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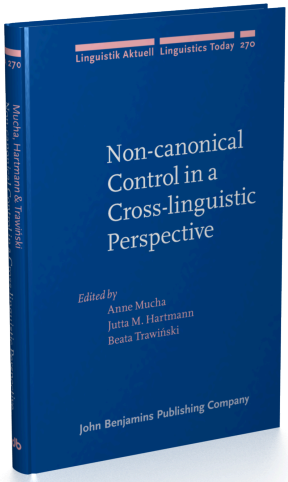

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The (null) subject of adjunct infinitives in spoken Spanish

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In this paper, I present a corpus study of adjunct infinitives in spoken Spanish, investigating null and overt subjects with respect to their control properties. I provide quantitative as well as qualitative data which show that (i) some instances of (null) subjects in adjunct infinitives do not easily fall into a division of predicative vs. logophoric control (Williams 1992), but that topicality is a relevant factor as well (Landau 2013, 2019), and (ii) control in spoken Spanish adjunct infinitives is a scalar phenomenon, being located at the syntax-pragmatics interface.

1. Introduction

Adjunct infinitives have raised interest in the literature on control because of their hybrid status with respect to Obligatory and Nonobligatory Control (cf. Williams 1992; Landau 2013; Green 2019). In the linguistic literature on Spanish, adjunct infinitives have been a major object of study, also because of their particular property of licensing overt, nominative subjects (Hernanz 1999; Piera 1987; Mensching 2000; Pöll 2007; Vanderschueren 2013; Herbeck 2015a; b; among others). It has been argued that subjects in Spanish adjunct infinitives have some properties of *pro*, sanctioned by abstract AGR on T (Rigau 1995; Torrego 1998). This raises the question whether the null subject in these configurations can have properties comparable to *pro* in finite clauses.

In this paper, I investigate this question by means of spoken corpus data from the PRESEEA (2014–) Madrid sample and CORPES XXI (RAE; subcorpus Spain).[1] I analyze the subject of infinitives introduced by the prepositions *al* 'when', *antes de* 'before', *después de* 'after', *para* 'for', and *sin* 'without' with respect to (i) phonetic re-

1. All English glosses, translations and emphasis that appear with corpus examples from PRESEEA (2014–) and CORPES XXI (RAE) in this paper have been added by myself.

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alization, (ii) local vs. non-local control, and (iii) [±human]. The data indicate that control into adjunct infinitives is not binary, but it quantitatively has a scalar basis in that local subject control is the preferred option, but several other strategies exist to a lesser degree. This is due to the fact that control into adjunct infinitives depends on a variety of factors (see Landau 2013; Green 2019), such as the adjunction site of the infinitive, the type of preposition, and the type of nonfinite verb. I furthermore provide evidence that non-local control in spoken Spanish cannot be reduced to logophoricity, but topicality has to be taken into account as well (Kawasaki 1993; Landau 2013, 2019).

Overt subjects in Spanish adjunct infinitives will be shown to have opposing properties to null subjects so that they can be considered the result of an 'anti-logophoricity' and, possibly, 'anti-topicality' effect.

This paper is structured as follows: first, I outline the theoretic background with respect to adjunct control in Spanish and discuss some unresolved issues. Then I present the corpus study of adjunct infinitives in spoken Spanish. Thereafter, I outline the theoretic implications of the results and present an analysis that does not rely on the PRO/*pro* distinction but situates adjunct control at the syntax-pragmatics interface, where various preference scales operate. Lastly, I discuss some properties of different prepositional infinitives and offer some tentative solutions.

2. Adjunct control between predication and logophoricity

Control into adjunct infinitives has been much discussed, also because of its hybrid nature between Obligatory and Nonobligatory Control (see Williams 1992; Landau 2000, 2013, 2019; Green 2019) and its susceptibility to pragmatic factors. Hornstein (1999) argues that adjunct control involves obligatory subject control except for rationale clauses:

(1) John$_i$ saw Mary$_j$ without PRO$_{i/*j}$ leaving the room. (Hornstein 1999: 76)

However, Williams (1992) observes that above all initial adjuncts sanction NOC, where the antecedent of the null subject must be the "logophoric centre" (in these sense of Sells 1987):

(2) a. Having just arrived in town, the main hotel seemed to Bill to be the best place to stay.
b. *Having just arrived in town, the main hotel collapsed on Bill.
(Williams 1992: 299)

Kawasaki (1993) and Landau (2013: 251) show that topicality is a further factor for control into adjuncts, explaining that definite DPs make more suitable controllers than indefinite ones:

(3) a. [After PRO_i collecting some money], a bank account was opened by the $landlord_i$.
b. *[After PRO_i collecting some money], a bank account was opened by a $businessman_i$. (Landau 2013: 251)

The following examples from Hernanz (1999: 2221 [adapted and glossed]) indicate that topicalization might also influence controller choice in Spanish:

(4) a. ***Los estudiantes***$_i$ increparon a la profesora después de $Ø_i$
the students rebuked ACC the teacher after of
entrar en clase.
enter.INF in class
b. ***A la profesora***$_j$, después de $Ø_j$ entrar en clase, los estudiantes
ACC the teacher after of enter.INF in class the students
la_j increparon.
her rebuked

In (4b), the topicalized object preferably controls the null subjects of the fronted adjunct infinitive.

Another restriction on NOC into adjunct infinitives that has been postulated is the [+human] requirement on the controller (cf. Landau 2013 and references), which would naturally follow either because of the arb interpretation or as a result of logophoric identification, given that only humans can be perspectival centers (cf. Landau 2013). Null subjects of adjunct infinitives could thus only be [–human] if they are obligatorily controlled by means of predication (cf. Williams 1992; Landau 2013).

However, when looking at spoken Spanish, counterevidence to the [+human] requirement on non-locally controlled null subjects can be found:[2]

(5) […] en Madrid la policía yo creo que sí que trabaja bien // para
in **Madrid**$_i$ the police I think that yes that work.3SG well for
ser una ciudad / grande / donde tienen // más problemas / que
$Ø_i$ be.INF a city big where have.3PL more problems than
aquí […] (CORPES XXI, PRESEGAL)
here
'[…] In Madrid, I think that the Police works well, taking into account that it is a big city, where they have more problems than here […]'

In this example, the null subject of *para ser una ciudad grande* '[for] being a big city' cannot be identified via local control because the controller *Madrid* is embedded

2. In the transcriptions, "/" stands for short pauses, "//" for pauses, and angular brackets indicate the presence of comments inside the transcriptions, such as <alargamiento> 'lengthening' (cf. PRESEEA 2008). I add "[…]" at the beginning and/or end of the citation of a corpus example to indicate that the cited passage is part of a wider context in the corpus.

inside the PP *en Madrid* 'in Madrid' and, thus, it does not c-command the null subject. Logophoric control is ruled out as well given the [–human] nature of the null subject, so that the question is what mechanism determines control in these cases. In fact, if topichood is a relevant factor for the identification of null subjects in NOC contexts (cf. Landau 2013), and if [+human] is not a strict requirement for topichood, examples like (5) would indicate that topic identification of null subjects also exists in adjunct infinitives.

3. The (null) subject of Spanish adjunct infinitives – PRO or *pro*?

One property of Spanish prepositional infinitives that has been observed in the literature (cf. Hernanz 1999; Mensching 2000) is the possibility of having overt nominative subjects:

(6) Después de actuar **Caballé**, cantó Carreras.
after of perform.INF Caballé, sang.3SG Carreras.
'After Caballé sang, Carreras performed.' (Rigau 1995: 280)

Overt subjects in infinitives underlie several restrictions, such as the preferred postverbal position. Furthermore, these subjects can be co-referent with a matrix antecedent (see (7)), or they can have disjoint reference (see (6); Hernanz 1999; Pérez Vázquez 2007):

(7) De tener yo dinero, me compraría una casa.
of have.INF I money me would-buy.1SG a house
'If I had money, I would by a house.'
(Hernanz 1999: 2265 [translations added])

Sundaresan (2014) and McFadden and Sundaresan (2018) have recently argued that Spanish adjunct infinitives represent a configuration in which [+R] *overt* subjects are licensed where a corresponding null subject is an instance of OC PRO. The authors build their evidence on obligatory co-reference, sloppy readings under ellipsis and *de se* readings. The first property is demonstrated by the following examples:

(8) [Al mostrar $EC_{i/*j}$ los primeros síntomas de la gripe], $Carlos_i$ se vacunó.
'Showing the first symptoms of flu, Carlos got vaccinated.'
(McFadden & Sundaresan 2018: 472)

(9) [Al mostrar María los primeros síntomas de la gripe], Carlos se vacunó.
'(With) María showing the first symptoms of flu, Carlos got vaccinated.'
(McFadden & Sundaresan 2018: 472)

Thus, overt [+R] subjects are licensed in contexts that do not sanction [+R] null subjects, i.e. small *pro*. The authors formulate the generalization that, in a consistent

pro-drop language with subject-verb-agreement like Spanish, *pro*-drop is not sanctioned in the subject position of a nonfinite control clause, if "the structural conditions for OC are met" (McFadden & Sundaresan 2018: 509).

However, one problem is that the null subject in the Spanish personal infinitive has been argued to have *pro*-like properties, sanctioned by abstract AGR (cf. Rigau 1995; Torrego 1998). Rigau (1995) offers the following example, in which the null subject of the adjunct is not co-referent with the matrix subject:

(10) Al desmayarte, empezaron a chillar.
in-the faint.INF-yourself (they)-began to shout.INF
'When you fainted, they began to shout.' (Rigau 1995: 286)

Even though McFadden and Sundaresan (2018: fn. 8) acknowledge this problem and link it to the reflexive clitic on the nonfinite verb, the following problems arise: (i) it would have to be explained why the reflexive clitic is not possible with the following subject infinitive (see Rigau 1995; Example (11) from Hernanz 1999: 2267):[3]

(11) *Fue penoso desmayarte en aquel lugar.
was.3SG sad faint.INF-REFL.2SG in that place
'It was sad to faint in that place'.

A second problem is that non-coreference (or non-control) of a null subject can also be found without a reflexive clitic on the nonfinite verb in spoken Spanish:

(12) y al sedarlo después ya estaba como dormido
and at-the sedate.INF-him after already was.3SG like sleeping
'and when they sedated him, he was already like sleeping afterwards'
(CORPES XXI, PRESEGAL)

Here, we are dealing with preposed adjunct infinitives introduced by *al* 'when/since', similarly to McFadden & Sundaresan's (2018) example in (8). In principle, we would expect the same referential possibilities of the null subject. However, OC is not enforced in (10) / (12).[4] Thus, if OC obtains as soon as the structural con-

3. As an anonymous reviewer points out, it could be argued that subject infinitives are more integrated into the structure than (some) adjunct infinitives. I will argue in Section 6.3 that the degree of integration of adjunct infinitives plays a crucial role for the identification of a null subject. In McFadden & Sundaresan's (2018) approach, it could thus be argued that in certain (non-integrated) adjuncts, the conditions for OC are not met and, thus, *pro* is licit.

4. As discussed in fn. 3, one could potentially argue that the adjunct infinitives in (10) and (12) are less integrated into the structure than the infinitive in (8) / (9), as an anonymous reviewer points out. However, in all of these cases, we are dealing with preposed *al*-infinitives so that it would have to be explained where the differences with respect to integration stem from.

ditions are met, it would have to be determined why OC is blocked in (10) / (12), but not in (8).

Note furthermore that similar examples to the ones discussed by McFadden and Sundaresan (2018) show properties different from OC or NOC PRO. Already Fernández (1987) observes that *al*-infinitives are possible with weather verbs:

(13) Al llover entra agua.
'When it rains, water enters.' (Fernández 1987: 128)

Here, the null quasi-argument is not controlled. Thus, there are null subjects in Spanish adjunct infinitives which are neither OC nor NOC PRO (see also Paz 2019 for discussion).

4. A corpus study of adjunct infinitives in spoken Spanish

To get a better understanding of null subjects in Spanish adjunct infinitives, a corpus study was conducted, examining the locality of the control relationship and the nature of the controller. First, I describe the data that have been examined. Then I turn to the main points of methodology. After that, I present and discuss the results.

4.1 The data

I first made a study of prepositional infinitives in the Madrid sample of PRESEEA (2014–). In order to obtain more data points, I carried out a follow up study of materials from the oral part of CORPES XXI (RAE; subcorpus Spain). Both corpora involve data from spoken Spanish.

I examined spoken data partly because one factor that has been claimed to influence controller choice is topicality and, thus, one question at stake was whether controller choice could be influenced by left-peripheral operations like topicalization, which are particularly frequent in spoken language.

I investigated adjunct infinitives introduced by 5 prepositions: *al* 'at-the', *antes de* 'before', *después de* 'after', *para* 'for' and *sin* 'without'. Infinitives introduced by *al* can either have a temporal or a causal meaning (Galán Rodríguez 1999; García Fernández 1999; examples from Hernanz 1999: 2307 [translations added]):

(14) Al salir del teatro, nos atracaron.
at-the leave.INF of-the theatre, us robbed.3PL
'When we came out of the theatre, we were robbed.'

(15) Al ser tan alta y desgarbada, los chicos se ríen de ella.
at-the be.INF so tall and ungainly the kids REFL laugh.3PL of her
'As she is so tall and ungainly, the kids make fun of her.'

Also *para*-infinitives do not form a semantically uniform category. On one hand, they can express the purpose, reason or intention for the event of the matrix clause (cf. Hernanz 1999: 2313):

(16) Robó una pistola para atracar un banco. (*ibid.*)
'(S)he stole a gun in order to rob a bank.'

On the other hand, *para*-infinitives can also appear without a purpose interpretation. As Hernanz (1999) and Galán Rodríguez (1999) observe, they can obtain a consecutive, concessive or conditional meaning. In these cases, the relation between the matrix and nonfinite clause is less strict and marked by a pause (cf. Hernanz 1999: 2315). The following demonstrates the concessive reading:

(17) Sabe mucha gramática para ser médico.
know.3SG much grammar for be.INF doctor
'Although he is a doctor, he knows a lot about grammar.'
(Hernanz 1999: 2315, citing Sánchez López 1995 [translations added])

When examining spoken data, the semantic categorization of these prepositions is sometimes ambiguous. For this reason, these fine-grained semantic differences could not be taken into account for the quantitative study. Some suggestions with respect to the influence of the different semantics of the relevant configurations will be made on a non-quantitative basis in Section 6.3.

Within the study of the Madrid sample of PRESSEEA (2014–), in total 340 adjunct infinitives introduced either by the preposition *al* 'at-the', *antes de* 'before', *después de* 'after', *para* 'for', or *sin* 'without' were analyzed. The sentences were extracted by means of word form searches of the relevant prepositions and subsequently classified with respect to their complement. *Antes de* 'before' and *después de* 'after' were classified together as 'temporal prepositions':

Table 1. Extracted prepositional infinitives from PRESEEA (2014–) Madrid

Preposition	Number of prep + infinitive
al ('at-the'; 'when')	42
temporal (*antes de* 'before' + *después de* 'after')	25
para ('for / in order to')	234
sin ('without')	39
Total	**340**

In order to obtain a higher number of adjunct infinitives, I carried out a follow-up study of the oral part of the CORPES XXI (RAE) database. The subcorpus was restricted to oral texts – specifically, to interviews and debates – from Spain from the years 2007–2016. The sentences were extracted via the CORPES XXI search mask,

indicating the word forms of the relevant prepositions plus an interval (+2 to the right) containing a nonfinite verb. After extraction of 2587 sentences, repetitions, false starts, and prepositional infinitives that were complements of verbs (e.g. *servir para* 'be useful for') were manually excluded.

Table 2. Number of analyzed prepositional infinitives from CORPES XXI

Preposition	Number of analyzed prep + inf
al ('at-the'; 'when')	275
temporal *(antes / después)*	153
para ('for / in order to')	1664
sin ('without')	215
Total	**2307**

In total 2307 adjunct infinitives from CORPES XXI were analyzed with respect to the (control) properties of their (null) subjects. In the next section, I outline the classification criteria.

4.2 Annotating controller choice for quantitative analysis

Data annotation with respect to the choice and type of controller was done manually. Determining type of control was done in a simplified manner because annotation of performance data without accessing speaker intuitions could not consider the fine-grained control types proposed in the literature.

The first category is local vs. non-local control. Control was considered [local] if the controller is situated in the matrix clause as a realized subject or object and it potentially c-commands the null subject of the infinitive, i.e. the controller is not embedded inside an NP or PP. I also considered local control if the controller was an implicit argument of a matrix verb, but not if it was an implicit controller of an adjective or noun. In case of [local] controller choice, I distinguished [subject] and [non-subject] control, the last comprising (experiencer) dative, accusative and implicit controllers of verbs (including implicit Agents of *se*-passives):[5]

(18) [local] + [subj]:
$[(XP_{NOM})_i\ [V\ (XP)]\ [_{PP}\ ec_i\ V_{inf}]]$

(19) [local] + [non-subj]:
$[(XP)\ [V\ (XP_{ACC/DAT})_i]\ [_{PP}\ ec_i\ V_{inf}]]$

5. In this sense, [local] vs. [non-local] control, even though inspired by the OC vs. NOC distinction, is not fully equal to it. In some theories, object and implicit control into adjuncts is classified as NOC (see Landau 2019 for discussion), while here, it was considered [local] matrix control for classification purposes.

Also classified as [local] were those cases in which the matrix clause containing the antecedent was elliptical, but it could be reconstructed from preceding contexts, which is very frequent in spoken discourse:

(20) [local] (elliptical):
E: ¿un chalet por qué? //
I: para tener un perro / (PRESEEA, Madrid, M11_004)
E: 'Why a chalet?
I: To have a dog'

The main clause can straightforwardly be reconstructed as *Quiero un chalet* 'I want a chalet', so that it was analyzed as local control with an elliptical 1SG subject.

I considered an infinitive to be [non-local] control if (i) there is no potential matrix controller, (ii) there is a potential matrix antecedent but the (pragmatic) context makes it unsuitable, (iii) there was an implicit controller of a matrix adjective or noun, or (iv) if a matrix controller does not potentially c-command the infinitive. The difference between (i) and (ii) is demonstrated by the following examples:

(21) no potential controller: [V [$_{PP}$ *ec*$_{arb}$ V$_{inf}$]]
[…] es para comentarlo de o / de otra manera (CORPES XXI, PRESEGAL)
'… [this] is [just] to comment on it in another way'

(22) potential, but unsuitable controller:
[(XP$_i$) V]. [V XP$_j$ [$_{PP}$ *ec*$_{i/arb}$ V$_{inf}$]]
[…] nunca tuve un aterrizaje tan bueno / el tío se portó / o sea / bajó con tanta suavidad que al tocar el suelo no lo no noté […] (CORPES XXI, PRESEGAL)
'I've never had such a good landing … the guy did very well, that is, he went down so smoothly that when Ø$_j$ touching the ground, I$_i$ didn't notice it'

(23) no creo que Ø$_i$ vivan en esta zona / yo creo más bien que / al Ø$_x$ ser como el punto donde<alargamiento/> hay muchas conexiones de autobuses en Manuel Becerra // sí que Ø$_i$ se ven más por eso (PRESEEA, Madrid, M13_018)
'I don't think that they$_i$ live in this area. I rather think that, Ø$_x$ being the point where… there are a lot of bus connections, in Manuel Becerra… one can see them$_i$ more there because of that'

In (21), there is no potential antecedent in the matrix clause. In (22), it is the plane that touches the ground in the external world and not the speaker.[6] In (23), the null subject of the adjunct infinitive refers to a place and not to the human matrix null subject 'they'.

6. In (22), an anonymous reviewer asks whether an interpretation, in which the null subject of 'when touching the ground' is interpreted as the speaker, is possible. This way, local control could obtain. However, given that it is the plane that touches the ground in the external world, I considered it not to be control by the matrix subject representing the speaker for classification purposes.

A special case of a [non-local] null subject that appeared in the data were null expletives:

(24) pero al no haber clases […] (CORPES XXI, PRESEGAL)
but at-the not have.INF classes
'but given that there was no class […]'

Apart from the locality of control, the subject of the infinitive was annotated as [null] or [overt]. If control is local and the subject is overt, the result is an emphatic pronoun or a floating quantifier. If the infinitive is classified as [non-local], an overt subject is [+R].

In a last step, null as well as overt subjects were classified as [+human] or [–human]. Note that the category [+human] also included metonymic cases, such as *las empresas* 'the companies', standing for standing for the workers.

It must be noted that, in several cases, it was not possible to determine controller choice, not even by considering the wider context. Out of the 2307 adjunct infinitives in Table 2, 345 had to be excluded so that 1962 sentences were analyzed with respect to [±local], [±overt], and [±human].

In the next section, I present the quantitative results.

4.3 Results

First, in the Madrid sample of PRESEEA (2014–), local control of null subjects is by far the most frequent strategy (see Table 3):[7]

Table 3. Overt and null subjects with respect to locality of control in the PRESEEA (2014–) Madrid sample

Prep.	Null		Overt		% overt
	Local	Non-local	Local	Non-local	
al	21	12	1	4	13%
antes/después	13	8	0	4	16%
para	163	49	1	3	2%
sin	29	4	2	0	6%
all	**226 (76%)**	**73 (24%)**	**4 (27%)**	**11 (73%)**	**5%**

In the case of overt subjects, the tendency is the opposite, local control applying in 27% of the cases.[8] However, overt subjects are generally not frequent (15/314 = 5%

7. 26 doubt cases have been excluded from the analysis.

8. Applying Fisher's Exact Test in R (R Core Team 2018), the association between phonetic realization of the subject and [(non-)local] control results significant ($p < 0.001$).

in total). With respect to [±human], I only found 7 cases of [–human] non-local null subjects, all with *al*-infinitives, including 2 null expletives. The following are examples of a non-local [–human] controller (see also (5)):[9]

(25) el coche hizo un trompo y al hacer el trompo él
the car made a spin and at-the make.INF the spin he
salió por la parte de atrás (PRESEEA, Madrid, M11_004)
went-out through the part of back
'The car did a spin and when it did a spin, he was thrown out of the back.'

(26) [Context: *la casa* 'the apartment']
E: claro / también es más práctico
sure also be.3SG more practical.M
I: no lo sé
not it know.1SG
E: ¿no? / al ser más pequeña ¿no?
no at-the be.INF more small.F
'E: Sure, it is also more practical. I: I don't know. E: Not? Given that it is smaller.' (PRESEEA, Madrid, M23_034)

In (25), the null subject can co-refer with the NP *el coche* 'the car', which is not inside the matrix clause, but in the immediately preceding discourse. In (26), the null subject of *es más pequeña* is not controlled by the null subject of *es más práctico* given the gender mismatch between the two.

In Table 4, I present the main quantitative results of the follow-up study of adjunct infinitives in the CORPES XXI sample:

Table 4. Overt and null subjects with respect to locality of control in the CORPES XXI (RAE; subcorpus Spain) sample

Prep.	Null		Overt		% overt
	Local	Non-local	Local	Non-local	
al	160 **(76,19%)**	50 (23,81%)	2 (7,41%)	25 (92,59%)	27/237 **(11,39%)**
antes / después	109 (85,83%)	18 (14,17%)	1 (8,33%)	11 (91,67%)	12/139 (8,63%)
para	1097 (80,01%)	274 (19,99%)	17 **(60,71%)**	11 (39,29%)	28/1399 (2%)
sin	170 (91,40%)	16 (8,60%)	0 (0%)	1 (100%)	1/187 (0,53%)
all	1536 (81,10%)	358 (18,90%)	20 (29,41%)	48 (70,59%)	68/1962 **(3,47%)**

9. Similarly to Example (22), an anonymous reviewer asks whether (25) could be a case of local control, given that the human matrix subject is at the same time part of the car. While it is true that an OC reading would be available, a native speaker I consulted pointed out that an interpretation, in which the car is the null subject of the adjunct infinitive, is also possible, above all given the immediate repetition of the VP *hacer el trompo* with the non-human subject.

Generally, overt subject frequencies are low (68/1962 = 3,47%). As can be seen, infinitives introduced by *al* have the highest overt subject frequencies (11%), followed by temporal prepositions (9%). Infinitives introduced by *para* or *sin* have lower numbers of overt subjects. With respect to control of null subjects, they have a local antecedent in most of the cases (1536/1894 = 81%). Furthermore, non-local null subjects in contexts of a potential matrix controller are rare, most instances being either elliptical infinitives (as in (26)), or infinitives in contexts without a potential matrix antecedent. Overt subjects are more frequently non-controlled (48/68 = 70,59%),[10] even though *para*-infinitives are an exception (11/28 = 39% non-controlled overt subjects).

It is interesting that the prepositional infinitive sanctioning the highest number of overt subjects – *al*-infinitives – also has the highest frequency of non-local null subjects (24%), including 6 null expletives. In fact, 6 out of 7 null expletives of the sample appear with *al*-infinitives (the remaining one with *sin*). This points to a special status of this type of infinitive with respect to its subject position (see also Vanderschueren 2013: 239ff for discussion of the high frequency of overt subjects in Spanish *al*-infinitives).

Having a look at the position of local matrix antecedents (see Table 5), subject control is expectedly the predominant strategy (1365/1536 = 89%), even though non-subject control (comprising dative (experiencers), accusative and implicit controllers) is possible (see also Paz 2019 for object control):

Table 5. Subject vs. non-subject local control (COPRES XXI (RAE) sample)

Prep.	Subj	Non-subj	Total
al	139 (86,9%)	21 (13,1%)	160
antes/después	101 (92,7%)	8 (7,3%)	109
para	964 (87,9%)	133 (12,1%)	1097
sin	161 (94,7%)	9 (5,3%)	170
Total	**1365 (88,9%)**	**171 (11,1%)**	**1536**

Let us turn to [±human] null subjects in adjunct control (Table 6).

As can be seen, [–human] null subjects in non-local contexts are rare (14/358 = 3,91% in total). This indicates that logophoricity might play a role in NOC adjunct control. However, [–human]/[non-local] null subjects do exist, which means that logophoricity and PRO_{arb} cannot be the only mechanisms. Most non-local [–human] null subjects occur with *al*-infinitives (11/50 = 22%, 6 null expletives

10. Applying Pearson's chi-squared test in R, the association between [±null] and [±local] is significant: χ^2 (1) = 103.73; $p < 0.001$.

Table 6. Null subjects and [±human] in adjunct infinitives in the CORPES XXI (RAE) sample

Prep.	Local		Non-local	
	Human	Non-human	Human	Non-human
al	154 (96,25%)	6 (3,75%)	39 (78%)	11 (22%)
antes/después	107 (98,17%)	2 (1,83%)	18 (100%)	0 (0%)
para	1084 (98,81%)	13 (1,19%)	272 (99,27%)	2 (0,73%)
sin	163 (95,88%)	7 (4,12%)	15 (93,75%)	1 (6,25%)
Total	**1508 (98,18%)**	**28 (1,82%)**	**344 (96,09%)**	**14 (3,91%)**

included), which is the type of infinitive sanctioning also most non-local controllers and most overt subjects.

It is also interesting that, even though OC should in principle sanction [–human] antecedents (via predication), non-human controllers are also very rare in these contexts (28/1536 = 1,82%).

Turning to overt subjects, these were always [+human] in local contexts (= 20/20), which is expected, given that strong subject pronouns have a [+human] requirement in Romance *pro*-drop (e.g. Cardinaletti & Starke 1999).

In the case of non-local *overt* subjects, *al*-infinitives even sanction slightly more [–human] than [+human] subjects (see Table 7):

Table 7. Non-local overt subjects and [±human] in the CORPES XXI (RAE) sample

Prep.	Human	Non-human	Total
al	8 (32%)	**17 (68%)**	25
antes/después	5 (45,45%)	**6 (54,55%)**	11
para	7 (63,64%)	4 (36,36%)	11
sin	1 (100%)	0 (0%)	1
all	21 (43,75%)	27 (56,25%)	48

Overt subjects have higher percentage of [–human] (27/48 = 56%), if compared with non-local null subjects (14/358 = 3,91%; see Table 6).[11]

11. Applying Fisher's Exact Test, the association between [±null] and [±human] with non-local subjects results significant ($p < 0.001$).

4.4 Discussion

The results of the preceding section point to the following conclusions:

i. Adjunct control cannot uniformly be classified as OC subject control with any of the examined prepositions (see Tables 4 + 5).
ii. Null subjects are in their vast majority [+human] (see Table 6).
iii. However, the existence of non-local [–human] null subjects and null expletives in spoken Spanish indicates that adjunct control cannot be reduced to predication or logophoricity nor can the null subject uniformly be OC or NOC PRO (see also Paz 2019).
iv. Overt subjects are, as expected, preferably [non-local], even though *para*-infinitives are an exception, overt subjects being more frequently [local].

    While null subjects are in their vast majority [+human], non-local *overt* subjects are [–human] in 56,25% of the cases in the CORPES XXI sample (Table 7). In fact, also Vanderschueren (2013), in her study of overt subjects in Spanish adjunct infinitives, observes that overt subjects are more frequently "non-dynamic" (65,2%), including abstract and non-dynamic inanimate NPs, than "dynamic" (*ibid*. 263).
v. Within different types of prepositional infinitives, *al*-infinitives have the highest referential flexibility with respect to [(non-)local] and [(non-)human] controllers. At the same time, they have the highest number of overt subjects and 8 of the 9 null expletives found in the two examined samples occur with this preposition.

However, it needs to be taken into account that the results reflect the annotation of spoken data, which includes several (non-reconstructable) elliptical sentences. In fact, some prepositional infinitives with [non-local] control almost seem to have root-like characteristics (like (26)), which are arguably least integrated into the syntactic structure and, thus, their subject position is predicted to have the highest referential flexibility. Furthermore, given the analysis of performance data, fixed criteria for the classification had to be applied, so that a null subject was classified as [–human] if it was so in the external world, leading to potentially ambiguous cases as in (25). However, unambiguous [non-local]/[–human] null subjects occur in the data, as in (5), (23) and (26), which indicates that NOC cannot be reduced to arb or logophoricity.

In the next section, I discuss some non-quantitative data with respect to null and overt subjects in prepositional infinitives.

5. Adjunct control in spoken Spanish data – some observations

On a non-quantitative basis, I would like to stress two phenomena with adjunct control in spoken Spanish: (i) there are structures which indicate that 'topic' control, apart from predicative and logophoric control, exists (cf. Kawasaki 1993; Landau 2013, 2019 for the relevance of topicality for controller choice). This indicates that the null subject shares some properties with *pro*, which has been linked to topic continuity (cf. Frascarelli 2007; Holmberg et al. 2009). (ii) phi-*Agree* does not always strictly apply even in cases of [local] control so that it is semantico-pragmatic rather than morpho-syntactic.

With respect to (i), several configurations can be found in which the controller is topicalized before the fronted adjunct infinitive:

(27) […] entonces ella / después de estar allí n eeh nueve años mm
then she after of be.INF there n[ine] eeh nine years mm
se casó (CORPES XXI, PRESEGAL)
REFL got-married.3SG
'[…] so she… after being there for n…eeh nine years… [she] got married'

(28) es decir eh tú para trabajar en un sitio te piden experiencia //
is say.INF eh you for work.INF in a place you ask.3PL experience
'That is … [you] for [you] to work in some place, they ask you to have experience' (CORPES XXI, PRESEGAL)

As can be seen, the topicalized controller is nominative, independently of whether local control holds with the subject (27) or object (28).

What is interesting is that these topicalized 'controllers' are produced in some instances in which matrix control cannot be established:[12]

(29) […] yo / al ser de esa zona / eeh los fines de semana no
I at-the be.INF from this region eh the weekends not
había otro divertimento […] (CORPES XXI, PRESEGAL)
there-was other entertainment
'Me, being from this region, eh, there was no other form of entertainment on the weekends'

12. At first sight, one could think that these 'topicalized' nominal expressions are actually 'overt subjects' of the infinitive, as an anonymous reviewer points out. If they were true overt subjects, one would expect them to appear above all in contexts in which they trigger non-co-referent interpretations. However, in their majority, they are co-referent with a matrix antecedent (as in (27) / (28)) and, thus, they rather seem to be (clause-external) (hanging) topics, which do not agree in Case with the matrix DP. However, further investigation into the exact syntactic position of these DPs is necessary.

(30) […] mis padres al tener un bar // no es / no e / no tengo
my parents at-the have.INF a bar not is not i[s] not have.1SG
ese recuerdo de / de ir […] (CORPES XXI, PRESEGAL)
that memory of of go.INF
'[…] My parents, given that they have a bar, it's not … it's not … I don't have this memory of going […]'

Furthermore, in (30), it is difficult to argue that *mis padres* 'my parents' is the perspectival center. This indicates that topic-identification might be a mechanism apart from predication and logophoric control (see also Landau 2019).

Another observation is that (ii) control, even if established with a local antecedent, is of a non-strict nature in that phi-mismatches can be found:[13]

(31) […] siempre **se** ha mirado hacia atrás pensando que cualquier
always **REFL.3** has looked towards back thinking that any
tiempo pasado fue mejor / sin acordar**nos** de los
time past was better without remember.INF-**REFL.1PL** of the
muchísimos defectos que […] (CORPES XXI, RAE)
many defects that
'One has always looked back thinking that any past time was better, without remembering the many defects that […]'

In some examples, there was a structural phi-mismatch involving impersonal forms, as between impersonal *se* and personal 1PL in (31), or between impersonal 2SG and personal 1SG. This might be due to the well-known inclusive interpretation that ARB readings can have. This indicates that we are not dealing with phi-*Agree* in the syntactic sense, i.e. PRO does not acquire phi-features syntactically from the controller.

In the following example, the reflexive clitic on the infinitive is 3rd person *se*, which agrees with the preverbal 3PL topic antecedent and not with 1PL inflection:

(32) porque tiene esa frase famosa / de que **los seres humanos** no
because have.3SG this phrase famous of that the human beings not
tenemos raíces como los árboles sino piernas y pies para
have.1PL roots like the trees but legs and feet for
moverse de un sitio a otro (CORPES XXI, RAE)
move-INF-REFL.3 from one place to another
'because there is this famous phrase that, the human beings, we don't have roots like trees, but legs and feet to move from one place to another'

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13. An anonymous reviewer points to the possibility that examples like (31) involve production errors, in which the speaker has lost track of grammatical details. However, these configurations are produced by speakers and, furthermore, this type of phi-mismatch seems to show some systematic patterns (e.g. the context of impersonal forms).

In (32), *se* on the infinitive enters a referential dependency with the 3rd person preverbal *los seres humanos* and not structural *Agree* with the matrix 1PL T/Agr.

In the next section, I outline a tentative analysis of the observed patterns in Spanish adjunct infinitives.

6. Towards an analysis: Discourse linking via C and preference scales for control

6.1 The case of null subjects in adjunct infinitives

We have seen that local subject control is by far the most frequent strategy in adjunct infinitives. Furthermore, null subjects are predominantly [+human]. However, non-local (arbitrary and discourse-identified) or non-controlled null subjects and overt, [+R] subjects set adjunct infinitives apart from OC. Furthermore, the existence of [–human], non-local null subjects is problematic for an analysis in terms of logophoric NOC. Note, however, that the null subject in adjunct infinitives still has properties different from finite null subjects, such as the high preference for local control and the availability of ARB interpretations without the impersonal *se*-clitic.

In Herbeck (2015b), I argued that finite *pro* is just a case of 'control' of a minimal pronoun (in the sense of Kratzer 2009; Landau 2015) via C – specifically, speaker/addressee coordinates in Force (see Sigurðsson 2011) – which is mediated by AGR. OC is the consequence of a reduced CP layer – a FinP, which only hosts internal *self-* (in the vein of Bianchi 2003; Landau 2015), but not external speaker/addressee coordinates (see also Haegeman 2004). Thus, identification of null subjects is (discourse-)linking of a minimal pronoun via C in *pro*-drop as well as control:

(33) DP V $[_{\text{ForceP}}\ \Delta_{\pm\text{speaker}/\pm\text{addressee}}\ [_{\text{FinP}}\ \text{Fin}\ [_{\text{TP}}\ T_{[\varphi]}\ [_{\text{vP}}\ D_{[\varphi:\_]}\ \ldots$

(34) DP V $[_{\text{FinP}}\ \Delta_{\text{self}}\ \text{Fin}\ [_{\text{TP}}\ T_{[\varphi:\text{self}]}\ [_{\text{vP}}\ D_{[\varphi:\_]}\ \ldots$

In (34), *self*-coordinates obligatorily bind the minimal subject to a matrix antecedent. In (33), the D-subject acquires valued phi-features via agreement with T/AGR and is linked to *speaker/addressee* coordinates, referring either to the speaker, the addressee or a (topic) antecedent (as indicated by the dotted lines).

In NOC, fully 'free' reference seems to be impossible, but arbitrary reference, topic-linking patterns and null expletives are licit, even though local control is the highly preferred pattern. Thus, Spanish adjunct infinitives share the property of OC of not sanctioning [+R] AGR. With finite clauses, they share the property of sanctioning (external) speaker/addressee and topic coordinates in C:

(35) DP V [$_{\text{ForceP}}$ $\Delta_{\text{Øspeaker/Øaddressee}}$ [$_{\text{FinP}}$ Δ_{self} Fin [$_{\text{TP}}$ T [$_{\text{vP}}$ D …

In fact, also Pérez Vázquez (2007: 301) argues that Spanish infinitives with overt subjects can be anchored to an 'external logophoric centre' in the vein of Bianchi (2003).

However, 'control' via speaker/addressee coordinates cannot be mediated by AGR so that phi of the minimal D subject must be fully recovered from C, i.e. through discourse linking to an antecedent or by means of (speaker-inclusive or addressee-inclusive) arbitrary reference. This way, identification of the null subject is susceptible to various requirements at the syntax-pragmatics interface. Thus, it is only expected that control in NOC is the result of scalar preferences (see also Schulte's 2007: 133 "default control hierarchy" and Landau's 2019 "controller-worthiness scale").[14]

According to the results of Section 4.3, identification of the null subject of adjunct infinitives underlies the following (sub-)scales:

(36) local [subject > non-subject] > non-local [Agent/perspective-holder/topic > non-agent/non-perspective-holder/non-topic]

This scale is a natural consequence of economy in that local relations are preferred over non-local ones for (phonetically or structurally) smaller nominal forms (cf. Levinson 1987; Cardinaletti & Starke 1999).

Let us consider the high preference for [+human] antecedents, but not ban against [–human] ones: even though [+human] is a precondition for logophoric control, this might be a preference rather than a requirement for topic linking (cf. Landau 2013: 255, 2019). In Givón (1983), the concept of 'topicality' or 'topic continuity' is defined as scalar, being the result of an interaction between hierarchies, such as the scale of roles and animacy:

(37) Grammatical case role hierarchy:
SUBJECT > Direct Object > others (Givón 1983: 22)

(38) Semantic case role hierarchy:
Agent > Dat/Ben > Acc > others (Givón 1983: 22)

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14. Schulte's (2007: 133) hierarchy consists of four levels:

(i) Level 1: subject control: Level2: direct/indirect object control;
Level 3: prepositional object control; Level4: indefinite/pragmatic control

However, I do not consider subject, object and pragmatic control as operating on one scale. Rather, local vs. non-local control are on one scalar level and within these categories, there are further competing forms on a more deeply embedded level (see (36)).

Thus, subjects and human/animate/agent referents are preferred as far as topicality is concerned (cf. Givón 1983: 22). Note that a link between topic continuity and subordinate (control) infinitives is in fact suggested by Givón (1983: 24): he argues that subordinate non-finite clauses are often used as "subject/topic continuity devices".

In the investigated sample, [–human] null subjects in adjunct infinitives are rare and arise in very restricted scenarios: (i) there is no referential dependency, as in the case of null expletives. In fact, out of the few, non-local [–human] null subjects in the CORPES XXI sample – 14 – 7 are null expletives. In the PRESEEA (2014–) sample, 2 out of 7 non-local [–human] null subjects are expletives. In the remaining cases, there seem to be two strategies: (ii.a) there is a highly prominent [–human] antecedent, which is, furthermore, located in the immediately preceding context of the prepositional infinitive. In (25), the nonfinite *hacer el trompo* 'to spin' is an exact repetition of an immediately preceding finite clause containing the [–human] subject *el coche* 'the car'. In (26), the inanimate *la casa* is established as a topic in the preceding discourse, maintained continuous, and there is no other competing antecedent. Thus, it could be argued that high activation in discourse or topicality sanction [–human] controllers here (see also Landau 2019 for discussion).

However, it is unclear whether topicality can account for all cases. Apparently, (ii.b) [–human] null subjects also arise if the interpretation of the subject is strongly directed towards a non-agent by means of the semantics of the embedded infinitive. The following examples contain unaccusative or copular verbs, which together with the PP strongly disfavor [+human] subjects:

(39) [Context: *la casa* 'the house/flat']
y al ser en el casco histórico / […]
and at-the be.INF in the center historic
'and given that it is in the historic centre […]' (CORPES XXI, PRESEGAL)

(40) [Context: talking about a building]
y era para estar dos meses cerrado / […]
and was for be.INF two months closed
'and this was for [it] to be closed for two months […]'
(CORPES XXI, PRESEGAL)

In (39), the copular *ser* + PP triggers an interpretation in which a *permanent* place is evoked and, thus, a [–human] one. In (40), *estar dos meses cerrado* 'being closed for two months' semantically precludes a human subject. Thus, local control is barred by the semantics of verb + PP in these configurations.

Hence, the least favored option of control – non-human/agent + non-local – is possible (i) if the controller is topicalized to the extent that it is structurally made sufficiently prominent or (ii) if the options higher on the scale (local, +human) are

rendered pragmatically implausible, which can be triggered by non-agentive verbs and contexts, which ban human subjects. Thus, it is not the *structural* impossibility of local control alone which makes non-local identification via C possible.

6.2 The case of overt subjects in adjunct infinitives

The question remains how overt subjects are sanctioned in adjunct infinitives. It has been argued that [focus] is one trigger for subject licensing in Spanish control infinitives (e.g. Schulte 2007). In Herbeck (2015a; b), I argued that focus can have a (morpho-phonological) licensing function of (pronominal) subjects in Spanish, similarly to nominative Case in other languages. However, while this approach can be applied to emphatic pronouns, overt subjects in adjunct infinitives, even though they are preferably postverbal, are not necessarily focused (Pérez Vázquez 2007; Herbeck 2015b; Paz 2019; see also Vanderschueren 2013 for discussion). Thus, we must go beyond binary features, such as [±focus] or [±contrast], to account for overt subjects in Spanish adjunct infinitives.[15]

A first important observation is that 27 out of the 48 cases of non-local overt subjects in the CORPES XXI sample are [–human] (i.e. 56%). This is in opposition to null subjects, which have a very strong preference for [+human] (14/358 = 3,91% non-human). Furthermore, we have seen that null subjects preferably show local control, while overt subjects exhibit the opposite pattern.

I would like to argue that overt subjects in adjunct infinitives can be considered an anti-logophoricity and anti-topicality effect. We have seen that phonetically and/or structurally smaller forms are often treated as default forms operating on high levels of (continuity) scales. Overt, lexical DPs thus arise as a strategy of shifting the default interpretational strategy, in (36) (i.e. logophoric or topic control) to the non-default option.

Note that preference for 'minimal' forms does not only arise on the nominal but also on the clausal level. Wurmbrand (2001) argues that nonfinite clauses have different degrees of richness of functional structure, restructuring infinitives being the smallest forms (VP), while partial control infinitives have more structure (CP). In the same vein, it has been argued that null subjects in control are the smallest forms (they are minimal pronouns in the sense of Kratzer 2009), while clitics, weak pronouns, strong pronouns and lexical DPs are successively structurally larger (e.g. Cardinaletti & Starke 1999).

Let us thus assume that the following scales obtain:

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15. I refer the reader to Pérez Vazquez (2007) for discussion of contexts that make overt subjects possible.

(41) Ø (no subject) < $D_{[\varphi:\_]}$ (minimal subject) < $D_{[\varphi:+]}$ (full pronoun) < DP (full DP)

(42) *v*P (restructuring) < TP (raising) < FinP (OC) < $CP_{[\varphi:\_]}$ (NOC) < $CP_{[\varphi:+]}$ (full 'finite' clause)

Preference for smaller forms with co-reference and control derives from general (neo-Gricean) pragmatic principles (e.g. Horn 1984; Levinson 1987). If not only (41) but also (42) obtains, the most economical strategy is in fact *combining* a reduced nominal with a reduced clausal structure.

In the case of infinitives, we have minimization of both, the clausal and the nominal form as the default option. However, it is expected that maximization of the nominal form is possible as a marked strategy, if the context requires it, which happens in the case of emphatic pronouns and full DPs.

The reason why this phenomenon is relatively rare might lie in the natural opposition between a minimalized and maximalized form, which is in need of a trigger, such as [focus] or the requirement of shifting away from the default strategy of logophoric or topic-linking.

So far, the approach leaves open the structural licensing mechanism of overt subjects. While a full discussion is beyond the scope of this paper (see Rigau 1995; Mensching 2000; Pérez Vázquez 2007; Herbeck 2015a; b, and references therein), the following represent some lines of reasoning that could tackle the structural possibility of overt subjects in Spanish adjunct infinitives: A property that distinguishes Spanish from English or French lies in the interpretability of agreement. Uninterpretable phi-features on T need to be checked against a DP with valued phi-features in English. In Romance *pro*-drop, phi-features on T are interpretable (Barbosa 2009), possibly correlating with V-to-T movement (cf. Alexiadou & Anagnostopoulou 1998). It has been argued that also Romance infinitives have (interpretable) abstract phi-features (cf. e.g. Rigau 1995; Barbosa 2009; Herbeck 2015a; b).

Uninterpretable phi-features on English non-finite T should trigger *Agree* with a subject, which would lead to an incompatibility between anaphoric AGR (Borer 1989) on T and a referential DP:

(43) V [… [$_{TP}$ $\mathbf{T}_{[\mathbf{u\phi:self}]}$ [$_{vP}$ $D_{[i\varphi:\_]}$ / *$DP_{[i\phi:3sg]}$

In Spanish, on the other hand, interpretability of phi on T might have the consequence that *Agree* with a subject DP is not enforced by the T-head but, instead, direct *Agree* with discourse-linkers in C can obtain (cf. Herbeck 2015b), as shown in (44):

(44) DP V [$_{ForceP}$ $\Delta_{ØS/ØA}$[$_{FinP}$ Δ_{self} Fin [$_{TP}$ $T_{[i\phi:\mathbf{def}]}$ [$_{vP}$ $D_{[i\varphi:\_]}$ / DP

This way, an optionality between internal and external logophoric linking structurally obtains, but local control is highly favored, given the preference scales outlined above.

Thus, the structural licensing of certain non-controlled subjects in Spanish would be due the possibility of direct *Agree* between the subject and C, the requirements of the T-head being 'absorbed' by means of interpretable phi on T. The notion of 'abstract AGR' would thus lie in the property of absorbing the requirement of checking structural features of nonfinite T in a Spec/Head relation.[16]

6.3 On differences between types of adjunct infinitives

Nothing has been said so far about the behavior of different prepositional infinitives. In this section, I outline some lines for future research without pretending to offer a full analysis.

Al-infinitives license the highest number of overt subjects, non-local null subjects (including null expletives) and [–human] subjects. We have seen in Section 4.1 that *al*-infinitives can have a temporal and a causal meaning (Hernanz 1999: 2307). In several examples with non-local (and [–human]) null subjects, *al*-infinitives adopt a causal interpretation (see (39) and (45)):

(45) […] porque al ser tu primer libro (CORPES XXI, RAE)
because at-the be.INF your first book
'[…] because given that it is your first book'

Galán Rodríquez (1999) divides Spanish adjunct clauses into 'integrated' and 'non-integrated' (peripheral) ones (see Haegeman 2012 and Frey 2016 for a discussion of different levels of integration of adjuncts). The latter represent given information and preferably occupy a preverbal position, among other properties (Galán Rodríquez 1999: 3610). The author categorizes *al*-infinitives into the category of peripheral/non-integrated ones. Thus, the non-integrated status of certain *al*-infinitives could result in a wider referential freedom of the subject.

A similar situation can be argued for *para*-infinitives. When these have a prospective meaning, implying an intentionality between the main and the embedded event, the intentional agent of the matrix clause must be animate and co-referent with the null subject of the *para*-infinitive (cf. Galán Rodríguez 1999: 3621; see Example (16)). This might also explain the high number of co-referent overt subjects, i.e. emphatic pronouns, with *para*-infinitives (see Table 4).

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16. See Mensching (2000) for the assumption that nonfinite T checks *in situ* nominative Case. A further factor, favoring the possibility of [+R] subjects in Spanish, could be the availability of a "neutral" position for inverted subjects (cf. Ordóñez 2007; Pérez Vázquez 2007).

The ban against non-co-referent null subjects, however, disappears if there is no pure purpose or intentionality interpretation:

(46) La tela nueva es para hacer una camisa.
the fabric new is for make.INF a shirt
'This new fabric is for making a shirt.' (Galán Rodríguez 1999: 3629)

In fact, in the study presented here, most non-local (arbitrary) null subjects appeared in *para*-infinitives without a potential agent and the infinitive expresses an event for which the matrix subject or object is an instrument or a condition. Also one of the only two non-local [–human] null subjects in *para*-infinitives appeared in a structure that does not have a potential intentional agent antecedent (see (40)).

Other constructions with non-local control are peripheral, non-integrated *para*-infinitives, in which they modify the whole clause, have a parenthetical function and degrees of lexicalization (cf. Hernanz 1999: 2317). In the examined samples, I often found expressions of the form *Para empezar,…* 'To start,…' most plausibly with speaker reference. As Galán Rodríquez (1999: 3628) observes, non-integrated *para*-infinitives lacking the pure purpose interpretation frequently have concessive, consequential or conditional meanings.

What is interesting is that the other example with non-local [–human] null subjects (see (5)) exactly has this property – it is a peripheral infinitive, separated by a pause and it has a concessive (and no pure purpose) interpretation. Thus, the peripheral, non-integrated status of adjunct infinitives plays a fundamental role in sanctioning 'non-standard' null subjects (apart from the 'topicality' status of the controller).[17]

In line with Green's (2019) analysis of "speaker-oriented adverbials", I would like to argue that some non-integrated infinitives can be directly adjoined to a functional head above TP (rather than being fronted to that position), so that they do not enter a direct dependency with the arguments of the main verb. In the case of (causal) *al*-infinitives, Galán Rodríguez (1999: 3620) states that these do not necessarily imply an objective cause but an evaluation on the speaker's side. This indicates a relation to the epistemic stance of the speaker and, thus, these infinitives can be argued to be adjoined directly to Cinque's (1999) EpistP or to a SpeechActPhrase (Speas & Tenny 2003):

(47) [$_{SAP}$ [Para ser una ciudad grande] SA [… [$_{TP}$ La policía T-trabaja … bien]]]

17. Note that 'peripheral' in the sense of 'non-integrated' is not equal to 'dislocated' or 'fronted', given that integrated control infinitives can also be preposed (see e.g. Hernanz 1999).

Those adjunct infinitives which are first merged in the CP area have the loosest link with the matrix VP and the highest flexibility concerning the licensing of non-local control and overt [+R] subjects.

7. Conclusions

In this paper, I have investigated the properties of null and overt subjects in adjunct infinitives in two corpora of spoken Spanish. The results indicate that control in this configuration is best analyzed as a scalar phenomenon, being subject to preference scales at the syntax-pragmatics interface. In syntax, adjunct control is established via discourse coordinates in C, linking a minimal subject to a discourse antecedent or resulting in speaker/addressee-inclusive arb readings.

The data show that adjunct control can neither be reduced to predication nor to logophoric control in Spanish. One potential candidate for a further strategy is topic identification (Kawasaki 1993; Landau 2013, 2019) via C. In this approach, overt subjects, apart from being sanctioned by focus, can be the result of an 'anti-logophoricity' or 'anti-topicality' effect.

However, I hope to have shown that topicality cannot be the only factor sanctioning ([–human]) non-local null subjects, but that pragmatic (in-)compatibilities between the main and embedded events and the semantics and the adjunction site of the infinitive must be taken into account as well.

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