

Obligatorily Control is fallible: failure of OC PRO yields *pro*

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Sundaresan (2014) notes a puzzling pattern, which she dubs the “Finiteness/*pro*-drop generalization” (FpDG): “For (at least a non-trivial set of) *pro*-drop languages . . . *pro*-drop is disallowed in the subject position of a prototypically non-finite clause.” FpDG is based on the observation of a number of *pro*-drop languages (Spanish, Italian, Romanian, Hungarian, Japanese, Hindi and Tamil), where an alternation can be found between overt and covert subjects in certain non-finite clauses (as in Spanish (1)):

- (1) Al mostra-r María_i/EC_{*i,j,*k} los síntomas de la gripe, Carlos_j se vacun-ó.
P show-INF María_i/EC_{*i,j,*k} the symptoms of the flu, Carlos_j SE vaccinate-PST
“[_{CP} {With Maria_i/EC_{*i,j,*k}} showing the symptoms of flu], Carlos_j got vaccinated.”

Given the possibility of an overt, non-anaphoric subject in such clauses and of *pro*-drop elsewhere in these languages, we expect the covert subject to (at least optionally) be *pro*. But Sundaresan shows that only the restricted interpretation associated with OC PRO (Landau, 2013’s “OC Signature”) is possible: the null subject is obligatorily coreferent with a matrix controller, obligatorily *de se* in attitude contexts, and yields only sloppy readings under ellipsis. Under standard approaches, which posit two inherently distinct elements PRO and *pro* with different underlying properties and conditions on their distributions (e.g. Chomsky, 1981; Martin, 2001; Hornstein, 1999; Landau, 2004), the impossibility of *pro* in these contexts is mysterious: i.e. it cannot be attributed to the unavailability of *pro*-drop or to the idea that *pro* would not be Case-licensed (given the possibility of an overt nonfinite subject). In this paper we draw a connection between the the FpDG and another hitherto unexplained fact, namely that the interpretations available to *pro* are a proper superset of those available to OC PRO. I.e. *pro* need not be coreferent with a controller or interpreted *de se*, and it yields both strict and sloppy readings under ellipsis (also, see Landau, 2015, and works cited there, for the idea that *de se* is a special case of *de re*).

We argue that both of these observations can be accounted for if we eschew the “Inherent” approach to *pro* and PRO described above for a “Derived” approach, according to which PRO and *pro* label different manifestations of one underlying element, with the differences derived from its interactions with distinct grammatical environments (see also Borer, 1989; Manzini, 2009; Duguine, 2015; Fischer, 2015; Landau, 2015). Specifically, we posit a single element PRO/*pro* with an underspecified semantics. Crucially, this PRO/*pro* is subject to OC, implemented in terms of Agree (Landau, 2004), but in a way that is conditionally obligatory, but fallible, along the lines of agreement for Preminger (2011). That is, if the structural conditions are met for a particular PRO/*pro*, OC obligatorily applies, restricting it to the bound variable interpretation known as OC PRO. If, on the other hand, OC is not possible, there is no ungrammaticality, but rather the underspecified semantics associated with *pro* results as a default. An approach along these lines is common for the distinction between OC and NOC PRO — with NOC interpretations being available only when the structural conditions for OC are not met (Landau, 2013). We extend it to cover *pro* as well, adopting ideas from e.g. Bouchard (1984); Hornstein (1999) that NOC PRO should be assimilated to *pro* as what obtains when OC cannot be established. Of course, classic *pro* and NOC PRO may still have interpretive differences due to further contextual differences (see Landau, 2013, ch. 7), but for us they must be alike in **not** having the interpretive profile of OC PRO, which arises from the control relation.

This approach gets the basic distribution of OC PRO vs. *pro*/NOC PRO interpretations right. Given its dependence on Agree, OC is restricted by minimality and obtains obligatorily when a given PRO/*pro* is c-commanded by a local DP, as in (2). When no local c-commanding controller

is available, Agree fails, and the OC interpretation is not derived. E.g. clausal subjects are typically not c-commanded by a matrix DP, and fully finite embedded CPs are phases, thus it is generally impossible for their subjects to Agree with something outside the CP. Hence OC can't obtain into (most) clausal subjects ((cf. 3), involving "arbitrary control" which is standardly treated as NOC PRO) or full-fledged finite clauses (4).

- (2) [Duke_i's mother]_j hates [PRO_{*i/j/*k} to run out of beer].
- (3) [PRO_{NOC} to run out of beer] would be a shame.
- (4) Gianni_i ha deciso [che *pro*_{i/j}/*PRO_i partirà domani]. (Italian)
 Gianni has decided [that *pro* will-leave tomorrow]
 'Gianni decided that he/she will leave tomorrow.'

Well-known cases of "finite control" typically involve subjunctives or other clauses with intermediate finiteness, where it is plausible to posit the lack of a phase boundary or an escape-hatch mechanism for Agree, yielding transparency for OC parallel to that in prototypical infinitives like (2) (see e.g. Landau, 2008).

Our Derived approach to the distinction between *pro*/NOC PRO and OC PRO has a series of clear advantages over traditional Inherent ones. It posits a single underlying element rather than two, yielding a modest Occam's Razor gain. More importantly, it draws an explanatory connection between the distributions of PRO and *pro* and how they are interpreted. The interpretations available to OC PRO are a proper subset of those available to *pro*/NOC PRO because control restricts the referential and attitudinal possibilities of PRO/*pro*, and when it fails, the restrictions simply don't apply. Above all, we have an explanation for Sundaresan's FpDG. Since OC PRO and *pro* are really just two contextually-conditioned interpretive realizations of a single underlying element, we predict that they will be in complementary distribution. The clause types exemplified by (1) have an intermediate status: unlike complements of verbs like 'try', they allow inherently non-controllable subjects like *María*, but unlike prototypical finite clauses, they are transparent to control. The latter point means that, whenever the subject is a PRO/*pro*, control will apply obligatorily, yielding the OC interpretation, and automatically ruling out the less restricted reading associated with *pro*, as desired.

A question that might be asked at this point is why, if OC PRO and *pro* are really two interpretations of the same element, OC PRO seems to be universal, while *pro*-drop is famously parametrized. Note first that at least certain types of *pro*-drop are related to the morphological expression of agreement (though characterizing the precise relationship remains tricky, see Biberauer, Holmberg, Roberts, and Sheehan, 2010; Duguine, 2015, for discussion), a point that is itself subject to cross-linguistic variation. PRO, on the other hand, is primarily found in precisely those contexts where agreement is blocked even in languages with rich agreement, so that variation is largely suppressed. Furthermore, for us, NOC PRO is actually *pro*, which reduces the parametric variation: i.e. languages like English, then, do in fact allow a restricted form of *pro*-drop. The conditions on silent subjects are in any case clearly subject to cross-linguistic variation, and there is ample evidence (Barbosa, 2009; Szabolcsi, 2009; Livitz, 2014, a.o.) that DP-(c)overtness and -interpretation (including OC vs. NOC) are conditioned by orthogonal factors. Our analysis speaks to the latter, not the former. Thus there is nothing to stop underlying PRO/*pro* in a particular context from surfacing as silent *pro* in Italian, but as an overt pronoun in English. This of course raises the question to what extent a Derived approach may be extended to the pronoun/anaphor distinction more generally. It is clear that not all pronouns and anaphors can be realizations of a single underlying element PRO/*pro*, given that the complementarity between (overt) pronouns and anaphors breaks down in certain environments (Reinhart and Reuland, 1993, among others), and the simple fact that object pronouns are not obligatorily bound by the

subject. What is less clear is whether such an account should be extended to purported overt variants of OC PRO and *pro* (Manzini, 2009). This is a matter of ongoing research.

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