

Predicate doubling asymmetries with factive clauses

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1 Introduction

Spanish exhibits **predicate doubling**, i.e., a construction in which an infinitive verb appears dislocated in the left periphery of the sentence, doubled by an inflected form of the same lexical verb that occupies a clause-internal position.

- (1) Leer, leyó.
read.INF read.3SG
‘As for reading, he did read’

Predicate doubling is acceptable even if the inflected verb is in a complement clause:

- (2) Leer, creo que leyó.
read.INF think.1SG that read.3SG
‘As for reading, I think that he did read’

In this presentation I explore a pattern that, as far as I know, has not been discussed in the literature: while predicate doubling is possible with complement clauses embedded under cognitive factive predicates (3a), it is unacceptable with clauses selected by emotive factives (3b).

- (3) a. Leer, sé que leyó.
read.INF know.1SG that read.3SG
‘As for reading, I know that he did read’
b. *Leer, lamento que haya leído.
read.INF regret.1SG that have.SUBJ.3SG read.PP
‘As for reading, I regret that he did read’

Main proposal

This asymmetry arises because of a semantic/pragmatic problem: predicate doubling with emotive factive clauses is not possible because it gives rise to an inevitable presupposition failure, i.e. an *impossible presupposition*.

2 Main assumptions

2.1 Predicate doubling, verum focus and QUD

Predicate doubling triggers **verum focus** interpretation, i.e., an emphasis on the positive polarity of the sentence (Vicente 2009, 2007).

- (4) A. ¿Leíste el libro?
read.2SG the book
‘Did you read the book?’
B. Leer, lo leí.
read.INF it read.1SG
‘As for reading, I did read it.’

Verum focus involves F-marking on a polarity head Σ (Goodhue 2018, Samko 2016).

- (5) Leer, $[\Sigma_F$ lo leí]
read.INF Σ_F it read.1SG
‘As for reading, $[\Sigma_F$ I DID read it]’

Semantically, the proposition marked with verum focus is contrasted with its negation. Adopting Rooth’s theory, the focus value of a verum focus sentence is the set $\{p, \neg p\}$.

- (6) $[[I\ DID\ read\ it]]^f = \{I\ read\ it, I\ didn't\ read\ it\}$

Focus allows to identify the relevant Question Under Discussion (QUD), i.e., an explicit or implicit question that corresponds to the current discourse topic (Roberts 1996). In semantic terms, the QUD denotes a set of propositions (i.e. its possible answers).

- (7) Focus Congruence (adapted from Onea & Zimmermann 2019)
 $QUD \subseteq [[\alpha]]^F$

Verum focus on p raises the QUD $?p$, that is, the polar question that denotes the set of its possible answers $\{p, \neg p\}$ (Samko 2016, Büring 2003).

- (8) a. Juan DID read the book
b. (Implicit) QUD: *Did Juan read the book?*

2.2 Factives and semifactives

Cognitive factives, unlike emotives, can lose their presuppositional status in some contexts.

- *Antecedent of conditionals* (Karttunen 1971)

- (9) a. If I **realize** later that I have not told the truth, I will confess it to everyone.
↗ *The speaker didn't tell the truth*
b. If I **regret** later that I have not told the truth, I will confess it to everyone.
→ *The speaker didn't tell the truth*

- *Parenthetical readings* (Simons 2007, Hooper & Thompson 1973)

- (10) A. Where was Harriet yesterday?
 B. Henry discovered that she had a job interview at Princeton.
- (11) A. Where was Harriet yesterday?
 B. #Henry is happy that she had a job interview at Princeton.

Thus, I assume that, **in some cases, cognitive factives, contrary to emotives, can introduce assertions.**

Assumptions: summary

1. Predicate doubling triggers verum focus marking.
2. The focus value of a verum focus sentence is the set $\{p, \neg p\}$.
3. Verum focus on p raises the QUD $?p$ (i.e., its polar question).
4. Cognitive factives, unlike emotives, can introduce assertions.

3 Analysis

3.1 Predicate doubling with cognitive factives

I claim that in predicate doubling constructions, cognitive factives involve prethetical readings, that is, **their complement introduce assertions**. Thus, cognitive factives behave as non-factive predicates.

- (12) A. ¿Juan leyó el libro?
 J. read.3SG the book
 ‘Did Juan read the book?’
- B. Leer, sé que lo leyó.
 read.INF know.1SG that it read.3SG
 ‘As for reading, I know that he did read it’

Since predicate doubling involves verum focus marking of the embedded clause, it evokes the QUD in (13a).

- (13) a. QUD associated with (12B) = Did Juan read the book?
 b. $[[\text{QUD}_{(13a)}]] = \{\text{that Juan read the book, that Juan didn't read the book}\}$
 c. $[[\text{QUD}_{(13a)}]]$ DOES NOT PRESUPPOSE that Juan read the book.

Crucially, the QUD does not presuppose the embedded clause of the answer. This shows that (12B) introduces new information to the Common Ground.

3.2 Predicate doubling with emotive factives

- (14) A. ¿Juan leyó el libro?
 J. read.3SG the book
 ‘Did Juan read the book?’
- B. *Leer, lamento que lo haya leído.
 read.INF regret.1SG that it have.SUBJ.3SG read
 ‘As for reading, I regret that he did read it’

Again, the predicate doubling construction triggers verum focus interpretation. In consequence, it evokes the QUD in (15a).

- (15) a. QUD associated with (14B) = Did Juan read the book?
 b. $[[\text{QUD}_{(15a)}]] = \{\text{that Juan read the book, that Juan didn't read the book}\}$
 c. $[[\text{QUD}_{(15a)}]]$ DOES NOT PRESUPPOSE that Juan read the book.

Unlike cognitive factives, **emotive factives select presupposed clauses**: (16a) triggers the presupposition (16b)). However, it is not presupposed by the QUD (16c)

- (16) a. *Leer, lamento que lo haya leído.
 ‘As for reading, I regret that he read it’
- b. PRESUPPOSITION triggered by (16a): Juan read the book
- c. QUD in (16a) = $\{\text{that Juan read the book, that Juan didn't read the book}\}$

Thus, **predicate doubling involving emotive factive predicates with verum focus reading will always lead to a presupposition failure**: the embedded proposition p should be presupposed, however, the verum focus evokes the QUD $?p$, that is, the set of alternatives $\{p, \neg p\}$. I claim that it is an instance of an *impossible presupposition*:

- (17) **Impossible Presupposition**
 A sentence S will trigger an *impossible presupposition* iff
- a. S triggers a presupposition p , and
 - b. there is no QUD congruent with $[[S]]^f$ that triggers the presupposition p .

In other words, an *impossible presupposition* is a presupposition that **cannot be satisfied in any context**.

4 Predictions

- **Prediction I**: Predicate doubling with emotive factive predicates should be possible if the embedded clause is not marked with verum focus. For instance, in (18B), it is the main clause which receives the verum focus marking.

- (18) A. ¿Lamentás haber leído el libro?
 regret.2SG have.INF read the book
 ‘Do you regret having read the book?’
- B. Leer, LAMENTO haberlo leído (pero no lamento haberlo comprado).
 read.INF regret.1SG have-it read but not regret.1SG have-it bought
 ‘As for reading, I DO regret having read it (but I don’t regret having bought it).’

In consequence, the embedded clause is presupposed and no impossible presupposition arises:

- (19) a. QUD associated with (18B) = Do you regret having read the book?
 b. $[[\text{QUD}_{(19a)}]] = \{\text{that the addressee regrets having read the book, that the addressee does not regret having read the book}\}$
 c. $[[\text{QUD}_{(19a)}]]$ PRESUPPOSES that the addressee read the book.

- **Prediction II:** Predicate doubling with emotive factive predicates should be possible if the emotive factive does not select a presupposed clause. This is borne out with announcements embedded under a verb of regretting:

- (20) A. ¿Perdió Federer?
 lost.3SG F.
 ‘Did Federer lose?’
- B. Perder, lamento informarte que perdió, (pero clasificó).
 lose.INF regret.SG inform.INF-you that lost.3SG but classified
 ‘As for losing, I regret to inform you that he lost, (but he classified).’

In these cases, the emotive factive predicate does not trigger any presupposition. Therefore, no presupposition failure arises and, consequently, predicate doubling is grammatical.

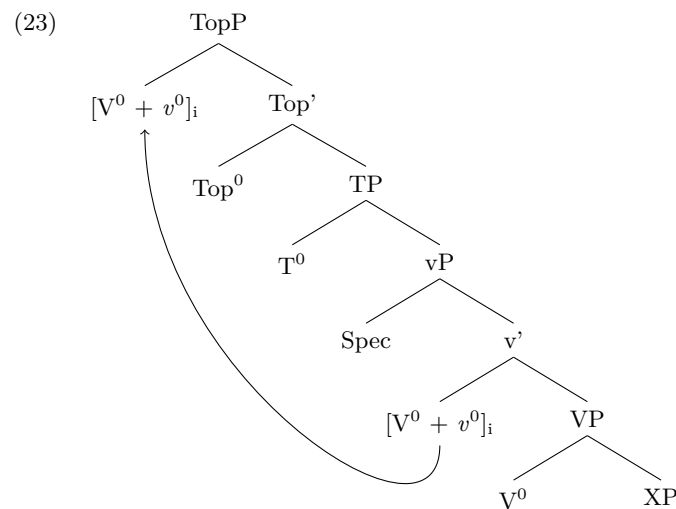
- **Prediction III:** Other verum focus constructions should be banned in clauses embedded under emotive factive predicates, since they would lead to an *impossible presupposition*:

- (21) Verum Focus Fronting (Leonetti & Escandell-Vidal 2009)
- a. Sé que algo leyó.
 know.1SG that something read.3SG
 ‘I know he read something’ (Intended: ‘I know that he did read’)
- b. *Lamento que algo haya leído.
 regret.1SG that something have.SUBJ.3SG read.PP
 ‘I regret that he read something’ (Intended: ‘I regret that he did read’)

- (22) Contrastive Verum Focus
- a. Yo sé que Juan SÍ leyó el libro.
 I know.1SG that J. yes read.3SG the book
 ‘I know Juan did read the book.’
- b. *Yo lamento que Juan SÍ haya leído el libro.
 I regret.1SG that J. yes have.SUBJ.3SG read the book
 ‘I regret that Juan did read the book.’

5 Syntactic alternatives

Vicente (2009, 2007) explains predicate doubling in Spanish in terms of Head-to-Spec movement: the complex head v^0 moves to Spec,TopP, as schematized in (23):



Evidence in favor of this proposal is the fact that predicate doubling exhibits island effects: it is blocked if an island boundary intervenes between the first and the second predicate, e.g. a relative clause (24a) or an adjunct (24b).

- (24) a. *Comprar, he visto al hombre que ha comprado un libro.
 buy.INF have seen to.the man that have bought a book
 ‘As for buying, I have seen the man that has bought a book.’
- b. *Comprar, he ido al cine después de comprar un libro.
 buy.INF have gone to cinema after of buy.INF a book
 ‘As for buying, I’ve gone to the movies after buying a book’

Regarding island constraints, Landau (2006) points out that predicate doubling in Hebrew is sensitive to factive islands. As is well known, factive clauses give rise to weak island effects:

- (25) a. Who do you think that Juan invited to the party?
 b. How do you think that Juan danced?
- (26) a. Who do you regret that Juan invited to the party?
 b. *How do you regret that Juan danced?

Landau assumes that predicate movement patterns together with adjunct movement, hence it is subject to weak islands effects. Consequently, since in Hebrew it is not possible to double a predicate that appears in a factive clause (27), he concludes that predicate doubling involves A'-movement.

- (27) Hebrew (Landau 2006)
- a. Le'hacbia, Gil amar še-Rina kvar hicbia la-avoda.
 vote.INF Gil said.3SG that-Rina already voted.3SG to-the-Labor
 'As for voting, Gil said that Mary had already voted to the Labor Party.'
- b. *Le'hacbia, Gil hitcta'er še-Rina kvar hicbia la-avoda.
 vote.INF Gil regretted.3SG that-Rina already voted.3SG to-the-Labor
 'As for voting, Gil regretted that Mary had already voted to the Labor Party.'

Now, in Spanish, clauses selected by cognitive factives (28) and by emotive factives (29) induce, in both cases, weak island effects:

- (28) a. ¿A quién sabés que invitó Juan a la fiesta?
 to who know.2SG that invited.3SG J. to the party
 'Who do you know that Juan invited to the party?'
- b. *¿Cómo sabés que bailó Juan?
 how know.2SG that danced.3SG J.
 'How do you know that Juan danced?'
- (29) a. ¿A quién lamentás que haya invitado Juan a la fiesta?
 to who regret.2SG that have.SUBJ.3SG invited J. to the party
 'Who do you regret that Juan invited to the party?'
- b. *¿Cómo lamentás que haya bailado Juan?
 how regret.2SG that have.SUBJ.3SG danced J.
 'How do you regret that Juan danced?'

Problem: If predicate doubling involves A'-movement, it predicts no contrast between clauses embedded under cognitive and emotive factives: since both types of clauses exhibit weak island effects, predicate doubling should be banned in both cases. However, as we have seen before, this is not the case:

- (30) a. Leer, sé que leyó.
 read.INF know.1SG that read.3SG
 'As for reading, I know he read.'
- b. *Leer, lamento que haya leído.
 read.INF regret.1SG that have.SUBJ.3SG read
 'As for reading, I regret that he read.'

6 Conclusion

- New asymmetry in predicate doubling construction between cognitive factives and emotive factives.
- Presuppositional account: *impossible presuppositions*, i.e., presuppositions that cannot be satisfied in any possible context.
- Limits of syntactic approaches: the asymmetry cannot be explained in terms of A'-movement.

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