

Controlling Gender Agreement

CILENE RODRIGUES

University of Brasília, UnB

0. Introduction

Traditional classifications of control distinguish two types: obligatory control and non-obligatory control. Recently, there has been a great deal of research devoted to the question of whether obligatory and non-obligatory control are handled by the same grammatical mechanisms. In this paper, I will attempt to further our understanding of control by looking at agreement in the embedded clause as a way of diagnosing the properties of the empty category known as PRO. Based on gender agreement in Romance, I will motivate the generalization in (1).

- (1) Only non-obligatorily controlled PRO is contrastive for agreement features.

I will then discuss how this generalization contributes to a better understanding of the syntax of control.

1. Gender Agreement in Romance

In Romance, “epicene” DPs like ‘victim’ are invariably feminine ([+Fem], henceforth), though semantically they can refer to either male or female entities. Thus, as shown in (2), a past participle or a (floating) universal quantifier combined with a [+Fem] DP records [+Fem] gender agreement. This is observed in Italian, Portuguese and Spanish.¹

- (2) a. La vittima fu aggredita/ *aggredito dai fascisti. (It.)
the victim.FEM.PL was.3SG attacked.FEM/*MASC by fascists
‘The victim was attacked by (the) fascists.’
b. Tutte/ *tutti le vittime arrivarano nello stesso momento.
all.FEM/*MASC the victims.FEM.PL arrived.3PL in.the same moment
‘All the victims arrived at the same time.’

¹ I will be considering data from these three languages; however, for space reasons, whenever possible, examples will be given only in Italian.

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2. If Control is Obligatory, Agreement Is Also Obligatory

In the sentences below, the [+Fem] DP is within a different clause than the past participle and the quantifier, yet gender agreement is obligatory. This agreement pattern is observed in controlled complement (4a-b) and adjunct-controlled clauses (4c-d):

- (6) a. La vittima₁ ha cercato di essere trasferita₁/??trasferito₁ (It.)
 the victim.FEM have.3SG tried of be.INF transferred.FEM/??MASC
 alla stazione di polizia di College Park.
 to.the station of police of College Park
 ‘The victim tried to be transferred to the police station of College Park.’
- b. Le vittime₁ hanno cercato di testimoniare tutte₁/ *tutti₁ lo
 the victims.FEM.PL have.3PL tried of testify.INF all.FEM/MASC the
 stesso giorno.
 same day
 ‘All the victims tried to testify the same day.’
- c. La vittima₁ morì dopo essere stata trasportata₁/??stato
 the victim.FEM died.3SG after be.INF been.FEM brought.FEM/ been.MASC
 trasportato₁ all’ ospedale.
 brought.MASC to.the hospital
 ‘The victim died after being brought to the hospital.’
- d. Le vittime₁ lasciarono l’ aula subito dopo aver
 the victims.FEM.PL left.3SG the-courtroom right after have.INF
 testimoniato tutte₁/ *tutti₁ insieme contro il mafioso.
 testified all.FEM / MASC together against the gangster
 ‘The victims left the courtroom right after having testified all together against the gangster.’

Crucially, these are instances of exhaustive control in the sense of Landau (1999, 2001), where the controllee (PRO) and the controller (i.e., a [+Fem] DP) are identical in reference. Thus, as represented in (7), in exhaustive control, a quantifier or a past participle form bypasses PRO, agreeing in gender with the controller.

- (7) Exhaustive Control: [...DP₁...]_{CP} [_{TP} PRO₁ [^{Agree}Quant/P. Participle...]]
-

(7) suggests that similarly to NP-traces (8), exhaustively obligatorily controlled PRO is not in itself contrastive for gender agreement.

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- (8) a. La vittima sembra essere ferita/ *ferito. (It.)
the victim.FEM seem.3SG be.INF injured.FEM/MASC
'The victim seemed to be injured.'
- b. Le vittime sembrano essere tutte/ *tutti malate/ *malati.
the victims.FEM.PL seem.3PL be.INF all.FEM/MASC sick.FEM/MASC
'The victims seem to be all sick.'

Interestingly, agreement is also obligatory in partial control (cf. Landau 1999, 2000 and Wurmbrand 2002), where the controller is not identical to PRO in reference, being interpreted as a strict subset of the set denoted by PRO (viz. the acceptance of plural predicates within the controlled clauses). In (9), for example, the adjectival secondary predicate agrees in gender with the [+Fem] DP. Here we can also observe number agreement. The secondary predicate will record plural agreement only if the controller is morphologically plural.

- (9) a. A vítima quer se encontrar bêbada/ *bêbadas/ ³
the victim.FEM.SG wants.3SG SE meet.INF drunk.FEM.SG/drunk.FEM.PL
*bêbado/ *bêbados. (Port.)
drunk.MASC.SG/drunk.MASC.PL
'The victim wants to meet (with somebody else) drunk.'
- b. As vítimas querem (se) encontrar *bêbada/ bêbadas/
the victims.FEM.PL want.3PL SE meet.INF drunk.FEM.SG/drunk.FEM.PL
*bêbado/ *bêbados.
drunk.MASC.SG/ drunk.MASC.PL
'The victims want to meet drunk.'

This supports a strong version of (7):

- (10) (Exhaustively or partially) obligatorily controlled PRO does not trigger agreement independently of its antecedent.

Non-controlled PRO, however, does not fall under (10), as shown in the next section.

3. If Control Is Not Obligatory, Agreement Is Not Obligatory Either

In non-obligatory control configurations, [+Fem] gender agreement is not obligatory (cf. (11)). To be more precise, agreement is disallowed by some Italian speakers, whereas in Portuguese, it is quite degraded with past participles but marginally accepted with universal quantifiers. In Spanish, it seems to be generally optional.

³ Italian speakers do not accept partial control with embedded plural predicates.

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- (11) a. La vittima ha detto che essere *portata/ portato (It.)
 the victim.FEM has.3SG said that be.INF brought.FEM/MASC
 alla stazione di polizia non era una buona idea.
 to.the station of police not was.3SG a good idea
 ‘The victim said that to be brought to the police station was not a good idea.’
- b. Le vittime hanno detto che testimoniare *?tutte/ tutti
 the victim.FEM.PL have.3PL said that testify.INF all.FEM/MASC
 lo stesso giorno puo’ non essere una buona idea.
 the same day may.3SG not be.INF a good idea
 ‘The victims said that all testifying at the same day may not be a good idea.’

In (11), it is possible to interpret the [+Fem] DP as the subject of the infinitival clause, yet syntactic agreement is voided. Therefore, it is arguably the case that in non-obligatory control configurations, an agreeing element within the c-command domain of PRO agrees with PRO, and not with the matrix subject, as represented in (12).

- (12) Non-obligatory control: [... DP..._{[CP [TP PRO [...Quant/P. Participle...]]]}]
-
- *

By way of comparison, we conclude that non-controlled PRO patterns with Romance finite null subjects (*pro*), which are also able to establish gender agreement. Importantly, similar to agreement in non-obligatory control configuration, in (13), [+Fem] agreement is unacceptable under a *pro* embedded subject, on the reading in which the victims are males.

- (13) a. La vittima_i ha detto che pro_i era *stata
 the victim.FEM has.3SG said.3SG that was.3SG been.FEM
 aggredita_i/ stato aggredito_i nella strada. (It.)⁴
 attacked.FEM/been.MASC attacked.MASC in.the street
 ‘The victim said that he was attacked on the street.’
- b. Le vittime_i hanno detto che pro_i faranno ricorso *tutte_i/ tutti_i
 the victims has.3PL said that will.do.3PL appeal all.FEM/MASC
 insieme.
 together
 ‘The victims said that they will all testify together.’

⁴ In Brazilian Portuguese, the past participle and the floating quantifier are obligatorily marked [+Fem]. Crucially, though, in this grammar, finite 3rd person null subjects display obligatory control properties (cf. Rodrigues 2004).

In sum, the contrast between obligatorily controlled and non-obligatorily controlled PRO leads us to the generalization stated in (1), repeated here as (14).

- (14) Only non-obligatorily controlled PRO is contrastive for agreement features.

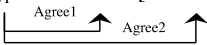
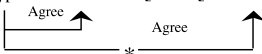
This is the first time this generalization has been noted, and an adequate theory of control should explain it. Hence, in what follows, I discuss the implications of (14) for two Minimalist theories of control: Hornstein (1999, 2001) and Landau (1999, 2000).

4. Theoretical Considerations

Recently obligatory control has been analyzed as an instance of NP-movement, (Hornstein, 1999, 2001) or as the result of Agree (Landau, 1999, 2000). The movement analysis argues that obligatorily controlled PRO is a trace of the controller (cf. (15a), whereas non-controlled PRO is *pro*, as represented in (15b).

- (15) a. [John_i tried [_{t_i} to win]]
 b. [John thinks [that [*pro* winning] is crucial]]

The Agree analysis, on the other hand, claims that control involves structures like (16a), in which PRO agrees with the matrix T, thus inheriting the ϕ -features of the controller. Non-control structures are like (16b), where PRO occurs inside an island, being thus unable to agree with an external head.

- (16) a. [_{TP} T [_{VP} John tried [_{PRO} to win]]]

 b. [_{TP} T [_{VP} John thinks [that [_{PRO} winning] is crucial]]]


In principle, either of these two analyses accounts for the contrast between non-obligatorily controlled and obligatorily controlled PRO. Under the movement analysis, in exhaustive control configurations, the controller controls agreement because it starts the derivation as the subject of the embedded clause, agreeing thus with the embedded past participle/quantifier. In non-control configurations, agreement with the matrix subject is voided because the subject of the infinitival clause is *pro*, and, as result, the past participle/quantifier agrees with *pro*. Under the Agree analysis, in exhaustive obligatory control configurations, the controller defines the agreement because the past participle/quantifier ϕ -agrees with PRO, which in turn ϕ -agrees with the controller. In non-obligatory control, agreement with the matrix subject is voided because the agreeing form (past participles and

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quantifiers) is within an island (a subject clause), and, according to Landau's proposal, islands block agreement with external probes.

Hornstein's and Landau's proposals for non-obligatory control are roughly variants of one another: subject islands block Move/Agree. However, the data presented here shows that their analyses for obligatory control are theoretically distinguishable. To account for the agreement pattern observed in (6), the Agree analysis must have a countercyclic character: the embedded past participle/quantifier will have its gender and number features defined only when the computation reaches the matrix level and the topmost T is inserted. This might be avoided if a feature-sharing principle (cf. Frampton et al. 2000, Pesetsky and Torrego 2004) is assumed, stating that if a constituent α ϕ -agrees with PRO and PRO ϕ -agrees with the controller, then α also ϕ -agrees with the controller. Clearly, under a movement analysis of (6), a feature sharing principle is superfluous.

Let us now consider partial control configurations. It has been argued that obligatory control cannot be fully subsumed under movement given the existence of partial control, where the controller is understood as a strict subset of the set of entities denoted by PRO. Landau suggests that partial control is a special case of Agree in which PRO is lexically specified with a plural semantic number feature, and even though PRO and the controller share the same set of valued syntactic ϕ -features, the semantic number feature of PRO does not enter into an Agree relation with features of the controller.

It is unclear that Landau's analysis is consistent with the agreement pattern observed in partial control (cf. (9)). In Romance, semantic gender and number features on a pronoun have syntactic agreement effects on adjectives, as discussed by Costa and Perreira (2003) and D'Alessandro (2004). In (17), the plural feature of the adjectives is triggered by the pronouns *a gente* and *si*, which are syntactically singular but semantically plural. The same is true of gender agreement: the adjectives are either masculine or feminine, depending on the referents of the pronouns. Thus, the fact that in (9) the adjective agrees in gender and number with the controller suggests that in partial control, the controllee does not differ from the controller in semantic number and gender features.

- (17) a. A gente está cansados/ cansadas. (Eur. Port.)
 we-SG is.3SG tired.MASC.PL/ tired.FEM.PL
 'We, the girls, are tired.'
- b. Se si è belli/ belle, si è (It.)
 if *si* is.3SG beautiful.MASC.PL/beautiful.FEM.PL *si* is.3SG
 di solito anche ricchi/ ricche
 usually also rich.MASC.PL/rich.FEM.PL
 'If one is beautiful, one is usually also rich'

Partial control is clearly puzzling. Its syntax (e.g. the agreement under discussion) suggests that it should be treated on a par with exhaustive control; on the

other hand, its interpretation points towards the opposite direction. While space reasons prevent a full analysis here, let me suggest we take partial control to be similar to exhaustive control in that both of them involve movement of the controller. Partial control differs, however, in that it applies a stranding strategy, as represented in (18): The initial lexical array (numeration) contains an empty category (say, *pro*) which starts the derivation by forming a constituent (DP) with the controller (18b), but ends up stranded as the controller cyclically moves towards the matrix clause (18c).⁵

- (18) a. John wants to meet.
 b. $[_{DP} [_{D'} [_{D} \text{pro}] \text{John}]]$
 c. $[_{TP} \text{John} [_{T'} [_{VP} t \text{ wants } [_{CP} [_{TP} t \text{ to } [_{T'} [_{VP} [_{DP} t [_{D'} [_{D} \text{pro}] t]]] \text{ meet}]]]]]]]]]]$
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According to this analysis, in (9), the embedded secondary predicate agrees with the controller because a copy of the controller occupies the embedded [Spec, TP], and secondary predicates are predicated of the DP in the closest spec of TP (cf. Koizumi 1994). Moreover, assuming that in (18b) *pro* is a null collective quantifier that takes *John* as its restrictor, we might be able to understand why *John* is interpreted as subset of the set of referents denoted by the embedded null subject.⁶

5. Conclusion

Agreement facts in Romance suggest that only non-controlled PRO is contrastive for agreement features. To account for this we can use either a movement analysis of control, or an Agree analysis coupled with a feature sharing principle. However, a theory that equates partially controlled PRO with a syntactically singular but semantically plural pronoun (e.g. the Agree analysis as proposed by Landau) does not explain why agreement with the controller is obligatory in partial control, given that in Romance an overt version of such a pronoun does trigger local syntactic agreement.

⁵ This analysis has roots in Kayne (2002), where obligatory control is treated as an instance of clitic doubling. However, I am proposing here that only partial control configurations involve building a complex DP headed by a null pronoun, followed by a stranding process. This restriction might be related to the fact that only partial controlled clauses are [+Tense], as discussed in Landau (1999, 2000).

⁶ For alternative implementations of a movement analysis for partial control, see Barrie and Pittman (2004), who argue that these structures are formed by movement of the controller plus a LF chain-splitting mechanism, and Hornstein (2003, fn. 77), who proposes that these structures are derived by movement of the controller plus an LF process that adjoins a null associative plural akin to the Japanese *tati* (on which, see Nakanishi and Tomioka 2002) to the copy of the controller in the embedded subject position.

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Cilene Rodrigues
Universidade de Brasília, UnB
Campus Darcy Ribeiro
ICC Ala Norte, Subsolo, módulo 7
Brasília, DF – Brazil 70910-900

cilene@unb.br