Overt vs. Null Subjects
in nonfinite constructions of Colombian Spanish

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1. Introduction
According to the standard theory (Williams 1980; Chomsky 1981, 1995; Rizzi 1982, 1986; and Lasnik & Uriagereka 1988, Miller 2002 and references therein), overt subjects are licensed by finite INFL/T, while controlled PRO is licensed in infinitives.

There are three descriptive claims underlying this type of approach (See Szabolcsi 2009, Rigau 1995):
(1) No overt (nominative) subjects in infinitives.
(2) No overt controlleres.
(3) No null referentially free subjects in infinitives.

These theoretical assumptions have been challenged\(^1\), especially by evidence from Romance languages such as Spanish where overt subjects can occur within infinitive clauses:

Para yo hacer eso. [Lipski, 1994:335]
Antes de yo salir de mi país. [Lipski, 1994:215]
Jugar Juan limpio a las cartas es una contradicción. [Suñer, 1994]
Al abrir Juan la puerta… [Rigau, 1995]
Todo el mundo se levantó al leer el juez el veredicto. [Torrego, 1998]
Al entrar yo por la puerta, todos se callaron. [Ortega, 2002]
Al ser francés Juan, no le pidieron pasaporte. [Zagona, 2002]
Decidió [ir ella misma en busca de agua]. [Schulte, 2007:163]
Al estudiar Juan en París, yo estaba trabajando en Londres. [Rico, 2016]
Sáez se lamenta haber sido él la nueva víctima... [Corbalán, 2018]

Here I show that overt and null subjects\(^2\) in Colombian Spanish (CS) infinitival adjunct clauses exemplify three systematic patterns\(^3\) of exceptions to the descriptive generalizations in (1) to (3):

**SIN-infinite pattern**: Overt subject alternating with pro
(5) María dejó de trabajar [sin [Rosa / ella / pro] decir nada].
María stopped to.work without Rosa / she / pro to.say nothing
‘Maria stopped working without (Rosa/her) saying anything.’

The *Sin*-pattern violates the ban in (1) on overt subjects and the ban in (3) on referentially free null subjects.

**AL-infinite pattern**: Overt subject alternating with PRO
(6) Juan sería feliz [al [José / él / PRO] dejar la casa].
Juan be-COND happy in.the José / él / PRO to.leave the house
‘Juan would be happy when he left/ leaving the house.’

The *Al*-pattern also violates the ban on overt subjects in (1).

**PARA-infinite pattern**: PRO alternating with ‘Overt PRO’
(7) Juan se fue [para [él / PRO / María] estar feliz].
Juan left for he / PRO /María to.be happy
‘Juan left in order to be happy.’

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\(^1\) Counter-evidence for these claims has been already observed in the literature (See Horsntein (1999) for English; Livitz (2011) for Hungarian, Italian, E. Spanish, Portuguese, Romanian, M.Hebrew; and Duguine (2013) for Basque).

\(^2\) Thereafter Ø

\(^3\) This data has been confirmed by 36 native speakers’ judgments obtained with an experimental protocol.
The Para-pattern pattern, unlike both the sin and al-patterns, violates the ban in (1) on overt subjects and on overt controlees/PRO in (2).

We will further establish novel and surprising asymmetries in the interpretation of null vs. OVERT PRO. We take these asymmetries to reflect the Anaphor Generalizations in (8).

(8) The Anaphor Generalizations:
   i. Both null and overt anaphors need to be syntactically bound.
   ii. Overt anaphors can be semantically bound; null anaphors must be semantically bound.

2. Distribution and interpretation of overt and covert subjects

What we expect to find on the standard analysis is PRO (Chomsky 1981). Since both overt and covert subjects occur in infinitival clauses (5)–(7), let’s apply the diagnostics of Obligatory Control (OC) vs. Non- Obligatory Control (NOC) (see Hornstein (1999) and Landau (2000-2013) for a discussion of the validity of these different tests)).

Below I discuss the following tests: Obligatory c-command test, Long distance antecedent test, Strict vs. Sloppy readings under ellipsis test and Bound variable vs. Coreferential readings under the focus particle test⁴.

In OC constructions, a local controller c-commands the non-overt subject, which only yields a sloppy interpretation under ellipsis. While in NOC constructions the antecedent doesn’t c-command the null subject and can be several clauses higher than the non-overt subject. In NOC, both the sloppy and the strict reading are possible.

For reasons of time, I will apply the test only to the null subject (NS) in order to establish its properties.
Let’s start with Sin-infinitives where the evidence will point to pro.

Non Obligatory c-command:
   The publishing house published the book of Maria without to. have finished the corrections.
   ‘The publishing house published Maria’s book without her finishing the corrections’.

The NS of this clauses does not need to be c-commanded by its antecedent.

Long distance antecedent:
(10) Juan sabe [que se abrieron las puertas [sin [Ø] dar la autorización]].
   Juan knows that CLIT 3p opened the doors without to.give the permission
   ‘Juan knows that doors were opened without him giving permission.’

The NS can be bound by a long distance antecedent.

Strict and sloppy readings under ellipsis:
   María stopped of to.work without ella/ [Ø] to.say nothing and Rosa too.
   ‘María stopped working without her saying anything and Rosa too.’

   a. Rosa también dejó de trabajar sin [María] decir nada. Strict reading √
   b. Rosa también dejó de trabajar sin [Rosa] decir nada. Sloppy Reading √

The NS allows for both strict and sloppy readings (11a) and (11b) respectively.

Bound variable and Coreferential readings under the focus particle test:
(12) Sólo María dejó de trabajar sin[Ø] firmar la autorización.
   ‘Only María stopped working without his/her authorizing signature.’

⁴De se-De-re distinction is not a reliable test for adjunct constructions (Landau 2013).
The statement in (12) can be denied in two different ways, showing that (12) is ambiguous depending on the interpretation of the NS:

a. ✓ No, Daniela also stopped working without her signed authorization.
   ✓ Daniela (λx(x stopped working without x’s signed authorization)). \(\rightarrow\) ✓BVA

b. ✓ No, Ana (María’s colleague) also stopped working without Pedro’s signed authorization. (In a context where Pedro was the only person that could sign the authorization).
   ✓ Ana ((λy(y stopped working without his authorization)). \(\rightarrow\) ✓Coreference

The NS allows for both BV (12a) and coreferential readings (12b) respectively.

- Since the null subject of *sin-infinitives* exhibits properties of NOC, we can conclude that this referentially free silent subject is *pro*.

Let us move to *Al-infinitives*, where the evidence will point to PRO.

**Obligatory c-command:**

(13) [El papá de Juan] sería feliz [al [Ø]i/*k dejar la casa].
   The dad of Juan be-COND happy [in-the [Ø]i/*k to.leave the house
   ‘Juan’s dad would be happy once he left the house.’

The NS needs to be c-commanded by its antecedent.

**Local antecedent:**

(14) Juan le dará un pc (a Pedro) [al [Ø]i/*k terminar los estudios].
   Juan CLIT.2p will.give a laptop in.the to.finish the studies
   ‘Juan will give him a laptop once he finished studying.’

The NS must be bound by a local antecedent.

**Only sloppy readings under ellipsis:**

(15) Juan sería feliz [al [Ø]i/*k dejar la casa] y María también.
   Juan be-COND happy [in-the [Ø]i/*k to.leave the house and María also
   ‘Juan would be happy when leaving the house and María too.’

a. María también sería feliz al [María] dejar la casa. Sloppy Reading ✓
b. María también sería feliz al [Juan] dejar la casa. Strict reading X

This silent subject only allows for sloppy readings under ellipsis.

**Only bound variable reading under the focus particle test:**

(16) Sólo Lea, se cayó al [Ø]i subir al tren
   ‘Lea fell when she was taking the train’

a. ✓ No, Karla also fell when she herself was taking the train.
   ✓ Karla (λx(x fell when x was taking the train)) \(\rightarrow\) ✓BVA
b. * No, Karla also fell when Lea was taking the train.
   * Karla (λx(x cheated for her to win)) (her= Léa)) \(\rightarrow\) *Coreference

The NS only yields the reading in (16a) where it is interpreted as a BV\(^6\).

- The silent subject of *Al-infinitives* exhibits properties of OC, as expected for non-finite controlled clauses. We take this to show that its null subject is interpreted as PRO.

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\(^5\) For the distinction of OC and NOC PRO (see Landau 2013). Following Horstein (1999) I will take NOC to be *pro.*

\(^6\) This finding is expected for OC PRO (See Landau (2013) and Baltin (2015)).
Let us turn now to *para-infinitives* where we find a referentially dependent null subject (by hypothesis PRO\(^7\)), alternating this time, with a controlled overt pronoun. We apply the three tests to both overt\(^8\) (A- examples)) and null subjects (B-examples).

**Obligatory c-command:**

(17) A. [El hermano de Juan] se fue [para [él] \(v^k\) estar feliz].
   Juan’s brother left for he/[e] to be happy
   ‘Juan’s brother left (in order for him) to be happy.’

B. [El hermano de Juan] se fue [para [\(\emptyset\)] \(v^k\) estar feliz].

**Local antecedent:**

(18) A. Pedro sabe [que Juan] se fue [para [él] \(v^k\) estar feliz]].
   Pedro knows that Juan left for he/[e] to be happy
   ‘Pedro Knows that Juan left (in order for him) to be happy.’

B. Pedro sabe [que Juan se fue [para [\(\emptyset\)] \(v^k\) estar feliz]].

**Both overt &null pronouns: only sloppy readings under ellipsis**

(19) A. Juan se fue [para [él] \(v^k\) estar feliz] y María también.
   Juan left for he/[e] to be happy and Maria did too
   ‘Juan left in order to be happy and Maria did too.’

B. Juan se fue [para [\(\emptyset\)] \(v^k\) estar feliz] y María también.

(20) a. ‘María también se fue [ella] para ser feliz.’ Sloppy Reading √

b. ‘María también se fue [Juan] para ser feliz’. Strict Reading X

**Overt pronoun: both BV and Coreferential readings under the Focus particle test**

(21) Sólo María hizo trampa para [ella] ganar el primer lugar.
   ‘Only María cheated in order for herself to win the first place’.

The statement in (21) can be denied in two different ways, showing that (21) is ambiguous depending on the interpretation of the OVERT pronoun.

a. ✔No, Daniela (María’s best friend) also cheated in order for herself to win.
   ✔Daniela (\(λy(y\) cheated for y to win)) \(→ \) ✔BVA

b. ✔No, Rosetta (María’s mother) also cheated in order for María to win.
   ✔Rosetta (\(λy(y\) cheated for her to win)) (her= María) \(→ \) ✔Coreference

**Null pronoun: Only BV reading under the focus particle test**

(22) Sólo María, hizo trampa para [\(\emptyset\)], ganar el primer lugar.
   ‘Only María cheated in order for herself to win the first place’.

a. ✔No Daniela (María’s best friend) also cheated in order for herself to win.
   ✔Daniela (\(λy(y\) cheated for y to win)) \(→ \) ✔BVA

Two Surprising findings:

➢ The **NS** of a *para* infinitive must be locally c-commanded by its antecedent, yields only sloppy readings under the ellipsis test and only BV reading under the focus particle test., thus patterning like PRO (an obligatory controlled null subject.

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\(^7\) Here I use PRO in purely descriptive terms (e.g. a lexical element without phonological features). Note that the nature of empty categories is still under debate in no-agreement configurations in Spanish. Contexts where [e] is supposed to be a trace of movement, it can behave as pro (see Suñer and Yépez (1988), Campos (1991), García-Mayo (1992:17).

\(^8\) Importantly, para-infinitives license only overt pronouns, but not overt DPs such as *Jose, él mismo, su hijo*, among others.
The OVERT subject of a \textit{para} infinitive must be locally c-commanded by its antecedent, yields only sloppy readings under the ellipsis test -- thus patterning like an \textit{overt} PRO (an \textit{obligatory controlled overt pronoun}). Crucially, however, overt PRO yields both coreference and BV readings under the focus particle test -- unlike null PRO!

These distributional and interpretational findings are unexpected.
- First, para-infinitives violate both the ban on overt (nominative) subjects (1) and on overt controllees (2) in infinitives.
- Second, we have two mysterious correlated \textit{asymmetries} to solve:

\textbf{(23) Overt vs. Covert PRO paradox}
\begin{itemize}
\item a. The standard tests for pronominal interpretation -- that is, the ellipsis & focus particles tests -- yield conflicting results for overt PRO - but not for null PRO. Why?
\item b. Null PRO and OVERT PRO yield conflicting results with respect to the focus particle test -- but not under the ellipsis test. Why?
\end{itemize}

The results of the tests are summarized in (24).

\textbf{OC vs. NOC Results}

\textbf{(24) Distribution of NS and Overt subject}

<table>
<thead>
<tr>
<th>Test</th>
<th>\textit{Sin}-infinitives</th>
<th>\textit{Al}-infinitives</th>
<th>\textit{Para}-infinitives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Null subject</td>
<td>Null subject</td>
<td>Null subject</td>
</tr>
<tr>
<td>Obligatory c-command</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Long distance antecedent</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Sloppy reading under ellipsis</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Strict reading under ellipsis</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Coreference reading under the focus particle test</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>BV reading under the focus particle test</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

\textbf{Recapitulating}

- The null subject of \textit{sin-infinitives} exhibits systematic properties of NOC, which we characterize as \textit{pro}.
- The null subject of both \textit{al-infinitives} and \textit{para-infinitives} exhibits systematic properties of OC --what is characterized as PRO.
- While the Overt subject of \textit{para-infinitives} -- Overt PRO-- displays nearly -but not all the properties of PRO.

The distribution and the interpretation of the overt and non-overt subjects of CS non-finite constructions are summarized in (25).

\textbf{(25) Distribution and interpretation of overt and non-overt subjects.}

<table>
<thead>
<tr>
<th>Distribution</th>
<th>\textit{Sin}-infinitives</th>
<th>\textit{Al}-infinitives</th>
<th>\textit{Para}-infinitives</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP</td>
<td>overt</td>
<td>covert</td>
<td>overt</td>
</tr>
<tr>
<td>pro</td>
<td>DP</td>
<td>PRO</td>
<td>Overt PRO</td>
</tr>
<tr>
<td>Interpretation</td>
<td>Referentially free</td>
<td>Referentially free</td>
<td>Referentially dependent</td>
</tr>
<tr>
<td></td>
<td>Referentially free</td>
<td>Referentially dependent</td>
<td>Referentially dependent</td>
</tr>
<tr>
<td></td>
<td>Referentially dependent</td>
<td>Referentially dependent</td>
<td>Referentially dependent</td>
</tr>
</tbody>
</table>
3. Deriving NS of sin-infinitives and para-infinitives

I adopt Duguine’s analysis of pro-drop where null subjects are analyzed not in terms of pro, but DP ellipsis (i.e. deletion of phonological material). I will show that this analysis can be extended to sin-infinitives (where we have identified a referentially free (pro-type) NS).

Duguine (2013):
- A null argument can yield not only pronominal, but also anaphoric readings. → This cannot be explained by pro, but with DP ellipsis.
- Posits an identity Condition (DP-Parallelism) on DP ellipsis given in (26).

(26) DP-Parallelism (adapted from NP-Parallelism (Fox 2000: 117))

DPs in the elided constituent and its antecedent must either:
 o have the same referential value (Referential Parallelism), or
 o be bound in identical dependencies (Structural Parallelism).

Prediction:
➢ Since we have found a referentially free null subject (pro) in sin-infinitives, we expect to extend automatically the DP-ellipsis analysis to this NS. The DP-Parallelism explains the availability of both strict readings (arising via the Referential Condition) and sloppy readings (arising via the Structural Condition).

DP-ellipsis in Sin-infinitives (the case of pro).
We expect that the ambiguity that we have found is explained via the Parallelism Conditions, thus reducing pro to an elided DP.

(27) A. María dejó de trabajar [sin [su jefe] decirle nada (a ella)].
    ‘María stopped working without her boss saying nothing to her.’
B. Y Rosa también dejó de trabajar [sin [Ø] decirle nada (a ella)].
    ‘And Rosa also stopped working without (him) saying nothing to her.’

• Strict reading: Referential Parallelism
(28) A. María dejó de trabajar [sin [su jefe] decirle nada (a ella)].
    B. Y Rosa también dejó de trabajar [sin [su jefe] decirle nada (a ella)].

Identical referential values
Since the DP sujefe refers to María in both (28A) and (28B).
→ This satisfies Referential Parallelism and the strict reading is automatically generated.

• Sloppy reading: Structural Parallelism
(29) A. María dejó de trabajar [sin [su jefe] decirle nada (a ella)].
    B. Y Rosa también dejó de trabajar [sin [su jefe] decirle nada (a ella)].

Identical structural dependencies
Since the possessive pronoun su is locally bound by its correspondent antecedent in both (29A) and (29B).
→ This satisfies Structural Parallelism and the sloppy reading is automatically generated.

➢ The NS of sin-infinitives is not pro, but an elided DP.
We don’t need to postulate primitives like pro in sin-infinitives since the NS we can find here is an elided DP.

Let’s turn now to the NS of para-infinitives, the case of PRO.
We repeat in (30) our generalizations and the resulting paradox (31).
(30) Properties of Null PRO vs. Overt PRO.

<table>
<thead>
<tr>
<th>Test</th>
<th>Overt PRO</th>
<th>PRO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sloppy reading under ellipsis</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Strict reading under ellipsis</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Coreference reading under the focus particle test</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Bound variable reading under the focus particle test</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

(31) Overt vs. Covert PRO paradox:

a. The standard tests for pronominal interpretation – that is, the ellipsis & focus particles tests -- yield conflicting results for overt PRO - but not for null PRO. Why?
b. Null PRO and OVERT PRO yield conflicting results with respect to the focus particle test -- but not under the ellipsis test. Why?

- So how do we reconcile our contradictory findings and solve these paradoxes?

Consider the following examples where lexical the anaphor ‘himself’ in English or ‘se’ in French allow for ambiguous interpretations:

Sportiche (2014) (based on a remark due to M. Prinzhorn about German):

       b. Seul Pierre se rase.

(31a) and (31b) are ambiguous since can be denied in 2 ways:

(33) a. No, I shave myself too.
       b. Non, moi aussi je me rase.
       → VP property: λx. x shave x

(34) a. No, I shave him too.
       b. Non, moi aussi je le rase.
       → VP property: λx. x shave y with y = Pierre

Sportiche’s footnote:
"That the second one [coreferential reading ((33))] is available is surprising as most people necessarily treat such reflexive as semantically bound, that is as bound variables, as shown by what happens in VP ellipsis in English or in French viz. John shaved himself and Bill did too, *shave John'."

Our findings with Overt PRO tell us that is not a surprising state of affairs, but rather appears to be a property more generally of OVERT Anaphora: lexical anaphors & Overt PRO.

We take the above asymmetries to reflect the following generalizations:

(35) The Anaphor generalizations:

i. Both null and overt anaphors need to be syntactically bound.
ii. Overt anaphors can be semantically bound; null anaphors must be semantically bound.

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9 Recent work by Bruening (2019) confirms similar effects in English.
These 2 generalizations straightforwardly account for our paradoxes:

(31b) Null PRO and OVERT PRO yield conflicting results with respect to the focus particle test -- but not under the ellipsis test. Why?

Focus particle test: PRO MUST be semantically bound

(36) Sólo María hizo trampa para [Ø] ganar el primer lugar.
   ‘Only María cheated in order for herself to win the first place’.
   ✓Daniela (λy(y cheated for y to win)) → ✓BVA
   *Rosetta (λy(y cheated for her to win)) (her= María)) → *Coreference

Focus particle test: Overt PRO CAN be semantically bound

(37) Sólo María hizo trampa para [ella]i/*j ganar el primer lugar.
   ‘Only María cheated in order for herself to win the first place’.
   a. Daniela (λy(y cheated for y to win)) → ✓BVA
   b. Rosetta (λy(y cheated for her to win)) (her= María)) → ✓Coreference

(31a) The standard tests for pronominal interpretation -- that is, the ellipsis & focus particles tests -- yield conflicting results for overt PRO - but not for null PRO. Why?

Focus particle test: Overt & Null PRO MUST be syntactically bound

(38) Sólo María hizo trampa para PROi/*j i/*j ella ganar el primer lugar

Ellipsis test: Overt & Null PRO MUST be syntactically bound

(39) A. Juan se fue para [él]i/*j estar feliz y María también.
    B. Juan se fue para [Ø]i/*j estar feliz y María también.
    ‘Juan left in order to be happy and Maria did too.’
    a. María left in order for [her]k to be happy. Sloppy Reading √

Let’s spell out the elided conjunct in (39), as shown in (40).

(40) a. Juan se fue para [él]i/*j estar feliz y María también se fue para [ella]i/*i/*j estar feliz √

Why is only the sloppy interpretation in (40a)) acceptable? Because in (40b) the overt pronoun él in the second conjunct violates the syntactic requirement on binding that hold of anaphors, whether they are overt or null.

One last question: How do we generalize the DP ellipsis to controlled null subjects in para-infinitives? By deriving the null subject via ellipsis of overt PRO? (e.g., María también se fue para [ella]i/*i/*j estar feliz).

Open questions:

- Why do para but NOT al-infinitives allow overt PRO?
- Why do sin but neither para or al allow referentially free subjects?
4. Conclusions for NS *Sin*-infinitives and *Para*-infinitives, and for covert vs. overt anaphora/PRO:

- **Sin-infinitives** allow overt DPs and covert/elided DPs. Strict readings under ellipsis arise via Referential Parallelism, sloppy readings arise via Structural Parallelism.

- **Para-infinitives** license both PRO and Overt PRO subjects. While the former can only be interpreted as a BV, the latter can be interpreted either as a BV or coreferential.

(41) **Overt vs. Covert PRO paradox:**
   a. The standard tests for pronominal interpretation – that is, the ellipsis & focus particles tests -- yield conflicting results for overt PRO - but not for null PRO. Why?
   b. Null PRO and OVERT PRO yield conflicting results with respect to the focus particle test -- but not under the ellipsis test. Why?

(42) **The Anaphor generalizations:**
   i. Both null and overt anaphors need to be syntactically bound.
   ii. Overt anaphors can be semantically bound; null anaphors must be semantically bound.

SELECTED REFERENCES


