



Empty head vs verb movement: an empirical study on Complementizer Deletion in Spanish

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- 1) The background;
- 2) Spanish CD;
- 3) Aim of this study and hypothesis;
- 4) Methodology;
- 5) Results;
- 6) Analysis;
- 7) Conclusions and open questions.

The background (1)



Complementizer Deletion is often attested cross-linguistically.

- (1) *I think* \emptyset *you are doing a great job.* (English)
- (2) *Ich glaub-e* \emptyset *d-en Apfel hat er ge-gessen.* (German)
I believe-PRS the-ACC apple has he PTCP-eaten
'I think he has eaten an apple.'
- (3) *John-wa Mary-ga koko-ni ki-ta* \emptyset *sura iw-ankat-ta.* (Kansai)
John-TOP Mary-NOM here come-PAST even say-NEG-PAST
'John did not even say that Mary came here.'
- (4) *Gli dispiace* \emptyset *la un ven-ga a casa.* (Florentine)
CL is sorry she-CL NEG come-SBJV.3SG at home
'He is sorry she doesn't come home.'

The background (2)



The existence of subordinate clauses lacking an overt C element has led to account for these environments by proposing different degrees of defectivity:

- The **IP Hypothesis** → treats complementizerless clauses as truncated structures lacking their Complementizer layer (Bošković 1997; Stowell 1981).
- The **CP Hypothesis** → comprises very different proposals depending on the functional projections we assume in the CP area.

The background (3)



Under the label CP Hypothesis, we find proposals assuming that the C layer of complementizerless clauses:

- it either maintains some of the projections that are usually available in the complement clauses with an overt complementizer, i.e., the assumption that **only the lower part of the C field** is projected (Giorgi & Pianesi 1996; Giorgi 2010);
- or it is characterized by a **syncretism of projections**.

Within the proposal of syncretic projections, there are two competing accounts:

- the syncretic C projects an empty or unpronounced C head (Kishimoto 2006);
- the syncretic C position is occupied by the embedded verb (Poletto 1996; Antonelli 2013).



According to the literature, Complementizer Deletion is available in Spanish if some specific conditions are satisfied:

- 1) The *que*-less clause cannot be left-dislocated.

(5) **(Que) no est-és contenta con tu trabajo, lamento.*
that not are-SBJV.2SG happy with your job lament-PRS.1SG
'That you are not happy with your job, I lament it.' (Brovetto 2002)

- 2) The main predicate must belong to a specific class. Typically, verbs of the class of *lamentar* 'to lament', *preocuparse* 'to be worried', *sentir* 'to be sorry', and volitional verbs and verbs of desire (Brovetto 2002: 34)



3) The embedded verb must be inflected for subjunctive, future or conditional.

"que may be omitted when the embedded proposition conveys a meaning of uncertainty or an irrealis meaning" (Brovetto 2002: 34)

4) The omission of *que* correlates with the absence of an overt preverbal subject in the embedded clause (Torrego 1983; Brovetto 2002). In contrast, null or post-verbal subjects are compatible with complementizerless clauses.

(6) *Lament-o* **(que) María/ella no est-é* *contenta.*
lament-PRS.1SG that Maria she not is-SBJV.3SG happy
'I lament that Mary/she is not happy.' (Brovetto 2002: 37)

(7) *Lament-o* \emptyset *no est-é* *contenta María/ella.*
lament-PRS.1SG not is-SBJV.3SG happy Maria she



- 5) If the complementizer has been omitted, the embedded CP cannot host left-peripheral material, see (8). By contrast, when the topicalized element is hosted in the left periphery of the main clause, CD is available (Brovetto 2002), see (9).

(8) *Lament-o *(que) a Maria no la cono-zcas.*

lament-PRS.1SG that ACC Mary not CL know-SBJV.2SG

(9) *A Maria lament-o (que) no la cono-zcas.*

ACC Mary lament-PRS.1SG that not CL know-SBJV.2SG

'Mary, I lament that you do not know.'



- 6) Likewise, if a *wh*-phrase is fronted within the embedded clause, the complementizer becomes obligatory. If the *wh*-phrase lands in the main CP, CD is available (Brovetto 2002).

- (10) a. *¿Lament-as *(que) qué libro no ha-ya le-ído?*
 lament-PRS.2SG that what book not have-SBJV.3SG read-PTCP
 'You lament that which book he hasn't read?'
 b. *¿Qué libro lament-as (que) no ha-ya le-ído?*
 what book lament-PRS.2SG that not have-SBJV.3SG read-PTCP
 'Which book do you lament that he hasn't read?' (Brovetto 2002: 41)

However, I claim that the problem of (10a) is not the CD. This example is ungrammatical both with and without the complementizer because *lamentar* does not select a question like *verba dicendi* do.



To sum up, the existing proposals on Spanish CD share two main assumptions:

- The omission of *que* is possible if the embedded verb is in **subjunctive** - and, consequently, it is mostly found in complements introduced by verbs such as *lamentar* 'to lament' - whereas it is mandatory when introducing an indicative embedded clause.
- The omission of *que* requires the **adjacency** between the main and the embedded verb. The embedded clause must occupy its complement position and no overt element can precede the embedded predicate.



IP Hypothesis (Brovetto 2002)

“When Spanish complementizer *que* is omitted in the complement clauses [...], the corresponding CP projection is missing.” (Brovetto 2002: 42)

Brovetto (2002) endorsed the view that Spanish CD is the result of the selection of an IP rather than a CP. Under this hypothesis, Topics and Foci are not available **because** the field which they belong to is not projected.

It can be assumed that the presence of an element belonging to the left-periphery activates the C-field and, therefore, the complementizer *que* becomes obligatory.



IP Hypothesis (Brovetto 2002)

Two are the explanations given by Brovetto for the non-availability of the preverbal embedded subject:

- If the C-layer is not projected, the preverbal embedded subject would inadequately receive accusative case from the main predicate. Therefore, the CP, and the consequent presence of *que*, is required to avoid the ECM configuration. Alternatively, the subject remains in post-verbal position to avoid the case clash when the complementizer is not present.
- Another account for the non-availability of preverbal subjects may be entertained assuming that Spanish preverbal subjects bear a topic feature.



CP Hypothesis (Antonelli 2013)

Antonelli (2013) endorsed the view that the peripheral heads Force and Fin are **syncretically projected**. Consequently, the intermediate peripheral heads are not projected which explains why the embedded CP cannot host left-peripheral material when *que* is not realized.

According with this hypothesis, the embedded verb works as an alternative checker of the relevant feature of the complementizer. Therefore, complementizer deletion is allowed by an I-to-C movement of the verb to “value the sentential feature associated to Force and the *irrealis* feature associated to Fin.” (Antonelli 2013: 21).

Aim of this study (1)



The present study aims:

- to verify the main assumptions taken from the existing proposals;
- to suggest, contrary to Brovetto (2002), that *que*-less clauses are not IP structures;
- to explore the configuration of the C-field of *que*-less clauses (namely if it is either a pruned or a syncretic CP), and whether this syntactic entity must be treated as a null complementizer or not. In order to do that, it will consider:
 - to what extent preverbal lexical material is incompatible with *que*-less clauses.
 - how preverbal lexical material is interpreted;
 - if there is a C-I relation between the main predicate and the embedded clause;
 - which are the restrictions for extraction from the embedded clause.

Aim of this study (2)



If *que*-less clauses present verb movement to C (i.e. Antonelli 2013), we expect to find:

- adjacency between the main and the embedded predicate, and the obligatory V-S inversion;
- if preverbal lexical material is attested, i.e. adverbs, they are interpreted with a marked interpretation;
- the presence of a C-I relation between the main predicate and the embedded clause (i.e., the possibility of extraction from the embedded clause; the indicative-subjunctive alternation is determined by the type of the governing predicate)



The data considered in this study has been extracted from CORPES (*Corpus del Español del Siglo XXI*) and CREA (*Corpus de Referencia del Español Actual*) in order to push further the discussion on CD in European Spanish.

The dataset consists of $n = 78.000$ finite complement clauses, which includes $n = 1382$ sentences lacking the phonetic realization of the complementizer *que*.

I extracted a number of 19 Complement-Taking Predicates (CTPs) identified as amenable to deleting the complementizer in Torrego (1983) and Yoon (2015).

The main verbs included in this study belongs to 4 different semantic classes: belief verbs, volitive predicates, verbs of desire and factives.



Linear order

The first observation is related to the distribution of lexical material in the embedded clause.

Antonelli's (2013) proposal of I-to-C movement predicts that no adverb can appear to the left of the embedded verb, since "in clauses lacking *que*, the finite verb will always be structurally higher than any adverb." (Antonelli 2013: 21).

This prediction is not borne out. The dataset attests occurrences of **subjects** and **adverbials** appearing to the left of the embedded verb both in indicative and subjunctive contexts.

- (11) *Ese día, que esper-o ∅ pronto ve-amos, la ciencia hab-rá encontr-ado*
this day that hope-PRS.1SG soon see-SBJV.1PL the science have-FUT find-PTCP
su camino.
its path
'This day, that I hope we will soon see, science will have find its path.' (CORPES 2011, FECYT)

Results (2)



Linear order

- (12) [...] *pero ¡ya está termin-ado!, algo que me produc-e verdadera ilusión*
but now is finish-PTCP something that CL produce-PRS.3SG true illusion
y que esper-o Ø los lectores disfrut-en tanto como yo
and that hope-PRS.1SG the readers enjoy-SBJV.3PL as much as I
he disfrut-ado al fraguar-lo.

AUX enjoy-PTCP when forge-CL

'[...] but it is finished!, which gives me true satisfaction and that I hope that readers will enjoy as much as I have enjoyed forging it.' (O'Shea 2008, CORPES)

- (13) *Además, Carreño se tom-a una licencia más que cre-o Ø nadie*
in addition Carreño CL take-PRS.1SG a license more that think-PRS.1SG nobody
ha señal-ado todavía [...].

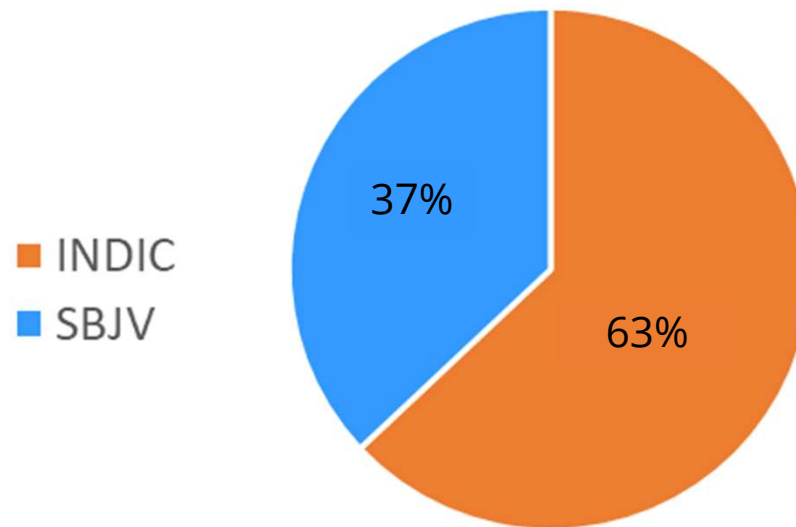
AUX note-PTCP already

'Also, Carreño takes another license that I think nobody has pointed out yet.' (Morán 2006, CORPES)



Overview of the mood of *que*-less clauses:

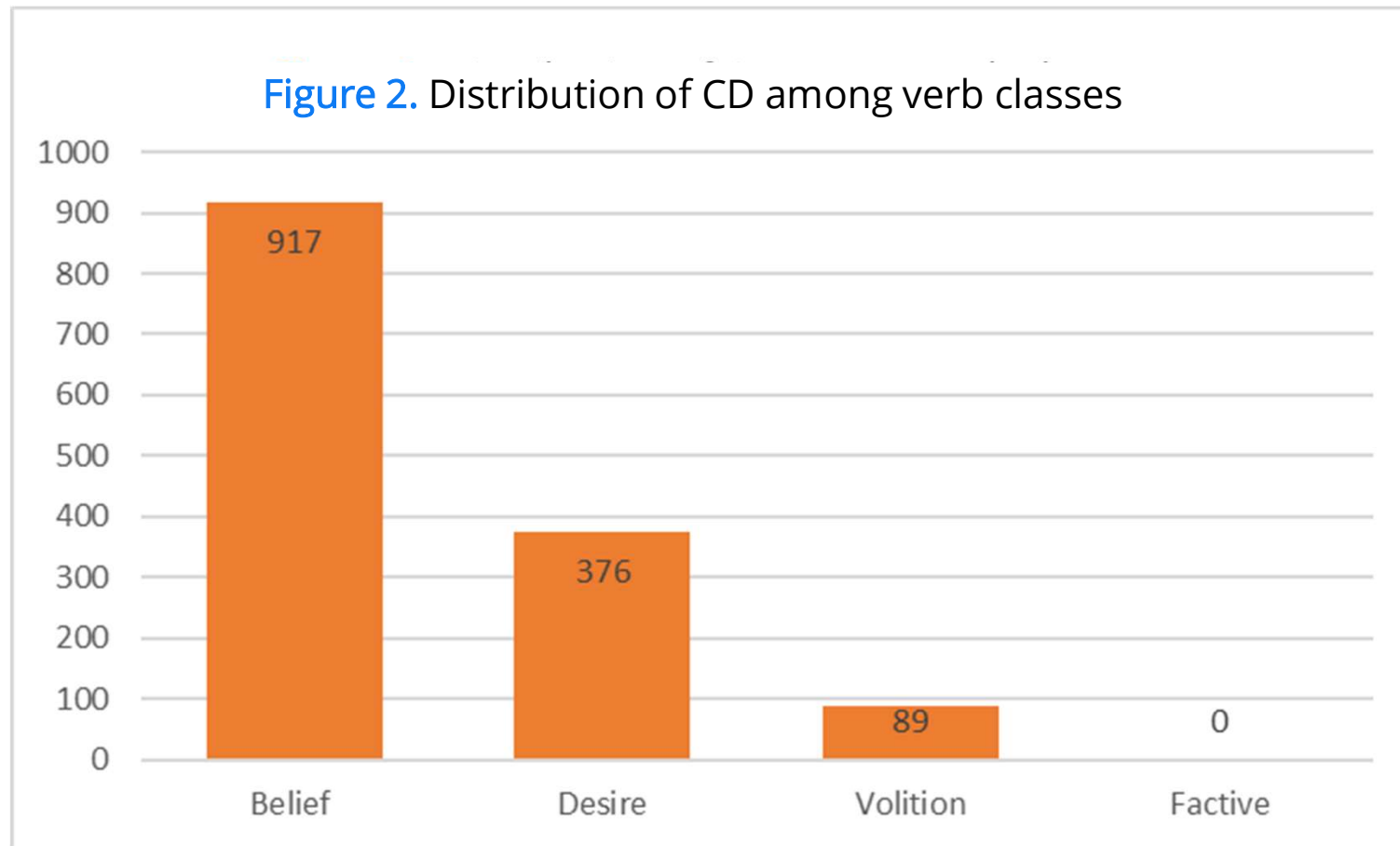
Figure 1. Mood of the embedded clauses



Results (4)



Overview of the semantic classes of CTPs included in the dataset:





Generalization

At this point, we can assert that our data contradicts the two major assumptions of the analyses presented at the beginning.

- There is **no** clear correlation between the omission of *que* and a mood conveying an irrealis meaning;
- The omission of *que* does **not** require the adjacency between the main and the embedded verb.



Generalization

- ✗ Adjacency between the main and the embedded predicate, and the obligatory V-S inversion;
- ✓ The indicative-subjunctive alternation is determined by the type of the governing predicate;
- ?
- ?
- The possibility of extraction from the embedded clause;
- ?
- The interpretation of preverbal lexical material.



Determining the status of preverbal lexical material

The adverbs that are attested in preverbal position are *siempre* 'always' and *pronto* 'soon', which are classified as low adverbs (cf. Cinque 1999; Ledgeway & Lombardi 2005) belonging to the I domain.

- (16) *Ese día, que esper-o ∅ pronto ve-amos, la ciencia hab-rá encontr-ado*
this day that hope-PRS.1SG soon see-SBJV.1PL the science have-FUT find-PTCP
su camino.
its path
'This day, that I hope we will soon see, science will have find its path.' (CORPES 2011, FECYT)

- (17) [...] *hoy me vest-í de verde / verde esperanza / el estado de ánimo*
today CL wear-PAST.1SG of green green hope the state of mind
que dese-o ∅ siempre te acompañ-e [...]
that wish-PRS.1SG always CL accompany-SBJV.1SG
'[...] today I am wearing green, hope green, the mood that I hope always be with you.'
(Balamoda 2016, CORPES)



Determining the status of preverbal lexical material

- According to consulted native speakers, this configuration in which the embedded verb of the *que*-less clause appears preceded by a low adverb, is accepted only if the adverb is read with a flat, neutral intonation. If the adverb receives a marked intonation, the sentence is ungrammatical.
 - According to Schifano (2018), the verb in Spanish targets a low position in the LAS (Lower Adverb Space) (cf. Cinque 1999; Ledgeway & Lombardi 2005) below *siempre* 'always' and precedes low adverbs up to *ya* 'already' only as a pragmatically marked option.
- The linear order found in *que*-less clauses suggests that the adverb has not been focalized and the embedded verb appears within the I-domain.



Determining the status of preverbal lexical material

As for adverbs lexicalizing the higher positions of the hierarchy, they cannot precede the embedded verb if *que* is missing.

- (18) *E-s, sin duda alguna, un contrasentido que cre-emos*
be-PRS.3SG without doubt any a contradiction that think-PRS.1PL
**(que) lamentablemente deb-e correg-ir-se.*
that unfortunately must-PRS.3SG correct-INF-CL
- (19) *E-s, sin duda alguna, un contrasentido que cre-emos*
be-PRS.3SG without doubt any a contradiction that think-PRS.1PL
**(que) evidentemente deb-e correg-ir-se.*
that evidently must-PRS.3SG correct-INF-CL



Determining the status of preverbal lexical material

If we agree with Poletto (1995) and Rizzi (1997) that quantifiers as subjects cannot undergo topicalization, then those subjects must be located within the IP domain.

- (20) *Además, Carreño se tom-a una licencia más que cre-o Ø*
in addition Carreño CL take-PRS.1SG a license more that think-PRS.1SG
nadie ha señal-ado todavía [...].
nobody AUX note-PTCP already
'Also, Carreño takes another license that I think nobody has pointed out yet.'
(Morán 2006, CORPES)

The interpretation of these subjects as fronted foci is also rejected. As for the bare negative quantifier *nadie*, it may be interpreted as negating or reasserting part of the hearer's presupposition but, unlike contrastive focused phrases, it does not introduce a variable with an associated value (Zubizarreta 1998: 103).



Determining the status of preverbal lexical material

The data shows that DPs subjects and quantifiers appearing in preverbal embedded position are characterized by an unmarked interpretation suggesting that they do not appear in higher C positions dedicated to discourse roles.

The distribution of adverbs also suggests that the finite verb is positioned in a low position, possibly within the inflectional domain. In other words, **the embedded predicate does not move to C in CD structures.**

The question that follows is whether the CP is absent (i.e. Brovotto 2002) or if it must be treated as a null complementizer.

Analysis (6)



Is there a C-T relation?

As for CD in **subjunctive contexts**, the selection of the embedded mood by the governing verb (factives, volitives and verbs of desire) may indicate the presence of a C-T relation.

As for CD in **indicative contexts**, the belief predicate selects the subjunctive mood in its embedded clause when it is negated:

(21) *No cre-o ∅ la ha-ya repet-ido con nadie.*
not believe-PRS.1SG CL AUX-SBJV.3SG repeat-PTCP with nobody
'I don't think he has repeated it to nobody.' (CREA 1985, *Yo, el rey*, Vallejo-Nágera.)

(22) *Los pormenores [...] los he aclar-ado [...] con la familia, y*
the details CL AUX clarify-PTCP with the family and
no consider-o ∅ deb-an ventil-ar-se a la luz pública.
not consider-PRS.1SG must-SBJV.1PL reveal-INF-CL to the light public
'I have gone through the details with the family and I don't think they should come to the public spotlight.' (CREA 1987)



Is there a C-T relation?

The preverbal embedded subject in *que*-less clauses does not receive accusative case from the matrix verb.

- (23) [...] *pero ¡ya está terminado!, algo que me produce verdadera ilusión*
but now is finish-PTCP something that CL produce-PRS.3SG true illusion
*y que esper-o ∅ (*a) los lectores disfrut-en tanto como yo*
and that hope-PRS.1SG ACC the readers enjoy-SBJV.3PL as much as I
he disfrut-ado al fragu-ar-lo.
AUX enjoy-PTCP when forge-INF-CL
'[...] but it is finished!, which gives me true satisfaction and that I hope that readers will
enjoy as much as I have enjoyed forging it.'

Contrary to Brovetto's (2002) claims, *que*-less clauses do not receive **Exceptional Case Marking**, typical of a clause which only has an IP status, i.e. non-finite complement of exceptional verbs.



Is there a C-T relation?

Most of CD gathered are embedded in relative constructions. Extractions of dislocates are not attested.

- (24) *Ese día, que esper-o Ø pronto ve-amos, la ciencia hab-rá encontr-ado*
this day that hope-PRS.1SG soon see-SBJV.1PL the science have-FUT find-PTCP
su camino.
its path
'This day, that I hope we will soon see, science will have find its path.' (CORPES 2011, FECYT)

- (25) *Allí se suen-a repetidamente la nariz en lo que imagin-o Ø ser-án*
there CL play-PRS.3SG repeatedly the nose in what that imagine-PRS.1SG be-FUT.3PL
pañuelos de papel.
handkerchief of paper
'There he blows his nose repeatedly in what I consider to be paper towels.'
(CORPES 2012, Muñoz Rengel, J. J., *El asesino hipocondríaco*)



Is there a C-T relation?

Wh-extractions are attested, both in indicative and subjunctive contexts, and the wh-phrase lands in the main CP:

- (26) *¿Cuál es la repercusión que cre-es tiene este certamen*
what is the repercussion that think-PRS.1sg has this competition
en el desarrollo de la danza en Burgos y [...]?
in the development of the dance in Burgos and
'What repercussion do you think that this competition has on the development of the dance in Burgos?'



Is there a C-T relation?

However, contrary to English, the wh-extraction of subjects is possible only if the complementizer is overtly realized:

(27) *¿Quién desea-rías *(que) vin-iera?*

who wish-COND.2SG that come-SBJV.PAST.3SG

'Who do you wish would come?'

(28) *¿Quién piens-as *(que) gan-a esta noche?*

who think-PRS.2SG that win-PRS.3SG this night

'Who do you think will win?'

Conclusions and pending questions (1)



Taken together, the facts of *que*-less clauses in Spanish argue against the previous analysis. In fact, we have seen that:

- These structures allow subjects and adverbs to break the adjacency;
- The embedded predicate remains in a low position;
- Data indirectly suggests the presence of a C-T relation.

From a **parametric** and **typological** point of view, the low position of the embedded verb in Spanish *que*-less clauses is not surprising, given that Spanish is classified as a very low-movement variety (cf. Schifano 2018).

Hence:

- The omission of *que* does not entail a I-to-C movement.
- The CP may contain a phonetically empty complementizer.

Conclusions and pending questions (2)



Mood selection:

- If we assume that in complement clauses with overt *que* mood is licensed through FinP, it is natural to assume that the same process takes place in complement clauses without *que*. Therefore, the Fin projection is needed;

Adverb distribution:

- The impossibility of high adverbs in embedded preverbal position may be predicted if we assume that *que*-less clauses only project the lowest C projection Fin. We do not expect Topics nor Foci in that position either;

Extraction:

- The extraction does not show a unitary behavior. *Que*-less clauses are often embedded under relative constructions, and wh-extractions are attested. Subject extractions in interrogative clauses require the phonetic realization of *que*.



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Thank you for your attention!

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