements, PRO inherits all ϕ -features from the controller, including semantic plurality, but not necessarily semantic singularity.

The final point concerning the EC/PC distinction which will play an important role in our analysis of both these types of control relates to tense properties of EC and PC complements. The former lack any independent tense specification and are therefore interpreted as denoting an action simultaneous with the action in the matrix clause. The latter are specified for their own tense.^{24 25} To illustrate the contrast between these two groups of complements, let us analyse (50) and (51), which instantiate EC- and PC-complements, respectively.

(50)

- a.*Yesterday Mark had to read the book tomorrow.
- b.*Yesterday Mark began to read the book tomorrow.
- c.*Yesterday Mark managed to read the book tomorrow.

(51)

- a. Yesterday Mark hoped to read the book tomorrow.
- b. Yesterday Mark wondered what book to read tomorrow.
- c. Today Mark claims to have read the book last week.
- d. Today Mark regrets having read the book last week.

Only PC-complements allow the use of conflicting time adjuncts in the main and the embedded clause (cf. (51)), whereas no such possibility exists for EC-

²⁴ The idea that infinitives have tense goes back to Stowell (1982), who suggests that all infinitival clauses denote irrealis tense with respect to the matrix tense. This idea has been utilized in various analyses of control, cf. Pesetsky (1992), Martin (1996), Bošković (1997) and Wurmbrand (2001).

²⁵ The tense in the case of complements of desideratives and interrogatives is irrealis, whereas in the case of complements of factives and propositional predicates it is realis.

complements (cf. (50)).²⁶ Landau notes that the verb *try*, in spite of being desiderative, does not take a complement with independent tense specification, as can be seen in (52):

(52)

*Yesterday Mark tried to read the book tomorrow.

Wumbrand (2001:84) observes that only *try* with the meaning ‘make arrangements’, as in (53), allows a complement with independent tense specification.

(53)

Yesterday Mark tried to bring Mary to the party tomorrow.

Landau argues that the fact that the desiderative *try* requires an untensed complement does not invalidate his proposal, as *try* is a Restructuring predicate and as such takes a bare VP-complement lacking any TP projection and consequently any tense specification. In other words, in the case of *try*, its restructuring property makes it necessary to reclassify this desiderative verb as an EC predicate. Furthermore, Landau argues, contra Pesetsky (1992), Martin (1996) and Bošković (1997), that complements of implicatives, as in (50c), always lack independent tense specification. Pesetsky (1992) notes that the complements in question can marginally contain *should* (cf. (54)), from which he concludes that these clauses are tensed.

(54)

??Bill somehow managed that Mary should get the prize.

Landau observes, after Wurmbrand (2001), that *manage* in (54) is different from *manage* in (50c) and it means roughly ‘make arrangements’, not ‘succeed’. For this reason it allows independent tense specification in its complements. Thus, sentences like (54) do not represent true counterexamples to the claim that complements of implicatives are untensed. Another predicate worth examining is *forget*. As noted by Wurmbrand (2001), *forget* may be classified as either an implicative or as a factive predicate. However, only in the latter case can its

²⁶ Hornstein (2003:41) notes that PC may also be found in gerunds, as in (i):

(i) John_i prefers PRO_{i+} meeting at 6.

This would indicate, contra Stowell (1982), that gerunds are [+tense].

complement be tensed. The contrast between (55a) and (55b) makes this point clear:

(55)

- a.*Mark has forgotten today to water the flowers yesterday.
- b. Mark has forgotten today having watered the flowers yesterday.

Thus, the fact that the two meanings of *forget* are reflected in the tense properties of its complement provides direct support for Landau's analysis.

A natural question which arises at this point is how the semantic distinction between PC- and EC-complements should be represented in syntax. In the literature the presence or absence of tense in infinitival complements has often been reflected in their categorial status: untensed complements represent VPs, and tensed complements represent IPs or CPs (cf. Bouchard (1984), Koster (1984), Rochette (1988), Thráinsson (1993) and Wurmbrand (2001)).²⁷ It seems that non-finite complements of desiderative, interrogative, factive and propositional predicates, which are specified for independent tense and can exhibit an overt C or [Spec, CP], can undoubtedly be regarded as CPs. However, the treatment of complements of implicatives, modals and aspectuals as CPs seems to be controversial. As for implicatives, their complements will be treated as CPs, although they do not show independent tense specification. The reason for this is that in many Romance languages implicative complements are introduced by overt complementisers (e.g. in French verbs like *oublier* 'forget', *négliger* 'neglect' and *éviter* 'avoid' select the C *de*). Secondly, weak implicatives in German like *vorgeben* 'pretend', *aufgeben* 'give up' and *sich weigern* 'refuse', resist long scrambling and long distance passivisation, which serve as diagnostics of Restructuring (cf. Wurmbrand (2001:328)). Since the possibility of Restructuring normally implies the presence of a VP complement (cf. Wurmbrand (2001), Landau (2000) and Chapter III), the lack of Restructuring implies the presence of at least a TP.²⁸ Furthermore, Anaphor Binding facts in German point towards the same conclusion. Wurmbrand (2001) notes that dative DPs cannot bind anaphors in German, as can be seen in (56a). However, there exist sentences like (56b), where apparently the dative DP binds the anaphor:

²⁷ The term 'untensed' is understood as a semantic notion, whereas the term 'tenseless' is used as a syntactic notion.

²⁸ However, implicatives can undergo Restructuring in Polish, as demonstrated in Chapter III, section 2.1.3.

(56)

- a. weil der Hans der Maria sich auf dem Photo zeigte
since the John-NOM the Mary-DAT himself on the picture showed
'since John showed Mary himself/*herself in the picture'
(Wurmbrand (2001:233))
- b. Es ist ihm₁ gelungen [PRO₁ sich₁ einen Turm zu bauen].
it is him-DAT managed himself a tower to build
'He managed to build himself a tower.'
(Wurmbrand (2001:234))

Sentences (56a) and (56b) are grammatical, as it is not the dative DP, but rather PRO controlled by this DP, that binds the anaphor. Consequently, the grammaticality of sentences like (56b) indicates that the complements of implicatives must contain PRO, which, in turn, implies the presence of at least a TP. As to modals and aspectuals, at least some of the former may be regarded as raising predicates and hence taking TP complements. The latter take gerundive complements, which may indicate that their complements are categories smaller than CP. Furthermore, modals and aspectuals belong to the core class of Restructuring predicates in the majority of languages, which strongly suggests treating them as VPs, not CPs or IPs (cf. Wurmbrand (2001, chapter 3)). Consequently, we take all PC-complements to be CPs, and treat EC-complements as a heterogeneous class: complements to implicatives are regarded as CPs, while complements to aspectuals and modals as VPs.

One final revision of the PC-Generalisation in (49) is necessary in order to incorporate the fact that PC-complements are tensed. This can be done as follows:

(57)

The PC-Generalisation (final version)

In tensed complements, PRO inherits all ϕ -features from the controller, including semantic plurality, but not necessarily semantic singularity.
(Landau (2000:60))

2.3. *Typology of control – a summary*

A complete classification of various control types distinguished in sections 2.1 and 2.2 is presented in Table 1 below:

(58) Table 1

	OC		NOC
	EC	PC	
Syntactic Context	Complement	Complement	Subject/Adjunct
Type of Complement	Modal Aspectual Implicative	Desiderative Interrogative Factive, Propositional	Inapplicable
Arbitrary Control	–	–	+
Long-Distance Control	–	–	+
<i>De re</i> Interpretation	–	–	+
Strict Reading	–	–	+

3.0. Minimalist analysis of control in English

Our analysis of OC and NOC in English is based on Landau's (2000) approach. His analysis will be reproduced here with respect to the whole range of problems covered in our study.²⁹ The suggested modifications will be highlighted as we proceed.³⁰

3.1. EC and PC

Any adequate analysis of EC and PC in English must account for the following differences between the two:

(59)

- a. PC can arise if an embedded collective predicate co-occurs with a singular matrix subject, EC cannot.
- b. PC-complements are tensed, EC-complements are untensed.

²⁹ Landau (2000) addresses some issues not analysed here, such as infinitival adjectival complements as well as the relation between control and predication.

³⁰ For critical remarks concerning some solutions offered by Landau (2000) cf. Hornstein (2003:38-42).

It must also be capable of deriving the PC-Generalisation in (57).

Landau claims that all the properties of EC and PC can be provided with a natural explanation under the assumptions listed in (60):

(60)

- a. DP's, including PRO, enter the derivation with valued ϕ -features.
- b. Functional heads enter the derivation with unvalued ϕ -features.
- c. Semantic plurality (SP): $+/-$ on DPs, $+/-\phi$ on functional heads.
- d. Matching: ϕ (i.e. no SP) and $[-SP]$ are non-distinct on functional heads.
- e. PRO and infinitival Agr are anaphoric.
- f. PRO, being anaphoric, cannot value unvalued functional heads.

(Landau (2000:31))

Assumptions (60a) and (60b) are standard within the MP of Chomsky (2000, 2001a, b) (cf. Chapter I, section 1.0). Assumption (60c) draws a distinction between DPs and functional heads; the latter, in addition to being $[+SP]$ or $[-SP]$, can also be equipped with the feature ϕ SP, whose non-distinctness from $[-SP]$, stated in assumption (60d), plays an important role in deriving PC. Assumption (60e) adds to the traditional conviction about the anaphoric character of OC PRO a new insight, originally due to Borer (1989), that infinitival Agr is anaphoric and needs identification. Finally, assumption (60f) links PRO's anaphoric character with its inability to value features.

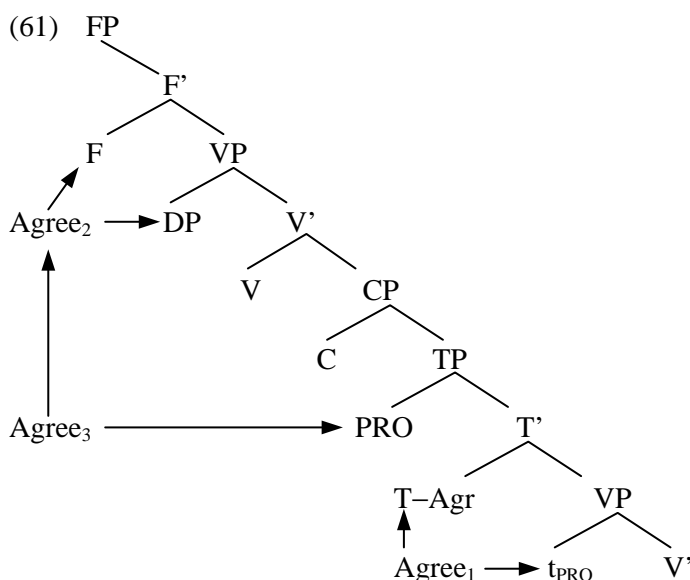
Another important element of the analysis of English EC and PC relates to T-to-C movement. As argued by Pesetsky and Torrego (2001), in tensed clauses, C contains an uninterpretable T-feature, which may be checked by T-to-C movement. Since PC complements are tensed (cf. (59b)), T-to-C movement affects them, in contradistinction to EC-complements, which are untensed. This difference will turn out to be crucial in accounting for PC effects.

Although Agr is mentioned in (60e), it should not be understood as heading a separate projection, but should rather be perceived as part of the T head. This is in line with Chomsky's rejection of the existence of AgrP (cf. Chomsky (1995b, chapter 4) and Chomsky (2000, 2001a, b)).

OC is regarded here as resulting from the operation Agree of Chomsky (2000, 2001a, b), which holds between an active Probe seeking a matching active Goal within its local domain (i.e. within the sister constituent of the Probe) (see Chapter I, section 1.0). EC and PC require the same Probe, namely, T in subject control and v in object control. However, the two differ in the Goal:

in EC, PRO itself constitutes the Goal, whereas in PC, anaphoric Agr acts as the Goal.

Let us now turn to the detailed analysis of both types of OC. The EC configuration is schematised in (61):



In (61), F stands for the functional head which is involved in the particular type of control, i.e. either T or *v*, while T-Agr represents the T head incorporating ϕ -features. In this case three Agree relations apply. Agree₁ holds between PRO and non-finite T-Agr matching the ϕ -features of these two items and causing the checking of PRO's null Case. After Agree₁ has applied PRO moves to [Spec, TP] to check T's EPP-feature. Agree₂ obtains between F and the controller of PRO and Agree₃ between F and PRO itself. As the result of Agree₂, F inherits the ϕ -features as well as the semantic number of the controller DP and as a consequence of Agree₃, PRO inherits these features as well. It is Agree₃ which guarantees that the controller DP and PRO are marked for the same features.

The analysis just sketched requires a few comments. First of all, EC-complements are untensed and hence T-Agr does not undergo T-to-C movement, blocking the possibility for Agr to enter the Agree relation with F and, as we shall see, making PC unavailable. Secondly, PRO in EC-complements counts as an active Goal for Agree₃ only by virtue of the fact that it is anaphoric, as otherwise it possesses only interpretable ϕ -features (cf. (60a)), its null Case being checked by infinitival T-Agr via Agree₁. Thirdly, F can enter two Agree relations under

the standard minimalist assumption (cf. Chomsky (2001a, b)) that checked features are not erased immediately but remain accessible until the end of the next higher phase. Finally, PRO is accessible to Agree with F in spite of the fact that it does not occupy the edge of the phase, i.e. the CP, which violates the PIC.³¹ In order to avoid this violation we must modify the PIC along the following lines:

(62)

Modified PIC

In a structure [...X...[_{YP}...Z...]], where YP is the only phase boundary between X and Z, Z is accessible to X:

- i) Only at the head or edge of YP, if Z is uninterpretable.
- ii) Anywhere in the YP phase, if Z is interpretable. (Landau (2000:69))

The modified PIC makes PRO, which is interpretable, accessible to Agree from the matrix clause in EC contexts, at the same time blocking Agree between F and uninterpretable T-Agr.

The analysis of EC just presented allows us to account for typical EC patterns such as (63):

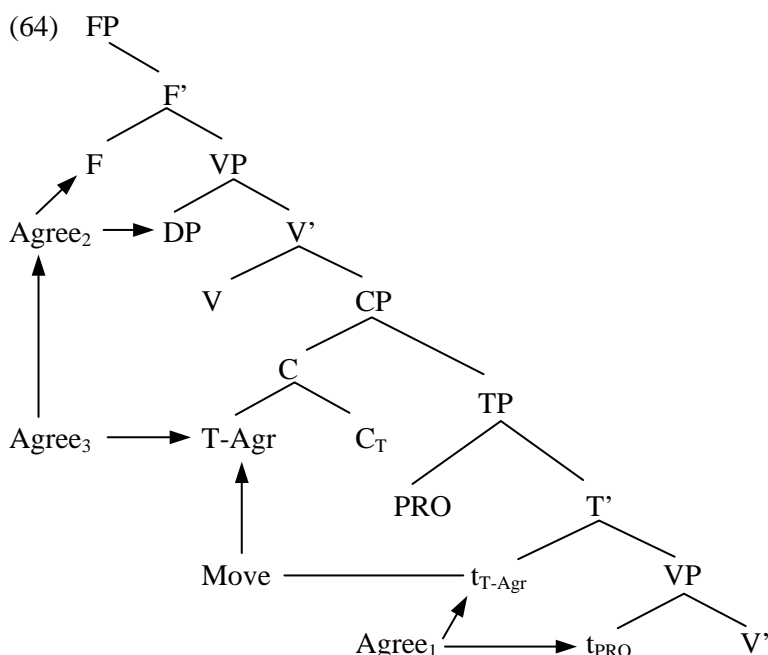
(63)

- a. The secretary₁ managed [PRO₁ to wear a tie].
- b. The parliament₁ managed [PRO₁ to gather before the summer break].
- c.*The secretary₁ managed [PRO₁₊ to gather before the summer break].
- d.*The parliament₁ managed [PRO₁₋ to wear a tie].

Cases (63a) and (63b) are straightforward: PRO inherits the feature [+/- SP] from F, which, in turn, has this feature valued by the matrix DP. (63c) illustrates an impossible PC reading, resulting either from the fact that there is a mismatch between [-SP] F and [+SP] PRO or from the fact that F in (61) picks out T-Agr as its Probe in violation of the PIC in (62). (63d) is another mismatch case; here F is [+SP], whereas PRO is [-SP].

The mechanism for deriving PC is schematised in (64):

³¹ The exact formulation of the PIC is given in (17) in Chapter I.



In the PC structure above, just like in the EC-representation in (61), three Agree operations apply. Agree₁ holds between PRO and T-Agr to guarantee that they match in their ϕ -features. It also triggers the checking of PRO's null Case and after it has applied, PRO moves to [Spec, TP] to check T's EPP-feature. Agree₂ obtains between F and DP and Agree₃ holds between F and T-Agr.³² Since PC complements are tensed (cf. (59b)), T-Agr must move to C to check C's uninterpretable T-feature. Thanks to T-to-C movement, T-Agr finds itself at the edge of the CP phase and hence is accessible for Agree₃. This step is responsible for the PC effect and is missing from the derivation of EC in (61). This time, however, PRO does not enter a direct Agree relation with F, as there is a closer Goal for F, i.e. T-Agr adjoined to C. Thus, in PC contexts it is Agr which is 'controlled', whereas PRO is merely 'parasitic'. The PC effect arises if F is marked [-SP], Agr within the T-Agr complex is marked no SP (i.e. ϕ SP) and PRO is marked [+SP], as in (65a) below:

³² Agree₃ holds between F with valued (by DP) uninterpretable ϕ -features and T-Agr with unvalued uninterpretable ϕ -features. Thus, in this case interpretability has no role to play in the application of Agree (cf. (4) Chapter I).

(65)

- a. The headmaster₁ wanted [PRO₁₊ to meet before the break].

[Agree₁ T-Agr_φ, PRO₊], [Agree₂ F₋, DP₋], [Agree₃ F₋, T-Agr_φ]

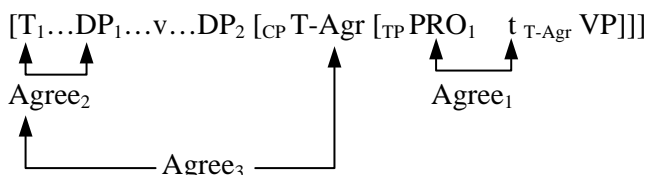
- b.*The parliament₁ wanted [PRO₁₋ to wear a tie].

[Agree₁ T-Agr₊, PRO₋], [Agree₂ F₊, DP₊], [Agree₃ F₊, T-Agr₊]

In (65a) T-Agr does not inherit semantic singularity from F, as features [-SP] and [φSP] are non-distinct on functional heads (cf. (60d)). The values [φSP] on Agr and [+SP] on PRO do not conflict, as they are not opposite. This way PC comes into being: a singular controller co-occurs with a plural PRO. However, (65a) contrasts with (65b), in which F is [+SP] and PRO is [-SP]. This time T-Agr must acquire [+SP] from F and therefore a mismatch arises between [+SP] T-Agr and [-SP] PRO yielding the unacceptability of (65b).

The analysis of EC and PC just presented accounts for the whole range of properties listed in (59) as well as for the PC-Generalisation in (57). One more issue which requires clarification concerns subject control with the verb *promise*. This case seems to be problematic, as it involves the MLC violation, as is made clear in (66):³³

(66)



The illicit operation in (66) is Agree₃, which targets T-Agr, bypassing closer potential Goals, i.e. v₂ and DP₂, both equipped with φ-features and closer to T₁ than T-Agr. Thus, Agree₃ should be blocked as an MLC violation. Why is it then possible in (66)? In order to account for cases like (66) Landau (2000) appeals to the Principle of Minimal Compliance (henceforth, PMC) of Richards (1997, 1998). This Principle allows the MLC to be violated by the second operation once the first one has satisfied it.³⁴ How does the PMC relate to (66)? In this

³³ *Promise* is a desiderative verb, hence falls under PC.

³⁴ Richards (1997) posits the PMC to account for multiple *wh*-questions in languages like Bulgarian with the schematic structure in (i):

(i) [*wh*₁-*wh*₃-*wh*₂-C...t₁...t₂...t₃]

case T_1 first undergoes Agree with the closest Goal, i.e. DP_1 , satisfying the MLC and in accordance with the PMC, it can look for a more distant Goal such as T -Agr across a potential intervener (i.e. v_2 and DP_2). In other words, it is the local operation Agree₂ in (66) which legitimates the application of the non-local Agree₃. This way, the PMC accounts for subject control across the intervening object in cases like (66).

3.2. OC vs. NOC in English

The hypothesis entertained by Landau (2000) is that OC (either EC or PC) is the only type of control found in non-finite complement clauses. In the case of subject clauses the situation is more complex. The data to be considered include the Super-Equi constructions, such as (67) below:

(67)

- a. Eve believed that it would worry Mark [PRO to vote for himself/*herself].
- b. Eve believed that it would ruin Mark [PRO to vote for himself/herself].
- c. Eve believed that [PRO voting for himself/herself] would worry Mark.
- d. Eve believed that [PRO voting for himself/herself] would ruin Mark.

As the above data show, short distance control is the only option in (67a), all the remaining sentences allowing long distance control. The choice of the controller in these structures seems to be sensitive to the following factors: 1) the predicate type, namely psychological, i.e. *worry*, vs. non-psychological, i.e. *ruin*, and 2) the sentence position of the infinitival clause, i.e. extraposition (cf. (67a) and (67b)) or intraposition (cf. (67c) and (67d)). Psych-predicates allow only short distance control if the infinitival clause is extraposed (cf. (67a)), whereas non-psych-predicates trigger either short or long distance control in the same context (cf. (67b)). The distinction between these predicate types gets neutralised in instances of intraposition, such as (67c) and (67d), where only long distance control is possible. The control patterns found in (67) are generalised by Landau (2000:96) in the following way:

In (i) C first attracts wh_1 , which complies with the MLC. This makes the attraction of wh_3 by C across a closer target, i.e. wh_2 , possible.

(68)

- a. In a structure [...X...[it Aux Pred Y [_S PRO to VP]]], where Y and S are arguments of Pred:
 - i) If Pred is psychological, Y must control PRO.
 - ii) If Pred is non-psychological, either X or Y may control PRO.
- b. In a structure [...X...[_S [_S PRO to VP] Pred...Y]]], either X or Y may control PRO.

In order to account for the control pattern found in (67) Landau makes the following assumptions:

(69)

Extraposition

VP-internal clauses must be peripheral at PF.

(70)

Chain Interpretation

Any link in a chain may be the LF-visible link.

(71)

Argument Projection

- a. Experiencer is generated above Causer.
- b. Causer is generated above Goal/Patient/Theme.

(69) expresses the fact that embedded clauses tend to undergo Extraposition, which is regarded as adjunction to VP, where the adjoined material lies outside the c-command domain of the VP. (70) predicts that at LF either the silent copy of the extraposed infinitival clause or the pronounced one is interpreted, which, as we shall see soon, accounts for the possibility of having either short distance or long distance control in Super-Equi structures like (67b). Finally, (71) imposes a hierarchical order on argument projection within a VP and thus contributes to explaining why psych-predicates differ in control patterns from non-psych-verbs.

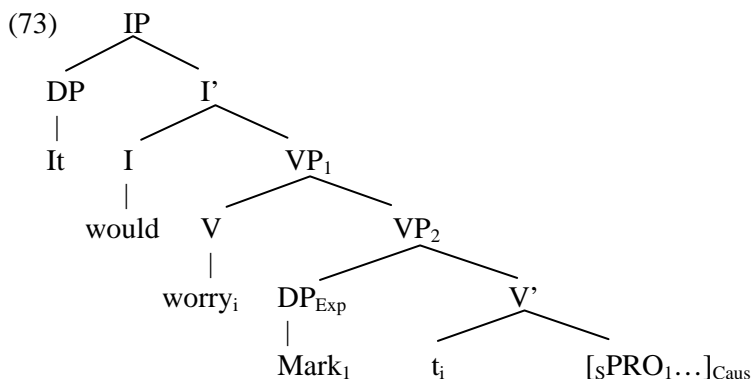
Landau (2000) suggests that it is not locality of the controller that distinguishes OC from NOC in Super-Equi structures like (67) but rather the syntactic position of the non-finite clause. He puts forward the following generalisation:

(72)

In a configuration [...DP₁...Pred...[_S PRO₁...]...], where DP controls PRO: If, at LF, S occupies a complement/specifier position in the VP-shell of Pred, the DP (or its trace) also occupies a complement/specifier position in that VP-shell. (Landau (2000:99))

The generalisation in (72) fixes the domain of OC, but it does not determine controller choice.^{35 36} By (72), an infinitive in the complement position requires a local controller, i.e. one within the minimal VP-shell containing its predicate. On the other hand, an extraposed or intraposed infinitive occupies a position outside the maximal projection containing its predicate and hence, by (72), allows NOC. Thus, the locality of the controller in OC on the one hand, and the non-locality of the controller in NOC on the other, follow directly from (72). However, (72) does not block local NOC, a case that we will return to at the end of this section. It is also worth emphasising that the infinitive position relevant for the generalisation in (72) is its LF-position.

Let us now apply the assumptions in (69)-(72) to the data in (67). First of all, let us examine cases like (67a), whose representation is schematised in (73).^{37 38}



³⁵ As we shall see in the next section, the choice of controller is left here to semantics/pragmatics.

³⁶ The generalization in (72) is incapable of deriving NOC both with propositional verbs like *rave about* and *comment on* and with factives such as *condemn*, *criticize* and *approve of*, mentioned in section 2.1.

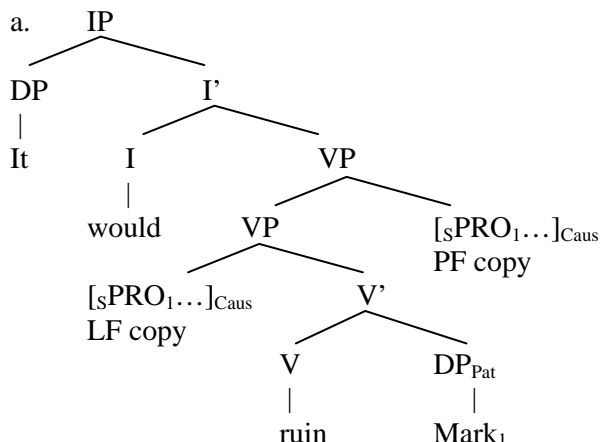
³⁷ The symbols IP and TP are used interchangeably here.

³⁸ Following Landau (2000:101) we abstract away from the little *v* analysis of causative constructions.

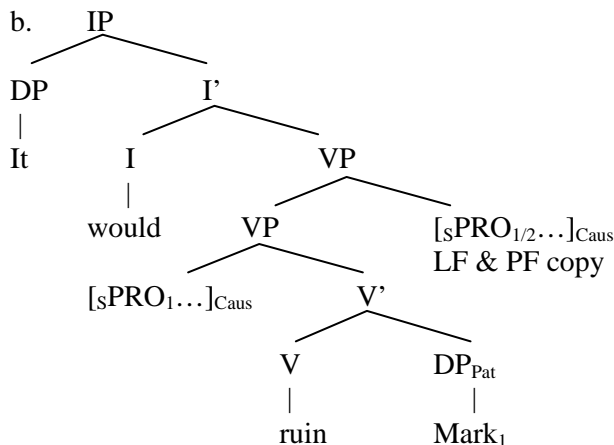
In (73) the infinitival clause does not extrapose, as it is already VP-peripheral, instead, it remains within the VP and in accordance with (72), its PRO subject requires OC within the minimal VP-shell. In this case, the Experiencer argument *Mark*, generated higher in the VP structure than the Causer argument in compliance with (71), acts as the controller of PRO.

The LF representation of Super-Equi structures with non-psychological predicates, as in (67b), is illustrated in (74a) and (74b).

(74) a. OC Structure



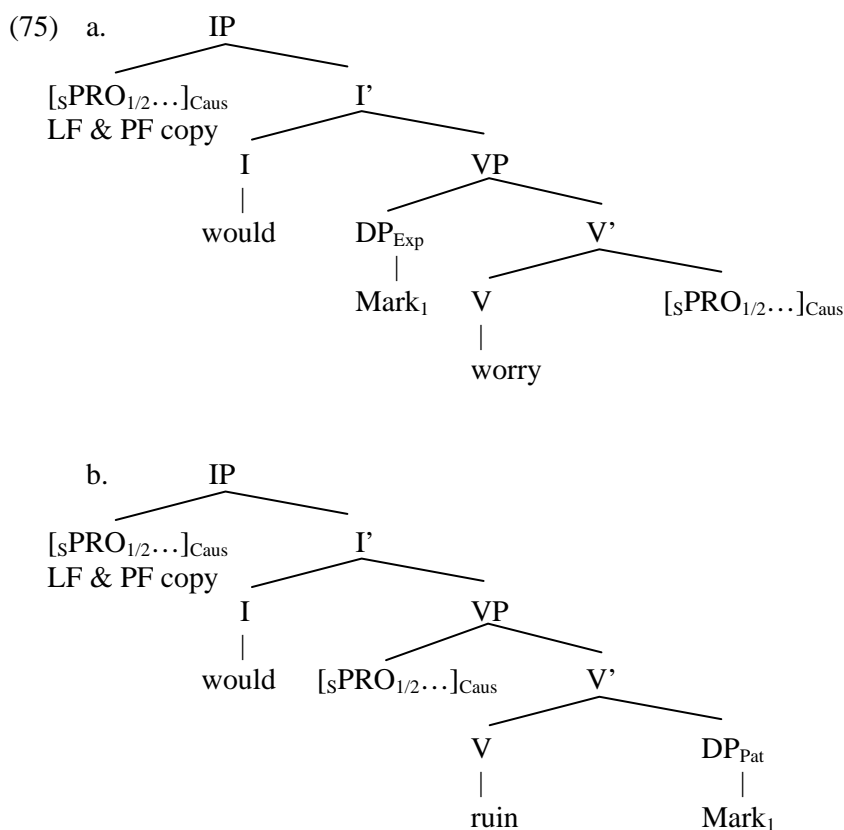
b. NOC Structure



In (74a) and (74b) the infinitive, being Cause, is generated higher in the structure than the Patient argument and for this reason it is not VP-peripheral. In accordance with (69), it undergoes Extraposition and thus at LF its two copies are present. If the base position is interpreted, as in (74a), the non-finite clause is

VP-internal at LF and by (72) the direct object *Mark* serves as an obligatory controller of PRO. If the VP-external (i.e. adjoined) copy is interpreted, as in (74b), then (72) fails to affect it and NOC results. As a result, sentences like (67b) are ambiguous between OC and NOC, which, as we shall see, has some structural consequences.

Finally, the LF representations of the intraposition cases, i.e. (67c) with the psychological predicate and (67d) with the non-psychological predicate, are reproduced in (75a) and (75b), respectively:



In both (75a) and (75b) the infinitival clause moves to [Spec, IP] to satisfy the EPP. This is an instance of A-movement and therefore it is always the higher copy that gets interpreted. This way the infinitive in (75a) and (75b) escapes the domain of OC as specified in (72) and hence triggers only NOC.

The analysis of OC and NOC in Super-Equi structures just outlined might seem problematic, especially for cases like (67b), since they are treated as

triggering either OC or NOC depending on which copy of the non-finite clause is interpreted at LF. Landau notes, however, that the analysis along these lines gets support from extraction facts. Only on OC reading do sentences like (67b) allow extraction from within, which suggests that they are VP-internal, whereas on the NOC reading they resist extraction, which indicates that they occupy a position outside the VP and hence act as islands.^{39 40} These two cases are illustrated in (76) and (77):

(76)

- a. It would help Bill₁ [PRO₁ to introduce himself to these professors].
- b. To whom₂ would it help Bill₁ [PRO₁ to introduce himself t₂]?

(77)

- a. It would help Bill₁ [PRO_{arb} to introduce him₁ to these professors].
- b.*To whom₂ would it help Bill₁ [PRO_{arb} to introduce him₁ t₂]?

(Landau (2000: 106))

Although (76) and (77) are string identical, they differ in that OC reading holds in the former, whereas the NOC reading obtains in the latter. Extraction out of the infinitival clause is allowed only in (76), but not in (77). This clearly shows that the non-finite clauses in (76) and (77) must occupy different structural positions at LF, though they do not differ at PF.

Likewise, extraction is banned out of long distance control constructions with non-psychological predicates, as in (78):

(78)

- a. Hillary₁ thinks it damaged Bill [PRO₁ to talk about herself on the Dave Letterman show].
- b.*That's the talk show₂ that Hillary₁ thinks that it damaged Bill [PRO₁ to talk about herself on t₂].

(Landau (2000:104))

³⁹ Similarly, intraposed clauses, being subjects, are islands. Extraction out of such clauses is impossible, as shown in (i):

(i) a. [PRO₁ Buying himself those shares] would worry/ruin Mark₁.
 b. *What₂ would [PRO₁ buying himself t₂] worry/ruin Mark₁?

⁴⁰ Landau notes that generally infinitives are very weak islands and hence arguments can be extracted out of them without triggering any severe violation. What matters in the text are contrastive judgements, showing that extraction out of a locally controlled infinitive is better than extraction out of a non-locally/arbitrarily controlled one.

However, OC structures with psych-predicates do not block extraction, as shown in (79):

- (79)
- a. Eve believed it would worry Mark₁ [PRO₁ to buy himself those shares].
 - b. What₂ did Eve believe it would worry Mark₁ [PRO₁ to buy himself t₂]?

The contrast between NOC cases such as (78a) and OC ones such as (79a) gets a natural explanation under the analysis just presented. The non-finite clause in (78a), being an adjunct, resists extraction from within, whereas extraction out of the non-finite complement as in (79a) is perfectly legitimate.

It has already been hinted at that the generalisation in (72) does not exclude local NOC, as the distinction between OC and NOC is not defined in terms of locality. Local NOC, though infrequent, appears in sentences like (80) below:

- (80)
- It will remind Sue₁ of him₂ [PRO₁ to read Richard's₂ poems to her daughters].
(Landau (2000: 109))

The control in (80) is local, yet the non-finite clause is interpreted in the extraposed position, since the pronoun *him* and the DP *Richard* do not give rise to Condition C effects. Thus, (80) demonstrates that NOC is not incompatible with local control. Extraction out of the subject clause in (80) is unacceptable, as can be seen in (81):

- (81)
- ?? [Which of her daughters]_i will it remind Sue₁ of him₂ [PRO₁ to read Richard's₂ poems to t_i]?
(Landau (2000:109))

For extraction to go through, the non-finite clause in (81) must occupy a complement position. However, the clause extraposes to escape Condition C violation and hence becomes an island for extraction.

Furthermore, the islandhood of infinitival adjuncts and subjects is responsible for the fact that they resist OC and give rise to NOC. As has been stated in section 3.1, Agree is the operation involved in OC (both EC and PC). However, Agree is sensitive to islands and therefore it can apply to PRO or anaphoric Agr within complements, but it cannot penetrate adjunct and subject islands, which yields NOC in such contexts. Thus, the different distribution of OC and NOC

can be derived from the independently motivated Condition on Extraction Domains (henceforth CED) of Huang (1982).⁴¹

Deriving the distribution of OC and NOC from the CED has consequences for the analysis of adjunct control.^{42 43} If adjuncts occupy the VP-external position, they are expected to allow only NOC, just like extraposed and intra-posed infinitival clauses in Super-Equi constructions. This expectation is not met in the majority of cases, since adjuncts typically require subject control.^{44 45} One such example is presented in (82):

(82)

John₁ greeted Mary₂ [before PRO_{1/*2} entering the room].

In order to account for the control facts in (82) we would have to assume after Larson (1988) that adjuncts are in fact complements. Under this assumption the OC in (82) is no longer mysterious, but is a consequence of the VP-internal position of the adjunct.

However, the issue of adjunct control is more complicated than that. As signalled by Landau (2000:176-178), some adjuncts allow control by an implicit argument (cf. (83)), some by the topic (cf. (84)) and some do not require any controller (cf. (85)).

(83)

The game was played wearing no shoes. (Landau (2000:176))

(84)

Many women were harassed by John. After talking to the manager,
complaints were filed. (Landau (2000:177))

⁴¹ Reducing the distribution of OC and NOC to the CED is reminiscent of Hornstein's (2001) claim that NOC is attested only within islands (cf. Chapter I, section 2.2.1).

⁴² Landau (2000) does not in fact analyse adjunct control. He only focuses on implicit control in the case of adjuncts and rationale clauses.

⁴³ An OT analysis of adjunct control can be found in Lyngfelt (2000).

⁴⁴ Adjuncts are restricted here to temporal adjuncts (i.e. *after/before/while*), absolute adjuncts and adjuncts headed by *without*.

⁴⁵ In fact, object control is also possible in adjuncts in case objects act as logophoric centres of the utterance, as in (ia), contrasted with (ib) (cf. footnote 46):

(i) a. PRO Having been away for so long, nothing really matters to John
b.* PRO Having been away for so long, nothing really bears on John.

Objects can also control into purpose clauses, as in (ii):

(ii) John₁ hired Fred₂ [PRO_{1/2} to fire Bill]. (Petter (1998:178))

(85)

After pitching the tents, darkness fell quickly. (Landau (2000:178))

Furthermore, Williams (1992) observes that logophoricity has a role to play in adjunct control, as can be seen in (86) below:

(86)

a. PRO Having just arrived in town, the main hotel seemed to Bill to be the best place to stay.

b.*PRO Having just arrived in town, the main hotel collapsed on Bill.
(Williams (1992:299))

The above sentences have the same syntactic configuration, as in both cases the controller of PRO, i.e. *Bill*, occupies a position within the PP. However, only (86a), where *Bill* is the logophoric centre of the sentence, is acceptable, whereas (86b), where *Bill* does not function as a logophoric centre is illicit.⁴⁶ Nonetheless, it seems that the treatment of adjunct control as a species of logophoricity faces some problems. There exist instances like (87) below, where PRO's controller is not a logophoric centre, but nevertheless no unacceptability arises.

(87)

PRO Having run smoothly for years, it was finally time for my car to be serviced. (Williams (1992:309))

In (87) the non-human antecedent for PRO, i.e. *car*, can never act as a logophoric centre, hence, if adjunct control relies on logophoricity, (87) is predicted, contrary to fact, to be ungrammatical. In order to explain the grammatical status of sentences like (87), Williams claims that sentences like (87) express the 'point of view' of the car (cf. footnote 46, condition 3). For this explanation to go through, however, one has to specify when physical point of view is an available option in adjunct control. Williams does not address this question. Thus, it appears that neither OC nor logophoricity cover the whole range of control

⁴⁶ Williams (1992:300) notes that in order for a DP to be a logophoric centre it must at least denote a thinker, perceiver, or an individual whose thoughts and feelings are reported by the sentence. Sells (1987) distinguishes three independent conditions on logophoricity, namely the logophoric centre is: 1) the source of the report, 2) the person with respect to whose consciousness (or 'self') the report is made, and 3) the person from whose point of view the report is made.

patterns attested in various types of adjuncts. Actually the problem of adjunct control is much more complex than has commonly been recognised (cf. Borer (1989), Clark (1990) and Hornstein (1999, 2001)). In what follows we will leave aside all the intricacies of this problem, and content ourselves with noting the complexity of the matter.

3.3. *NOC and logophors*

As stated in the previous section, Agree is blocked in NOC. Consequently, the question arises what licenses NOC PRO. What we would like to suggest is that NOC is licensed in the way logophors are.⁴⁷ In other words, NOC PRO is treated as a silent logophor.⁴⁸ NOC PRO, in a way analogous to logophors, is licensed by discourse factors, including focus, perspective, centre of consciousness or communication.⁴⁹ The similarities between NOC PRO and logophors can be easily detected on the basis of the following data:⁵⁰

(88)

- a. John said to Mary that it would be easy [PRO to prepare herself for the exam].
- b. John said to Mary that there was a picture of herself with a Mafia figure in the newspaper.

⁴⁷ The similarity between long distance control and logophors has been observed in the literature by Grinder (1970), Kuno (1975), Lebeaux (1985), Williams (1992), Pollard and Sag (1992) and Manzini and Roussou (2000).

⁴⁸ For arguments against regarding NOC PRO as a silent pronoun cf. Chapter I, 2.2.2.

⁴⁹ Baker (1995) argues that at least in British English locally free reflexives, which have commonly been analysed as logophors (cf. Zribi-Hertz (1989)), should rather be treated as non-nominative intensified pronouns. He defines intensification in terms of either contrastiveness or relative discourse prominence. The contrastiveness requirement does not seem to apply to PRO, which is phonologically empty, and hence can never be associated with contrast. The relative discourse prominence, as defined by Baker (1995), seems to cover the same cases as those subsumed under the label 'logophor'. Thus, it seems that there is nothing to be gained from treating PRO along the lines suggested for locally free reflexives by Baker.

⁵⁰ The data in (88), (89) and (90) are quoted after Landau (2000:119). Landau notes that they come from Kuno (1975).

(89)

- a.*John said about Mary that it would be easy [PRO to prepare herself for the exam].
- b.*John said about Mary that there was a picture of herself with a Mafia figure in the newspaper.

(90)

John sued Mary for divorce because it was no longer possible [PRO to support her/*him].

Examples (88a) and (89a) contrast in grammaticality despite the fact that *Mary* occupies the same syntactic position in both. However, only in the former is *Mary* the centre of communication and therefore only in this case can it serve as a long distance controller for PRO. In this respect NOC behaves like the picture-anaphora in (88b) and (89b); the similarity between the two is no longer surprising, as they represent the same phenomenon, namely logophoricity. This phenomenon is also at play in (90) blocking the control of PRO by *Mary* in spite of its functioning as an argument of the matrix predicate on a par with *John*. The impossibility of long distance control in (90) has clearly nothing to do with the grammatical function of *Mary*.

Logophoricity also underlies NOC in the case of intraposed clauses, as demonstrated in (91) below:

(91)

- a. [PRO To find himself alone in Times Square] became one of John's most abiding fears.
- b.*[PRO To find himself alone in Times Square] became one of John's aunt's most abiding fears. (Williams (1992:309))

In (91a) John's point of view is being reported and therefore *John* can control PRO. This is not the case in (91b), where John's aunt's point of view is taken into account and for this reason *John* does not act as an appropriate controller. Thus, there is evidence that NOC in Super-Equi structures is constrained by logophoricity.

3.4. Interpretation of PRO

So far we have concentrated on the distribution of OC and NOC PRO and little has been said about its interpretation (cf. footnote 35). In the literature numerous

attempts have been made to derive subject and object control from syntactic clues. There exists a long lasting tradition of determining the interpretation of PRO by means of a locality principle such as the MDP. This principle goes back to Rosenbaum (1967) and its formulation is reproduced below after Larson (1991).⁵¹

(92)

Minimal Distance Principle

An infinitive complement of a predicate P selects as its controller the minimal c-commanding noun phrase in the functional complex of P.

There are numerous problems connected with the MDP-based approach to the interpretation of PRO. Let us highlight a few of them.⁵² First of all, the MDP turns out to be problematic for the subject control found with the so-called verbs of commitment like *promise*, *vow*, etc., illustrated in (93) below.⁵³

(93)

a. Mark₁ promised Mary₂ [PRO₁ to leave].

b. John₁ vowed to Mary₂ [PRO₁ to marry her after the war].

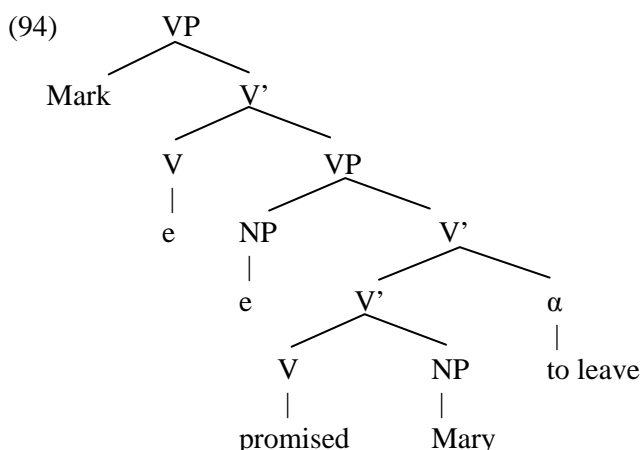
(Landau (2000:200))

Assuming a treble branching VP-structure for verbs like *promise* and *vow*, the closest c-commanding DP in the above examples is the object, which nonetheless cannot control PRO. Larson (1991) derives subject control in sentences like (93a) by assuming that *promise* is a double-object verb whose Theme argument (i.e. the infinitival clause) is higher than the object Goal and by stipulating that the MDP holds at D-structure. Therefore the Agent NP is the closest NP c-commanding the infinitive and the subject control is predicted to be the only option available in such cases. The D-structure representation of (93a) based on Larson's proposal is presented in (94) below:

⁵¹ The validity of the MDP for the interpretation of PRO was first recognized by Rosenbaum (1967) and later on adopted, among others, by Larson (1991), Martin (1996), Hornstein (1999, 2001) and Manzini and Roussou (2000).

⁵² Landau (2000, chapter 5) meticulously points out the problems of various analyses relating the interpretation of PRO to the MDP.

⁵³ The term *verbs of commitment* was introduced by Sag and Pollard (1991).



In (94) the verb *promise* moves to the higher V position and the NP *Mary* moves to the higher NP position to obtain the correct surface word order.

Although Larson's analysis correctly derives subject control in cases like (93a), it remains unclear how to adopt it in the framework like the MP, in which the notion of D-structure has been abandoned. What is more, the verb *vow*, as in (93b), is not a double object verb and hence does not lend itself to the analysis along the lines suggested by Larson.⁵⁴ Consequently, subject control with *vow* remains problematic for Larson's analysis.

Second, the MDP together with Larson's assumptions have the consequence of predicting that the verb *promise* always triggers subject control. This prediction, however, is not borne out by the data, as demonstrated in (95) below:

- (95) John₁ promised Mary₂ [PRO₂ to be allowed to sing]. (Landau (2000:198))

In spite of the fact that sentence (95) contains the verb *promise*, it allows only object control. Larson argues that object control in cases like this results from semantic construal. For him double object constructions involve transfer of possession and what is transferred in (95) is permission. Consequently, (95) triggers the following chain of entailments: Mary got the permission to sing → Mary sings. Thus, object control in cases like (95) does not follow from the

⁵⁴ The fact that *vow* is not a double object verb becomes clear in the light of the data like (i) below:

(i) *John vowed Mary the wedding.

MDP but relies on semantic construal. What is problematic in this account is that Larson fails to explain why the presence of *to be allowed to* in the embedded clause is a necessary factor for control shift to arise in sentences like (95).⁵⁵ Under Larson's transfer of possession approach to double object constructions, we would expect also sentences like (93a) to allow this kind of transfer and hence give rise to object control. Since this is not possible, Larson is forced to derive normal control like (93a) and control shift like (95) by two distinct mechanisms, the former by the MDP and the latter by semantic construal.

Third, Larson's analysis of *promise* as a double object verb predicts incorrectly that all double object verbs allow only subject control. Verbs like *teach* and *allow*, in spite of being double object verbs, trigger only object control, as can be seen in (96):

(96)

- a. John₁ taught Mary₂ [PRO₂ to swim].
- b. John₁ allowed Mary₂ [PRO₂ to swim].

In order to derive cases like (96a) Larson once again appeals to semantic construal, independent of control. He argues that *teach* in sentences like (96a) has an 'injunctive' reading, corresponding to *teach how to*. Therefore it is not subject to the analysis posed for double object verbs and can exhibit object control under the MDP. The status of the data he uses to motivate his analysis is dubious and so is the overall argumentation he uses to derive object control with *teach*. As for (96b), Larson treats *allow* as an ECM verb (in the same way as Mittwoch (1976)) taking an implicit dative argument. Thus, (96b) has the following underlying structure:

(97)

John allowed [Mary to swim] (to Mary).

⁵⁵ The majority of instances of control shift contain *to be allowed to* in the embedded clause. However, sometimes control shift arises even without *to be allowed to*, as shown in (i) from Landau (2000:184):

- (i) a. The pupil₁ asked the teacher₂ [PRO₁ to leave early].
- b. The guard₁ asked the prisoner₂ [PRO₂ to leave the room].

Only in (ib) is the verb *ask* synonymous with *request*, whereas (ia) can be paraphrased as in (ii):

- (ii) The pupil₁ asked the teacher if he₁ could leave early.

What is problematic in (97) is that the dative argument must always be left implicit and that the implicit dative must always be co-referential with the ECM subject. Generally, however, implicit datives are allowed to pick their referents from the discourse, as shown in (98):

(98)

Mary was unhappy. John said (to her) to behave herself.

All in all, although Larson's approach seems to work for *promise*, it faces serious problems when confronted with double object verbs allowing only object control. To account for such cases Larson is forced to resort to mechanisms independent of control whose status is dubious on empirical grounds. Besides, he must appeal to semantic construal to derive instances of control shift. It seems questionable, then, whether even cases for which controller choice can be determined by the MDP should be derived from it considering its overall lack of explanatory value.⁵⁶ An approach where controller choice is determined semantically/pragmatically might do more justice to the actual facts. This conclusion gets additional support from the fact, noted by Landau (2000), that the approach based on the MDP provides no explanation for the phenomenon of split control, as in (99):

(99)

John₁ persuaded Mary₂ [PRO₁₊₂ to go to the cinema together].

On the other hand, the semantically/pragmatically based account of the interpretation of PRO can adequately derive the effects of split control as well as more standard cases of subject and object control. This conclusion is also supported by verbs like *suggest*, which, depending on the context, trigger subject, object or split control, as illustrated in (100a), (100b) and (100c), respectively:

(100)

- a. John₁ suggested [PRO₁ bringing the wine to the party].
- b. John₁ suggested to Mary₂ [PRO₂ ironing the shirt for him₁].
- c. John₁ suggested to Mary₂ [PRO₁₊₂ having a drink together].

⁵⁶ The arguments against subsuming the MDP under the MLC are presented in Chapter I, section 2.2.2.

Any analysis of control based on the MDP would have a hard task at designating a proper controller in the above sentences.

4.0. Non-finite clauses with overt subjects

This section addresses the question of how overt subjects are licensed in English non-finite clauses. The clauses analysed include non-ECM-complements, with or without the *C for*. The analysis presented is based largely on Bošković (1997), which has been briefly outlined in Chapter I, section 2.1.3.

The patterns to be investigated include the following:

(101)

- a. I want for you to win.
- b. I want you to win.

As noted in Chapter I section 2.1.2, (101b) does not represent an ECM-structure, as it allows ellipsis of its VP-complement, which is banned in ECM-clauses. The contrast is illustrated in (102a) and (102b):

(102)

- a. I want you to win whereas you don't want me to [_{VP} e].
- b. *I believe you to have won whereas you don't believe me to [_{VP} e].

Furthermore, as observed by Bošković (1997), the subject of the non-finite clause in (101b) cannot be passivised (cf. (103a)), which distinguishes it from subjects found in ECM-complements (cf. (103b)):

(103)

- a. *You are wanted to win.
- b. You are believed to have won.

Consequently, it seems that subjects in sentences like (101b) are not licensed via ECM.

Another observation frequently made as regards subjects in non-finite *for*-clauses such as (101a) is that they must be disjoint in reference from the matrix clause subject (cf. Bresnan (1982)). This is illustrated in (104):

(104)

- *I_i want for me_i to win.

However, co-reference is possible between the subject of the non-finite clause and the matrix clause object, as shown in (105):

(105)

- a. Louise signalled to Ted_i for him_i to follow her.
- b. It would really surprise Louise_i for her_i to lose after all that effort.
(Bresnan (1982:384))

The contrast between pronouns referring to the matrix subject, as in (104), and the ones referring to the matrix object, as in (105b), cannot be captured in terms of c-command, as in both cases the relevant DP (*I* in (104) and *Louise* in (105b)) c-commands the subject pronoun in the non-finite clause.⁵⁷

Whereas the pronominal subject of non-finite *for*-clauses must be obviative, Chomsky and Lasnik (1977) note that the anaphor whose antecedent is the matrix subject can appear as the subject of the non-finite *for*-clause or of the non-finite clause without *for*, for example:

(106)

- a.? We want very much for ourselves to win.
- b.? We want ourselves to win. (Chomsky and Lasnik (1977:442))

Sentences (106) might indicate that the binding domain for anaphors gets extended to the matrix clause, where they get bound by the matrix subject. The same domain extension seems to affect subject pronouns in cases like (104), but not in (105). However, sentences like (107a) and (107b) below cast doubts on this proposal.

(107)

- a.* We want for ourselves to win.
- b. We want us to win.

If the binding domain were extended for the anaphor and for the subject pronoun in the above-mentioned sentences, then (107a) would be predicted to be gram-

⁵⁷ Bresnan (1982:385) argues that the object DP in cases like (105b) c-commands the embedded clause on the basis of the unacceptability of (i), where *her* and *Louise* are co-referential:

(i) *It would really surprise her_i for Louise_i to lose after all that effort.

matical, whereas (107b) would be predicted to be ungrammatical. Since (107a) is unacceptable, while (107b) is licit, the analysis of obviation in terms of the binding domain extension cannot be on the right track. We leave this issue aside here without trying to account for it.

Turning back to sentence (101a), we would like to suggest, following Bošković, that the subject of the non-finite clause is licensed by the complex unit comprising the C *for* and *to* located in T. *For* is treated in the way suggested by Pesetsky and Torrego (2001) as a form of T that doubles infinitival *to*. The complex of *for* and *to* checks accusative Case on the subject and afterwards *for* moves to C, which is an instance of T-to-C movement. By moving to C, *for* checks C's uninterpretable tense feature against its own tense feature. The analysis of (101b) is similar, except that instead of an overt C we postulate, just like Bošković, the presence of a covert C, which together with *to* checks accusative Case of the embedded subject and moves to C to check C's uninterpretable T feature.⁵⁸

Two counterarguments have been put forward against this kind of analysis and have been sketched in Chapter I, section 2.1.3. First of all, the grammaticality contrast between (108a) and (108b) seems to be problematic for the analysis just presented.

(108)

- a. *It was preferred John to leave.
- b. It was preferred for John to leave.

It appears that the ungrammaticality of (108a) follows from the fact noted by Pesetsky and Torrego (2001) that subject clauses require an overt C in the same way that *that* must occur in finite subject clauses such as (109):

(109)

It was believed *(that) Mary was the best student in her class.

Thus, the ungrammaticality of (108a) does not argue for a different analysis of non-finite complements with and without *for*, but rather illustrates one of the properties of subject clauses in general. The second counterargument against the

⁵⁸ Alternatively, Pesetsky and Torrego (2001) argue that in sentences like (101b) the overt embedded subject moves to [Spec, CP], where it checks the uninterpretable tense feature of C.

analysis just outlined is based on the acceptability of sentences like (110) below (sentence (47) from Chapter I, repeated for convenience):

- (110)
Wedding dresses are preferred to be white.

To recall, the argument goes as follows: if the DP *wedding dresses* checked Case in the embedded clause, it should be impossible to raise it to the matrix clause under passivisation. This, however, is not the only interpretation of the data in (110). We might suggest that *prefer* in (110) is not a control verb at all, but rather it behaves like an ECM verb in that the subject of its non-finite complement can be passivised as is normally the case with ECM predicates (cf. (103b)).⁵⁹ The fact that *prefer* in (110) is different from *prefer* as a control predicate becomes clear when one compares their meanings: only the latter is volitional, whereas the former is non-volitional. The verb *prefer* with volitional meaning, as in (111a), never allows the subject of its non-finite complement to undergo passivisation, as can be seen in (111b). Hence, the second counterargument against our analysis of non-finite *for*-clauses loses its strength.

- (111)
a. I'd prefer you to do this.
b.*You'd be preferred to do this.

It is possible to come up with an alternative analysis of the licensing of overt subjects in non-finite *for*-clauses. It might be suggested that the clauses in question contain non-anaphoric T-Agr, which checks accusative Case on the subject.⁶⁰ On this analysis the presence or absence of the C *for* would be a matter of subcategorisation, i.e. some predicates, such as *want*, subcategorise for both, a CP with an overt C and the one with a covert C, while some other like *desire* subcategorise just a CP with a covert C. The problem for this analysis is how to

⁵⁹ Just like ECM verbs, *prefer* allows the expletive *there* in the subject position of its non-finite complement, as shown in (i) below:

(i) The general public prefers [there to be more women politicians in the parliament].
The *prefer* used in (i) is non-volitional (cf. the discussion in the text).

⁶⁰ Borer (1989) postulates the presence of non-anaphoric I to license nominative subjects in some languages. For a similar mechanism invoked in the licensing of overt subjects in Irish non-finite clauses, cf. Chapter V. One can also say that non-anaphoric T-Agr checks default Case, which in English happens to correspond to accusative.

block sentences like (112) below, or in other words, how to block the occurrence of the overt C in the absence of the overt subject.

(112)

*I want for PRO to come.

If the presence of *for* depended solely on subcategorisation properties of a predicate and had nothing to do with the presence of the overt subject, sentences like (112) should be grammatical. In order to account for the *for-to* Filter one would have to stipulate that whenever *for* is selected, non-anaphoric T-Agr must also be selected. It is unclear why this should be so and therefore the licensing of overt subjects in *for*-clauses by non-anaphoric T-Agr seems to be inferior to the one in which both *for* and *to* participate in the licensing of overt subjects.

5.0. Summary

The chapter has focussed on the distribution, typology and analysis of control structures in English. As regards typology, Landau's (2000) criteria for distinguishing OC from NOC have been demonstrated to be superior to alternative proposals offered by Williams (1980), Hornstein (1999, 2001) and Wurmbrand (2001). It has been argued, contra Landau, that not all complements exhibit OC. There exist declarative verbs such as *comment on* and *rave about* and propositional predicates like *condemn*, *criticise*, etc. whose complements can trigger NOC, and which thus constitute exceptions to Landau's generalisation.

Following Landau, it has been argued that OC should be divided into two subtypes, namely EC and PC. EC holds when the reference of PRO is identical with that of its controller, while PC obtains when the reference of PRO covers the reference of its controller but is not identical with it. It has been demonstrated that EC-complements do not have independent tense specification, while PC-complements do. Additionally, in PC-complements PRO is semantically plural, but is not plural syntactically. In section 3, an analysis of various types of control postulated in section 2 has been presented, based on Landau's (2000) study. It has been argued that both types of OC, i.e. EC and PC, are derived via the operation Agree; the difference being that in the case of EC, PRO itself is anaphoric and hence is targeted by Agree, whereas in the case of PC Agr, a composite part of T, is anaphoric and hence susceptible to Agree. Anaphoric PRO in EC is accessible to Agree only if the PIC is modified along the lines suggested in (62). Anaphoric Agr becomes a possible target for Agree only after T-Agr has moved to C. T-to-C movement is possible only in tensed clauses, as only in these clauses does C contain an uninterpretable T-feature. Thus, T-to-C

movement and the anaphoric nature of Agr in T conspire to derive PC effects in tensed clauses, under the assumptions listed in (60). These assumptions are either independently necessary within the MP or represent a minimal way of deriving the required results without resorting to stipulations. Although OC in our analysis results from the operation Agree, which is a composite part of the operation Move, OC does not arise via any application of movement, in contradistinction to the treatment of OC offered by Hornstein (1999, 2001) and Manzini and Roussou (2000). For this reason our analysis manages to avoid the problems encountered by the movement analyses of control (cf. Chapter I, section 2.2.2). The weakness that our analysis shares with non-movement analyses of control, such as Chomsky and Lasnik (1993), Martin (1996) and Bošković (1997) (cf. Chapter I, section 2.1), lies in invoking null Case as a mechanism licensing PRO. This stipulation seems, for the time being, to be unavoidable in order to explain why PRO appears in the subject position of non-finite clauses.

As for NOC, it has been argued that it obtains in extraposed subject clauses, which being adjoined to VP, function as adjuncts and hence resist Agree and consequently disallow OC. The analysis presented here also predicts that intraposed subject clauses, being islands, trigger only NOC. It has also been argued that NOC PRO obeys the same constraints as logophors and for this reason is best analysed as logophoric in nature. Such a treatment of NOC PRO is superior to regarding it as an empty pronoun, as Hornstein (1999, 2001) does.

It has been demonstrated that the interpretation of PRO does not follow from the Minimal Distance Principle, but is rather semantically/pragmatically determined. The semantic/pragmatic approach to PRO's interpretation naturally accounts for split control and control shift, phenomena which remain problematic for the models in which the interpretation of PRO is based on syntactic principles.

Finally, it has been argued after Bošković (1996, 1997) that overt subjects in non-finite *for*-clauses are licensed by the complex comprising *for* and *to*, capable of checking accusative Case on the subject.