

Week 12

Null Complement Anaphora

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1 Today's topic

Depiante considers examples like the following, in which the complement to a modal verb is not pronounced. Such sentences go by the name of *Null Complement Anaphora*, or NCA.

- (1) Juan quiere irse de vacaciones, pero María no quiere [__]
Juan wants go on holiday but María not wants

Sentences like this raise two questions:

- What exactly happens to the missing VP?
- Does the answer to the previous question help explain some of the properties of this construction.

Depiante's answers are as follows:

- There is no "missing VP" in these examples. The complement to the modal verb is not a verbal constituent, but rather a silent pronoun.
- Yes, to a large extent, though some of the properties remain unexplained.

2 Deep vs. surface anaphora

In a very famous paper, Hankamer and Sag (1976) pointed out that not all elliptical structures are of the same kind. They argued that there are two major types of ellipsis:

- **Surface anaphora**, which is derived from a full sentence via a process of deletion. This type of ellipsis still shows properties of a full sentence. An example of this is English VP ellipsis.
- (2) Andy has gone to Berlin and Chris has gone to Berlin too ⇒
Andy has gone to Berlin and Chris has [~~gone to Berlin~~] too.
- **Deep anaphora**, where the ellipsis site is inserted in the sentence from the beginning, without any deletion process taking place. No full-sentence properties are observed here. An example of this is English *do so* anaphora.
- (3) Andy went to Berlin, and Chris did so too.

Depiante's proposal is that Spanish NCA is a case of deep anaphora, and therefore it should behave as though there is no underlying VP in it.

3 Evidence for deep anaphora

3.1 Impossibility of extraction out of the NCA site

Depiante observes that nothing can be extracted out the site of NCA, even in cases where the non-elliptical versions of the same sentence allow extraction.

Clitic climbing Clitic climbing is blocked under NCA.

- (4) a. Juan quiere leer este libro, y María también **lo** quiere leer
Juan wants read this book and María also CL wants read
- b. * Juan quiere leer este libro, y María también **lo** quiere [____]
Juan wants read this book and María also CL wants

This is expected: if the NCA site doesn't have any internal structure, then there is no clitic either that can be climbed.

Long object preposing Spanish allows a type of long object preposing with *SE* constructions, but this movement is blocked under NCA.

- (5) a. Estas casas se pueden alquilar fácilmente, y estos apartamentos también se
These houses *SE* can rent easily and these apartments also *SE*
pueden alquilar fácilmente
can rent easily
- b. * Estas casas se pueden alquilar fácilmente, y estos apartamentos también se
These houses *SE* can rent easily and these apartments also *SE*
pueden [____]
can

The explanation is the same as for clitic doubling: since the NCA site doesn't have internal structure, there is no possible source for the object.

Wh- movement and topicalization There is no possibility of wh- movement or topicalization out of an NCA site.

- (6) a. Juan sabe qué revista quiero leer, y Pedro sabe qué revista
Juan knows which magazine I-want read and Pedro knows which magazine
puedo leer.
I-can read
- b. * Juan sabe qué revista quiero leer, y Pedro sabe qué revista
Juan knows which magazine I-want read and Pedro knows which magazine
puedo [____]
I-can
- (7) a. A María, Juan quiere darle un libro, y a Susana, Juan también quiere darle un
to María Juan wants give a book and to Susana Juan also wants give a
libro.
book
- b. * A María, Juan quiere darle un libro, y a Susana, Juan también quiere [____].
to María Juan wants give a book and to Susana Juan also wants

Topicalization and wh- movement are actually an environment where we can compare Spanish NCA (deep anaphora) and English VP ellipsis (surface anaphora). English VP ellipsis allows wh-movement and topicalization without problem (Schuyler 2001).

- (8) a. I know which magazine John wants to read, but I don't know which one he should.
 b. I think Bill might not have signed the blue papers, but the green ones, he most definitely did.

3.2 Failure of θ -assignment

Auxiliaries and raising verbs Depiante observes that NCA is not generally possible with auxiliaries and raising verbs.

- (9) a. Juan había leído cuatro libros, y Pedro también había leído cuatro libros.
 Juan had read four books and Pedro also had read four books
 b. * Juan había leído cuatro libros, y Pedro también había []
 Juan had read four books and Pedro also had
- (10) a. María suele cocinar salmón, y Susana también suele cocinar salmón
 María usually cooks salmon and Susana also usually cooks salmon
 b. * María suele cocinar salmón, y Susana también suele []
 María usually cooks salmon and Susana also usually

The reason why NCA is not allowed here is because auxiliaries and raising verbs cannot assign a θ -role to the subject. For that, we need the infinitive. However, there is no infinitive inside an NCA site, so we get a failure of θ -assignment.

This analysis predicts that auxiliaries will allow NCA in those cases where the subject doesn't need a θ role, such as weather verbs. The following example confirms this.

- (11) Yo creía que había nevado mucho, pero en realidad no había []
 I thought that had snowed a lot but in reality not had

Readings of modal verbs A modal verb (can, might...) typically has two readings, which are called *root* and *epistemic*.

- **Epistemic** readings indicate possibility.
- **Root** readings indicate permission.

- (12) Juan no puede ir a trabajar.
 Juan not can go to work
epistemic reading: Juan is not able to go to work
root reading: Juan is not allowed to go to work

Depiante's observation (citing previous work by López and Bruccart) is that epistemic readings disappear under NCA.

- (13) a. Juan puede ir a trabajar, pero Pedro no puede ir a trabajar
 Juan can go to work but Pedro not can go to work
 ✓ *epistemic reading*: Juan is able to go to work, but Pedro is not able to go to work
 ✓ *root reading*: Juan is allowed to go to work, but Pedro is not allowed to go to work

- b. Juan puede ir a trabajar, pero Pedro no puede [___]
 Juan can go to work but Pedro not can
 * *epistemic reading*: Juan is able to go to work, but Pedro is not able to go to work
 ✓ *root reading*: Juan is allowed to go to work, but Pedro is not allowed to go to work

The reason Depiante gives is the same as for auxiliaries and raising verbs: in their epistemic reading, modals are raising verbs, so the subject is left without a θ role. In contrast, in their root reading, they are control verbs and therefore can assign an independent θ -role to the subject.

3.3 Pragmatic licensing

Hankamer and Sag point out that surface anaphora requires a linguistic antecedent, whereas deep anaphora does not. The following is VP ellipsis, i.e., surface anaphora.

- (14) *Context: we were going to visit a beautiful ancient church, and when we get to the site, we discover that the church has been demolished to make space for a parking lot. You look at me in disbelief and say:*
 # I really can't understand why they did [___]!

Compare to a case of deep anaphora, such as the *do it* construction.

- (15) *Context: we were going to visit a beautiful ancient church, and when we get to the site, we discover that the church has been demolished to make space for a parking lot. You look at me in disbelief and say:*
 I really can't understand why they did it!

Spanish NCA allows this kind of pragmatic licensing.

- (16) *Context: Javier is eating a delicious chocolate ice-cream. Juan says:*
 ¡Yo también quiero [___]!
 I also want
- (17) *Context: Javier has just run a marathon in under 3 hours. Juan says:*
 ¡Yo también puedo [___]!
 I also can

3.4 Inconclusive tests

Depiante offers two more tests for the deep anaphora status of NCA. However, under closer inspection, these tests fail to distinguish between deep and surface anaphora.

Strict identity Depiante, following Hankamer and Sag (1976), argues that surface anaphora requires strict syntactic identity with the antecedent, whereas deep anaphora does not.

- (18) a. * The oats had to be taken to the bin, so Bill did [___]
 [VP ellipsis, surface anaphora]
 b. The oats had to be taken to the bin, so Bill did it
 [*do it* construction, deep anaphora]

Since Spanish NCA allows form mismatches, Depiante concludes it supports her hypothesis that NCA is a form of deep anaphora.

- (19) Los pacientes tienen que ser llevados a terapia intensiva, aunque la enfermera con
 the patients have to be taken to therapy intensive even if the nurse with
 más fuerza no pueda [___]
 most strength not can

However, since Depiante wrote her thesis, other people have discovered that surface anaphora does, in some cases, allow for form mismatches, so this test is inconclusive.

- (20) a. This problem was to have been looked into, but obviously nobody did [___].
 b. The system can be used by anyone who wants to [___].
 c. The janitor must remove the trash when it is apparent that it should be [___].

Missing antecedents Again following Hankamer and Sag, Depiante assumes that deep anaphora cannot function as a discourse antecedent for pronouns.

- (21) a. Mary didn't cut the meat with a knife, but Sally did [___], and *it* was rusty.
 b. * Mary didn't cut the meat with a knife, but Sally did so, and *it* was rusty.

Comparable examples with Spanish NCA show a slight contrast, but considerably weaker than the English ones.

- (22) ?? Juan no pudo asesinar a Pedro con un cuchillo, pero Pablo sí pudo [___],
 Juan not could kill to Pedro with a knife but Pablo yes could
 aunque *pro* estaba oxidado.
 although was rusty
 "Juan couldn't kill Pedro with a knife, but Pablo could, even though it was rusty"

3.5 In conclusion

There is good evidence that Spanish NCA is deep anaphora, even though some of the tests are inconclusive. In this way, Spanish NCA patterns with English *do so* and *do it* constructions, rather than with VP ellipsis.

4 Verbs that allow NCA

We have already seen at least one restriction: only verbs that assign an external θ role can license NCA of their complements. Another, less obvious restriction, has to do with the fact that Spanish allows certain verb to take a clitic (*lo*) instead of a full complement clause.

- (23) Juan creía que Federer iba a ganar Wimbledon, y Pedro también lo
 Juan believed that Federer was going to win Wimbledon and Pedro also CL
 creía
 believed

In some dialects of Spanish (including my own), *lo* can also be replaced with the demonstrative pronoun *eso* 'that'.

- (24) Juan creía que Federer iba a ganar Wimbledon, y Pedro también creía
 Juan believed that Federer was going to win Wimbledon and Pedro also believed
 eso.
 that

Given this much, one would expect that *lo/eso* would be the overt counterparts of the silent pronoun that Depiante argues underlies NCA. Surprisingly, though, she reaches the opposite conclusion.

(25) *Distribution of NCA and 'lo/'eso'*

NCA is possible only with those verbs that don't allow. *lo/eso*.

This is a start, but she doesn't provide a generalization of which verbs allow (or don't) *lo/eso*, so we are also left without an explanation of which verbs allow (or not) NCA. This has to be stipulated for each verb individually, and she gives a rather long list on page 52 of her thesis.