

On null complement anaphora in Spanish and Italian¹

MARCELA A. DEPIANTE

Abstract

This paper provides evidence from Spanish and Italian for the distinction between deep and surface anaphora as first proposed by Hankamer and Sag's (1976). We observe that certain verbs in Spanish and Italian allow their infinitival/clausal complements to be null. However, sentences containing them become ungrammatical when we try to extract an element that would have appeared inside the clausal complement in the non-null version, such as a clitic, a wh-phrase, etc ... or when restructuring has occurred. We propose, and provide evidence that these null clausal complements in Spanish and Italian are instances of Null Complement Anaphora, a type of deep anaphor in Hankamer and Sag's (1976) sense and not an instance of surface anaphor such as VP ellipsis in English. We claim that Null Complement Anaphors and deep anaphors in general are elements that do not have internal structure in the syntax, and therefore cannot host a trace. They contrast with surface anaphors which do have internal structure in the syntax and can host a trace, allowing for extraction out of them.

-
1. I would like to thank Sigrid Beck, Željko Bošković, Andrea Calabrese, Guglielmo Cinque, Pascual José Masullo, Jairo Nunes, William Snyder, Miriam Uribe-Etxebarria and especially Howard Lasnik for comments, invaluable suggestions and encouragement. In addition, I would like to thank the two anonymous reviewers for their suggestions which greatly improved the paper and everyone who helped me with the Italian, Spanish and English judgments. Finally, I would like to thank the audience at ESCOL 97 at Yale University where an earlier version of this paper was presented. This paper was originally written as my second generals paper while I was a student at the University of Connecticut, and later became a chapter of Depiante (2000). The final revisions were made at Universidad Nacional del Comahue, in Argentina and were possible thanks to Research Grant J-009, Pascual José Masullo, Principal Investigator.

1. Introduction

This paper provides a unified account of a number of restrictions on the presence of null clausal complements in a subset of the class of restructuring verbs (modals, aspectuals and motion verbs) in Spanish and Italian. It is observed that these complements cannot be null when there is evidence that restructuring has occurred and also when extraction of an element from within their clausal complements has occurred. This paper proposes that these null clausal complements are not instances of ellipsis as either a PF deletion phenomenon (as in Sag (1976), Chomsky and Lasnik (1993), Lasnik (1995, 1999 and others) or an LF-copying phenomenon (as in Williams (1977), Fiengo and May (1994) and others) but are instances of null complement anaphora (NCA) which is a type of deep anaphor in Hankamer and Sag's (1976) sense. It is shown that this deep anaphor has no internal structure at LF, being unable to host a trace inside of it, as opposed to surface anaphors such as VP ellipsis in English, which allow extraction out of them by virtue of having internal structure in the syntax.

This paper provides further evidence for the distinction between two types of anaphoric processes in the grammar: deep and surface anaphora, as argued for in Hankamer and Sag (1976) and furthers our understanding of the nature of Null Complement Anaphora, an instance of deep anaphora.

In Section 2 the relevant data is presented. In Section 3, previous analyses of a subset of the data are presented. In Section 4, the proposal is presented. Section 5 contains a discussion on the nature of NCA and Section 6 presents the conclusions.

2. The data

2.1. *The core data to be explained*

It has been previously observed in the literature, that languages like Spanish and Italian allow the clausal complements of some restructuring verbs to be null.² (Zubizarreta (1982), Radford (1977)). The verbs that belong to the restructuring class are verbs like *querer* ('want'), modals such as *poder* ('can'), *deber* ('must'), *saber* ('to be able to'), and aspectual verbs such as *empezar* ('start'). Consider now the examples in (1) below taken from Spanish.

2. Not all restructuring verbs allow their clausal complements to be null. See Appendix I for a list of those that do and those that don't. In addition, some non-restructuring verbs that take infinitival complements or finite clausal complements allow them to be null. A list of these is also given in Appendix I. I also list the verbs in English that have been argued in the literature to take NCA. To clarify, in this paper I will concentrate on the investigation of the behavior of the subset of restructuring verbs that do allow their complements to be null. For more discussion on this see Section 5 of this paper, Bruccart (1999) and Depiante (2000).

- (1) a. *Juan puede hablar con Pedro y María también*
 Juan can speak with Peter, and María also
puede \emptyset .
 can
- b. *Juan empezó a estudiar más, y María también*
 Juan started to study more and María also
empezó \emptyset .
 started
- c. *Juan quiere ir al cine y María también*
 Juan wants to go to the cinema, and María also
quiere \emptyset .
 wants

This section presents data showing that this subset of restructuring verbs does not always allow their clausal complements to be null. The first case is one where there is clitic climbing in the second conjunct, as seen in (2a)–(4a) for Spanish and (5a)–(6a) for Italian. These facts have previously been noted in Zubizarreta (1982: 138), and Sáez (1989/90: 218) for Spanish and in Radford (1977: 194) and Cinque (1998) for Italian.

- (2) a. **Juan las quiere ver, y María también*
 Juan them-fem-CL wants to see, and María also
las quiere \emptyset .
 them-fem-CL wants
- b. *Juan quiere verlas y María también*
 Juan wants to see them-fem-CL and María also
quiere \emptyset .
 wants
- c. *Juan las quiere ver y María también*
 Juan them-fem-CL wants to see and María also
quiere \emptyset .
 wants
- (3) a. **Juan las puede ver, y María también*
 Juan them-fem-CL can see, and María also
las puede \emptyset .
 them-fem-CL can
- b. *Juan puede verlas y María también puede* \emptyset .
 Juan can see them-fem-CL and María also can
- c. *Juan las puede ver y María también puede* \emptyset .
 Juan them-fem-CL can see and María also can

- (4) a. **Juan las debería visitar y María también*
 Juan them-fem-CL should visit, and María also
las debería ϕ .
 them-fem-CL should
- b. *Juan debería visitarlas y María también*
 Juan should visit them-fem-CL, and María also
debería ϕ .
 should
- c. *Juan las debería visitar y María también*
 Juan them-fem-CL should visit and María also
debería ϕ .
 should
- (5) a. **Gianni lo vorrebbe vedere e anche Maria lo*
 Gianni him wants to see and also Maria him
vorrebbe ϕ .
 wants
- b. *Gianni vorrebbe vederlo e anche Maria vorrebbe* ϕ .
 Gianni wants to see him and also Maria wants
- c. *Gianni lo vorrebbe vedere e anche Maria vorrebbe* ϕ .
 Gianni him wants to see and also Maria wants
- (6) a. **Gianni lo puo vedere e anche Maria lo puo* ϕ .
 Gianni him can see and also Maria him can
- b. *Gianni puo vederlo e anche Maria puo* ϕ .
 Gianni can see him and also Maria can
- c. *Gianni lo puo vedere e anche Maria puo* ϕ .
 Gianni him can see and also Maria him can

2.2. *On clitic climbing*

Rizzi (1978) discussed clitic climbing as a “symptom” (together with change in auxiliary selection and long object preposing, to be discussed in later sections) of what he called restructuring, which refers to a process by which a bi-clausal structure becomes mono-clausal.³ Most verbs that take infinitival complements do not allow clitic climbing. Take for example the verb *permitir* (‘to allow’ in Spanish) in (7). Example (7c) shows that the clitic *la* (‘her’) cannot be placed on the higher verb.

3. Rizzi (1978) and Aissen and Perlmutter (1983) are the first ones to discuss restructuring and offer a concrete proposal. Since then numerous researchers have tried to explain this phenomenon. I will not review the literature on this topic, but refer to a summary of it in Moore (1996).

- (7) a. *Juan prometió ver a María.*
 Juan promised to-see (to) Mary
 b. *Juan prometió verla.*
 Juan promised to see her(cl)
 c. **Juan la prometió ver.*
 Juan her (cl) promised to see

On the other hand, verbs like *want*, modals, aspectuals and motion verbs in Spanish and Italian allow a clitic to “climb”; that is to be placed in the higher clause, as shown in (8c) with the modal *poder* (‘can’).

- (8) a. *Juan puede ver a María.*
 Juan can to-see (to) Mary
 ‘Juan can see Mary.’
 b. *Juan puede verla.*
 Juan can to-see her(clitic)
 ‘Juan can see her.’
 c. *Juan la puede ver.*
 Juan her(clitic) can to-see
 ‘Juan can see her.’

2.3. On Change in Auxiliary Selection in Italian

As is well known, in Italian (see Burzio (1986)) some verbs (unaccusatives, passives) select the auxiliary *essere* (‘be’) while others (unergatives and transitives) take *avere* (‘have’). For example, the verb *volere* (‘want’) selects the auxiliary *avere* (‘have’) as shown in (9), not *essere* (‘be’).

- (9) *Mario ha/*è voluto un costoso regalo di Natale.*
 ‘Mario HAVE/*BE wanted an expensive Christmas present.’ (Rizzi 1978)

When a verb such as *promettere* (‘promise’) in Italian takes an infinitival complement, the auxiliary will be selected by *promettere*, not by the infinitival verb, as shown in (11). The verb *tornare* (‘return’) on its own takes *essere* (‘be’) as shown in (10).

- (10) *Mario è/*ha tornato a casa.*
 ‘Mario BE/*HAVE come back home.’
 (11) a. *Mario ha promesso di tornare a casa.*
 ‘Mario has promised to come back home.’
 b. **Mario è promesso di tornare a casa.*
 ‘Mario is promised to come back home.’ (Rizzi 1978)

Auxiliary selection can change with verbs such as *volere* ('want'), modals, aspectuals and motion verbs in Italian. When these verbs take an infinitival complement, the auxiliary can be selected either by the modal/aspectual/motion verb as shown in (12a) or by the infinitive verb as shown in (12b).

- (12) a. *Mario ha voluto tornare a casa.*
 Mario HAVE wanted to return home
 'Mario wanted to return home.'
- b. *Mario è voluto tornare a casa.*
 Mario BE wanted to return home
 'Mario wanted to return home.'

For completeness, let us note that change in auxiliary selection correlates with clitic climbing. Rizzi (1978) discusses this issue, and provides the examples in (13) to show that it does.

- (13) a. *Maria ha dovuto venirci molte volte.*
 Maria HAVE must come there-(Cl.) many times
 'Maria must have come there many times.'
- b. *Maria c'èmphe dovuta venire molte volte.*
- c. *?*María ci ha dovuto venire molte volte.*

(Rizzi 1998)

2.3.1. *Auxiliary selection and the possibility of having a null clausal complement.* This section discusses the interaction between auxiliary selection and the possibility of having a null clausal complement with a subset of restructuring verbs in Italian. We observe that these complements cannot be null if the auxiliary being selected is *essere* (BE) which tells us that we have done restructuring as shown in (14a). However, if the auxiliary being selected is *avere* ('have') as given in (14b), the clausal complement can be null.

- (14) a. **Mario sarebbe proprio voluto andare a casa e anche Maria sarebbe proprio voluta \emptyset .*
 'Mario BE really wanted to go home and also Maria BE really wanted.'
- b. *Mario avrebbe proprio voluto andare a casa e anche María avrebbe proprio voluto \emptyset .*
 'Mario HAVE really liked to go home and also María HAVE really wanted.'

2.4. *Long Object Preposing with impersonal se/si in Spanish and Italian*

Long object preposing refers to cases where a direct object moves to the subject position and behaves in all respects as a subject, for example triggering verb

agreement.⁴ As Aissen and Perlmutter (1983) for Spanish and Rizzi (1978) for Italian, originally noted, long object preposing with impersonal *si/se* can only happen when the verb belongs to a certain class of verbs, the restructuring class. The phenomenon is illustrated in (15) and (16) below. The Italian verb *promettere* ('promise') in (15a) does not allow long object preposing with *si*. On the other hand, the Italian verb *volere* ('want') in (16b) allows it. In (16b), the object has raised to the subject position, triggering verb agreement in *volere*.

- (15) a. *Si è promesso di costruire le nuove case popolari entro un anno.*
 'SI has promised to build the new council houses in a year.'
 b. **Le nuove case popolari si sono promesse di costruire entro un anno.*
 The new council houses SI are promised to build in a year
- (16) a. *Si vuole vendere queste case a caro prezzo.*
 SI wants to sell these houses at a high price
 b. *Questa case si vogliono vendere a caro prezzo.*
 These houses SI want to sell at a high prize.

The same facts hold for Spanish. For completeness, the data in (17) and (18) show that long object preposing correlates with clitic climbing in Italian, as described in Rizzi (1978).

- (17) a. *Si vuole vendergli queste case a caro prezzo.*
 SI wants to sell him these houses at a high prize
 b. *Gli si vuole vendere queste case a caro prezzo.*
- (18) a. **Queste case si vogliono vendergli a caro prezzo.*
 These houses SI want to sell them at a high prize
 b. *Queste case gli si vogliono vendere a caro prezzo.*

(Rizzi 1998)

2.4.1. *Long Object Preposing and the possibility of having a null clausal complement.* The examples in (19) and (20) from Italian and Spanish respectively, show that long object preposing is not compatible with a null clausal complement.

- (19) a. **Le nuove case si cominceranno a costruire e anche i nuovi appartamenti si cominceranno \emptyset .*
 The new houses SI start to construct and also the new apartments SI start
 (*restructuring has occurred*)

4. Rizzi (1978) notes that the direct object preposes "optionally in some dialects, and obligatorily in others."

- b. *A Roma si comincerà a costruire nuove case ma a Milano non si comincerà presto* \emptyset .
 In Roma, SI will start to construct new houses but in Milano not SI will start
 (no restructuring has occurred)
- (20) a. **Estas casas se pueden alquilar fácilmente y estos departamentos también se pueden* \emptyset .
 These houses SE can be rented easily, and these apartments “SE can
 (restructuring has occurred)
- b. *En setiembre se podrá alquilar estas casas, pero en diciembre no se podrá* \emptyset .
 In September SE can rent these houses, but in December not SE
 (no restructuring has occurred)

2.5. *Wh-movement and Topicalization and the possibility of having a null clausal complement*

Other types of movements, beside clitic movement and long object preposing, are also incompatible with the presence of null complements with the verbs under discussion. The Spanish example (21) shows that we cannot do wh-movement out of the second conjunct and the Spanish example (22) shows that we cannot have topicalization out of the second conjunct.

- (21) **Juan sabe qué libro Maria quiere / puede leer y Pedro sabe qué revista Ana quiere / puede* \emptyset .
 Juan knows which book Maria wants / can to read and Peter knows which magazine Ana wants / can
 (cf. *Juan sabe qué libro Maria quiere/puede leer y Pedro sabe qué revista Ana quiere/puede leer.*)
- (22) **A María, Juan quiere / puede darle un libro, y a Susana, también quiere / puede* \emptyset .
 To Mary, Juan wants / can to give (her) a libro and to Susana also wants / can
 (cf. *A María, Juan quiere/pudo darle un libro y a Susana también quiere/pudo darle un libro.*)

The examples in (23) and (24) show the same facts for Italian:

- (23) **Gianni sa quale libro Maria vorrebbe / potrebbe leggere*
 Gianni knows which book Maria wants / can to read
e Piero sa quale giornale Anna vorrebbe / potrebbe \emptyset .
 and Peter knows which magazine Anna wants / can
 (cf. *Gianni sa quale libro Maria vorrebbe/potrebbe leggere e Piero sa quale giornale Anna vorrebbe/potrebbe leggere.*)
- (24) **A Maria, Gianni vuole dare un libro e anche a*
 To Maria, Gianni wants to give a book and also to
Susana, vuole \emptyset .
 Susana wants
 (cf. ?*A Maria, Gianni vuole dare un libro e anche a Susana, vuole dare un libro.*)

2.6. *Root and epistemic modals and the possibility of having null clausal complements*

Some modals in Spanish can have an epistemic or a root reading. One such modal is *poder* ('can'). In its epistemic reading it means possibility; in its root reading it means permission or ability. A sentence like that in (25a) has two readings as given in (25b) and (25c).

- (25) a. *María no pudo salir a esa hora.*
 María not has could to-go at that time
 b. *María wasn't able to go out at that time.* (root reading)
 c. *It isn't possible that María went out at that time.*
 (epistemic reading)

López (1994) and Sáez (1989/90) note that the epistemic reading of modals is lost under what they consider to be ellipsis, and only the root reading is preserved. An example from Spanish is given in (26) taken from López (1994: 350). The same fact occurs in Italian as given in (27).

- (26) a. *Carlos pudo salir a las 12 pero Juan no pudo \emptyset .*
 Carlos could to-leave at 12 but Juan not could
 b. *... but Juan was not able to go out.* (root reading)
 c. #*... but it is not possible that Juan left at 12.* (*epistemic reading)
- (27) a. *Gianni può andare via alle 12, Pietro invece non*
 Gianni could leave at 12, Pietro instead not
può \emptyset
 could
 b. *... but Pietro was not able to leave at 12* (root reading)
 c. #*... but it is not possible for Pietro to leave at 12*
 (*epistemic reading)

2.7. *Raising restructuring verbs and the possibility of having null clausal complements*

The verb *soler* ('to do usually') in Spanish is a member of the class of restructuring verbs. Example (28b) shows that we can do clitic climbing with this verb, and example (28c) shows that we can do long object preposing with impersonal *se* with this verb. In addition, this verb is a raising verb as shown by the example in (29), with an idiom chunk. The idiom being *salta la perdiz* (literally: 'the partridge jumps', idiomatically: 'an opportunity appears').

- (28) a. *Juan suele comprarlos.*
 Juan 'does-usually' buy them
- b. *Juan los suele comprar.*
 Juan them-MASC-PL 'does-usually' buy
 'Juan usually buys them'
- c. *Estas casas se suelen vender fácilmente.*
 These houses SE do-usually sell easily
 'These houses usually sell easily'
- (29) *La perdiz suele saltar (en los momentos menos esperados).*
 The partridge does-usually jump (in the moments least expected)
 'Opportunities usually appear (in the least expected moments).'

Example (30) shows that the verb *soler* in Spanish be followed by a null clausal complement.

- (30) **Juan suele comprarlos y Maria también*
 Juan does-usually buy them and Maria also
suele \emptyset .
 does-usually

3. Previous analyses

3.1. *Zubizarreta (1982)*

Zubizarreta (1982) proposes that restructuring verbs in Spanish and Italian can select Null Complement Anaphora as their complements. She notes examples such as (2a) where we cannot have a clitic and a null clausal complement. She observes that when these verbs have undergone restructuring, they behave like non-main verbs (like auxiliaries such as *haber* ('have') and *estar/ser* ('to be')) in not allowing the null complement anaphor to appear (see Zubizarreta (1982: 138)). The

question arises as to what these verbs are. Under her view, when they do not undergo restructuring, they behave as main verbs. But note that main verbs in Spanish do not allow VP ellipsis (for, e.g., **Juan vió a María y Pedro también vió* ('Juan saw Mary and Peter also saw')) as they do in other languages such as European Portuguese (Martins (1994)), Modern Hebrew (Doron (1999)), Irish (McCloskey (1991)), and Serbo-Croatian (Stjepanović (1999)). In these languages the verb raises overtly and then the VP left behind is elided.

3.2. *Bosque (1984) and Brucart (1987, 1999)*

Bosque (1984) observes that some verbs allow their infinitival complements to be null and also notes that these null complements can be controlled pragmatically as is possible with deep anaphors in Hankamer and Sag's (1976) sense. Brucart (1987, 1999) building on this, proposes as Zubizarreta (1982) does, that these null complements are instances of Null Complement Anaphora, since they can be pragmatically controlled. In Section 4, a proposal in support of this view will be presented. Further evidence for the deep anaphoric nature of these null complements will be provided as well as further investigation on the nature and structure of NCA.

3.3. *López (1994) and Sáez (1989/90)*

These two authors propose that the cases under discussion constitute cases of ellipsis, understood as surface anaphora. However they do not present empirical evidence against a deep anaphoric treatment of these null complements. In this paper, we provide empirical evidence showing that these null complements can only be analyzed as instances of deep anaphora and not as surface anaphora, and in this way account for all their characteristic behaviors.

4. The proposal

4.1. *The proposal in a nutshell*

This section argues against the analyses proposed in López (1994) and Sáez (1989/90) where the null element (symbolized by "∅") sentences such as (1c) repeated below as (31) is considered to be an instances of ellipsis understood as surface anaphora in Hankamer and Sag's (1976) sense, and in favor of the analysis given in Zubizarreta (1982) and Brucart (1987, 1999) following Bosque (1984) who propose that the empty element in (31) is an instance of Null Complement Anaphora (NCA), a case of deep anaphora in Hankamer and Sag's (1976) sense.

- (31) *Juan quiere ir a Boston, y Maria también quiere ϕ .*
 Juan wants to go to Boston and Maria also wants

In this section, further substantial empirical evidence is given to show that the null complement in (31) is a NCA, a deep anaphor in Hankamer and Sag's (1976) sense as opposed to a surface anaphor (like VP ellipsis in English). This proposal will explain why we cannot have NCA when restructuring has occurred, when extraction out of the NCA has occurred, when we have an epistemic modal, and when we have a raising verb.

4.2. *Deep and surface anaphora: Hankamer and Sag (1976)*

Hankamer and Sag (1976) argue for the distinction between what they call "deep anaphora" and "surface anaphora". The main idea that they propose is that deep anaphors are not derived by a transformational operation but are present in the underlying structure. On the other hand, surface anaphors are derived transformationally, which in their view is by a PF deletion operation. This means that the antecedent of deep anaphors will never replace the anaphor at any point in the derivation, while the antecedent of surface anaphors will replace the anaphor at some point in the derivation. Later in this section it will be shown that deep anaphors do not have any internal structure in the syntax, while surface anaphors do. This will account for the unavailability of extraction out of the NCA cases under discussion.

Hankamer and Sag (1976) argue that if an element can be pragmatically controlled, then it is a deep anaphor, if it can't, it is a surface anaphor. Consider the contrast in (32)–(34) below:

- (32) [Hankamer attempts to stuff a 9-inch ball through a 6-inch hoop]
 a. Sag: #*It's not clear that you'll be able to ϕ .* (VP-ellipsis)
 b. Sag: #*I don't know how ϕ .* (Sluicing/IP ellipsis)
- (33) [Same context]
 Sag: *It's not clear that you'll be able to do it.* (*do-it* pro-form)
- (34) [Same context]
 Sag: *It's not clear you'll succeed ϕ .* (NCA)
 (modified from Hankamer and Sag (1976))

The pro-form *do it* in (33) and the Null Complement Anaphor in (34) can be pragmatically controlled, but the elided VP and IP in (32a) and (32b) respectively cannot be pragmatically controlled⁵. Hankamer and Sag (1976) argue that in (32),

5. For arguments against this view, see Chao (1987). She claims that what Hankamer and Sag (1976) consider surface anaphors, like VP ellipsis in English can in fact take a pragmatic antecedent. See

VP-Ellipsis and sluicing are cases of surface anaphora, while *do it* pro-form and NCA illustrate instances of deep anaphora. On the basis of this test, and two other tests (to be discussed below), Hankamer and Sag (1976) argue that the processes of VP ellipsis, sluicing, gapping and stripping, involve surface anaphora, while pro-forms such as *do it* and NCA involve deep anaphora.

The other two tests that Hankamer and Sag (1976) use to distinguish between deep and surface anaphoric elements are the following: (a) Only surface anaphors require strict syntactic parallelism between the antecedent and the anaphor; (b) Only surface anaphors exhibit the missing antecedent phenomenon described originally in Grinder and Postal (1971) and Bresnan (1971). Test (a) is illustrated in (35) below.

- (35) The oats had to be taken to the bin.
 a. **so Bill did.*
 b. *so Bill did it.*
 c. *so Bill volunteered \emptyset .* (from Hankamer and Sag (1976: 413))

We see in (35a) that VP-ellipsis is ungrammatical because the antecedent of the deleted VP is not structurally identical to what the elided VP would have to be were it overt. However, (35b) which contains a case of *do it* pro-form is grammatical, as well as (35c), which is a NCA. These last two types of anaphoric elements do not need strict syntactic parallelism. If the complement of “volunteer” in (35c) were overtly present, it would have taken the following form: *to take the oats down to the bin* (which is different from the antecedent: *to be taken to the bin*).

Test (b) is illustrated in (36)–(38).

- (36) *I've never ridden a camel, but Ivan has [_{VP} \emptyset] and he says it stank horribly.*
 (37) **Jack didn't cut Betty with a knife, Bill did it and it was rusty.*
 (38) **He said that one of us had to give up his seat, so Sue volunteered \emptyset because it was too narrow for her anyway.*

In (36) the null VP derived by VP ellipsis can serve as the antecedent for the pronoun *it*, because it is a surface anaphor and the antecedent (*ridden a camel*) is present at the point in the derivation where the interpretation of pronouns takes place. However, in (37) and (38) neither the *do it* pro-form nor the NCA following *volunteered* can contain the antecedent of the pronoun *it*. The reason being that these two elements are deep anaphors, which are never replaced by their antecedents, at any point in the derivation. Therefore, a pronoun cannot refer to something inside of them since nothing is really there.

also Schachter (1977) and Hankamer (1978) for counterarguments and the discussion in Bosković, (1994).

Sentence (39) shows that the pronoun *it* could not pick its reference from *a camel* when *a camel* is under the scope of negation.

(39) **I've never ridden a camel but Ivan says it stank horribly.*

4.3. *Are the null clausal complements under discussion deep or surface anaphors?*

4.3.1. *Test 1: Pragmatic or linguistic antecedent?* Bošković (1994) shows that root modals in Spanish can take a deep anaphor complement as shown in (40) below.

(40) [Javier jumps into the icy cold sea]
 Juan says: *Yo también puedo ϕ !*
 I also can

The same can occur with the verbs *querer* ('want') or the aspectual *empezar* ('start') which we have seen can take null clausal complements.

(41) [Javier is stepping out of the house to go play in the playground]
 Juan says: *Yo también quiero ϕ !*
 I also want

(42) [Javier is finally starting to write his generals paper]
 Juan says: *Yo ya empecé ϕ !*
 I already started

With respect to the first test we have evidence that these verbs can take a deep anaphor given that the empty complements of the sentences above can get their interpretation from the pragmatic context in which they are uttered. The Italian data is presented in (43) and (44).

(43) Context: [Mary jumps into the icy cold water]
 Ana says: *Io non posso ϕ .*
 'I can't.'

(44) Context: [Mary is going out to play]
 Ana says: *Anch'io vorrei ϕ .*
 'I also would want.'

4.3.2. *Test 2: Strict syntactic parallelism.* Hankamer and Sag (1976) show that only surface anaphors need to have a strict syntactic parallelism with their antecedents. Consider (45), the Spanish counterpart to the English (35) discussed above.

- (45) *Los pacientes del tercero tienen que ser llevados a*
 The patients of the third (floor) have to be taken to
terapia intensiva, aunque la enfermera con más
 the intensive care unit, even though the nurse with the most
fuerza no pueda ϕ .
 strength can't
 'The patients on the third floor must be taken to the intensive care unit,
 even though the nurse with the most strength can't do it.'

We can see in (45) above that if the complement of *poder* ('can') were overtly present then it would take a different form from its antecedent; it would be: *llevarlos a terapia intensiva* ('to take them to the intensive care unit') while the actual antecedent is *ser llevados a terapia intensiva* ('have to be taken to the intensive care unit'). This test, therefore, suggests that the elided complement in question can be a deep anaphor.

Another evidence for the lack of strict syntactic parallelism comes from examples (2c), (3c), (4c), in Spanish and (5c) and (6c) in Italian⁶. I repeat (2c) below, from Spanish to illustrate the point.

- (2) c. *Juan las quiere ver y María también*
 Juan them (CL fem, pl) wants to see and María also
quiere ϕ .
 wants

In (2c) the first conjunct has undergone restructuring, since clitic climbing has occurred, but in the second conjunct no clitic climbing has occurred and still the sentence is grammatical, even though the syntactic parallelism is not identical.

The two tests above show that the null clausal complements discussed in this paper can be deep anaphors. The next two tests discussed below, will lead us to conclude that they must be deep anaphors and in this way rule out the possibility of them being surface anaphors.

4.3.3. *Test 3: "Missing antecedents" phenomenon.* Hankamer and Sag (1976) show that only surface anaphors can contain an element that can serve as an antecedent to a pronoun. Deep anaphors cannot. The relevant English examples were given in (37) and (38). In Spanish and Italian, the same facts hold as shown in (46) and (47) below.⁷ An element within the null clausal complements of the verbs we

6. I would like to thank one anonymous reviewer and Jairo Nunes for asking me about these facts and pointing out their relevance.

7. See also Grinder and Postal (1971) for similar data in Italian. Grinder and Postal (1971:281) present example (i) below where a missing antecedent is possible out of the null complement of the verb *potere* (*can*) in Italian. This type of example is also possible in Spanish, as we see in (ii) The difference with the examples given in the main text is that Grinder and Postal (1971) use

have been looking at cannot serve as an antecedent to a pronoun. ('pro' in this case).

- (46) a. *?Juan no pudo asesinar a Pablo con un cuchillo pero*
 Juan not could kill Pablo with a knife but
Pedro sí pudo \emptyset y pro estaba oxidado.
 Peter yes could \emptyset and *pro* was rusted.
- b. *Juan no pudo asesinar a Pablo con un cuchillo pero*
 Juan not could kill Pablo with a knife but
Pedro sí pudo asesinar a Pablo con un cuchillo y
 Peter yes could kill Pablo with a knife and
pro estaba oxidado.
pro was rusted.
- (47) a. *??Gianni non poté assassinare a Giovanni con un*
 Gianni not could kill Giovanni with a
coltello, ma Piero si poté \emptyset , e pro era arrugginito.
 knife but Piero yes could \emptyset and *pro* was rusted
- b. *Gianni non può assassinare a Giovanni con un*
 Gianni not could kill Giovanni with a
coltello, ma Piero si può assassinare a Giovanni con
 knife, but Piero yes could kill Giovanni with
un coltello, e pro era arrugginito.
 a knife and *pro* was rusted.

4.3.4. *Further evidence that we are not dealing with surface anaphora: Scope.* Hirschbühler (1982) noticed that sentences like (48) allow for scopal ambiguity in both conjuncts.

an overt pronoun while I use a null one (see (46) and (47) in the main text), and in addition, their pronoun is in object position, while mine is in subject position. At this point I have no principled way of accounting for this split in the data, but see Bresnan (1971) who discusses some of these issues. We should also take into consideration that missing antecedent judgments are quite delicate in any language.

- (i) *Paolo non puo trovare un libro ma io posso ___ e mi piacerebbe*
 Paulo not could find a book but I can ___ and I would like
leggerlo.
 to drive it
- (ii) *Pablo no pudo encontrar el libro pero yo sí pude ___ y me*
 Pablo not could find the book but I could ___ and I
gusto leerlo.
 liked to read it

- (48) *Some boy admires every teacher, and some girl does* [_{VP} \emptyset] *too*

In (48) above, the first conjunct is ambiguous as well as the second conjunct. Tomioka (1997) takes this to be evidence that in the second conjunct the empty VP in fact has internal structure at LF because the universal quantifier can move out of it and have wide scope. This test is used below to see whether the NCAs under discussion in Spanish and Italian have internal structure at LF or not.

If we take the Spanish sentence (49) below, we get an ambiguous interpretation, where either *un periodista* ('a journalist') or the universal quantifier (*todos los candidatos* ('every candidate')) can have wide scope.

- (49) *Un periodista quiere hablar con todos los candidatos.*
 A journalist wants to speak to every candidate

If we elide the clausal complement of *querer* ('want') in the second conjunct of a coordination sentence, as shown in (50) below, we cannot have a wide scope reading of the universal quantifier in the second conjunct (or in the first, this last fact can be explained by the semantic parallelism requirement that holds independently between conjuncts proposed by Fox (1995) and earlier by Lasnik (1972)).

- (50) *Un periodista quiere hablar con todos los candidatos y*
 A journalist wants to speak with every candidate and
un ciudadano también quiere \emptyset .
 a citizen also wants
 'A journalist wants to speak to every candidate and a citizen also wants to.'

Following Tomioka's reasoning then, the data suggest that the null element following *quiere* ('wants') in (50) lacks internal structure at LF. This explains the lack of scopal ambiguity.

As discussed by Grimshaw (1979) a verb like *volunteer* in English can take NCA. Speakers who find sentences like (51a) ambiguous, find sentences like (51b) unambiguous, they only accept an existential wide scope reading. English NCA behaves like Spanish NCA in this respect.

- (51) a. *Some doctor volunteered to visit every patient.*
 b. *Some doctor volunteered to visit every patient and some nurse also volunteered \emptyset .*

To complete the paradigm, the examples in (52) below show that overt extraction out of NCA in English is ungrammatical. These examples are parallel to the examples (21) and (23) for Spanish and Italian NCA respectively.⁸

- (52) a. **Bill knows which novel Bill volunteered to read and Mary knows which biography Peter volunteered ϕ .*
 b. **Mary wondered which conference talk Tommy refused to attend and Susan wondered which colloquium talk Susan refused ϕ .*
 c. **Susan asked Peter which house Anne agreed to donate and Mary asked John which car Susan agreed ϕ .*

4.4. Accounting for the data

4.4.1. *Why is clitic climbing not possible with NCA?* As was noted in Section 2, sentences such as (2a) repeated below as (53) are ungrammatical in Spanish as well as in Italian. In the previous section, it was shown that the null element in (53) is a NCA with no internal structure to it at LF.

- (53) **Juan las quiere ver, y María también*
 Juan them-fem-CL wants to see, and María also
las quiere ϕ .
 them-fem-CL wants

The question is how do we rule out (53). Traditionally, there have been two ways of looking at clitics, one is to adopt a theory of movement (see Kayne (1975) Uriagereka (1995) among others). The other way is to adopt a base generation approach (see Strozer (1976), Rivas (1977), Bouchard (1984), Borer (1984), Burzio (1986)). See also Sportiche (1996) for an approach that combines the two views.

If we assume a movement analysis of clitics then the clitic must have come from the lower clause, since it is the object of the infinitive verb *ver* ('to see'). As argued above, there is a NCA in the place of the null infinitival complement, with no internal structure in the syntax. Example (53) is ruled out via Theta-Theory. The clitic *las* (them-FEM-PL) is left without a theta role, since the NCA does not contain any verb at LF which could assign a theta role to it.

8. Note that we can extract an adjunct as in (i) below but this adjunct can never modify the verb that is part of the meaning of the NCA, it can only modify the verb that is overtly present. Example (i) can only mean that the speaker found out when Peter refused his mom's request, and not that the speaker found out that he refused to do early morning-cleaning (thanks to Ellen Thompson (p.c) for noticing this example).

(i) *Peter's mom asked Peter to clean up his room early in the morning, and I found out when he refused.*

Under an approach to clitics such as that proposed by Strozer (1976) and Rivas (1977), clitics are base-generated in their surface position, but they are in an agreement relation with their NP arguments. The ungrammaticality of the sentences with NCA and clitic climbing can be accounted for via a break up of this agreement relation.⁹

4.4.2. *Why is NCA not possible when there has been a change of auxiliary in Italian.* As noted in Section 2, NCA is incompatible with change in auxiliary selection in Italian. Example (14) is repeated below as (54).

- (54) a. **Mario sarebbe proprio voluto andare a casa e anche Maria sarebbe proprio voluta \emptyset*
 ‘Mario BE really wanted to go home and also Maria BE really wanted’

9. In Serbo Croatian (SC) which has VP-ellipsis (VPE) (as shown in Stjepanović (1999) we observe that VPE *is* compatible with clitic movement, as seen in (i) below, and as predicted by our analysis.

- (i) *Ja sam mu ga dala, a ti mu ga nisi ~~[VP dala]~~.*
 I am him-dat it-acc given, and you him-dat it-acc aren't
 ‘I gave it to him, but you didn't give it to him’ (Stjepanović (1999: 37)

An anonymous reviewer points out that European Portuguese (EP) does not display the same behavior as SC in this respect, as shown by (ii), even though it allows VPE (as shown in Martins (1994)).

- (ii) *O Pedro quer-te ver e a Maria também (*te) quer \emptyset .*
 the Peter you wants to-see and the Mary also (you) wants

However, even though EP has VPE, this does not rule out the possibility that it can also have NCA with some verbs, just as English does. The case in (ii) with *want* must be analyzed as an instance of NCA. It is not clear to me at this point how to rule out a VPE analysis (since that would incorrectly predict that the clitic could be present). This question is left open for future research. In fact, the verb *want* in EP takes a NCA, and the evidence for this comes from (iii), the Missing Antecedent test (thanks to Ana María Martins for the judgments).

- (iii) *?*O Pedro nao quer ir passear no carro da Maria, mas o Joao quer \emptyset , ainda pro nao funcione bem*
 The Peter not wants to go out in the car of Maria, but the John wants \emptyset even though *pro* not works well
 ‘Peter doesn't want to go out in Maria's car, but John wants to even though it doesn't work well’

Example (iii) contrasts with (iv) below, where we do have VPE.

- (iv) *O Joao nao viu a Maria com os binóculos, mas o Pedro viu ~~[VP a Maria com os binóculos]~~ e pro estava desfocada.*
 The John not saw the Maria with the binoculars but the Peter saw the Maria with the binoculars and *pro* was out of focus
 ‘John didn't see Maria with binoculars but Peter did and she was out of focus.’

- b. *Mario avrebbe proprio voluto andare a casa e anche María avrebbe proprio voluto \emptyset*
 ‘Mario HAVE really liked to go home and also María HAVE really wanted’

The null element in (54a) is a deep anaphor, which has no structure at LF, hence it does not contain the verb *andare* (‘to go’) at LF. Auxiliary selection must occur at this level, and it cannot be done if the infinitive verb *andare* is not present. The sentence in (54a), then, is ruled out because the auxiliary *essere* (BE) is not licensed.

4.4.3. *Why is NCA not possible with long object preposing?* As shown in Section 2, NCA is not possible when we have done long object preposing with impersonal *se/si* constructions in Spanish and Italian. Recall that this is the third “symptom” of restructuring as argued by Rizzi (1978). I repeat the Spanish example (20) below as (55).

- (55) a. **Estas casas se pueden alquilar fácilmente y estos departamentos también se pueden \emptyset .*
 These houses SE can be rented easily, and these apartments SE can
- b. *En setiembre se puede alquilar estas casas, pero en diciembre no se puede \emptyset .*
 In September SE can rent these houses, but in December not SE can.

Under the proposal put forth in this paper the verb *poder* (‘can’) is a verb that takes NCA. In (55a) movement of the object cannot take place out of the NCA, because as we have seen earlier NCA has no internal structure in the syntax. The moved object will not be able to receive a theta role in (55a) and the sentence is ruled out as a violation of the Theta Criterion. In (55b) the object has not raised, and so no violation of the Theta Criterion takes place, predicting the grammaticality of the sentence.

4.4.4. *Why is NCA incompatible with wh-movement and topicalization?*¹⁰ As was noted in Section 2, extraction and NCA are not compatible. The question is why this is the case. The explanation for this is similar to that given for why clitics are not possible with NCA. I repeat below examples (21) and (22) as (56) and (57) respectively.

10. An anonymous reviewer poses the interesting question of whether the equivalent of *whether* in Spanish is compatible with NCA. If it isn’t, it would be evidence for the view put forth in Katz and Postal (1964: 96) and Larson (1985: 238) that *whether* is a Wh-phrase moving to Spec CP,

- (56) **Juan no sabe qué libro María quiere leer pero Pedro*
 Juan not knows which book María wants to read but Peter
sabe qué revista Ana quiere / pudo \emptyset .
 knows which magazine Ana wants / could
- (57) **A María, Juan quiere / pudo darle un libro, y a*
 To Mary, Juan wants / could to give (her) a libro and to
Susana, también quiere / pudo \emptyset .
 Susan also (he) wants / could

Haik (1987) uses the English example (58) (which is the equivalent to the Spanish example (56)) to show that the null VP in English has internal structure, since there is a trace inside of it. If the empty VP in (58) had no internal structure, then there would be no place for a trace in it, and (58) would be ungrammatical.¹¹

- (58) *Bill knows which book Kris read and Dan knows which journal she did \emptyset*

The ungrammaticality of the Spanish and Italian examples is explained because the wh-phrase and the topicalized NP are left with no trace to bind, since the null

and not a head, assuming that the movement is from within the null site. On the other hand, if the equivalent of *whether* in Spanish is compatible with NCA, then it would provide evidence for the more traditional view of *whether* as a Complementizer (as in Chomsky (1981, 1982)). Kayne (1991) argues that Italian does not have the equivalent of *whether*, but only of *if*, namely *se*, which is a head and not a Wh-phrase. The same argument can be made for Spanish. However, for the sake of completeness, we show in (i) and (ii) examples in Spanish illustrating that *si* and NCA are compatible.

Given our analysis so far, the examples in (i) and (ii) show that the *si* in Spanish could not have moved from within the null complement, otherwise the sentences would not be grammatical.

- (i) *Juan quiere casarse y tener hijos, pero no sé si su*
 Juan wants to get married and have children but (I) don't know if his
novia querrá \emptyset .
 girlfriend would want
- (ii) *María puede levantar 20 kilos con un solo brazo pero yo no*
 María can lift 20 kilos with only one arm, but I don't
sé si pueda \emptyset .
 know if (I) could (Subjunctive)

Notice also the examples in (iii)–(v) from English which also show that *whether* is compatible with NCA, and so could not have moved from within the NCA site. In Depiante (2000) I further discuss the status of status of *whether* in English.

- (iii) *Mary succeeded in installing Word 2000 but I don't know whether Peter succeeded \emptyset .*
- (iv) *I know that Mary volunteered to cook for the colloquium dinner but I don't know whether Susan volunteered \emptyset .*
- (v) *I know that Peter refused to clean up the office, but I don't know whether John refused \emptyset .*

complement anaphor has no internal structure, as opposed to the empty VP in English shown in example (58).

4.4.5. *Why is NCA incompatible with epistemic modals/raising verbs and auxiliaries in Spanish and Italian?* In this section, we follow the standard analysis of root and epistemic modals (see Ross (1969) and Perlmutter (1971)). This analysis takes root modals (those that express obligation, permission) to be external theta-role assigning verbs (control verbs) and epistemic modals (those that express possibility, inference) to be non-external theta role assigning verbs (raising verbs).

The epistemic reading is lost in sentences such as (26a) repeated below as (59a) because *Juan* in (59a) does not receive a theta role, since *poder* ('can') in its epistemic reading is not an external theta-role assigner. In its root reading, *Juan* will receive a theta role since *poder* in its root reading is an external theta role assigner.

- (59) a. *Carlos pudo salir a las 12 pero Juan no pudo ϕ*
 Carlos could to-leave at 12 but Juan not could
 b. ... *but Juan was not able to leave.* (root reading)
 c. #... *but it is not possible that Juan left at 12* (*epistemic Reading)

The modal *deber* ('must') in some Spanish dialects only has an epistemic reading as shown in (60) below. (The same is the case for *deure* 'must' in Catalan as shown by Picallo (1990)).

-
11. Williams (1977) takes examples of the type in (58) to be ungrammatical. His example is given in (i) below.

- (i) **John, who Bill saw and who Bob did too*

For Williams (1977) the structure of (i) before the application of the VP rule (a Discourse Grammar rule that copies the antecedent VP onto the empty VP) is that in (ii).

- (ii) *John who_i Bill [saw t_i]_{VP} and who_j Bob did [Δ t_j]_{VP} too.*

The way Williams (1977) rules out (i) is to say that in (ii) the VP rule cannot apply because the delta (Δ) occupies "too small" a part of the VP. By "too small" he means that ellipsis of a VP cannot apply to a subpart of the VP, because of the ungrammaticality of examples such as (iii) where we have deleted the verb, but kept the direct object.

- (iii) **John kissed Mary and Bob did Peter.*

However, examples such as (iii), known as pseudogapping cases, are considered by many native speakers of English to be acceptable (see Lasnik 1995, 1999). Another problem in Williams (1977) is that later in the paper he must relax the notion of "too small" to account for other facts. Furthermore, the native English speakers I have consulted accept (58) as well as (i). See also Fiengo and May (1994).

- (60) a. *Juan debe salir a las 12.*
 Juan must leave at 12
 b. *It must be the case that Juan leaves at 12* (epistemic reading)
 c. *#Juan is obliged to leave at 12* (*root reading)

And as predicted, *deber* in these dialects is not compatible with NCA as shown in (61). On the other hand, in peninsular Spanish, where both meanings are possible, the sentence in (61) is grammatical but only in its root reading.

- (61) **Juan debe salir a las ocho y Maria también debe ϕ .*
 Juan must leave at eight and Maria also must

This explanation of the impossibility of NCA with epistemic modals can also account for the ungrammaticality of NCA with raising verbs such as *soler* in Spanish. Example (30) is repeated below as (62):

- (62) **Juan suele comprarlos y Maria también ϕ .*
 Juan does-usually buy them and Maria also
 suele ϕ .
 does-usually

The ungrammaticality of (62) is due to a violation of the Theta Criterion. The subject of the clause in the second conjunct, *Maria* fails to receive a theta role, since *soler* is not an external theta role assigner.

The analysis presented here finds further support in the unavailability of NCA with auxiliaries in Spanish (discussed in Zagona (1988a, b) in terms of VP ellipsis) and Italian, as shown in the examples (63) and (64) for Spanish and Italian respectively.

- (63) **Juan había leído este libro y Pedro también había ϕ .*
 Juan has read this book and Peter also has
- (64) **Gianni ha letto questo libro e anche Piero ha ϕ .*
 Gianni has read this book and also Peter has

NCA is not possible with auxiliary verbs because they are not external theta-role assigners. Hence the examples above will be ruled out as violations of the Theta Criterion. This analysis predicts that if we have an expletive subject in a sentence like (63), the sentence will be grammatical. The prediction is borne out as seen in (65).¹²

12. The example above is slightly marginal. I attribute this to the quasi-argumental status of weather verbs (see Chomsky 1981: 325).

- (65) *Yo creía que había nevado mucho, pero en realidad no*
 I though that it had snowed a lot, but in reality it
había \emptyset .
 hadn't

5. On the nature of NCA

Grimshaw (1979: 293) discusses Null Complement Anaphora and notes that there is “some arbitrariness as to whether or not a given predicate allows null complement anaphora at all.” As noted earlier, not all restructuring verbs select for NCA in Spanish, and furthermore, some non-restructuring verbs which take clausal complements allow NCA. These data are given in Appendix I, together with a list of verbs that take NCA in English. The question is whether these verbs form a natural class or not. Bosque (1984: 176) speculates that the verbs that select for NCA in Spanish seem to express predisposition, attitude or purpose. To this, Bruccart (1999: 2839) adds the class of causative predicates that express permission, collaboration or influence over the attitude of others (such as *autorizar a* (‘authorize’), *ayudar a* (‘help’), *dejar* (‘leave’) among others) and pronominal verbs such as *abstenerse de* (‘abstain from’), *adherirse a* (‘adhere to’), *acordarse de* (remember to’), *decidirse a* (‘decide to’), *disgustarse por* (‘get mad about’) *enfadarse por* (get upset) among others).

However, even though it seems that it is possible to make a division in terms of classes of verbs that can select NCA, not all verbs that belong to these classes take NCA. So the problem remains how to predict which verbs will select NCA. See Bruccart (1999) and Depiante (2000) for attempts to characterize the class of verbs that select for NCA, based on the complementarity between NCA and predicative *lo* and overt pro-forms in English.

5.1. On the interpretation of NCA

One generalization seems to hold cross linguistically for the three languages under study: NCA cannot be interpreted as an individual. In Depiante (2000) I provide a semantic analysis of NCA. I propose that NCA is represented in the semantic component as a free variable, whose value is fixed by a variable assignment function. Crucially, NCA differs from pronouns in that it does not pick up an individual as its value. NCA can be interpreted as a property as in (66), a proposition, as in (67), or a question as in (68) (see Grimshaw (1978)) but not as an individual as shown by the ungrammaticality of (69). (For more discussion on the semantics of NCA see Depiante (2000))

- (66) *Mary asked John to clean up the kitchen but he refused* __.
 (67) *Ana said that they should leave and Bill agreed* __.

- (68) a. *Ana asked what time it was and Mary inquired* __.
 b. *Ana asked the time and Mary inquired* __.
- (69) a. **Ana knows Greek and Peters knows* __*too*.
 b. **Ana quiere una manzana y Pedro también quiere*¹³ __.
 Ana wants an apple and Peter also wants

6. Conclusions

This paper proposes that in Spanish and Italian the null complements of a class of verbs which includes some restructuring verbs and some non-restructuring are not instances of surface anaphora in Hankamer and Sag's (1976) sense, but instances of deep anaphora, namely Null Complement Anaphora. Deep anaphors are characterized by not being the result of a transformational operation as opposed to surface anaphors. The tests that Hankamer and Sag (1976) have proposed for distinguishing deep and surface anaphors were applied to these null complements in Spanish and Italian, and these tests provide evidence that these null complements in Spanish and Italian are instances of NCA, a type of deep anaphor.

In addition, it was shown that NCA is an element with no internal syntactic structure, as opposed to VP ellipsis in English. This explains why extraction out of NCA is not possible in Spanish, Italian or English. An account that proposes that the Spanish and Italian cases under discussion are cases of surface anaphora cannot explain any of these different restrictions in a unified and principled way.

Finally, the last section of this paper discusses the nature of NCA. It is proposed that NCA in Spanish, Italian and English is a null pro-form with no internal structure in the syntax. In the semantics, NCA is a free variable whose value has to be fixed by a variable assignment function. In semantic terms, the free variable can be of type $\langle s, \langle e, t \rangle \rangle$ (when interpreted as a property), type $\langle s, t \rangle$ (when interpreted as a proposition) or type $\langle \langle s, t \rangle, t \rangle$ (when interpreted as a question) but never type

13. Spanish allows for null objects in some environments. As when the linguistic antecedent is a bare NP, but not if the antecedent is a definite NP. See the contrast between (i) and (ii).

- (i) A: *Quieres café?*
 Do you want coffee?
 B: *Sí, si quiero* __
- (ii) A: *Quieres el café de Colombia?*
 Do you want the coffee from Colombia?
 B: **Sí, si quiero* __

This is discussed by Campos (1986) who calls this null object indefinite object drop and give evidence that it is a null operator. This is a different type of element from NCA which can appear inside islands.

<e> because it is never interpreted as an individual (see Depiante (2000) for more details).

In more general terms, the work presented here provides further empirical evidence for Hankamer and Sag's (1976) distinction between deep and surface anaphor as an important and relevant distinction of the grammar¹⁴ and furthers our understanding of the nature of deep anaphors.

Appendix

As was mentioned in the main text of the paper, not all restructuring verbs allow NCA as their complements. Below, I provide a list of restructuring verbs that do and do not allow NCA in Spanish. (As is well known in the literature (see Moore 1996), there are dialectal, and idiolectal variations as to which verbs belong to the class of restructuring verbs. So, the reader shouldn't be surprised if when checking these data, s/he finds differences.) For further examples on which verbs take NCA in Spanish and which ones do not as well as speculations on whether they constitute a natural class see Brucart (1999: 2838) and Depiante (2000).

Restructuring verbs that allow NCA: *querer* 'want', *poder* 'can', *deber* 'should', *tratar de* 'try', *saber* 'know', *empezar a* 'start to', *comenzar a* 'begin to', *acabar de* 'finish', *terminar de* 'finish', *seguir* 'continue', *dejar de* 'stop', *planear* 'plan', *rehusar* 'refuse to'.

Restructuring verbs that disallow NCA: *esperar* 'hope to', *tener que* 'must', *soler* 'tend to', *acabar de* 'finish', *estar por* 'be about to', *lograr* 'achieve', *venir a* 'come to', *ir a* 'go to', *llegar a* 'manage to', *pensar* 'intend to', *elegir* 'choose', *preferir* 'prefer', *admitir* 'admit'.

Non-restructuring verbs that allow NCA: *insistir* 'insist', *luchar por* 'fight for', *vacilar en* 'hesitate to', *parar de* 'stop', *persistir en* 'persist in', *probar* 'try', *regresar a* 'return to', *renunciar a* 'give up', *salir a* 'go out'.

Non-restructuring verbs that do not allow NCA: *odiar* 'hate', *sentir* 'feel', *negar* 'deny', *prometer* 'promise', *recomendar* 'recommend', *decidir* 'decide', *consid-*

14. The question still remains to be answered why Spanish and Italian do not allow VP ellipsis of the English-type. López (1994) and (1999) argue contra Zagona (1988a,b) and Martins (1994) and propose that Spanish does have VP ellipsis of the English-type. In Depiante (2000) I present arguments showing that his examples can be analyzed in a different way. Zagona (1988a, b) and Martins (1994) discuss some possible ways of accounting for the differences between English and Spanish with respect to VP ellipsis of the English-type. However, further research needs to be done in this area so as to provide a principled way of accounting for the differences.

erar ‘consider’, *soñar con* ‘dream about’, *evitar* ‘avoid’, *sugerir* ‘suggest’, *pedir* ‘ask for’, *trabajar por* ‘work for’, *quedar en* ‘agree to’, *seguir sin* ‘still be without’.

The examples in (70) show that a non-restructuring verb such as *insistir* in Spanish can take NCA and examples (71) show that it is in fact a true NCA, since no extraction is possible out of it. Italian patterns the same way (thanks to G. Cinque for the judgments).

- (70) a. **Juan lo insistió en leer.* (no clitic climbing)
 Juan it-CL insisted on (prep.) to-read.
 b. *Juan insistió en terminar antes, y María también insistió ϕ .*
 Juan insisted on (prep.) to finish earlier, and María also insisted
- (71) a. **Juan sabe qué libro María insistió en leer y Pedro sabe qué revista Susana insistió ϕ .*
 Juan knows which book María insisted in reading and Peter knows which magazine Susana insisted
 b. **A María, Juan insistió en invitar y a Susana, Pedro insistió ϕ .*
 Mary, John insisted on inviting and Susan, Peter insisted

Verbs in English that take NCA (sources: Shopen (1972), Hankamer and Sag (1976), Grimshaw (1979)): *(dis)agree, refuse, (dis)approve, volunteer, comply, overhear, succeed, try, know, find out, inquire, accept, insist, consent, object, understand.*

References

- Aissen, Judith and David M. Perlmutter (1983). Clause reduction in Spanish, in *Studies in Relational Grammar I*, David M. Perlmutter (ed.), 360–403. Chicago: The University of Chicago Press.
- Borer, Hagit (1984). *Parametric Syntax*. Dordrecht: Foris.
- Bošković, Željko (1994). D-structure, Theta Criterion and Movement into Theta Positions. *Linguistic Analysis* 24: 247–286
- Bosque, Ignacio (1984). Negación y Elipsis. In *Estudios de Lingüística* (Alicante) 2: 171–199.
- Bouchard, Dennis (1984). *On the Content of Empty Categories*. Dordrecht: Foris.
- Bresnan, Joan (1971). Note on the notion ‘Identity of sense anaphora’. *Linguistic Inquiry* 2: 589–597
- Brucart, José María (1987). *La Elisión Sintáctica en Español*. Belaterra, Universitat Autònoma de Barcelona.
- (1999). La Elipsis. In *Gramática Descriptiva de la Lengua Española*. Vol. 2. Bosque, Ignacio and Violeta Demonte (eds.), 2787–2863. Madrid: Espasa Calpe.
- Burzio, Luigi (1986). *Italian Syntax. A Government Binding Approach*. Dordrecht: Reidel.
- Campos, Héctor (1986). Indefinite Object-drop. *Linguistic Inquiry* 17: 354–359.
- Chao, Wynn (1987). On ellipsis. Unpublished Ph.D. dissertation, University of Massachusetts, Amherst.

- Chomsky, Noam (1981). *Lectures on Government and Binding*. Dordrecht: Foris.
- (1982). *Some Concepts and Consequences of the Theory of Government and Binding*. Cambridge, MA: MIT Press.
- (1995). *The Minimalist Program*. Cambridge, MA: MIT Press
- Chomsky, Noam and Howard Lasnik (1993). The Theory of Principles and Parameters. In *Syntax: An International Handbook of Contemporary Research*, Jacobs, Joachim, Armin von Stechow, Wolfgang Sternefeld, and Theo Vennemann (eds.), 506–569. Berlin and New York: Walter de Gruyter. (Reprinted in Chomsky (1995), Chapter 1. 13–127.)
- Cinque, Guglielmo (1998). On Clitic Climbing and other Transparency Effects. Talk given at the Department of Linguistics and Philosophy, Massachusetts Institute of Technology, Cambridge.
- Depiante, Marcela A. (2000). The syntax of deep and surface anaphora: A study of null complement anaphora and stripping/bare argument ellipsis. Unpublished Ph.D. dissertation. University of Connecticut, Storrs.
- Doron, Edit (1999). V-Movement and VP Ellipsis. In *Fragments. Studies in Ellipsis and Gapping*, Lappin, Shalom and Elabbas Benmamoun (eds.). New York, Oxford: Oxford University Press.
- Fiengo, Robert and Robert May (1994). *Indices and Identity*. Cambridge, MA: MIT Press.
- Fox, Danny (1995). Economy and scope. *Natural Language Semantics* 3: 283–341.
- Grimshaw, Jane (1979). Complement selection and the lexicon. *Linguistic Inquiry* 10: 279–326.
- Grinder, John and Paul M. Postal (1971). Missing antecedents. *Linguistic Inquiry* 2: 269–312.
- Haik, Isabelle (1987). Bound VPs that need to be. *Linguistics and Philosophy* 10: 503–530.
- Hankamer, Jorge (1978). On the nontransformational derivation of some null VP anaphors. *Linguistic Inquiry* 9: 66–74.
- Hankamer, Jorge and Ivan Sag (1976). Deep and surface anaphora. *Linguistic Inquiry* 7: 391–426.
- Hirschbühler, Paul (1982). VP-deletion and across-the-board quantifier scope. In *Proceedings of NELS 12*, James Pustejovsky and Peter Sells (eds.), 132–139. GLSA University of Massachusetts at Amherst.
- Kayne, Richard (1975). *French Syntax: The Transformational Cycle*. Cambridge, MA: MIT Press.
- (1991). Romance clitics, verb movement and PRO. *Linguistic Inquiry* 22: 647–686.
- Katz, Jerold and Paul Postal (1964). *An Integrated Theory of Linguistics Descriptions*. Cambridge, MA: MIT Press.
- Larson, Richard (1985). On the syntax of disjunction scope. *Natural Language and Linguistic Theory* 3: 217–264.
- Lasnik, Howard (1972). Analysis of negation in English. PhD dissertation MIT.
- (1995). A note on pseudogapping. In *Papers on Minimalist Syntax*, Rob Pensalfini and Hiroyuki Ura (eds.), 143–163. (MIT Working Papers in Linguistics 27). Massachusetts Institute of Technology, Cambridge: MITWPL Department of Linguistics and Philosophy.
- (1999). Pseudogapping puzzles. In *Fragments. Studies in Ellipsis and Gapping*, Lappin, Shalom and Elabbas Benmamoun (eds.), 141–174. New York, Oxford: Oxford University Press.
- López, Luis (1994). The syntactic licensing of VP-ellipsis: A comparative study of English and Spanish. In *Issues and Theory in Romance Linguistics*, M. Mazzola (ed.), 333–354. Washington, D.C.: Georgetown University Press.
- (1999). VP-ellipsis in Spanish and English and the features of Aux. In *Probus* 11: 263–297.
- Martins, Ana Maria (1994). Enclisis, VP-deletion and the nature of sigma. In *Probus* 6: 173–205.
- McCloskey, James (1991). Clause structure, ellipsis and proper government in Irish. *Lingua* 85: 259–302.
- Moore, J. (1996). *Reduced constructions in Spanish*. New York: Garland Publishing.
- Perlmutter, David (1971). *Deep and Surface Structure Constraints in Syntax*. New York: Holt, Rinehart and Winston.
- Picallo, Carme M. (1990). Modality in Catalan. *Natural Language and Linguistic Theory* 8: 285–312.
- Radford, Andrew (1977). *Italian Syntax. Transformational and Relational Grammar*. Cambridge: Cambridge University Press.
- Rivas, A. (1977). A theory of clitics. Unpublished Ph.D. dissertation. Massachusetts Institute of Technology, Cambridge

- Rizzi, Luigi (1978). A Restructuring Rule in Italian Syntax. In *Recent Transformational Studies in European Languages*, Keyser, Samuel (ed.), 113–158. Cambridge, MA: MIT Press. (Also in Rizzi, Luigi (1982). *Issues in Italian Syntax*. Dordrecht: Foris. 1–48.)
- Ross, John Robert (1969). Auxiliaries as main verbs. In *Studies in Philosophical Linguistics.*, W. Todd (ed.), 252–286. Evanston, IL: Great Expectations.
- Sáez, Luis (1989/90). Antecedent-contained deletion and modals in Spanish comparative constructions. *The Linguistic Review* 6: 195–225.
- Sag, Ivan (1976). Deletion and logical form. Unpublished Ph.D. dissertation. Massachusetts Institute of Technology, Cambridge.
- Schachter, Paul (1977). Does she or doesn't she. *Linguistic Inquiry* 8: 763–767.
- Shopen, Timothy (1972). A generative theory of ellipsis. Unpublished Ph.D. dissertation. University of California at Los Angeles, Los Angeles.
- Sportiche, Dominique (1996). Clitic Constructions. In *Phrase Structure and the Lexicon*, Rooryck, Johan and Laurie Zaring (eds.), 213–276. Dordrecht: Kluwer.
- Stjepanović, Sandra (1999). What do second position cliticization, scrambling and multiple wh-fronting have in common. Unpublished Ph.D. dissertation. University of Connecticut, Storrs.
- Strozer, Judith. (1976). Clitics in Spanish. Unpublished Ph.D. dissertation. University of California at Los Angeles, Los Angeles.
- Tomioka, Satoshi (1997). Focusing effects and NP interpretation in VP ellipsis. Unpublished Ph.D. dissertation. University of Massachusetts, Amherst.
- Uriagereka, Juan (1995). Aspects of the Syntax of Clitic Placement in Western Romance. *Linguistic Inquiry* 26: 79–123.
- Williams, Edwin (1977). Discourse and logical form. *Linguistic Inquiry* 8: 103–139.
- Zagona, Karen (1988a). Proper Government of Antecedentless VP in English and Spanish. *Natural Language and Linguistic Theory* 6: 95–128.
- (1988b). *Verb Phrase Syntax. A Parametric Study of English and Spanish*. Dordrecht: Kluwer.
- Zubizarreta, María Luisa (1982) On the relationship of the lexicon to syntax. Unpublished Ph.D. dissertation. Massachusetts Institute of Technology, Cambridge.