

Squibs and Discussion

A CHALLENGE TO NULL CASE
THEORY

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1 Introduction

This squib presents a challenge to the theory according to which PRO would receive null Case. We will mainly discuss evidence involving Case agreement in control complements in morphologically rich languages like Latin, but we will also show that Italian retains the Latin pattern in one area of the grammar in which case morphology has been preserved.

As is well known, PRO is (largely) in complementary distribution with overt pronouns and with *pro*. In the Government-Binding Theory and the later Minimalist Program, at least three types of account for the distribution of PRO have been proposed.

According to the first approach, PRO is in complementary distribution with overt pronouns and *pro* because the latter need to be assigned (or check) a Case, while the former is Case resistant (see Bouchard 1984).

The second approach, which has become standard in Government-Binding Theory, involves the PRO Theorem, which capitalizes on the notion of government (see Chomsky 1981).

Once the notion of government was dispensed with, a third approach emerged, which makes use of the idea of null Case (see Chomsky and Lasnik 1993, Chomsky 1995, Martin 1996, 2001). PRO would carry a special Case, called null Case, that can be checked only by the impoverished infinitival inflection of the verb. On the other hand, overt pronouns and *pro* need to check other (ordinary) types of Case.

The line of reasoning we will articulate is as follows. First, we assume that an NP cannot carry two distinct Cases at the same time (e.g., an NP cannot be simultaneously nominative and accusative). Then, we discuss evidence involving Case agreement in control complements that suggests that PRO can carry nominative (or accusative) in Latin. From this type of data, we conclude that the hypothesis that PRO carries null Case in these constructions faces a serious problem.

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The problem for the null Case theory that we will illustrate with Latin (and Italian) data has already been pointed out by Baltin (1995), who, citing data from Sigurðsson (1991), claims that there is “evidence in Icelandic that PRO may be not only Case-marked, but in fact marked with one of the standard Cases rather than a special ‘null Case’ ” (Baltin 1995:242). Data potentially problematic for the null Case theory have also been discussed in the literature on Russian. So, it is appropriate to begin by pointing out why the Latin (and Italian) data that we are going to discuss contribute new, interesting evidence.

In Russian, Case agreement in control complements is visible only on floating quantifiers like *odin* ‘alone’ and *sam* ‘(one)self’, which arguably agree with a subject PRO. These floating quantifiers are nominative when the controller is the matrix subject (suggesting that PRO shares nominative with its controller), but are dative otherwise (see Franks and Hornstein 1991 for a more complete discussion). Icelandic is different because a floating quantifier or a secondary predicate in an embedded infinitival clause can receive, at least as a marginal option, the Case that the infinitival verb normally assigns to its subject in a finite clause (nominative or quirky Case, as determined by the verb). This suggests that PRO, although Case-marked, resists Case sharing with its controller in Icelandic (see Sigurðsson 1991, Hudson 2002, and references cited therein for a more detailed description).

Although this is the basic pattern, both languages exhibit various other complications, as the cited literature attests. All in all, the pattern in Russian and Icelandic is quite complex. By contrast, the pattern in Latin (and Italian) that we will discuss here is very neat: as we will show, PRO *always* shares Case with its controller. Therefore, we believe that Latin (and Italian) provide a stronger, or at least clearer, challenge to the null Case theory than Russian and Icelandic.

2 PRO Shares Case with Its Controller in Latin and Italian

The main piece of empirical evidence we want to discuss is a Latin construction in which a control verb takes as a complement a copular construction.

Let us begin by observing that in Latin, which has a very rich case morphology, the subject NP and the adjective overtly agree in case, number, and gender in a predicative copular construction (in our glosses, we will indicate Case agreement only, because Case agreement is the only evidence that is directly relevant).

- (1) Ego sum bonus.
 I(NOM) am good(NOM)

In (1), the adjective *bonus* agrees with the subject *ego* in number, gender, and (crucially for our purposes) case (nominative).

The second piece of background information is that Latin has a class of subject and object control verbs that take an infinitival clause with a PRO subject, much as their counterparts in English do. One

example is the subject control verb *volo* 'I want'.¹ If we embed a copular structure like (1) under *volo*, the result is (2).

- (2) Ego volo [PRO esse bonus].
 I(NOM) want to-be good(NOM)

The embedded subject PRO in (2) obviously is not overt, so we cannot directly see its Case feature. However, its Case can be detected by looking at the adjective with which it overtly agrees. Since the adjective is nominative in (2), we conclude that PRO must be nominative as well. In a sense, this is not surprising, since PRO is controlled by the matrix subject, which is nominative. However, if PRO is really nominative in (2), a problem arises for the null Case theory, since an NP cannot bear two Cases at the same time.

A defendant of the null Case theory might deal with these data by arguing that the nominative feature on the adjective *bonus* is a default Case. Alternatively, one might speculate that *bonus* does bear null Case, but null Case is morphologically nondistinct from nominative in Latin (much as accusative and dative are indistinguishable in English). It is not difficult to show that these ways out do not really work, though. To exclude them, it is enough to embed the copular construction under an object control construction. The controller of PRO in (3) is the accusative object *te* 'you'. Crucially, the adjective is accusative in (3) and this indicates that PRO is also accusative.

- (3) Ego iubeo te [PRO esse bonum].
 I order you(ACC) to-be good(ACC)

(2) and (3) suggest that PRO carries the same Case feature as its controller (nominative in (2) and accusative in (3)). Under the assumption that an NP cannot carry two distinct Cases at the same time, it seems that PRO cannot have null Case either in (2) or in (3). Since (2) and (3) are just ordinary control structures, the conclusion is of general import. Latin copular constructions, thanks to the rich case morphology of this language, might reveal what covertly happens in general: PRO in control structures cannot bear null Case because it already bears a Case, which it shares with its controller.²

The Latin pattern is replicated in Italian. In this language, case morphology has been lost for the most part. However, it is retained

¹ For a general presentation of infinitival subordination in Latin from a generative perspective, see Cecchetto and Oniga 2002.

² We also tried to test Case agreement in a control complement by using a dative controller. However, testing this is difficult, because most Latin verbs that take a dative indirect object do not select for a control complement clause; instead, they select for a finite clause (in particular, for an *ut/ne* clause). Case agreement with a dative controller can be tested in sentences like (i), in which the complement clause that arguably contains PRO is the discontinuous sequence *quieto esse* 'to be quiet', which is selected by the impersonal verb *licet* 'it is allowed'. In (i), Case sharing between the controller *tibi* 'to you' and

on first person pronouns. In particular, *io* ‘I’ is the nominative form and *me* ‘me’ is the accusative form (case morphology is also retained on clitic pronouns). We will exploit this fact to show that Italian duplicates the Latin pattern.

First, look at (4). This sentence shows that a personal pronoun can appear in a postcopular position, even when a lexical subject already appears in the precopular subject position. When this happens, the personal pronoun must share its Case with the nominative subject.

- (4) (Io) sono io/*me.
 I am I /*me
 ‘I am me.’³

PRO obtains, as the dative morphology of the adjective *quieto* indicates.

- (i) *Quieto tibi licet esse.* (Plaut. *Epid.* 338)
 quiet(DAT) you(DAT) licit-is to-be
 ‘You are allowed to stay quiet.’

Interestingly, the best descriptive grammars (see Hofmann and Szantyr 1965: 349–350) note that, whereas the Case agreement pattern in (i) is certainly the one that is commonly found, there are some “exceptions” in which the adjective is accusative rather than dative. The oscillation may be observed even within the corpus of the same author, as (ii) and (iii) indicate.

- (ii) *Licere illis incolumibus ex hibernis*
 allowed-was them(DAT) untouched(DAT) from winter-headquarters
dicedere. (Caes. *Gall.* 5,41,6)
 go-out
 ‘It was allowed to them to leave the winter-headquarters unhurt.’
- (iii) *quibus licet iam esse*
 to whom(DAT) possible-is now to-be
fortunatissimos (Caes. *Gall.* 6,35,8).
 very-prosperous(ACC)
 ‘who, by now, can be very rich’

We believe there is nothing really surprising about this oscillation. Take the “exception,” namely, the clause *iam esse fortunatissimos* selected by the impersonal verb in (iii). In fact, this is the type of clause that can admit a lexical accusative subject. This fact seems to be general. All the attested “exceptions” involve clauses selected by impersonal verbs, and impersonal verbs can select the so-called *accusativus cum infinitivo* construction—that is, clauses that contain a lexical accusative subject (see Hofmann and Szantyr 1965:358–359). So, we assume that, whenever the clause introduced by the impersonal verb is a control clause, there is dative sharing between the controller and PRO. This happens in (i) and (ii). When the clause introduced by the impersonal verb is an *accusativus cum infinitivo* construction, the adjective agrees with the null accusative subject. This happens in (iii) (see Cecchetto and Oniga 2002:171ff. for more discussion of null accusative subjects). Note that in indisputable examples of control configurations like (2) and (3), no “exception” is ever reported and Case sharing between the controller and PRO always obtains.

³ Strictly speaking, (4) is an identity sentence that is totally uninformative. However, it is commonly used in pragmatic contexts like the following:

- (i) *Non mi importa cosa faresti tu. Io sono io e tu sei tu.*
 ‘I do not care what you would do. I am me and you are you.’

Note that English is different from Italian, if *me* in the sentence *I am me* has

Let us embed this copular construction under a subject control verb like the counterpart of *promise*. The result is (5).

- (5) (Io) promisi [di PRO essere io/*me il vincitore].
 I promised COMPL to-be I/*me the winner
 'I guaranteed that the winner would be me.'

Crucially, the postcopular personal pronoun in the control complement in (5) must be nominative in order for the sentence to be grammatical. We take this to be an indication that it agrees in Case with the PRO subject of the control complement (much as the postcopular personal pronoun agrees in Case with the precopular subject in (4)). So, we can infer that PRO shares nominative with its controller in (5). Let us now embed the relevant copular construction under an object control verb like (the counterpart of) *order*.

- (6) (Io) ordinai a lui [di PRO essere me/*io nel
 I ordered to him COMPL to-be me/*I in-the
 film].
 movie
 'I asked him to play me in that movie.'

The first person pronoun in the complement clause now must surface in the accusative form (*me*). The controller in (6) is the accusative pronoun *lui*.⁴ We assume that, as in the Latin sentence (3), PRO shares accusative with its controller and the first person pronoun agrees in Case with PRO.

So, Italian strictly resembles Latin in the relevant respect, because the Case of an element in a control complement depends on the Case of the controller, and this reveals the Case of PRO. This parallelism is confirmed by a final minimal pair. *Dire* 'to tell' introduces either an object control or a subject control complement. As expected, when subject control obtains, the postcopular pronoun in the control complement is nominative (see (7)). When object control obtains, the postcopular pronoun in the control complement carries accusative, which ultimately comes from the controller, through the mediation of PRO (see (8)).

- (7) (Io) dissi a lui [di PRO essere io nel film].
 I told to him COMPL to-be I in-the movie
 'I told him that the person in that movie was me.'

a default Case. As the paradigm in (4)–(8) indicates, the Case on the postcopular pronoun in Italian cannot have arisen by default, because it covaries with its controller (it is nominative if subject control obtains and accusative if object control obtains).

⁴ *Lui* checks accusative through the preposition *a*. Since it is irrelevant for our purposes here, we do not discuss whether and how the whole PP *a lui* is assigned dative.

- (8) (Io) dissi a lui [di PRO essere me nel film].
 I told to him COMPL to-be me in-the movie
 ‘I told him to play me in that movie.’

To conclude, the Latin pattern is remarkably simple: PRO shares Case with its controller, as overtly indicated by an adjectival form that agrees with PRO. The same pattern is visible with Italian personal pronouns.⁵

3 Theoretical Consequences

Although a squib is not the place to propose a comprehensive treatment (or to propose a general theory of PRO, of course), we would like to briefly comment on how some available theories of PRO could deal with the Latin (and Italian) pattern we have just discussed.

Let us start with the null Case theory, which is the most directly challenged. It seems to us that the most (possibly, the only) successful way to account for Latin within the null Case theory is to abandon the canonical idea that it is PRO that mediates between the controller in the main clause and the category in the control complement that is semantically dependent on the controller. The idea that can save the null Case theory is that whereas in binding cases like (9), it is the

⁵ A methodological problem that can arise with using Latin data is of course the fact that we do not have access to native speaker intuitions. Although the absence of negative data is a problem, we believe it can be overcome, at least in the present case. First, the problem does not arise with Italian, which duplicates the Latin pattern, as we just showed. Second, the Latin data we are talking about are not exotic. All adjectives agree in Case in Latin, so the phenomenon we are describing is well attested. To keep the discussion as simple as possible, we have used elementary textbook examples in (2) and (3), but the relevant sentences are easy to find in the Latin corpus. Some attested examples are given in (i)–(iv).

- (i) Ego quoque volo esse liber. (Plaut. *Trin.* 440)
 I also want to-be free(NOM)
 ‘I want to be free, too.’
- (ii) Ego nolo Caesar esse. (Flor. *carin.* 1)
 I not-want Caesar(NOM) to-be
 ‘I don’t want to be Caesar.’
- (iii) Tardiloquum esse te iubeo. (Sen. *epist.* 40,14)
 late-speaking(ACC) to-be you(ACC) (I) order
 ‘I am ordering you to speak cautiously.’
- (iv) Animum enim cogo sibi intentum
 (I) mind(ACC) really force self(DAT) careful(ACC)
 esse. (Sen. *epist.* 56,5)
 to-be
 ‘I really try to stay concentrated on myself.’

Finally, the Case agreement pattern we are talking about is explicitly described by the best traditional grammars, although the description remains at an informal level (e.g., Hofmann and Szantyr 1965:413; Bertotti and Traina 1965–1966, I:41, II:124, 135). Interestingly, no ‘‘exception’’ is reported even in the most detailed descriptive grammars, which commonly contain long lists of exceptions to the informal descriptions they offer.

subject-controlled PRO that binds the anaphor, in (2), repeated as (10), the adjective *bonus* ‘good’ bypasses PRO and somehow checks Case by direct connection with the main clause subject.

(9) John tried [PRO to excuse himself].

(10) (Ego) volo [PRO esse bonus].

This approach raises various nontrivial problems. Why is the binding case in (9) different from (10)? Even if Case can be checked in situ by long-distance Agree, as proposed by Chomsky (2001), how can it be that a probe in the main clause can make a search in the embedded clause, bypassing PRO? A reviewer speculates that the reason why PRO is irrelevant in the Case-checking process of *bonus* is that null Case is not compatible with adjectives, since they probably require a Case value that can be overtly realized. This line of research has some potential, but problems remain. For example, it is not at all clear how a category in the matrix clause can probe a category in the control complement. Most likely, such a long-distance operation would violate Chomsky’s (2001) Phase Impenetrability Condition, since the control complement seems to qualify as a strong phase according to ‘phasehood tests.’⁶

Another family of approaches to control structures explains the distribution of PRO by saying that it is Case resistant. Despite initial appearances, this approach is probably better suited to deal with the Latin data than the null Case theory. In fact, the intuition that underlies this approach is that PRO cannot occupy a position in which Case is *checked* (or assigned, as the same point was stated in the earlier framework). Since the subject position of the infinitival clauses in (2) and (3) is not a position in which Case is checked, PRO is expected to be able to occupy it. Of course, this approach has to explain why PRO can share Case with its controller. One possibility is to develop a theory of feature inheritance along the following lines. PRO cannot occupy a position in which Case is checked but can *inherit* Case from its controller. The inheritance of substantive features like gender, number, and person is already attested with anaphors. Anaphors, however, do not inherit Case from their antecedent (e.g., *He likes himself*). From this perspective, anaphors and (obligatorily controlled) PRO have much in common because they are both parasitic on an antecedent. However, they differ in a crucial way: PRO inherits the complete set of formal features of the antecedent (Case, gender, number, and person), while anaphors inherit just a subset of these features. Admittedly,

⁶ The problem with the Phase Impenetrability Condition can be obviated if, as the reviewer suggests, control complements involve some form of restructuring (the clausal reduction triggered by restructuring probably involves the elimination of the relevant phase boundaries). We believe that the analysis based on restructuring is perhaps viable with sentences like (2), but it is much harder with sentences like (3), since an indirect object in the matrix clause blocks restructuring in canonical cases (see the absence of clitic climbing in languages like Italian whenever an indirect object is present in the structure).

such a theory of inheritance has to be built basically from scratch and will face nontrivial problems (e.g., in languages like Russian and Icelandic, PRO, at least in certain constructions, does *not* share Case with its antecedent). Still, this line of research might be worth exploring.

Finally, there is another approach to explaining Case sharing between PRO and its controller. As a reviewer suggests, Hornstein's (1999) theory, which reduces control to raising, can gain the desired result. In Hornstein's theory, the category usually labeled PRO is just a trace (copy) left by A-movement. In his theory, (2) and (3) should receive the analysis in (11) and (12). *Ego* and *te* move from the position inside the control complement because they need to check their Case features, and they do so in the position occupied by what is usually labeled "controller."⁷

(11) Ego volo [t_{ego} esse bonus].

(12) Iubeo te [t_{te} esse bonum].

A way to explain Case agreement in control complements in Hornstein's framework might be the following. Take (11) as a representative instance. The nominative form *ego* is inserted in the subject position of the control complement (or in an appropriate position in the small clause within the control complement) with the Case feature that it will later check in the derivation. In this position, *ego* triggers Case agreement with the adjective *bonus*. Then, since it cannot check its nominative feature if it remains in situ, *ego* moves to the subject position of the matrix clause, where nominative checking takes place.

Summarizing, we have argued that the Latin (and Italian) Case agreement pattern in control complements strongly suggests that PRO and its controller share Case. This Case-sharing pattern is an interesting property that any theory of PRO should explain. We have speculated on how current theories of PRO can account for it.

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⁷ Note that the chains of *ego* and *te* check one Case but are assigned two θ -roles. This forces Hornstein to (among other things) revise θ -theory quite substantially. For a more complete presentation and discussion, see Hornstein 1999.

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SUPERMAN SENTENCES

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1 Introduction

Suppose Father comes home from work and finds Mother in obvious distress. Then the following discourse may take place:

- (1) Father: What happened?
 Mother: You know how I think our children should read decent books. Well, when I came home, rather than doing his homework, [_{IP} Johnny was [_{VP} reading [_{DP} SUPERMAN] to some kid]].

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