

Empty categories and Inverse Ellipsis

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1. Background: Empty subjects in *pro-drop* and control have traditionally been analyzed as two distinct types of empty categories (*ec*) PRO and *pro*. Thus, *ecs* lack phonological content in the lexicon and are subject to licensing conditions in syntax. However, adopting a framework of ‘late insertion’ of morpho-phonological material as in Distributed Morphology (DM; Halle & Marantz 1993 and subsequent work), the difference between empty and overt elements cannot be encoded in the lexicon but must be the result of the (in-)application of post-syntactic Spell-Out rules. The question arises, first, which factors trigger or fail to trigger Spell-Out rules, yielding the overt/covert distinction of subjects and, second, how the differences between PRO and *pro* can be encoded.

2. Differences between PRO and *pro*: We will pursue the line of reasoning that there is no lexically inherent difference between PRO and *pro*: Following Borer (1989), the differences between null subjects in control and *pro-drop* are derived from the features of the T (AGR) head. Null subjects are reference variables (Sigurðsson 2008), characterized by $[uD, u\phi]$ -features. This reference variable gets ‘referentially linked’ by means of Agree with interpretable features on T in *pro-drop* as well as control:

- (1) a. $C-T = i\phi_{\text{compl}} + iD$ / $D = u\phi + uD \rightarrow \text{pro-drop}$
- b. $C-T = i\phi_{\text{def}} + iD$ / $D = u\phi + uD \rightarrow (\text{Forward}) \text{ Control}$
- c. $C-T = u\phi_{\text{compl}} + uD$ / $D = i\phi + iD \rightarrow \text{non-pro-drop}$
- d. $C-T = u\phi_{\text{def}} + uD$ / $D = i\phi + iD \rightarrow \text{raising (Backward Control)}$

The defectiveness of T in control (see Landau 2004) will trigger a further Agree relationship with a matrix functional head, in contrast to finite *pro-drop*:

(2) **Control:**

Juan intentó [_{CP} C_{def} [_{TP} T_[iD, iφ_{def}]-dormir [_{VP} D_[uD, uφ] v-dormir [_{VP} dormir...]

(3) **Pro-Drop:**

Juan dice [_{CP} que [_{TP} T_[iD; iφ_{compl}]-durmieron [_{VP} D_[uD, uφ] v-durmieron [_{VP} durmieron...]

Thus, the mechanism responsible for the ‘licensing’ of empty subjects are not as distinct in control and *pro-drop* as is assumed by the Movement Theory of Control.

3. Overt vs. covert subjects in control and *pro-drop*: Some empirical evidence for this approach will be provided in the form of overt subjects in control infinitives in Spanish and Catalan-type languages:

- (4) Carlos_i promet-ió_i hacer **él_i** los deberes. (Spanish)
Carlos promised to-make he the homework
- (5) Promet-i_i hacer **yo_i** los deberes. (Spanish)
Promised-I to-make I the homework
- (6) * Me prometió hacer **Juan** los deberes. (Spanish)
Me promised to-make Juan the homework

In Spanish and Catalan, we face an asymmetry between the possibility of morphologically pronominal elements (with anaphoric behavior) and full R-expressions. The latter are licit in restructuring contexts in Spanish while they are fully ruled out in Catalan (see Ordóñez 2007):

- (7) Ayer quería hacer **Juan** los deberes. (Spanish)
Yesterday wanted to-make Juan the homework
- (8) *? Ayer odiaba hacer **Juan** los deberes. (Spanish)
Yesterday hated to-make Juan the homework
- (9) *? Ahir volia fer **en Joan** els deures. (Catalan)
Yesterday wanted to-make the Joan the homework

Further asymmetries between pronominal elements and full R-expressions can be found in Nonobligatory Control contexts (see also Cardinaletti 1999 for Italian):

- (10) Anar-me'n ([?]jo) va ser un error. / Anar-se'n (^{*}la Maria) va ser un error.
To-go-me-cl I PAST be an error / To-go-SE-CL the Maria PAST be an error
- (11) Irse (^{él}/[?]Juan) del colegio fue un error.
To-go-SE (he/Juan) of-the college was an error
- (12) Abans de (^{*}ell/^{*}en Joan) menjar (^{*}en Joan/^{*}ell) pomes (en Joan/ell),...
Before of (he/the Joan) to-eat (the Joan / he) apples (the Joan/he),...
- (13) Antes de ([?]yo/^{*}Juan) comer (Juan/yo) manzanas (Juan/yo),...
Before of (I / Juan) to-eat (Juan / I) apples (Juan / I)

These asymmetries are evidence for assuming that full R-expressions are subject to stricter licensing conditions in syntax than strong pronouns in Romance *pro-drop* languages. Cardinaletti (1999) argues that the latter can be inherently default Case-marked, escaping the Case Filter while R-expressions need structural Case in syntax. We claim that strong pronouns are mere Case-less reference variables in syntax which are Spelled-Out post-syntactically. The factors triggering post-syntactic Spell-Out rules can be of two kinds: (i) structural Case and (ii) discourse-sensitive marking ($[\pi]$ -marking, where $[\pi]$ = [focus], [emphasis], [contrast]). Overt subjects in infinitives, being in Case-less domains, need $[\pi]$ -marking to be Spelled-Out - the result of Inverse Ellipsis (context-sensitive *insertion*):

- (14) a. $D = \phi_{[1p,sg]} \rightarrow /jo/$ b. $D = \phi_{[1p,sg]} \rightarrow \emptyset$
(15) a. $D = [\phi: 1p.sg], [nom] \rightarrow /jo/$ b. $D = [\phi: 1p.sg] \rightarrow \emptyset$
(16) a. $D = [\phi: 1p.sg], [\pi] \rightarrow /jo/$ b. $D = [\phi: 1p.sg] \rightarrow \emptyset$

Interpretable phi-features on T can optionally absorb $[nom]$ -Case. Hence, in *pro-drop* as well as control, there will be a competition between two Spell-Out rules, having the same domain of application (see (14.a and b)). This competition can be resolved through $[nom]$ -Case marking (see (15)) or discourse-sensitive marking at the phase edges (see (16)), assuming a model in which discourse-information interfaces with syntax at the phase edges before post-syntactic Spell-Out of morphosyntactic information (see López 2009). This analysis can explain, first, why subject pronouns consistently appear in discourse-sensitive positions in *pro-drop* (Spec,v (Belletti 2004), Spec,T after phase-sliding (see Gallego 2010), and Spec,C); second, why the same state-of-affairs is true for overt subjects in control infinitives and hence why overt subjects in infinitives have a very restricted distribution (only postverbal subjects are licit because of left-peripheral defectiveness in infinitives (see Gallego 2010) and, third, why overt subjects in infinitives are morphologically pronouns but syntactically anaphoric in nature – they are mere postsyntactic Spell-Out of $[uD, u\phi]$ after valuation by means of Agree has taken place. Hence, the same mechanism is responsible for Spell-Out of $[uD, u\phi]$ in *pro-drop* and control. The differences with respect to Binding Theory derive from the properties of the T head. Full R-expressions, on the other hand, need structural Case and, hence, are subject to stricter licensing conditions. Thus, apparent Backward Control is only licit in restructuring contexts in Spanish because the subject may remain *in situ* in this language (Ordóñez 1998), even after the formation of a verbal complex. In Catalan, on the other hand, structural nominative Case and EPP must be checked in Spec,T (López 2009) and, hence, apparent Backward Control is ruled out even in restructuring contexts.

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