

A new take on partial Control: defective thematic intervention

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Abstract

Partial Control (PC) presents a non-trivial problem for the Movement Theory of Control (MTC). As Landau (1999, 2000, 2003, 2004) has argued at length, PC patterns with Exhaustive Control (EC) in being sensitive to locality/island conditions, in yielding only a sloppy reading under ellipsis and functioning as a bound variable - the diagnostics used by Hornstein (1999) *et seq.* to argue that EC involves movement. Unlike EC, however, PC cannot easily be analysed as movement as the connection between controller and controllee is a non-exhaustive subset-superset relation wholly untypical of A-chains. This paper describes apparent examples of PC in European Portuguese (EP) with both inflected and uninflected infinitives. It is proposed that while Boeckx, Hornstein and Nunes' (2010) covert comitative approach provides a plausible account of PC with *uninflected* infinitives, this analysis does not extend to PC with *inflected* infinitives. These data, moreover, are also problematic for Landau's (2000, 2004) Agree-based approach. A new analysis is put forth whereby PC with inflected infinitives arises from defective thematic intervention (in the sense of Chomsky 2000) in a system where a single DP can bear multiple theta-roles (in line with the core idea behind the MTC).

Keywords: Partial Control; Movement Theory of Control; defective intervention; multiple agree; theta-theory

1 Introduction: The Movement Theory of Control

As Hornstein (1999) notes, there are three separate questions associated with the phenomenon of Control:

- a) What determines the distribution of PRO?
- b) What determines the interpretation of PRO?
- c) What determines the nullness of PRO?

While the Government and Binding approach to Control provided independent explanations for (a)-(c), the *Movement Theory of Control* (henceforth MTC) (Hornstein 1999 *et seq.*) is highly appealing in its attempt to provide a principled and unified answer to all three questions: PRO is the trace of A-movement. According to Chomsky's (2000, 2001) Activity Condition, only Caseless DPs can undergo A-movement, and so it follows

that PRO (i.e. A-trace) will be limited to non-Case positions. Likewise, in the MTC, the interpretation of PRO (i.e. A-trace) is determined via a movement-derived chain and no independent Control module is required. Finally, the nullness of PRO can be assimilated to chain reduction, possibly along the lines proposed by Nunes (1999, 2004), whereby only the highest copy in a chain is pronounced at PF.¹ At a conceptual level, then, the MTC clearly has much to recommend it. Nonetheless, a number of potentially serious empirical challenges for the MTC have been raised in the literature, notably by Culicover & Jackendoff (2001, 2006); Landau (2003, 2004, 2007); Sigurdsson (2008); Bobaljik & Landau (2009) and Modesto (2010) (cf. also Boeckx, Hornstein and Nunes 2010: ch 5 for a response). In this paper I address one persistent empirical challenge, Partial Control (PC), and argue that if the approach to movement in Chomsky (2000, 2001) is adopted, then PC actually provides crucial evidence *in favour* of the idea that theta-roles can be assigned via *Internal* as well as *External* Merge. I begin in section 2 by introducing PC with English data and outlining exactly why it poses such a serious challenge for the MTC, summarising the arguments made by Landau (1999, 2000, 2003, 2007), and introducing two previous attempts to deal with the phenomenon in a manner consistent with the MTC (Rodrigues 2007; Boeckx, Hornstein and Nunes 2010). In section 3, I argue that apparent examples of PC in European Portuguese (EP) with *uninflected* infinitives are problematic for Landau's Agree-based analysis of PC, but behave exactly as predicted by Boeckx, Hornstein and Nunes' (2010) covert comitative approach, so that these apparent instances of PC actually reduce to EC ('fake PC'). Section 4 shows, however, that EP also has genuine examples of PC with *inflected* infinitives, ('true PC'), which cannot be analysed as EC and which are also problematic for other previous analyses of PC. The remainder of the paper sets out a novel analysis of 'true PC' based on the idea that it results from defective intervention. In section 4, I introduce the notion of defective intervention and illustrate how it works in relation to phi-feature/Case-related Agree, yielding the Person Case Constraint (PCC). Section 5 proposes an account of true PC in EP compatible with the general approach of the MTC, whereby a visible but inactive DP functions as a defective thematic goal for theta-role assignment. Section 6 sketches how this account could be extended to cover PC in English and discusses some of the issues which arise for such an extension. Finally, section 7 concludes, raising some issues for future research.

¹ Though cf. Sheehan (to appear) for a different account of chain realisation.

2 Partial Control: a challenge for the Movement Theory of Control

2.1 The problem

Landau (1999, 2000) first drew attention to the phenomenon of Partial Control (PC), whereby PRO is anaphorically dependent on, but not exhaustively controlled by, a higher DP:²³

- 1) a. *The chair gathered/gathers on a regular basis.
b. The chair_i would prefer [PRO_{i+} to gather at 6]
c. *The chair_i would prefer [PRO_{i+} to gather without him_i]

Crucially, the embedded predicate in (1b) requires a semantically plural subject as shown by the ungrammaticality of (1a). The fact that (1b) is grammatical despite the fact that the controller is (both syntactically and semantically) singular indicates that this is an instance of PC: the subject *the chair* partially controls PRO, meaning that the referent of PRO must include the controller plus some other contextually determined referent(s). The ungrammaticality of (1c) is thus due to condition B of binding theory, as in such cases, PRO, which is local to the pronoun, is necessarily partially co-referent with it. Landau (2000: 60) provides the following generalisation concerning PC:

2) The PC-generalization

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

There are two crucial aspects to this generalisation. Firstly, as Landau shows, only tensed non-finite clauses are compatible with PC. The non-finite complements of implicative, aspectual and (certain) modal predicates

² Landau (2000: 61, fn 25) notes that there were actually some forgotten pioneers of PC, notably Lawler (1972), who discussed similar phenomena earlier in the literature. Williams (1980: 218, citing Debbie Nanni) also observes the existence of the phenomenon. It is nonetheless fair to say that Landau (1999) published as Landau (2000) is the first in depth discussion of PC.

³ Throughout the discussion, I will label the embedded subject of non-finite clauses PRO for ease of exposition. No theoretical claims should be read into this move.

permit only EC in English as their complements are untensed, whereas the complements of factive, propositional, desiderative and interrogative predicates permit either EC or PC, as their complements are tensed, as shown by their ability to support independent temporal reference:⁴

- 3) a. *The chair managed/began [PRO to gather at 6].
b. *Yesterday John managed/began [PRO to eat tomorrow].
- 4) a. The chair was sorry/preferred/wondered whether [to meet earlier than planned].
b. Yesterday John was sorry/preferred/wondered whether [to leave tomorrow].

The second important aspect of (2) is the claim that in instances of PC, PRO inherits all its features from its controller with the exception of semantic plurality. As Landau shows, verbs like *meet* require their subject to be semantically plural in English, but not necessarily syntactically plural, and this proves crucial to his analysis:

- 5) The committee met this morning.⁵

As Landau has long pointed out, the properties of PC make it apparently problematic for Hornstein's (1999 *et seq*) Movement Theory of Control (MTC). This is because, as he notes, PC is a subtype of obligatory Control (OC):

⁴ As Landau notes, and as we shall further see below, this cuts across the raising/control divide as well as the restructuring/non-restructuring divide.

⁵ He also discusses more microparametric variation concerning the ability for semantic plurality to control syntactic morphological agreement, with many varieties of British English permitting this (cf. Sauerland and Elbourne (2002) for discussion):

(i) The committee meet at 5 each day. (British English: ✓)

“PC verbs show all the familiar characteristics of OC: The controller must be local, cannot be arbitrary, PRO is interpreted *de se* and allows only a sloppy reading under ellipsis.” (Landau 2004: 834)

The fact that PC PRO requires a controller and cannot have arbitrary reference is illustrated by the ungrammaticality of (1c), as it is clearly the case that the referent of PRO must include the local DP controller. As Landau (2000, 2003) shows, this is true, even for interrogative complements which are PC contexts, despite having often been misanalysed as instances of non-obligatory Control (NOC):

6) John_i wondered [how PRO to talk about himself/oneself]

Although, the anaphor *oneself* is possible here, Landau shows that this it does not imply truly arbitrary reference for PRO. Rather *oneself* appears to be the anaphor which surfaces (somewhat marginally) with PC PRO in English. Crucially, even where *oneself* is present, PRO must still be partially controlled in OC contexts, as illustrated by (7):

7) *John_i wondered [how PRO_{i+} to talk to him_i about oneself]. (Landau 2000: 40)

If the ungrammaticality of (7) is again due to condition B, then the binder of *oneself* cannot be arbitrary PRO, but must rather be PC PRO.

The fact that the controller must be local in instances of PC is illustrated by (8):

8) The chair_i thought that Mary_j wanted PRO_{*i+k/j+} to meet after breakfast.

In (8), PRO must be partially controlled by the local (next-clause-up) DP *Mary* and is not partially controlled by the non-local DP *the chair*. This is not to say, of course that *the chair* cannot be (accidentally/optionally) included in the reference set of PRO, as Landau notes. Crucially, though, whereas *Mary* must be included in that set, *the chair* need not be. This is illustrated by the following contrast, again due to condition B:

- 9) *The chair_i though that Mary_j wanted PRO_{j+} to gather without her_j.
- 10) The chair_i though that Mary_j wanted PRO_{j+} to gather without him_i.

The semantics of PC are not straightforward to illustrate, but with some care, it is possible to show that PRO again patterns with obligatory rather than non-obligatory Control in instances of PC. Consider the following example, adapted from Landau (2000: 42):

- 11) John_i would prefer [PRO_{i+} to meet after breakfast] and Bill_j would too (but without *him_j/John_i)

In (11), it cannot be the case that Bill would prefer for John and some other people excluding Bill to meet after breakfast. It must rather be the case that Bill would prefer for himself and some other people (either including or excluding John) to meet after breakfast. As such, (10) displays a sloppy reading, meaning once again that PC PRO patterns with OC rather than NOC. Replicating another of Hornstein's (1999) tests for OC, it can also be shown, with some effort, that PC gives rise to a bound variable reading. Thus in (12), the only available reading is one whereby Mrs Shufflebotham is the only person *x* such that *x* wondered where *x* and some other people (say her students) should assemble in the event of a fire:

- 12) Only Mrs. Shufflebotham_i wondered [where PRO_{i+} to assemble in the event of a fire]

Example (12) cannot have the reading whereby Mrs. Shufflebotham is the only person *x* who wondered where Mrs Shufflebotham and her students should assemble. As such, (11) is thus true in a situation where Mr Postlethwaite also wondered where Mrs. Shufflebotham and her students should assemble, but knows where he and his students should regroup, and false where Mr Postlethwaite was also unsure about the fire assembly point.

As Landau (2003, 2004, 2007) has repeatedly pointed out and as Boeckx, Hornstein and Nunes (2010: 183) (henceforth BHN) acknowledge, the properties of PC leave the MTC with a serious challenge. PC conforms to almost all of the diagnostics used by Hornstein (1999, *et seq*) to argue for a movement account of EC with one exception. In instances of EC, there is a sense in which the controller and PRO are identical and so analysing

them as copies in a movement-derived chain seems highly plausible, modulo certain empirical challenges.^{6, 7} In instances of PC, however, the relationship between the controller and PRO is a subset-superset relation, wholly unlike movement-derived chains. There is no partial raising, as Landau (2003: 493) notes, nor partial passivisation:

- 13) a. *The chair seemed to meet at 6.
b. *The chair was brought together.

The instances of A-movement in (13) fail to mitigate the requirement for a plural subject/object respectively, unlike the PC examples above. These facts seem to undermine the MTC, as here we have an instance of OC which looks like it *should* be derived by movement but simply *cannot* be. Landau (2004: 833) goes so far as to claim that PC “challenges (and in fact, refutes) most existing accounts of control”.^{8 9}

2.2 Previous responses

Landau takes the existence of PC to be fatal for the MTC, for the reasons just discussed. Proponents of the MTC, however, have until recently underestimated the relevance of the PC data. As far as this author is aware, there have only been two serious attempts to address PC in the context of the MTC.¹⁰

⁶ Of course, where the controller is non-referential, things are more complex, but in these cases PRO still behaves like a bound variable (cf. BHN 2010: 54-55).

⁷ There are of course familiar differences between raising and control concerning reconstruction, the possibility of expletives, and other semantic differences which plausibly reduce to the differing thematic roles involved in the two contexts (cf. BHN 2010: 45 for discussion).

⁸ BHN (2010: 183) are less pessimistic, but nonetheless admit that “partial- and split-control constructions look especially challenging for the version of the MTC explored here”.

⁹ This paper addresses only the challenge posed by PC, and leaves to one side the more general problem of the occasional availability of split control. See Fujii (2010) for a recent overview of split control and a potential way to deal with it from the perspective of the MTC.

¹⁰ Prior to BHN (2010), proponents of the MTC often downplayed the significance of PC, based on the fact it remains marginal for many speakers and fails to exist in certain well-studied languages (cf. Alboiu 2007 on

(a) PC is really EC (with a covert comitative) (Boeckx, Hornstein and Nunes 2010)

John_i wants t_i to meet *pro*_{comitative}

(b) PC *is* movement, albeit subextraction rather than full phrasal movement (Rodrigues 2007)

John_i wants [_{DP} *pro* t_i] to meet

Response (a) basically claims that PC has the properties of OC because it is EC (coupled with a covert comitative). In these terms, all instances of OC are really EC, so that the phenomenon of PC does not exist as such and apparent instances of PC are really ‘fake PC’. Response (b) attributes PC to subextraction from a big DP containing a null associative pronoun. This accounts for the subset-superset nature of the chain in instances of PC. On this kind of approach, PC, which exists independently of EC, is attributed to the availability of (i) null associative pronouns and (ii) subextraction from the relevant kids of DP.¹¹ In what follows, I argue that while some apparent instances of PC in EP are actually cases of ‘fake PC’, as in (a), there are also genuine instances of PC in EP and English. For various reasons, I further argue that ‘true PC’, is better analysed as an instance of defective intervention, rather than subextraction, contra (b). As such, it will be proposed that Landau’s conclusion is premature, but that previous attempts to accommodate PC within the MTC have not been fully successful. It will be further argued, however, that the very existence of PC provides strong empirical support for the proposal that theta-roles can be assigned by *Internal* as well as *External Merge*, lending strong support to the general approach of the MTC.

Romanian, Alexiadou, Anagnostopoulou, Iordachioaia and Marchis 2010:95, citing Varlokosta 1994 on Greek).

¹¹ An immediate problem with (b) is that it is inconsistent with Landau’s generalisation in (2), a point to which I return below.

3 ‘Fake PC’ with uninflected infinitives¹²

European Portuguese (EP) permits apparent instances of PC with *uninflected* infinitival complements (henceforth ‘fake PC’) according to Landau’s (2000) generalisation in (2) above, repeated here:

14) The PC-generalization

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

In EP, as in other Romance languages, many (reciprocal) predicates are reflexive in form, and require a plural subject, as shown in (15a). In instances of fake PC (15b-16), PRO and its associated reflexive clitic share all the syntactic features of the controller. If the controller is 3rd person then so too is the clitic (though 3rd person clitics are not marked for number in EP).¹³

- 15) a. *O Manel reúne=se todos os dias
 the Manel meets.3SG=self.3 all the.MPL days.MPL
 Lit. ‘Manel meets every day.’

- b. O Manel pensa reunir=se amanhã.
 The Manel thinks.3SG meet.INF=self.3 tomorrow
 Lit. ‘Manel thinks to meet tomorrow.’

- 16) O João preferia reunir=se às 6.
 the João preferred.3SG meet.INF=self.3 at.the 6
 ‘João preferred/would prefer to meet at 6.’

¹² Unless otherwise specified, all EP data were collected by the author. Delicate data were checked via various electronic surveys with between 15-40 native speakers of European Portuguese. Where there was disagreement between speakers, numbers are reported in the text. Some (less controversial) examples were checked more informally with native speaker informants.

¹³ In section 4, I adopt Adger and Harbour’s (2007) proposal that 3rd person equates to the absence of person. I nonetheless gloss *se* as 3rd person for ease of reference.

As such, like the languages discussed by Landau, EP allows fake PC into the complements of factive, epistemic and volitional verbs, which select a non-finite tensed complement, and disallows fake PC into the complements of implicative and modal verbs which select an untensed non-finite complement clause:

- 17) *O Pedro conseguiu reunir=se hoje de manhã.
the Pedro managed.3S meet.INF=self.3 today of morning

This is true also whether or not restructuring has taken place:

- 18) *O Pedro conseguiu=se reunir hoje de manhã.
the Pedro managed.3S=self.3 meet.INF today of morning

These data are in line with Landau's (2000: 77-79) observation that the PC/EC divide does not reduce to the impossibility/availability of restructuring. Landau's (2000: 79-82) further claim that restructuring is nonetheless incompatible with PC does not so clearly apply to fake PC. *Preferir* is not a restructuring verb for most EP speakers and so clitic climbing is not generally possible in such examples for independent reasons, though some speakers nonetheless accept it:¹⁴

- 19) *O Pedro preferia=se reunir mais tarde? [*=23, ?=3, ✓=6]
the Pedro prefer.3SG=self.3 meet.INF more late

With the verb *querer*, which is a well-behaved restructuring verb, around a quarter of those surveyed (5/22) fully accepted clitic climbing in instances of fake PC, and another quarter (6/11) found it marginally possible:

- 20) %O João queria=se reunir às 6. [*=11, ??=6, ✓=5]
the João wanted.3SG=self.3 meet.INF at.the 6

¹⁴ This is in line with microparametric variation with the equivalent verb documented in relation to Italian and Spanish, whereby some speakers treat it as a restructuring verb but most do not (cf. Cinque 2004: fn 27).

‘João wanted/would like to meet at 6.’

This suggests that while the combination of fake PC and restructuring is marked, it is not completely impossible, unlike what is reported for PC in Italian and Spanish (cf. Landau 2000: 80, citing Martin 1996: 197-8 on Spanish). Note crucially, moreover, that all speakers accept PC with *querer* where no clitic climbing has taken place:

- 21) O Pedro queria reunir=se mais tarde.
the Pedro wanted.3SG meet.INF=self.3 more late
‘Pedro wanted/would like to meet later on,’

It therefore seems to be the case that some speakers allow fake PC in EP, even where clitic climbing has taken place, contrary to what is usually the case with (true) PC.¹⁵

The fact that such examples are indeed instances of PC is strongly suggested by the fact that all speakers rejected (22), presumably because of condition B, as is (23):

- 22) *O João_i queria=se reunir sem ele_i
the João wanted.3SG=self.3 meet.INF without him
- 23) *O João_i preferia reunir=se sem ele_i às 6.
the João preferred.3S meet.INF=self.3 without him at.the 6
Lit. ‘João_i preferred/would prefer to meet without him_i at 6.’

Like PC, fake PC displays the properties of OC, requiring a local (next-clause-up) antecedent, for example, and yielding a sloppy reading under ellipsis:

¹⁵ In the following section, I argue that this can be taken as additional evidence that such examples are not instances of ‘true’ PC.

- 24) Eu acho que o Pedro preferia reunir=se mais cedo
 I believe that the Pedro preferred meet.INF=self.3 more early
 ‘I believe that Pedro would prefer to meet earlier on.’
- 25) *O Pedro acha que eu preferia reunir=se mais cedo¹⁶
 The Pedro believes that I preferred meet.INF=self.3 more early
 ‘Pedro believe that I would prefer to meet earlier on.’
- 26) O João preferia reunir=se de manhã, e a Maria também preferia.
 the João preferred meet.INF=self.3 of morning, and the Maria also preferred
 ‘João would prefer to meet in the morning and so would Maria.’
- 27) O João preferia reunir=se de manhã, e a Maria_i também preferia (*mas sem ela_i).
 the João preferred meet.INF=self.3 of morning, and the Maria also preferred (but without her)
 ‘João would prefer to meet in the morning and so would Maria (but without her).’

Landau (2003) does not discuss instances of PC in Romance with 1st/2nd person antecedents. 1st/2nd person reflexive clitics are morphologically distinguished for both person and number and thus provide more information as to the features of the embedded subject in instance of fake PC. Interestingly, with singular controllers, only phi-matched reflexive clitics are permitted in instances of fake PC, despite the requirement for verbs like *reunir-se* ‘meet’ to take a plural subject.¹⁷

¹⁶ As illustrated below, examples like the following are ungrammatical because the anaphor *se* is 3rd rather than 1st person:

- (i) *Eu preferia reunir=se mais cedo
 I preferred.1S meet.INF=self.3 more early

¹⁷ Landau (2004: 835) seems to suggest that Italian (and presumably other Romance languages with the exception of French) permit *si/se* reflexives in instances of PC because this third person form is unspecified for number, but the data presented here show that this is not the case in EP.

- 28) a. Eu preferia reunir=me mais tarde. [*=1, ?=3, ✓=28]
 I preferred.1SG meet.INF=self.1SG more late
 ‘I preferred/would prefer to meet later.’
- b. *Eu preferia reunir=nos às 3.¹⁸ [*=21, ?=5, ✓=6]
 I preferred.1SG meet.INF=self.1PL at.the 3
- c. *Eu preferia reunir=se mais tarde. [*=19, ?=0, ✓=0]
 I preferred.1SG meet.INF=self.3 more late
- 29) a. Preferias reunir=te mais tarde? [*=3, ?=4, ✓=25]
 prefer.2SG meet.INF=self.2SG more late
 ‘Would you prefer to meet later on?’
- b. *Preferias reunir=se amanhã ou na sexta?¹⁹
 prefer.2SG meet.INF=self.2PL/3 tomorrow or on.the Friday
 [*=30, ?=1, ✓=1]

These examples are again in line with Landau’s generalisation in (2)/(14) above: descriptively, PRO shares all syntactic phi-features with its controller, and this confirms quite clearly Landau’s contention that PRO in instances of PC can be syntactically singular, but semantically plural. In the following section, I show that

¹⁸ Those who accepted this example probably did so under an EC reading whereby the 1PL clitic is the direct object of *reunir* ‘to reunite’, so that the meaning is ‘I would prefer to bring us together at 3’. This is consistent with the fact that this possibility disappears in (36b) given that the 2PL object and reflexive clitics are different. (35b) is thus ambiguous in a way that (36b) is not, hence its higher rate of acceptability. The reason why more speakers failed to find (35b) acceptable can be attributed to the fact that the example was heard in the context of other examples involving *reunir-se* used as a reciprocal verb.

¹⁹ The 2PL pronoun *vocês* is derived from a 3rd person form and so takes the same reflexive clitic as the 3rd person singular/plural (*se*). As such, the ungrammaticality of (24b) serves to rule out both an unmarked 3SG and a 2PL specification for PRO.

fake PC is nonetheless problematic for Landau's analysis of PC and, in fact, is better analysed as involving covert comitatives à la BHN.²⁰

3.1 Why this is not about mereology/semantic plurality

Landau (2000: 62-64) develops an analysis of PC in terms of semantic plurality/mereology. PRO/DP enters the derivation valued for (i) phi-features and (ii) semantic plurality ([SP]), whereas functional heads acquire such values via Agree, as per Chomsky (1995 *et seq.*).^{21, 22} There is a crucial difference between DP and PRO, though: whereas DP can value the uninterpretable features of functional heads, Landau stipulates that PRO, being anaphoric, cannot. Exhaustive Control, (EC) in Landau's terms, is an instance of Agree (matching) between a matrix functional head (F) and PRO. Because the non-finite complement in instances of EC is untensed, no T-to-C movement takes place. As such, F agrees with PRO directly and so controller and controllee must have identical feature specifications both in terms of (i) (syntactic) phi-features and (ii) SP/mereology:

- 30) a. ...F DP_[+SP] [CP PRO_[+SP] T-Agr_[ØSP] ...]
b. *...F DP_[-SP] [CP PRO_[+SP] T-Agr_[ØSP] ...]
c. *...F DP_[+SP] [CP PRO_[-SP] T-Agr_[ØSP] ...]

²⁰ Also insightful is the fact that the (a) examples above were virtually universally accepted by those surveyed, contrary to what is often claimed to be the case for PC in other languages (cf. Hornstein 2003). Again, this follows if PC with an uninflected infinitive is not a true instance of PC, as argued in the following section.

²¹ A DP/PRO can be semantically plural but syntactically singular (e.g. *the committee*).

²² Landau (2004: 835-849) makes slightly different assumptions, proposing that "[...] PRO in OC is a null SE-anaphor of sorts (see Martin 1996 for a related proposal). Lacking any inherent specification of ϕ -features, PRO is [-R].[...] For concreteness, assume that PRO contains slots for each ϕ -feature (including case), and these slots are valued under agreement with the controller [...]" (ibid: 841). I develop a version of this proposal in different terms below. As the crucial insights of his 2000 analysis concerning PC are carried over to this later account I gloss over the differences here for ease of exposition.

Instances of PC, however, involve a tensed non-finite complement, which, in Landau's terms, means that the T-Agr complex raises to the C-position and acts as an intervener for the F-PRO Agree relation. As such, in PC contexts, agreement between F and PRO is mediated by T-Agr. Moreover, because PRO cannot value T-Agr's unvalued features, T-Agr is simply not specified for SP (i.e. it is [\emptyset SP]). The combination of these two facts makes it possible for there to be a mismatch between the semantic plurality of the matrix subject which is [-SP] and PRO which is [+SP]: T-Agr is simply [\emptyset SP] and Landau proposes that on functional heads [-SP] and [\emptyset SP] are non-distinct:

31) ...F DP_[-SP] [_{CP} T-Agr_[\emptyset SP] PRO_[+SP] ...]

The mismatch can only go in one direction, though, as F always agrees with the matrix subject, and if F is specified as [+SP] it can look past T-Agr to PRO, which must then also be [+SP]:

32) *...F DP_[+SP] [_{CP} T-Agr_[\emptyset SP] PRO_[-SP] ...]

Technicalities aside, the crucial ideas behind this analysis are that (i) PC is permitted by the mismatch in semantic plurality between the matrix subject and PRO and (ii) this in turn is permitted because of T-to-C movement, which effectively prevents PRO from being probed by F.^{23, 24}

Further EP data show conclusively that there is more to fake PC than this mismatch in semantic plurality. In fact, in instances of fake PC, PRO can receive a reading wholly distinct from its syntactic phi-specification, both in terms of number *and* person. Consider, for example, (29a) (repeated here as (33)), which can have either of the following readings:

²³ Cf. BHN (2010: 20-34) for a critique of Landau's Agree-based approach.

²⁴ Landau (2004) revises some of the details of this analysis, notably the postulation of T-to-C movement, but the crucial idea remains: C optionally lacks a [Mer(eology)] slot so that "[...] any control relation that is mediated by C₀ will be [Mer]-neutral in the sense that it will not match the value of [Mer] of the controller with that of PRO. [...] This is how we account for the contrast between PC-infinitives, which involve control via C₀, and EC-infinitives, which do not." (ibid: 849)

33) Preferias reunir=te mais tarde? [EP]

prefer.2SG meet.INF=self.2SG more late

i. 'Would you prefer PRO_{2PL} to meet later on?'

ii. 'Would you prefer PRO_{1PL} to meet later on?'

Crucially, PRO in (33) can include the speaker, making it 1st person, despite it being 2nd person syntactically.

Likewise, the partially controlled PRO in (34) is not limited to a 3rd person interpretation, it can also include the speaker:²⁵

34) O João preferia reunir=se às 6. [EP]

the João preferred.3SG meet.INF=self.3 at.the 6

i. 'João would prefer PRO_{3PL} to meet at 6.'

ii. 'João would prefer PRO_{1PL} to meet at 6.'

In fact, all that is required in instances of fake PC, is that the controller be included in the the referent of PRO.

This means that fake PC does not fall under Landau's characterisation of PC. It is not the case that semantic plurality is the only feature of PRO which can shift in instances of fake PC, the semantic person features of PRO can also do so.

This fact is apparent also in the fact that fake PC is also possible with a plural antecedent:²⁶

35) Nós preferíamos reunir=nos mais cedo

²⁵ Note, however, that there is a potential get-out clause here if 3rd person is the absence of person. The same does not apply where PRO is 1st/2nd person, though.

²⁶ In English too, similar effects hold, suggesting that Landau's account faces more general problems, even in relation to true PC, a point to which I return below:

- (i) a. We_{i+j} want PRO_{i+j/i+j+k} to meet this afternoon.
- b. Do you_{2PL} want to PRO_{1PL} meet this afternoon?
- c. My friends_i want PRO_{i/i+/1PL} to meet at 9 tomorrow.

We_i preferred.1PL meet.INF=self.1PL more early

i. 'We_{i+j} would prefer PRO_{i+j} to meet early.'

ii. 'We_{i+j} would prefer PRO_{i+j+k} to meet early.'

36) Os meus colegas preferiam reunir=se mais cedo.

the my.PL colleagues preferred meet.INF=self.3 more early

'My colleagues_i would prefer PRO_{i/i+/1PL} to meet earlier on.'

37) Vocês preferiam reunir=se amanhã ou na sexta?

you.PL prefer.2PL meet.INF=self.3 tomorrow or on.the Friday

i. 'Would you prefer PRO_{2PL} to meet tomorrow or on Friday?'

ii. 'Would you prefer PRO_{1PL} to meet tomorrow or on Friday?'

In (35), the embedded subject can be partially controlled by the 1PL matrix subject, including some other second/third party in the meeting. In (36)-(37), the same effect holds, meaning that the semantic person of PRO can again differ from that of its controller. As such, Landau's approach to PC provides a potential explanation for why verbs like *meet* can occur in Control constructions with singular antecedents, but it cannot offer an account of fake PC in EP. Where PRO has a plural antecedent, Landau's generalisation is also observed in EP as PRO again shares all syntactic phi features of its controller. Such cases clearly show, though, that PC is still possible, and that this has nothing to do with semantic plurality. PC is simply the requirement that the controller be interpreted as a proper subset of the reference of the controllee, regardless of person and number features (cf. BHN 2010: 184 for related criticism).

3.2 Covert comitatives

BHN (2010: 185) propose that apparent instances of PC in (American) English actually involve EC plus a null comitative object *pro* (replacing a withP):

38) a. The chair_i hoped [_{t_i} to meet pro_{comitative} at 6]

b. The chair_i hoped [_{t_i} to apply together pro_{comitative} for the grant]

To capture the limited availability of *pro*_{comitative}, they stipulate that the latter is licensed only in +tense, -finite clauses, hence the fact that verbs like *meet* require a plural subject elsewhere.²⁷ In this section, I argue that while BHN's approach faces certain problems as an analysis of English PC, it fits very well with the fake PC data in EP. It does not extend, however to *true* instances of PC with inflected infinitives in EP, which I turn to in section 4 and beyond. As such, BHN's attempt to do away with PC ultimately fails, but they correctly identify the phenomenon of fake PC, which exists in addition to true PC.

In support of their account, BHN claim that PC is only possible with those embedded predicates which can take a comitative PP:

- 39) a. *The chair sang alike/was mutually supporting with Bill.
 b. *The chair hoped to sing alike/be mutually supporting.
 c. John met/collided/agreed/gathered/interacted with Bill.
 d. John doesn't want to meet/collide/agree/gather/interact today.

Landau (2005) has already raised some problems with the veracity of this claim in relation to English. In fact, a consideration of which predicates can surface in (apparent) instances of PC, strongly suggests that EP fake PC but not English PC involves a covert comitative. There is a strong correlation in EP between the possibility of a comitative and the ability to participate in PC with an uninflected infinitive, whereas the same does not hold for British or American English. While a large class of the predicates requiring a plural subject are comitative, Levin (1993: 62-63) gives two further classes of verbs which require plural subjects in English, both of which are reflexive in EP. The first are those predicates which denote separation/divergence and usually surface with a PP introduced by *from* in English (differ, diverge, divide, divorce, part, separate). In English, while some speakers allow these predicates to co-occur with a comitative PP, many do not and yet all speakers allow these predicates in PC constructions:

²⁷ BHN provide no rationale for this stipulation and it remains mysterious. However, if the null comitative arises via reanalysis of a true PC construction of the kind described in sections 5-6, then there may be a diachronic explanation for the extremely limited distribution of *pro*_{comitative}.

- 40) a. %Because of her behaviour, John separated with Mary last year.
 b. *Because of Mary's behaviour, John separated last year.
 c. Because of Mary's behaviour, John wants to separate.

In EP, this class of verbs simply does not require a plural subject, and so the test is rendered impossible:

- 41) O Pedro separou=se/divorciou=se
 The Pedro separated=self.3/divorced=self.3
 'Pedro got divorced/separated.'

The second class consists of symmetrical verbs denoting reciprocated actions (court, embrace, hug, kiss, nuzzle, pass, pet). Again, these predicates can freely participate in PC in English, despite the fact that speakers both sides of the Atlantic almost universally reject examples like (42a):

- 42) a. *John has been seeing Mary for a while now and he wants to kiss with her soon.
 b. *John has been seeing Mary for a while now and he kissed last night.
 c. John has been seeing Mary for a while now and he wants to kiss soon.

As such, again, English fails to conform to BHN's predictions. In EP, however, such verbs cannot participate in fake PC, exactly as predicted by the covert comitative analysis.²⁸

²⁸ BHN further claim that where an overt comitative PP is present only an EC reading is possible in English:

- (i) The chair hoped to meet with the president.

While an EC reading is certainly favoured in (i), it is not clear that this generalisation holds more generally.

All (British and American) speakers surveyed permit a PC reading whether or not a *withP* is present in (ii):

- (ii) a. Do you_i want PRO_{i+} to meet (with the client) tomorrow?
 b. Do you_i want PRO_{i+} to have dinner (with my parents) tomorrow evening?

In both cases, a salient reading involves PC whereby PRO is interpreted as the addressee plus the speaker. The premise of this diagnostic is flawed in any case as English clearly permits double *withPs* in such cases:

- (iii) a. Do you want PRO to meet with the client with me tomorrow?

- 43) *Há uma semana que o Pedro anda com a Maria
 has a week that the Pedro walks with the Maria
 e queria beijar=se/abraçar=se agora
 and wants kiss.INF=self.3/embrace.INF=self.3 now
 Intended 'Pedro has been seeing Mary for a week and he would like to kiss/cuddle now.'

In relation the basic distribution of the phenomenon, then, there is good reason to believe that fake PC in EP involves EC plus a covert comitative, but the same is not true of English PC.

A second prediction of BHN's approach is that fake PC will behave essentially like EC. There are three ways in which this is true of fake PC in EP. Firstly, recall that fake PC, unlike genuine examples of PC, is marginally compatible with restructuring. This follows if fake PC is actually EC, which, as is well known, is also compatible with restructuring. Secondly, recall that fake PC was almost unanimously accepted by speakers of EP, contrary to what has been claimed for true PC, and in line with the facts for EC. Finally, note that in instances of fake PC, anaphors are licensed exactly as they are in EC. The anaphor, in all cases, agrees in all features with its controller, as illustrated in (44):

- 44) a. Preferias reunir=te mais tarde? [*=3, ?=4, ✓=25]
 prefer.2SG meet.INF=self.2SG more late
 'Would you prefer to meet later on?'

b. Do you want PRO to have dinner with my parents with me tomorrow evening?

As such, the fact that, in EP, it is not the case that the presence of an overt *comp* blocks a PC reading can presumably also be attributed to the fact that two *comPs* are (marginally) possible:

- (iv) Queres jantar com os meus pais amanhã?
 Want.2S dine.INF with the.MPL my.MPLparents.MPL tomorrow
 'Do you_i want PRO_{i+} to have dinner with my parents tomorrow?'

b. *Preferias	reunir=se	amanhã	ou	na	sexta? ²⁹
prefer.2SG	meet.INF=self.3	tomorrow	or	on.the	Friday
[*=30, ?=1, ✓=1]					

The same cannot be said of PC in (American or British) English. In English, only the anaphor *oneself* is (marginally) possible in instances of PC, as discussed above. If PC in English involved EC plus a covert comitative, then (45a) with a 3S anaphor ought to be grammatical, contrary to fact:³⁰

- 45) a. *John wants PRO_{i+} to reunite himself soon.
b. John wants to reunite himself with Mary soon.
- 46) a. *I want PRO_{i+} to bring myself together around the campfire.
b. ?I want to bring myself together with my friends around the campfire.

As such, there are strong reasons to believe that EP fake PC, but not English PC involves EC.

There are thus strong reasons to believe that fake PC in EP is actually EC combined with a covert comitative PP, as proposed by BHN (2010). Moreover, this approach is capable of capturing the fact that PRO's syntactic features can be wholly distinct from its (apparent) semantic features, as discussed above. If fake PC arises from EC coupled with the presence of a null comitative, then this mismatch is immediately explained:

²⁹ The 2PL pronoun *vocês* is derived from a 3rd person form and so takes the same reflexive clitic as the 3rd person singular/plural (*se*). As such, the ungrammaticality of (24b) serves to rule out both an unmarked 3SG and a 2PL specification for PRO.

³⁰ Hornstein (2003: 44) claims that the following example is possible in American English:

- (i) (*)John wants to talk about himself all together at dinner tonight.

Many speakers find such examples highly marginal, but even disregarding this fact, it is clearly the exception rather than the rule. In most cases of PC, it is not possible to have a singular anaphor (other than *oneself*) in instances of PC.

- 47) Ele_i preferia [t_i reunir=se_i *pro*_{commutative}] mais tarde
 he prefer.3S meet.INF=self.3 more late
 ‘He would prefer to meet later on.’

In such cases, the reflexive anaphor simply agrees with the subject *ele* before it undergoes A-movement into the matrix clause and the presence of the covert comitative (*with you/him/them*) serves to explain the apparent shift in person *and* number in the embedded clause.

As such, it appears that apparent instances of PC with uninflected infinitives in EP (fake PC) are actually instances of EC coupled with a covert comitative. In English, however, PC has different properties, more similar to PC with inflected infinitives in EP, to which I now turn.

4 Inflected infinitives: a problem for the covert commutative account

What looks like PC is also possible for many but not all speakers with inflected infinitives, henceforth ‘inflected PC’ (cf. Modesto 2010 on Brazilian Portuguese):³¹

- 48) %Eu preferia reunirmo=nos mais tarde. [*=5, ?=2, ✓=5]
 I preferred.1SG meet.INF.1PL=self.1PL more late
 ‘I would prefer to meet later on.’

- 49) %Preferias reunirem=se amanhã ou na sexta?³² [*=13, ?=3, ✓=17]

³¹ Rodrigues and Hornstein (2011) raise some questions about Modesto’s BP data, based partly on the fact that BP is losing inflected infinitives, and so speakers seem to lack native-like competence as to their use (cf. Pires and Rothman 2010). As Pires, Rothman and Santos (2011) show, however, the same is not true of EP, as EP-speaking children as young as 6 already display understanding of the morphosyntax of inflected infinitives. Although not all speakers accept PC with inflected infinitives, judgements across those who accept it are reasonably stable, suggesting that inflected PC is a part of the native grammar of many EP speakers.

³² This example was provided with a context, because the 3PL reflexive clitic is homophonous with the 3rd person forms and speakers are likely to interpret it as such in out of the blue contexts:

Preferred.2SG meet.INF.2PL=self.2PL tomorrow or on.the Friday

‘Would you prefer to meet tomorrow or on Friday?’

50) %O João preferia reunirem=se mais tarde. [=13, ?=1, ✓=8]

the João preferred.3SG meet.INF.3PL=self.3 more late

‘João would prefer to meet later on.’

Here, there is clearly no requirement for the syntactic number *or* person features of the controlled subject to match those of the controller. In fact, as long as the controller is a potential proper subset of the referent of PRO, the embedded subject has syntactic features to match its semantics, regardless of the features of the controller (as indicated by the inflection and the features of the reflexive clitic). Where the phi-feature specification of controller and controllee makes this impossible (for semantic reasons), ungrammaticality results:³³

51) %O João preferia reunirmo=nos mais tarde.

the João preferred.3SG meet.INF.1PL=self.1PL more late

‘João_i would prefer for us_{i+speaker+} to meet later on.’

52) *Eu preferia reunirem=se mais cedo.

I preferred.1SG meet.INF.3PL=self.3 more early

(i) Maria, tens de falar com os teus colegas.

Maria have.2SG of speak.INF with the your colleagues.

Preferias reunirem=se amanhã ou na sexta?

Prefer.2SG meet.INF.2PL=self.2PL tomorrow or on.the Friday

‘Maria, you need to speak to your colleagues. Would you_{2SG} prefer PRO_{2PL} to meet tomorrow or on Friday?’

This may explain why the inflected infinitive is more acceptable here than in the other two examples cited, which were provided out of context.

³³ As noted below, this is further evidence that such example involve PC and not co-incidental co-reference.

Intended: 'I would prefer them to meet earlier on.'

EP Inflected PC, like the English data already discussed, strongly suggest that PC exists as an independent phenomenon, so that not all apparent instances of PC reduce to EC plus a covert comitative. These examples clearly show that, in inflected PC, it is the plurality of the subject and not the presence of a null comitative which is at stake. Note also that around half of the EP speakers surveyed accepted inflected PC, and that this is in line with the variable norm for PC (as compared with fake PC, which was almost unanimously accepted):³⁴

Like fake PC, inflected PC is only possible into [+tense] non-finite clauses:

- 53) *O Pedro conseguiu reunirem=se mais tarde.
the Pedro managed.3S meet.INF.3PL=self.3 more late
Lit. 'Pedro managed to meet later on.'

Unlike fake PC, though, inflected PC is not possible with matrix restructuring verbs, with or without clitic climbing:

- 54) *O Pedro queria reunirem=se mais tarde.
The Pedro wanted meet.INF.3PL=self.3 more late
55) *O Pedro queria=se reunirem mais tarde.
The Pedro wanted=self.3 meet.INF.3PL more late

³⁴ The numbers surveyed in each case differ because they are drawn from distinct surveys with overlapping informants. This was necessary due to the number of questions to be tested, which far exceeded what could reasonably be included in a single questionnaire. Additionally, conversations with native speakers linguists and non-linguists have confirmed that the inflected infinitive is indeed possible here for many speakers. Note also that speakers tended not to remain neutral with respect to these examples, but rather either rejected or accepted them, suggesting that % is the correct designation rather than ???.

This contrasts strikingly with what was observed with fake PC, above. Again, this suggests that while PC with an uninflected infinitive (fake PC) may be an instance of EC with a covert comitative, inflected PC is a distinct phenomenon.

Interestingly, while fake PC is possible into wh-complements, inflected PC is not:

- 56) a. O Pedro não sabe quando se reunir.³⁵
 The Pedro not knows when self.3 meet.INF
 b. *O Pedro não sabe quando se reunirem.
 The Pedro not knows when self.3 meet.INF.3PL

This is in line with Raposo's (1987) (somewhat mysterious) generalisation that inflected infinitives are ruled out in all clauses in which spec CP is filled.³⁶

It is important, at this point, to make sure that inflected PC is a genuine instance of PC. This is especially true given that some (epistemic, factive) Control verbs in EP permit non-finite complements with inflected infinitives and referential null subjects:

- 57) O Manel pensa [*pro* terem levado o livro].
 the Manel thinks have.INF.3PL taken the book
 'Manel believes them to have taken the book.' (adapted from Raposo 1987: 98)

Although it appears that inflected PC is possible with epistemic matrix predicates, such examples might be an instance of accidental partial co-reference.³⁷

³⁵In this example proclisis in the embedded clause is triggered by the presence of the wh-phrase.

³⁶ I have no explanation for this fact at present and will not explore it further as it appears to be an independent fact about EP inflected infinitives which does not bear on PC.

58) %O Manel pensa reunirem=se amanhã. [*=12 ?=7 ✓=14]
 the Manel thinks.3S meet.INF.3PL=self.3 tomorrow

Crucially, desiderative Control predicates do *not* permit non-finite complements with referential subjects, as Raposo (1987) shows:

59) a. *O Manel desejava [os amigos terem levado o livro].
 the Manel wished.3SG the friends have.INF.3PL taken the book
 b. *O Manel desejava [terem os amigos levado o livro].
 the Manel wished.3SG have.INF.3PL the friends taken the book
 c. *O Manel desejava [terem levado o livro].
 the Manel wished.3SG have.INF.3PL taken the book
 Lit. 'Manel_i wished them_j to have taken the book.' (Raposo 1987: 98)

The potential confound from referential null subjects can thus be avoided if only matrix desiderative predicates are considered. Desiderative predicates permit complements with inflected infinitival complements only in instances of PC.³⁸

³⁷ The fact that only half of those speakers surveyed permitted (58) might seem surprising if it is not an example of PC, but informal discussions suggest that not all speakers readily accept examples such as (57) either.

³⁸ In such contexts, a finite subjunctive complement is required for disjoint reference:

(i) Queremos [que (tu) sejas/(eles) sejam simpático(s)].
 want.1PL that you be.2SG/they be.1PL nice.PL
 'We_i want you/them to be nice.'

Many speakers express a preference for finite subjunctive paraphrases also in instances of PC. This is perhaps also indicative of the slightly awkward nature of PC.

There are also many other reasons to believe that these are genuine instances of OC, contra the objections raised by Rodrigues and Hornstein (2011) in relation to Modesto's (2010) BP data. Firstly, note that the matrix subject must be included in the reference of the embedded null subject, as indicated by the following condition B violation:

- 60) *O João_i preferia reunirem=se sem ele_i [EP]
 the João preferred.3S meet.INF.3PL=self.3 without him
 Lit. 'João_i preferred/would prefer to meet without him_i.'

As was the case with fake PC, inflected PC is also subject to locality (the next-clause-up condition), suggesting that it is an instance of OC:

- 61) %Eu acho que o Pedro preferia reunirem=se mais cedo.
 I believe that the Pedro preferred meet.INF.3PL=self.3 more early
 'I think Pedro would prefer to meet earlier on.'

- 62) *O Pedro acha que eu preferia reunirem=se mais cedo.
 the Pedro believes that I preferred meet.INF.3PL=self.3 more early
 Lit. 'Pedro believes that I would prefer for them to meet earlier on.'

It is difficult to test whether these constructions get a sloppy reading under ellipsis as the majority of speakers rejected VP-ellipsis under a full verb in such contexts:

- 63) %O João preferia reunirem=se de manhã, e a Maria também preferia.
 the João preferred meet.INF.3PL=self.3, of morning and the Maria also preferred
 'João would prefer to meet in the morning and Maria would too.' [*=17, ?=7, ✓=8]

Of the eight speakers who accepted the baseline example, half found (64) less acceptable.³⁹

- 64) *O João preferia reunirem-se de manhã, e a Maria também preferia
the João preferred meet.INF.3PL=self.3, of morning and the Maria also preferred
(mas sem ela). [$\ast=2$, $\text{?}=2$, $\checkmark=4$]
but without her
‘João would prefer to meet in the morning and Maria would too (but without her).’

Although less conclusive than one would like, these data at least go in the right direction, in suggesting that inflected PC PRO gets a sloppy reading under ellipsis. It would appear then that in EP, PC is also possible into non-finite complements with inflected infinitives. This fact seems to raise problems for both BHN’s and Landau’s approaches to PC. Firstly, these data provide conclusive evidence that not all instances of PC reduce to EC in conjunction with a null comitative pronoun. Inflected PC cannot be an instance of EC, as the syntactic features of PRO and its controller clearly do not match, ruling out an analysis in terms of EC (plus a covert comitative). Inflected PC is also problematic for Landau’s approach to PC, even at the descriptive level, as it fails to adhere to his PC-generalisation in (2), repeated (again) here:

65) The PC-generalization

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

Inflected PC thus creates even more serious problems for Landau’s approach (outlined above): it very obviously cannot be a mismatch in semantic plurality which is at stake here. The phi-features of the partially controlled subjects of inflected infinitival clauses are necessarily distinct from those of their antecedent. In fact, the features of said subjects have syntactic features to match their semantic features. Crucially, though, in both cases there is the same requirement that the controller must be a proper subset of the controllee, the same sensitivity to locality and (less clearly) the same sloppy reading under ellipsis, suggesting that in both cases we

³⁹ Note also that three of the speakers who accepted (67) also accepted the equivalent example with an uninflected infinitive, which was generally rejected, suggesting they may not have understood the task.

have an instance of OC. Above, I argued that PC with uninflected infinitives may be an instance of EC, following BHN. This leaves the question of how PC with inflected infinitives can be accounted for.

4.1 Rodrigues (2007)

It is worth considering at this point whether the other previous attempt to accommodate PC in the MTC might apply to inflected PC. Rodrigues (2007) proposes a movement-based account of PC, whereby the controller subextracts from a big-DP containing a null associative pronoun:

- 66) a. The chair_i hoped $[[_{DP} pro\ t_i]$ to meet at 6]
 b. The chair hoped $[[_{DP} pro\ t_i]$ to apply together for the grant]

This approach accounts straightforwardly for the fact that PC displays the characteristics of movement as well as for the semantic subset-superset relation between controller and controllee. The proposal faces a serious problem in relation to the English facts, discussed above. As Rodrigues & Hornstein (2011: fn 8) partially acknowledge, the Big-DP approach fails to account for the fact, noted by Landau and discussed above, that the syntactic features of PC PRO, may differ from its semantic features. Thus, as Landau shows, in English, PC PRO can be semantically plural but syntactically singular, hence its inability to license plural anaphors:

- 67) The president hated PRO meeting (*each other) early in the morning.

This problem does not arise in relation to inflected PC in EP, however, as in such cases the embedded subject is syntactically as well as semantically plural, as expected:

- 68) %Eu preferia reunirmo=nos mais tarde. [$\ast=5$, $\text{?}=2$, $\checkmark=5$]
 I preferred.1SG meet.INF.1PL=self.1PL more late
 ‘I would prefer to meet later on.’

In this much, then, Rodrigues’ approach shows some promise as an analysis of inflected PC. There are, however, reasons to reject such an account, as detailed below.

The most serious problem with this approach is overgeneration. It would appear that EP permits these big DPs containing an associative pronoun only in inflected PC and not elsewhere. The analysis therefore needs to rule out such DPs in other A-movement contexts and even where no A-movement has taken place. Rodrigues (2007: 221) discusses the second of these problems, noting that such big DPs are not possible, for example, in matrix clauses, and this carries over to EP (cf. example (15a) above):

69) *_[DP pro the victim] meets drunk. (Rodrigues 2007: 221)

She proposes to account for this fact by stipulating that the null associative must occur within the scope of a modal.⁴⁰ While this will be sufficient to rule out (69)/(15a), it will not rule out (70) and the EP equivalent:

70) *It's possible that _[DP pro the victim] will meet drunk.

In relation to EP, the most serious problem with the approach, though, is the availability/motivation for subextraction. It is well-known that inflected infinitives never surface in instances of raising (Raposo 1989: 297, Quicoli 1996: 59):

71)	<i>pro</i> _i	parecem	[<i>t</i> _i	ter	razão]
		seem.PRES.3PL		have.INF	reason

72)	EXPL	parece	[<i>pro</i>	terem	razão]
		seem.PRES.3SG		have.INF.3PL	reason

‘They seem to be right.’

⁴⁰ It would of course be possible to restate Rodrigues’s proposal such that a tensed T, rather than a modal licenses the associative *pro*. This is desirable as the modals which license PC are actually those which take tensed complements:

(i) John_i can _[DP pro *t*_i] meet tomorrow.

(ii) Right now John can meet tomorrow, but his diary may fill up.

- | | | | | |
|-----------------|---------------|-----------------|--------------|--------|
| 73) <i>*pro</i> | parecem | [t _i | terem | razão] |
| | seem.PRES.3PL | | have.INF.3PL | reason |

This follows if an inflected infinitive assigns nominative Case to its subject, as Raposo (1987) argues, preventing the latter from moving into a higher clause, as is the case with finite clausal complements of raising verbs in English and other languages:

- 74) It seems that they are right.
75) *They_i seem that t_i are right.

As Pires (2001) notes, the fact that inflected infinitives are ruled out in instances of subject EC is consistent with the claim that uninflected infinitives, unlike their inflected counterparts fail to assign nominative Case if EC also results from A-movement:⁴¹

- 76) Queremos [ser/ *sermos simpáticos].
 want.1PL be be. 1PL nice.PL
 ‘We_i want PRO_i to be nice.’

- 77) Prometemos-lhe [ajudar/*ajudarnos]
promised.1PL-him help/help.1PL
'We_i promised him PRO_i to help.'

⁴¹ In instances of object control, things are not so clear cut and inflection appears to be optional in some instances of EC (cf. Raposo 1989 on EP, Modesto 2010 on Brazilian Portuguese). It is possible that some such examples may actually be examples of PC, but a full discussion of these patterns is beyond the scope of this paper:

- | | | | | | |
|--|-------------------|------------|---|----------------|--------------------------|
| (i) Eu | obriguei/persuadi | os meninos | a | ler(em) | esse livro |
| I | forced/persuaded | the kids | A | read.INF(.3PL) | that book |
| 'I forced/persuaded the kids to read that book.' | | | | | [EP, Raposo (1989: 277)] |

The implication is that the subject position in instances of inflected PC must be a Case-marked. But if this is the case, then there is nothing forcing subextraction in instances of inflected PC. The activity condition remains a crucial postulate of the MTC and without it, the rationale for subextraction in instances of inflected PC disappears. A related question is what prevents such DPs from surfacing in the absence of subextraction in inflected PC contexts (e.g. the complements of desiderative predicates)?

78) *O Pedro preferia [[_{DP} *pro* eu] reunirmo=nos mais cedo
 the Pedro preferred I meet.INF.1PL=self.1PL more early

A further problem with the subextraction approach is that it fails to generalise to PC in other languages. It has already been argued, contra BHN, that English PC cannot be analysed as EC with a comitative *pro*. Given this fact, it would be preferable to pursue a unified approach to genuine instances of PC in EP and English, all else being equal, and the big DP approach renders this immediately impossible.

Finally, note that the kind of subextraction necessary to derive PC is of a kind not usually permitted. There are no instances of partial raising or partial passivisation in English, as noted above, and the same is true of EP:

79) a. *O Pedro parece terem=se reunido
 The Pedro seems.3SG have.INF.3PL=self.3 met
 b. O Pedro foi reunido *(com a Maria) ontem.
 The Pedro was reunited with the Maria yesterday
 Lit. 'Pedro was reunited yesterday.'

Moreover, subextraction of one half of a co-ordinate structure is very generally banned (cf. Ross 1967). Again the subset-superset relation of PC appears to result from the Control relation itself, rather than being generally available in contexts of A-movement, something which a big DP approach again cannot capture without additional stipulations. Despite initial appeal, then, the big DP approach does not seem to solve the PC problem. While it is possible to describe PC in in such terms, there is little independent evidence for such an approach, and the kind of movement which it requires is not otherwise attested. An account in terms of defective intervention, on the other hand, has the benefit of (i) explaining why PC should exist, (ii)

assimilating the effect to other well attested phenomena such as the Person Case Constraint and (iii) extending to PC in other languages, such as English.

Thus far, it has been argued that inflected PC cannot be accounted for by previous approaches to PC and is thus ripe for a novel analysis. The fact that inflected infinitives assign Case to their subjects explains why they are not compatible with EC, but raises other questions for the MTC. For example, why are referential subjects not permitted in the inflected infinitival complements of desiderative predicates, given that Case appears to be available? How can *pro* be partially controlled? Crucially, whatever grammatical mechanism serves to give rise to PC here should also serve to explain why inflected infinitives can surface only in instances of PC in such cases. In the following sections I develop an account of PC based on defective intervention which fulfils these criteria. I first introduce defective intervention in some detail in section 5 before spelling out the proposal in section 6. In section 7, I propose that the same approach can be extended to English, with certain interesting complications.

5 Defective intervention

Following Rizzi (1990), it is generally accepted that syntactic dependencies are subject to some form of Relativised Minimality (RM), so that agreement between a probe and goal cannot skip an intermediate potential goal. Chomsky (2000) proposes a version of RM whereby even inactive goals act as interveners:

80) The Defective Intervention Constraint (based on Chomsky 2000:123)

$\alpha > \beta > \gamma$ (*AGREE (α, γ), where α is a probe and β is a matching goal, and β is inactive)

The evidence for such a constraint comes from examples of the following kind (cf. McGuinness 1998, Torrego 1996, Hartman to appear):⁴²

81) Gianni sembra (??a Piero) fare il suo dovere [Italian]

⁴² Hartman (to appear) offers a potential explanation as to why the English translations of examples (81)-(82) are grammatical. He suggests that the constraint nonetheless holds universally, as suggested by the fact that other raising verbs are elsewhere subject to the constraint (e.g. (83c)).

Gianni seems.3SG to Piero do.INF the his duty

Lit. 'Gianni doesn't seem to himself to do his duty.' (adapted from McGuiness 1998: 92)

82) Jean semble (??à Marie) avoir du talent [French]

Jean seems.3SG to Marie have.INF some talent

'Jean seems to Mary to have talent.' (adapted from McGuiness 1998: 90)

83) a. Cholesterol is important (*to Mary) to avoid.

b. John was claimed (*to Bill) to have stolen the art.

c. The hurricane threatened (*me) to destroy my house. (Hartman to appear: PP)

As noted by Hiraiwa (2001), however, it appears that (80) can be avoided where the same functional head α agrees with both β and γ . In such contexts, however, the features of β impose certain restrictions on those of γ . Anagnostopoulou (2003, 2005, 2008) discusses this issue in some detail and proposes an account of the strong Person Case Constraint (PCC) in these terms. The PCC in its stronger form prevents weak first and second person direct objects from co-occurring with weak indirect objects of any person:

84) Person Case Constraint (Bonet 1991, 1994)

Strong PCC: *dO_{weak.1st/2nd} iO_{weak} (Greek and French)

This means that where an accusative clitic is present in these languages, it must be 3rd person:

85) *Tha su me sistisune [Greek]

FUT CL.GEN.2SG CL.ACC.1SG introduce.3PL

'They will introduce me to you' (Anagnostopoulou 2008: 16)

Anagnostopoulou's (2008) account of the strong PCC is as follows. Following Taraldsen (1995), she proposes that datives are defective in the specific sense that they have person but no number features (as a result of the fact that they bear quirky Case). She further proposes, following Adger and Harbour (2007), that 3rd person datives have the specification [-person]. This means that when α probes for phi-features it must first agree

with the dative DP (β) for [-person]. The same head α can then agree with the next-closest accusative DP (γ) in number only (via *cyclic Agree*). As long as the accusative DP lacks a person specification as is the case with 3rd person accusatives, the derivation converges. If the accusative has a [+person] feature, however, the derivation crashes, as by hypothesis, in order to receive structural Case, a DP must Agree fully with a Case-assigning head. Given the assumption that 1st and 2nd person accusative pronouns are [+person], this serves to capture the strong PCC. The fact that accusatives unlike datives are fully specified for both number and person features is due to the fact that only the latter require structural Case. The crucial insight behind this approach to the PCC is that a derivation can converge in spite of a defective intervener as long as the relevant feature set of γ is a proper subset of those of β . Schematically, this is as follows:

86) $X_{\text{probe}} > DP_1 > DP_2$

X can agree with DP_2 only if it first (partially) agrees with DP_1 . In such cases, the relevant feature set of DP_2 must be a proper subset of that of DP_1 .

In relation to the PCC, the relevant feature is person, as the Agree relation in question is that related to structural Case/phi-feature agreement. With respect to other kinds of dependencies, however, the feature sets involved are expected to vary. Where v probes for a DP to assign a theta-role to, for example, the relevant feature set will be the referential index itself, which is partially independent of phi-features.⁴³ This, it will be argued in the following section, provides the basis for an explanatory account of PC in terms wholly analogous to the PCC. In these terms, PC arises as the result of defective thematic intervention.

6 An account of Partial Control

6.1 Thematic roles as features

The crucial assumption at the heart of the MTC is that a single DP can bear more than one theta-role. Hornstein (1999) proposes to couple this assumption with the additional proposal that theta-roles be reconceptualised as “features on verbs” or “morphological features” (Hornstein 1999:78-79, following Lasnik 1995, Bošković 1994, and Bošković and Takahashi 1998). This represents a radical departure from the traditional idea that theta-roles are configurationally determined (cf. Baker 1988, 1997), and assimilates them

⁴³ Thus an individual X can be encoded as either 1st, 2nd or 3rd person depending on perspective.

to other relational features such as Case.⁴⁴ Hornstein makes a conceptual case for this ancillary proposal, but it should be acknowledged that it is neither a necessary nor sufficient condition in order for the MTC to hold.⁴⁵ As noted by BHN (2010: 82-83), it is perfectly possible to conceive of a less radical version of MTC whereby theta-roles are still configurationally determined, albeit by Merge rather than External Merge exclusively.⁴⁶ In this section, I argue that this latter version of the MTC, and all it entails in the context of Chomsky (2000), has a substantial empirical advantage over the minimally different feature-based approach whether it is couched in terms of checking as per Hornstein (1999), or Agree: it provides a non-stipulative account of inflected PC (and potentially other instances of true PC).

In the context of Chomsky (2000), it is predicted that Agree will be needed as a precursor to movement (Internal Merge) of a phrase contained in a visible complement domain. There are strong empirical reasons to believe that this Agree relation is a necessary but not sufficient condition for theta-role assignment in such cases, so that theta-role assignment is ultimately configurational.⁴⁷ At the broadest level, whether one accepts Baker's (1988) Uniformity of Theta Assignment Hypothesis in its original form, there appear to be pervasive cross-linguistic patterns regarding the way in which certain thematic distinctions are reflected grammatically.⁴⁸

⁴⁴ Though in the context of checking theory, these implications are not manifest.

⁴⁵ Hornstein (1999) claims that the configurational approach to thematic roles is a relic of the D-structure era. He notes that as long as movement into theta-positions is banned by stipulation, "the minimalist abandonment of D-Structure as a level [...] is less radical than often perceived" (Hornstein 1999: 71).

⁴⁶ BHN appear to remain non-committal as to which possibility they endorse.

⁴⁷ Note that Hornstein (2009) does not adopt Chomsky's (2000) model and attempts to eliminate Agree as a narrow syntactic operation, meaning that theta-roles, even if they are features, would not be able to be assigned via Agree, marking effectively, a return to checking theory. The analysis proposed here is not compatible with that approach as it requires Agree and Merge to be available and distinct.

⁴⁸ Baker's (1988: 46) Uniformity of Theta Assignment Hypothesis (UTAH) states that "Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure".

If theta-roles could be assigned via Agree, then these patterns would be highly mysterious (cf. also Chomsky 1995 for a defence of configurational theta-assignment).⁴⁹

There are also many fairly obvious problems which arise if theta-roles are features which can be valued by Agree, even in English. Consider, for example, the well-known fact that raising but not Control verbs are compatible with expletive subjects:

87) *There expected [John to leave]

BHN (2010) note that (87) can be ruled out in the MTC by the fact that expletives cannot absorb theta-roles. Crucially, this is only the case if theta-roles require Merge. If theta-roles could be assigned via Agree, *John* could simply receive two distinct theta-roles via Agree in (87), with *there* satisfying the EPP. Crucially, (87) is not ruled out on Case grounds as *expect* is an ECM verb which, if transitive, can assign accusative Case to the subject of a TP complement (i.e. *John*). For the MTC to be empirically tenable, then, it seems necessary that theta-role assignment must be configurationally determined.⁵⁰

With facts such as these in mind, let us assume, in line with the second option outlined by BHN (2010), that theta-roles can be discharged only via Merge.⁵¹

⁴⁹ Locality will do some work here, of course, but it cannot be called upon to distinguish unergatives from unaccusatives. C-selection will not work here either, as many unergative verbs are optionally transitive.

⁵⁰ There are of course purported instances of backwards control, which might plausibly be analysed as instances where theta-roles are assigned under Agree. But this does not weaken the point made here which is this possibility is not generally available in all languages. Backwards control can also be analysed via a PF parameter which favours the pronunciation of the lowest copy in chain (cf. Potsdam 2009). This is arguably more attractive than modelling such variation via parameterised theta-assignment mechanisms (i.e. saying that language A assigns theta-roles via Merge and language B via Agree).

⁵¹ Of course, one could take this as evidence that the checking theory of Chomsky (1995) has advantages over Chomsky's (2000) Agree-based system. It will be argued at length below that this is not the case.

88) Principle of theta-role assignment

Theta-roles can only be assigned via External or Internal Merge with a thematic head.

This is identical to the standard position with the exception that internal Merge also serves to discharge theta-roles. It is also very similar to Hornstein's original checking-based proposal except that in the context of Chomsky (2000), it is predicted that where a theta-role is discharged via internal merge, Agree will be required as a precursor. As such theta-roles retain their configurational nature and their connection to Merge but can be determined derivationally as well as at 'D-structure', addressing Hornstein's major criticisms of the traditional view. This immediately solves the problems outlined above: the ungrammaticality of (87), for example, reduces to the simple fact that the thematic DP fails to merge with the relevant thematic head.

In relation to EC, (88) appears to make exactly the same predictions as Hornstein's original proposal, and indeed might be considered a notational variant of it. A matrix thematic head probes its complement domain for a local visible DP with a referential index:⁵²

89) EC⁵³

$v_{[D: i]} V [DP_i [-Case] T \dots]$

- a) matrix v probes for a local DP
- b) v forms a dependency with DP, formally valuing its unvalued uninterpretable feature $[D: i]$
- c) DP_i merges with v and receives a second theta-role at LF
- d) The derivation converges as long as DP gets Case from a higher head

⁵² According to Hornstein 1999, EC into adjuncts is possible because of sideward movement. In such contexts no probing is possible, as adjuncts are generally strong islands, and this serves to account for Landau's observation that we never see PC into adjuncts (Landau 2000).

⁵³ I leave to one side, until section 6.3., the question of why some CPs are visible for probing while others are not.

In the spirit of Chomsky's (2000) Activity Condition, and in line with Hornstein's (1999) approach, I assume that a DP is free to undergo Internal Merge with v and thus to receive a second theta-role as long as said DP lacks Case.⁵⁴

6.2 Defective thematic intervention

Now consider a different context where v probes its complement domain for a potential argument and comes across an inactive DP (a DP which already has Case and so cannot move to absorb a second theta-role).⁵⁵ Suppose that in such contexts, v nonetheless agrees with this DP, as is generally the case in instances of defective intervention, and so values its unvalued uninterpretable D feature. The value assigned to v 's [D:] feature is the referential index of said DP, which, if movement were possible, would also be linked to the predicate's theta-grid. Because the DP in question already has Case, however, it cannot, under our/Hornstein's assumptions, raise to merge with v and so cannot absorb v 's theta-role. Nevertheless, as v has thematically 'agreed' with said DP, it follows that when v subsequently discharges its theta-role to a distinct, externally merged, DP, the latter will need to be a referential subset of the DP which has valued v 's [D:] feature. Just as defective phi-agreement with DP₁ determines the potential person features of DP₂, so too does defective thematic Agree determine the potential referential index of DP₂.

⁵⁴ Landau (2003, 2006, 2007), Sigurdsson (2008) and Bobaljik and Landau (2009) raise certain objections to the idea that the subject position in OC contexts lacks structural Case, but see BHN (2010: 152-168) for a reply to these objections.

⁵⁵ BHN (2010: 4.5.1) argue that Merge-over-Move blocks object control into adjuncts, but if this were the case then PC would never occur as external merge would always be favoured over internal merge and the complement domain would never be probed. It is possible that the relevant difference here concerns internal merge within a single workspace vs. internal merge across workspaces, where only the latter appears to add material to a given numeration. More needs to be said about expletives, which might never be merged if the preference for Merge-over-Move does not hold. This problem is avoided if expletives are actually base-generated with their associates, as Hornstein and Witkos (2003), following Rosenbaum (1967) propose. In section 6, I return briefly to the related issue of why objects do not generally act as thematic interveners in simple transitive clauses, relating this to Burzio's generalisation.

This, in essence, is PC:

90) PC

$DP_j \nu_{[D: j]} V [DP_{i[+Case]} T \dots]$

- a. matrix ν probes for a local DP
- b. ν forms a dependency with DP_i , formally valuing its unvalued uninterpretable feature $[D: i]$
- c. DP_i is inactive and cannot merge with ν .
- d. DP_j is externally merged, and thus receives ν 's theta-role at LF.
- e. As ν bears a valued feature $[D: i]$ as the result of having agreed with DP_i , it follows that the external argument's referential index j must be a proper subset of i .
- f. The derivation converges as long as DP_j gets Case from a higher head

Effectively, PC arises where a visible but inactive DP enters into a defective thematic relation with a head ν , serving to limit the reference of the DP which eventually receives ν 's theta-role. The movement-like properties of true PC follow from the fact that Agree is subject to locality (because of Relativised Minimality). As such, effectively failed movement from a visible complement position displays the same diagnostics as successful movement from a visible complement domain, because both involve Agree. The bound variable/sloppy reading in inflected PC follows from the thematic dependency between the probed DP and the externally merged DP because of ν 's $[D: j]$ feature. In the following section I give evidence that this proposal can account for inflected PC, before extending the account to English.

6.3 Defective intervention in inflected PC

As discussed above, it is well known that inflected infinitives assign nominative Case to their subjects (cf. Raposo 1987, Madeira 1994):

- 91) Será difícil [eles aprovarem a proposta].
 Be.FUT.3SG difficult they approve.INF.3PL the proposal
 'It will be difficult for them to approve-Agr the proposal.'

- 92) *Será difícil [eles aprovar a proposta].

Be.FUT.3SG difficult they approve.INF the proposal

(Raposo 1987: 86)

This means that the subject in instances of inflected PC must be an inactive *pro* with structural Case. A consideration of the interpretation of the subject in inflected infinitival clauses strongly suggests that *pro* loses the possibility of being referential because of defective intervention. Consider the following generalisation, based on Raposo (1987) and Madeira (1994):

93) **Generalisation regarding the interpretation of *pro* in inflected infinitival clauses**

The subject *pro* of an inflected infinitive clause is referential iff it is not visible to a sufficiently local (next clause up) c-commanding thematic probe.

Thus, where no local c-commanding thematic probe is present, in subject clauses, the *pro* in inflected infinitives can be free/referential (or non-obligatorily controlled):

94) Será difícil [(eles) aprovarem a proposta]. [EP, Raposo (1987: 86)]

Will.be difficult they approve.INF.3PL the proposal

'It will be difficult for them to approve the proposal.'

As adjuncts, too, inflected infinitival clauses can have referential null subjects, plausibly because their island status prevents them from being visible to a thematic probe. This also explains why we do not see PC into adjuncts, even though EC into adjuncts is possible, via sideward movement:

95) *pro* escrevi a carta [para (eles) perceberem].

wrote.1SG the letter for them understand.INF.3PL

'I wrote the letter in order for them to understand.'

Next, consider 'transparent' (non-island) complement domains. In the complements of raising verbs, inflective infinitives are possible and again *pro* can be referential as there is no local c-commanding thematic probe:

96)EXPL	parece	[<i>pro</i>	terem	razão]
	seem.PRES.3SG		have.INF.3PL	reason

‘They seem to be right.’

But the subject of inflected infinitives in the complements of desiderative predicates cannot be referential, as discussed above, plausibly because of (90). This follows if inflected infinitival clauses are generally visible for probing, but defective thematic intervention only arises where a local, c-commanding thematic probe is present. As such, we have a potential explanation as to why the inflected infinitival complements of desiderative predicates are Case domains which do not support overt subjects or subjects with independent reference.

The fact that epistemic and factive Control predicates permit inflected infinitival complements with referential subjects, as discussed above, is apparently problematic for (90). However, as Raposo (1987) notes at length, there is good evidence that these non-finite complements contain hidden structure. The complements of epistemic verbs require obligatory Aux-to-Comp movement, whereas the complements of factive predicates involve either (a) Aux-to-Comp or (b) a concealed DP layer. In both cases, Raposo argues, the clause in question receives Case, and hence must be nominal in some sense. If this is the case then such clauses may be opaque to thematic probing because they themselves function as interveners.

This provides a potential handle on why it is that some clauses are visible for thematic probing, whereas others are not. An additional empirical challenge which has often been discussed in relation to the MTC is the fact that whereas many (though not all) languages allow Control into an embedded clause introduced by a complementiser, raising never does (cf. Landau 2003: 488). BHN (2010: 128-129), following Nunes (2007, 2010) offer an attractive explanation for this fact. If C bears phi-features then its presence will be sufficient to block phi-related probing into its c-command domain, but these phi-features will not affect thematic probing, which is independent of phi-features. By the same logic, it is expected that where C is [+D], it will block thematic probing into its complement domain. Whether an embedded clause is visible for thematic probing therefore reduces to whether or not it is introduced by a [+D] complementiser. Modern English *for* appears, by these criteria to be +D as it is incompatible with OC, whereas EP *de* must lack a D-specification, as it is not:

- 97) O Pedro precisa de sair
the Pedro needs of leave.INF

The complements of desiderative verbs in EP, unlike those of epistemic/factive predicates might lack D either because they are TPs or because they are CPs, where C lacks a D feature. I remain agnostic as to which is the correct analysis in the absence of persuasive evidence in either direction.⁵⁶

The defective intervention analysis explains the semantics of PC as well as the availability of phi-mismatches between controller and the controllee. If PC results from the fact that the referential index of an externally merged subject must be contained in the referential index of the intervener, then this applies semi-independently of phi-specifications. All that is required is for the phi-features of controller and controllee to be compatible with the relationship between their indexicals. Consider the following ungrammatical example:

- 98) *Eu_j preferia [_{TP} pro_i reunirem=se mais tarde.
I preferred.1SG meet.INF.1=3PL=self.3 more late

In such cases, the matrix *v* thematically agrees with *pro_i*, picking up the value [D: i]. This means that at LF *eu_j* must both (i) pick up *v*'s theta-role and (ii) have an index which is a proper subset of *i*. In such cases, though, it is not possible to interpret *eu* as a proper subset of the referent of 3PL *pro* as, for semantic reasons, 1SG cannot be a member of a 3PL set.⁵⁷ A similar problem would arise with an overt non-pronominal DP.⁵⁸

⁵⁶ This raises the question why CPs headed by a [+D] complementiser do not trigger PC, if they are defective interveners. The answer to this is possibly that they lack a referential index and so fail to constrain the reference of the externally merged subject. Alternatively, in section 7, I argue that the same head cannot probe the same phrase twice for different features. If CPs which are [+D] receive a kind of Case, as author (2011) proposes, then this constraint might independently prevent defective intervention in such cases.

⁵⁷ This is because 1st person is dominant over 2nd and 3rd person, just as 2nd person is dominant over 3rd. Thus a mixed group of 1st and 3rd person gives rise to a 1PL referent.

⁵⁸ Note, however, that in Spanish, a language which permits 3PL DPs to be interpreted as 1PL, PC of 3PL DPs appears to be possible, as noted by Torrego (1996), and discussed also by Rodrigues (2007):

99) *Eu preferia [TP os colegas reunirem=se mais tarde.
 I preferred.1SG the colleagues meet.INF.1=3PL=self.3 more late

Here again, it is not possible to interpret the matrix subject *eu* as a proper subset of the 3PL embedded subject *os colegas*.

7 PC in English

Recall that PC in English is an instance of ‘true’ PC rather than a case of EC plus a covert comitative. It remains to be seen whether the account of ‘true’ PC in terms of defective intervention can be extended to English, however. In order for this to happen, it would have to be the case that tensed non-finite clauses assign Case to null subjects, making PRO in such contexts a defective thematic intervener:

100) I_j v_[D: i] want [TP PRO_i to meet at 5 tomorrow]

Crucially, it cannot be that PRO resists or even lacks Case as if this were true then it would be free to move and absorb a second theta-role, and would not give rise to PC.

This appears to force us back essentially to Chomsky and Lasnik’s (1993) and Martin’s (1996, 2001) much criticized Null Case proposal. Chomsky and Lasnik argued that PRO must receive a special Null Case, based on the observation that it surfaces in passives, but cannot move from Case positions to the canonical ungoverned (Case-less) position:

101) a. We never expected [PRO_i to be found t_i]
 b. *We never expected [PRO_i to appear to t_i [that Bill left]]

(i) No sabemos si firmar los lingüistas la carta

Not know.1PL if sign.INF the linguists the letter

‘We do not know whether the linguists among us should sign the letter.’

The pattern in (101) obviously follows from the Activity Condition under the MTC: only a DP without Case can move. If EC PRO is always the trace of A-movement, then it follows that it is possible in (101a) but not (101b), because in (101b) the complement of *to* is a Case position, whereas the complement of *found* is not. As has been noted in the MTC approach, if all instances of OC reduce to movement, then, we have no need for Null Case. However, as we have seen at length, PC in English is an instance of OC which does not reduce to movement (i.e. it is not an instance of EC plus a null comitative). Note, moreover, that PC PRO is also possible in contexts such as (102a):

- 102) a. (?)John thinks it's time for a meeting. He_i wants PRO_{i+} to be gathered by 5pm.
 b. (?)John misses Mary. He_i wants PRO_{i+} to be reunited.

Here PRO must raise to the embedded subject position, from where it can be partially controlled. To explain the availability of this A-movement in the context of the Activity Condition we have to assume that PRO needs and starts off without Case, acquiring it from non-finite T. Martin (2001) proposes a revision of Chomsky and Lasnik's approach, whereby it is only non-finite tensed T which can assign Null Case. Although Martin's account fails to correctly delineate those contexts permitting EC vs. raising (cf. BHN 2010: 18-20, citing unpublished work by Susanne Wurmbrand), it fairly accurately picks out those contexts which permit PC: as Landau (2000) shows at length, there is a robust cross-linguistic correlation between the specification +tense in non-finite clauses and PC. If PRO occurs only in PC and not in EC, then some version of the Null Case approach may actually turn out to be right after all.^{59, 60}

⁵⁹ Hornstein (1999) proposes that that NOC, unlike OC, involves a null pronominal which is inserted as a last resort in syntactic islands if no structural Case is available and movement of the subject is blocked:

- (i) John_i didn't think that [*pro*_i getting his CV in order] was a priority.

Hornstein (1999) explicitly asserts that this *pro* does not require structural Case. This proposal seems theoretically anomalous, though. One of the great achievements of the MTC if it is successful is the elimination of anomalous Caseless pronouns/anaphors from the theory. If NOC involves a Caseless *pro* (PRO by another name), then the MTC retains PRO and simply reduces its distribution. If non-finite [+tense] T licenses Null Case then NOC might actually have Null Case. The unavailability of PC in NOC contexts would follow independently from the fact that NOC is limited to syntactic islands, which are not visible for probing.

A final, obvious and potentially serious challenge for the approach outlined here concerns the status of objects as thematic interveners in simple transitive clauses. Following the logic proposed here, before a DP (subject) can be externally merged in spec vP, v must first probe its complement domain for potential thematic goals (i.e. DPs). Hornstein argues that verbs like *wash* which are optional Case-assigners successfully locate an object and remerge it in spec vP, giving rise to covert reflexive constructions:

103) John washes in the morning.

This raises the question of what happens where a lower DP has Case and yet is still visible, as should generally be the case in non-reflexive transitive vPs. In such cases, it is apparently predicted that defective intervention would lead only to the following kind of interpretation, contrary to fact:

104) *John_i loves them_{i+}

In fact, such an interpretation is ruled out by Condition B of Binding theory. How is it, then, that object DPs are not thematic interveners in transitive clauses, leading to grammaticality? One possibility is that there is a constraint which prevents the same functional head from establishing both a thematic and a phi-based Agree relation with the same DP, essentially a ban on a head probing the same XP twice for different features. In other words, a head cannot both assign Case and thematically probe the same DP. This appears to derive a one-way version of Burzio's generalisation (external argument > accusative Case). A similar reasoning would explain why ECM is possible.⁶¹

I leave a full investigation of this idea for future research. It is worth noting here, though that NOC requires an inflected infinitive in EP. For an investigation of NOC in Portuguese, cf. Pires (2001).

⁶⁰ It might also be the case that NOC receives Null Case, though a full exploration of this idea is beyond the scope of this paper. Hornstein's (1999) claim that NOC *pro* lacks Case seems problematic on several counts (cf. Landau 2003 for discussion).

⁶¹ Again, there is more to say here, notably in relation to Pesetsky's (1991) generalization that only non-agentive verbs can be ECM verbs, which does not follow from the account proposed here.

8 Conclusions

BHN (2010: 190) note that “there remain many open questions” concerning PC. One of the biggest mysteries is why there is so much inter-speaker variation, while judgements concerning EC are very stable. The analysis put forth here provides an explanation for this fact: in many (though not all) cases, PC involves defective thematic intervention, and so results from what is effectively a problem with the computational system. Crucially, where PC is only apparent, and it results rather from the presence of a null comitative, the result is much more widely acceptable. Thus all speakers of EP accept PC with an uninflected infinitive, but only around half accept PC with an inflected infinitive. In sum, I have taken issue with Hornstein’s pessimism that “partial control phenomena do *not* follow from the [MTC –MS]”. I have argued that they do, as in many cases they arise via defective thematic intervention of a kind that is to be expected if theta-roles can be assigned via either External or Internal Merge. While many questions remain concerning the viability of the MTC, PC, once a thorn in its side, may turn out to be a lot less problematic than previously thought. In fact, its very existence may turn out to be crucial evidence that thematic roles can be assigned via *Internal* as well as *External* Merge.

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References

- Adger, David, and Daniel Harbour. 2007. Syntax and syncretisms of the Person Case Constraint. *Syntax* 10:2-37.
- Alboiu, Gabriela. 2007. Moving forward with Romanian backward control and raising. In *New horizons in the analysis of control and raising*, eds. William D. Davies and Stanley Dubinsky, 187- 213. Dordrecht: Springer.

- Alexiadou, Artemis, Elena Anagnostopoulou, Gianina Iordachioaia, and Mihaela Marchis. 2010. No objections to backwards control. In *Movement Theory of Control*, eds. Norbert Hornstein and Maria Polinsky, 89-118. Amsterdam: John Benjamins.
- Anagnostopoulou, Elena. 2003. *The Syntax of Ditransitives : Evidence from Clitics*. Berlin; New York: Mouton de Gruyter.
- Anagnostopoulou, Elena. 2005. Strong and weak person restrictions: a feature checking analysis. In *Clitic and Affix Combinations*, eds. Lorie Heggie and Fernando Ordóñez, 199-235. Amsterdam: John Benjamins.
- Anagnostopoulou, Elena. 2008. Notes on the Person Case Constraint in Germanic (with special reference to German). In *Agreement Restrictions*, eds. Roberta D'Alessandro, Susann Fischer and Gunnar Hrafn Hrafnbjargarson, 15-47. Berlin/New York: Mouton de Gruyter.
- Baker, Mark C. 1988. *Incorporation: a theory of grammatical function changing*. Chicago: University of Chicago Press.
- Baker, Mark C. 1997. Thematic roles and syntactic structure. In *Elements of grammar*, ed. Lilianne Haegeman, 73-137. Dordrecht: Kluwer.
- Bobaljik, Jonathon, and Idan Landau. 2009. Icelandic Control is not A-movement: The Case from Case. *Linguistic Inquiry* 40:113-132.
- Boeckx, Cedric, and Norbert Hornstein. 2004. Movement under Control. *Linguistic Inquiry* 35: 431-452.
- Boeckx, Cedric, and Norbert Hornstein. 2006a. Control in Icelandic and theories of Control. *Linguistic Inquiry* 37: 591-606.
- Boeckx, Cedric, and Norbert Hornstein. 2006b. The virtues of Control as movement. *Syntax* 9:118-130.
- Boeckx, Cedric, Norbert Hornstein, and Jairo Nunes. 2010. *Control as movement*. Cambridge: Cambridge University Press.
- Bonet, Eulàlia. 1991. Morphology after syntax: pronominal clitics in Romance languages, MIT: PhD dissertation.
- Bonet, Eulàlia. 1994. The Person-Case Constraint: a morphological approach. *MIT Working Papers in Linguistics* 22:33-52.
- Bošković, Željko. 1994. D-structure, theta-criterion, and movement into theta-positions. *Linguistic Analysis* 24:247-286.
- Boškovic, Željko, and Daiko Takahash. 1998. Scrambling and Last Resort. *Linguistic Inquiry* 29:347-366.
- Chomsky, Noam, and Howard Lasnik. 1993. The theory of principles and parameters. In *Syntax: An*

- international handbook of contemporary research*, ed. Joachim Jacobs, Arnim von Stechow, Wolfgang Sternefeld, and Theo Vennemann, 506-569. Berlin: Walter de Gruyter. [Also published in Noam Chomsky. 1995. *The Minimalist Program*, 13-127. Cambridge, Mass.: MIT Press.]
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 2000. Minimalist Inquiries. In *Step by step: essays on minimalist syntax in honour of Howard Lasnik*, eds. Roger Martin, David Michaels and Juan Uriagereka, 89-155. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: a life in language*, ed. Michael Kenstowicz, 28-53. Cambridge, Mass.: MIT Press.
- Cinque, Guglielmo. 2004. Restructuring and functional structure. In *The structure of CP and IP*, ed. Luigi Rizzi, 45-127. Oxford: OUP.
- Culicover, Peter W., and Ray Jackendoff. 2001. Control is not movement. *Linguistic Inquiry* 32: 493-512.
- Culicover, Peter W., and Ray Jackendoff. 2006. Turn over control to the semantics. *Syntax* 9:131-115.
- Fujii, Tomohiro. 2010. Split control and the principle of minimal distance. In *Movement Theory of Control*, eds. Norbert Hornstein and Maria Polinsky, 211-244. Amsterdam: John Benjamins.
- Hartman, Jeremy. to appear. (Non-)Intervention in A-movement: some cross-constructional and cross-linguistic consequences. *Linguistic Variation Yearbook* 11.
- Hiraiwa, Ken. 2001. Multiple Agree and the Defective Intervention Constraint in Japanese. *MIT Working Papers in Linguistics* 40 40:67-80.
- Hornstein, Norbert. 1999. Movement and Control. *Linguistic Inquiry* 30: 69-96.
- Hornstein, Norbert. 2009. *A Theory of Syntax: Minimal Operations and Universal Grammar*. Cambridge: Cambridge University Press.
- Hornstein, Norbert, Ana-Maria Martins, and Jairo Nunes. 2008. Perception and Causative Structures in English and European Portuguese: Phi-Feature Agreement and the Distribution of Bare and Prepositional Infinitives. *Syntax*, 11.2: 198-222.
- Hornstein, Norbert, and Maria Polinsky. 2010. *Movement theory of Control*, Amsterdam: John Benjamins.
- Hornstein, Norbert, and Jacek Witkos. 2003. Yet another approach to existential constructions. In *Grammar in Focus: Festschrift for Christer Platzack*, eds. Lars-Olof Delsing, Cecilia Falk, Gunlög Josefsson and Halldor Sigurðsson, 167-184. Lund: Lund University.
- Karttunen, Lauri. 1971. 'Implicative Verbs', *Language*, 47 (2): 340-58.

- Landau, Idan. 1999. Elements of Control, MIT: PhD dissertation.
- Landau, Idan. 2000. *Elements of control : structure and meaning in infinitival constructions*, Dordrecht: Kluwer Academic Publishers.
- Landau, Idan. 2001. Control and extraposition: the case of super-equi. *Natural Language and Linguistic Theory* 19: 109-152.
- Landau, Idan. 2003. Movement Out of Control. *Linguistic Inquiry* 34.3: 471-498.
- Landau, Idan, 2004. The Scale of Finiteness and the Calculus of Control. *Natural Language and Linguistic Theory* 22.4: 811-877.
- Landau, Idan. 2005. Control vs. raising again: notes on Hornstein (2003). Ms., Ben Gurion University.
- Landau, Idan. 2006. Severing the distribution of PRO from Case. *Syntax* 9.2: 153-170.
- Landau, Idan. 2007. Movement-Resistant Aspects of Control. In *New Horizons in the Analysis of Control and Raising*, eds. William D. Davies and Stanley Dubinsky, 293-325. Dordrecht: Springer.
- Lasnik, Howard. 1995. Last Resort and Attract F. *Proceedings of FLSM* 6: 62–81.
- Lawler, John. 1972. A problem in participatory democracy. *Studies in Generative Semantics* II.
- Levin, Beth. 1993. *English verb classes and alternations : a preliminary investigation*. Chicago ; London: University of Chicago Press.
- Madeira, A. 1994. 'On the Portuguese inflected infinitive ', *UCL working papers in linguistics*, 6: 179-203.
- Martin, Roger Andrew. 1996. A minimalist theory of PRO and control, University of Connecticut: PhD dissertation.
- Martin, Roger. 2001. Null Case and the Distribution of PRO. *Linguistic Inquiry* 32:141–166.
- McGuinness, Martha. 1998. Locality in A-movement, MIT: Ph.D thesis.
- Modesto, M. 2007. 'Inflected infinitives in Brazilian Portuguese as an argument both contra and in favor of a movement analysis of control', *Revistas letras Curitiba*, 72: 297-309.
- Modesto, M. 2010. 'What Brazilian Portuguese Says about Control: Remarks on Boeckx & Hornstein', *Syntax*, 13 (1): 78-96.
- Nunes, Jairo. 2007. A-over-A, inherent case and relativised probing. *GLOW newsletter* 58.
- Nunes, Jairo. 2010. Relativizing Minimality for A-movement: phi and theta relations. *Probus* 22:1-25.
- Nunes, Jairo. 1999. Linearization of chains and phonetic realization of chain links. In *Working Minimalism*, eds. Samuel David Epstein and Norbert Hornstein, 217-250. Cambridge, mass. & London, England: MIT Press.

- Nunes, Jairo. 2004. *Linearization of Chains and Sideward Movement*. Cambridge, Mass.: MIT Press.
- Pesetsky, David. 1991. Zero Syntax: vol. 2: Infinitives, Ms., MIT.
- Pires, Acrisio. 2001. PRO, movement and binding in Portuguese. In *Romance syntax, semantics and L2 acquisition: Selected papers from the 30th Linguistic Symposium on Romance Languages.*, eds. Joachim Camps and Caroline Wiltshire. Amsterdam: John Benjamins.
- Pires, Acrisio, and Rothman, Jason. 2010. Building bridges: Experimental L1 acquisition meets diachronic linguistics. In *New Directions in Language Acquisition*, eds. Pedro Guijarro-Fuentes and Laura Domínguez, 357-385. Newcastle upon Tyne: Cambridge Scholars Press.
- Pires, Acrisio, Rothman, Jason, and Santos, Ana L. 2011. L1 acquisition across Portuguese dialects: Modular and interdisciplinary interfaces as sources of explanation. *Lingua Special Issue: Acquisition at the Linguistic Interfaces* 121:605-622.
- Potsdam, Eric. 2009. Malagasy Backward Object Control. *Language* 85: 754-784.
- Quicoli, A. Carlos. 1996. Inflection and Parametric Variation: Portuguese vs. Spanish. In *Current Issues in Comparative Grammar*, ed. Robert Freidin, 46-80. Dordrecht: Kluwer Academic Publishers.
- Raposo, Eduardo. 1987. Case Theory and Infl-to-Comp: The Inflected Infinitive in European Portuguese, *Linguistic Inquiry*, 18 (1): 85-109.
- Raposo, Eduardo. 1989. 'Prepositional Infinitival constructions in European Portuguese', In *The Null Subject Parameter*, eds. O. Jaeggli and K. Safir. Dordrecht: Kluwer.
- Rizzi, Luigi. 1990. *Relativized minimality*: Linguistic inquiry monographs. Cambridge, Mass.: MIT Press.
- Rodrigues, Cilene. 2007. Agreement and Flotation in Partial and Inverse Partial Control Configurations. In *New Horizons in the Analysis of Control and Raising*, eds. William D. Davies and Stanley Dubinsky, 213-229.
- Rodrigues, Cilene, and Norbert Hornstein. 2011. Epicene agreement and Inflected Infinitives when the data is “under control”: A reply to Modesto (2010). To appear in *Syntax*
- Rosenbaum, Peter S. 1967. The grammar of English predicate complement constructions, M.I.T. Press: Thesis--Massachusetts Institute of Technology.
- Ross, John R. 1967. Constraints on variables in syntax, Massachusetts Institute of Technology: Ph.D Thesis.
- Sauerland, Uli, and Elbourne, Paul. 2002. Total Reconstruction, PF Movement, and Derivational Order. *Linguistic Inquiry* 33:283-319.
- Sheehan, Michelle. To appear. Some implications of a copy theory of labeling. To appear in *Syntax*.

- Sigurðsson, Halldor. 2008. The case of PRO. *Natural Language & Linguistic Theory* 26:403-450.
- Taraldsen, Knut Tarald. 1995. On agreement and nominative objects in Icelandic. In *Studies in Comparative Germanic Syntax*, eds. Hubert Haider, Susan Olsen and Sten Vikner, 307-327. Dordrecht: Kluwer Academic Publishers.
- Torrego, Esther. 1996. Experiencers and raising verbs. In *Current Issues in Comparative Grammar*, ed. Robert Freidin, 101-120. Dordrecht: Kluwer.
- Varlokosta, Spyridoula. 1994. Issues on Modern Greek Sentential Complementation, University of Maryland: PhD dissertation.
- Williams, Edwin. 1980. Predication. *Linguistic Inquiry* 11:203-238.