Predicate doubling in Spanish: On how discourse may mimic syntactic movement

Carlos Muñoz Pérez
Catholic University of Chile

carlos.munozperez@uc.cl

Matías Verdecchia
CONICET - University of Buenos Aires

mnverdecchia@filo.uba.ar

Abstract

Predicate doubling in Spanish is usually taken to involve multiple copy spell-out. This approach is mainly motivated by the fact that two instances of the same lexical verb appear in the construction, and by the observation that the pattern is sensitive to island restrictions. In contrast, we contend in this paper that predicate doubling is a phenomenon for which an analysis based on multiple copy spell-out cannot be empirically substantiated. We argue that the construction is better understood as involving a base-generated predicate in the left periphery that functions as a contrastive topic. We show that a number of properties of predicate doubling follow from this analysis, including lexical identity between the verbs and sensitivity to islands. Furthermore, our proposal provides a rationale for genus-species splits in the construction, and also offers a straightforward account for otherwise mysterious asymmetries arising with factive verbs.

Keywords— Predicate doubling Islands Contrastive topic Question under discussion Movement

1 Introduction

The term *predicate doubling* refers to a family of constructions in which two occurrences of the same lexical verb appear.[1] The first verb occupies a dislocated position in the left periphery of the sentence, while the second remains in its clause-internal base position. The examples in (1) and (2) illustrate the phenomenon.

(1) l̿i à l̿i-dā zué sàká.
     eat we eat-PAST yesterday rice
     'We ATE rice yesterday.'

Vata (Koopman 1984)

---

[1]This type of construction has received many names over the years, e.g., *Predicate Cleft*, *VP-Cleft*, *vP-Topicalization*, etc. We follow Aboh and Dyakonova (2009) and many others in calling it *predicate doubling* simply because we find that this terminology describes the phenomenon in a more transparent way.

(2) Rira adie ti Jimo o ra adie.
     buying chicken ti Jimo HTS buy chicken
     'The fact that Jimo bought chicken.'

<div align="right">Yoruba (Kobele 2006)</div>

As these sentences show, the "size" of the left-peripheral verbal duplicate may vary. For instance, in (1) only the bare verb $\overline{li}$ 'eat' is doubled at the left, while in (2) the left-peripheral duplicate seems to be the VP *rira adie* 'buying chicken'. For ease of reference, we will henceforth refer to the leftmost and rightmost verbal constituents in these constructions, whatever their size, as PREDICATE 1 and PREDICATE 2, respectively.

(3) $\underbrace{\text{VERB (XP)}}_{\text{PREDICATE 1}}$ ... [$_{\text{CLAUSE}}$ ... (AUX/MODAL) ... $\underbrace{\text{VERB (XP)}}_{\text{PREDICATE 2}}$]

Predicate doubling constructions have been argued to offer evidence supporting the *Copy Theory of Movement* (Nunes 2004). In this framework, doubling patterns like (1) and (2) are analyzed as instances of multiple copy spell-out, i.e., PREDICATE 1 and PREDICATE 2 are taken to be overt members of a single movement chain C = {PREDICATE 1, PREDICATE 2}; see Cho and Nishiyama (2000), Abels (2001), Nunes (2004), Kobele (2006), Landau (2006), Trinh (2009), among many others.

This paper focuses on the Spanish variety of the phenomenon.[2] In this language, predicate doubling has been observed to involve either a bare infinitive, e.g., (4a), or an infinitival phrase, e.g., (4b), in the left periphery of the sentence.

(4) a. Comprar, compré   un auto.
         to.buy   bought.1SG a   car
         'As for buying, I bought a car.'
     b. Comprar el auto, ya   lo compré
         to.buy   the car   already it bought.1SG
         'As for buying the car, I bought it already.'

Vicente (2007, 2009) offers a movement-based analysis of Spanish predicate doubling. According to him, the derivation of a sentence like (4a), in which PREDICATE 1 is a bare infinitive, involves moving the complex head v^0 to Spec,C as in (5a), while a sentence like (4b), in which PREDICATE 1 is an infinitival phrase, requires movement of the full vP to Spec,C as in (5b). These movements are assumed to involve topicalization of the verbal projection.

(5)

---

[2]All Spanish grammaticality judgements reported in this article are provided by the authors and were confirmed by native speaker colleagues. Spanish examples correspond to the Rioplatense variety, in which predicate doubling is a productive pattern.
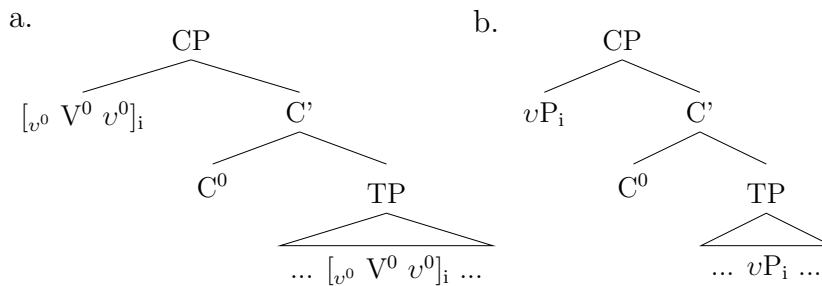
In both cases, the two members of the movement chain $C = \{v^0, v^0\}$ or $C = \{vP, vP\}$ receive pronunciation. To account for the distinct morphology in the doubled verbs (e.g., *comprar* 'to buy' vs. *compré* 'I bought' in (4a)), Vicente assumes that an infinitival suffix appears by default on bare verbal roots.

(6) INFINITIVE BY DEFAULT (adapted from Vicente 2009: 170)
As $[_{v^0}\ V^0\ v^0]$ lacks any agreement projection, it ought to be spelled out as a bare uninflected root. However, it is not possible to spell out a bare root in Spanish. Therefore, as a Last Resort mechanism, the morphological component spells out this category as an infinitive by default.

As evidence for this analysis, Vicente notices that PREDICATE 1 and PREDICATE 2 are subject to locality constraints that are reminiscent of those holding between filler and gap in A'-movement dependencies. To begin with, predicate doubling is acceptable if PREDICATE 2 is located within a complement clause.

(7) a. Comprar, Cosmo dice   que Eliana compró   el libro.
        to.buy   Cosmo say.3SG that Eliana bought.3SG the book
        'As for buying, Cosmo says that Eliana bought the book.'

    b. Comer, quiero   comer una pizza.
        to.eat want.1SG to.eat a   pizza
        'As for eating, I want to eat a pizza.'

However, the doubling pattern becomes unacceptable if PREDICATE 2 is inside a syntactic island. This is shown in the examples in (8) regarding adjuncts (8a), preverbal subjects (8b), coordinate structures (8c), and relative clauses (8d).[3]

(8) a. * Comprar, Eliana fue   al   cine   después de comprar un libro.
          to.buy   Eliana went.3SG to.the cinema after   of to.buy   a book
          'As for buying, Eliana went to the cinema after buying a book.'

    b. * Comprar, que Eliana haya   comprado un libro me sorprendió.
          to.buy   that Eliana have.3SG bought   a book me surprised
          'As for buying, that Eliana bought a book surprised me.'

_____

[3]The landscape of island restrictions in Spanish does not differ significantly from other well-studied Romance languages. There are two topicalization constructions involving leftward dislocation: *clitic left dislocation* and *hanging topics*. From these, only the former obeys island restrictions (Zubizarreta 1999, López 2009, Olarrea 2012), the latter being unanimously analyzed as base-generated constituents above the CP level (Cinque 1977, Alexiadou 2006, López 2009); however, see Muñoz Pérez (2021) for the observation that infinitival hanging topics might be island-sensitive. Wh-movement and *focus fronting* are both subject to canonical island restrictions (Francom 2012, Olarrea 2012).

c. * Comprar, Eliana compró   un libro y   vendió   una revista.
     to.buy   Eliana bought.3SG a   book and sold.3SG a   magazine
     'As for buying, Eliana bought a book and sold a magazine.'

d. * Comprar, vi   a   la   mujer que compró   un libro.
     to.buy   saw.1SG DOM the woman that bought.3SG a   book
     'As for buying, I saw the woman who bought a book.'

While the data in (8) seem to offer a quite strong empirical argument for a movement-based analysis, we contend that predicate doubling constructions in Spanish are not derived through movement, i.e., PREDICATE 1 and PREDICATE 2 are not copies pertaining to the same chain. Instead, we maintain that PREDICATE 1 is a base-generated *contrastive topic* in the sense of Büring (2003). That is, we observe that predicate doubling in Spanish has the effect of introducing a complex discourse structure consisting of a set of alternative questions, and that PREDICATE 1 "announces" the main predicate of the *question under discussion*. We argue that this approach not only accounts for the island restrictions attested in (8), but also explains several features of the construction that are unexpected under a movement perspective.

The structure of the paper is as follows. In Section 2, we discuss a number of empirical reasons that undermine an analysis of Spanish predicate doubling in terms of multiple copy spell-out. Section 3 discusses our account: in 3.1, we introduce Büring's (2003) theory of contrastive topics, and in 3.2 we show that predicate doubling in Spanish fits this characterization straightforwardly; in 3.3, we derive the island effects exemplified in (8) by appealing to information structure and discourse principles that follow from PREDICATE 1 being a contrastive topic; in 3.4, we show that the lexical identity between the verbs in PREDICATE 1 and PREDICATE 2 follows from the same principles. Section 4 discusses two additional patterns attested with predicate doubling that are problematic for a multiple spell-out analysis but follow from our account. Finally, Section 5 contains some concluding remarks.

2   Is that really multiple copy spell-out?

So far, we have mentioned two empirical reasons to adopt an analysis of Spanish predicate doubling in terms of multiple copy spell-out: (i) the island effects exemplified in (8), and (ii) the fact that both predicates involve the same lexical verb. In this section, we contend that there is no further empirical motivation for this approach beyond these two, and that the argument based on islands is actually inconclusive. First, we show that the nominals within PREDICATE 1 and PREDICATE 2 are not required to be identical copies, but are related through standard anaphoric means. Second, we argue that island effects do not offer a conclusive argument for movement, as doubling patterns involving base-generation also display them. Third, we argue that there is no independent evidence for the claim that v^0 and vP undergo topic movement in Spanish, not even from reconstruction effects in predicate doubling. These observations severely undermine the hypothesis that PREDICATE 1 and PREDICATE 2 are related through movement.

2.1 Predicates are related through anaphora, not identity

According to most versions of Copy Theory, if two constituents α and β pertain to the same movement chain, then α and β must be structurally isomorphic, i.e., *non-distinct* (Chomsky 1995, Nunes 2004, i.a.). Since a movement-based analysis of predicate doubling is based on the idea that PREDICATE 1 and PREDICATE 2 are overt members of a single chain, it follows that both predicates must be strictly identical. This is true for certain cases of predicate doubling, as exemplified in (9). The v^0 and vP labels on PREDICATE 1 and PREDICATE 2 correspond to Vicente's analyses in (5).

(9) a. $[_{v^0}$ Comprar], pude $[_{v^0}$ comprar] un auto.
       to.buy   could.1SG   to.buy   a car
       'As for buying, I was able to buy a car.'

     b. $[_{v\mathrm{P}}$ Comprar un auto], pude $[_{v\mathrm{P}}$ comprar un auto].
       to.buy   a   car   could.1SG   to.buy   a   car
       'As for buying a car, I was able to buy a car.'

However, data discussed by Saab (2017) show that the nominals within these predicates are not required to be identical. In particular, Saab observes that DPs in PREDICATE 1 can be doubled by anaphoric elements in PREDICATE 2, e.g., clitics (10a), strong pronouns (10b), or epithets (10c). The reader must take into consideration that other constructions that have been analyzed as multiple copy spell-out, e.g., *wh-copying* (Fanselow and Mahajan 2000, Nunes 2004) or *emphatic doubling* (Saab 2011, 2017), do not tolerate this kind of mismatch.

(10) a. $[_{v\mathrm{P}}$ Comprar el   auto], puedo $[_{v\mathrm{P}}$ comprar-lo].
       to.buy   the car   can.1SG   to.buy-it
       'As for buying the car, I can buy it.'

     b. $[_{v\mathrm{P}}$ Hablar con   Cosmo], puedo $[_{v\mathrm{P}}$ hablar con   él].
       to.talk with Cosmo   can.1SG   to.talk with he
       'As for talking to Cosmo, I can talk to him.'

     c. $[_{v\mathrm{P}}$ Hablar con   Cosmo], puedo $[_{v\mathrm{P}}$ hablar con   ese   idiota].
       to.talk with Cosmo   can.1SG   to.talk with that idiot
       'As for talking to Cosmo, I can talk to that idiot.'

Furthermore, these anaphoric expressions behave *exactly* as if they were referring to a previously mentioned definite DP in a different sentence, e.g., (11). Since this type of dependency is not mediated by any narrow syntactic operation, the claim that the predicates in (10) are related through movement is severely weakened.

(11) a. Finalmente compré   el   auto$_i$. Lo$_i$ compré   ayer.
       finally   bought.1SG the car   it   bought.1SG yesterday
       'I finally bought the car. I bought it yesterday.'

     b. Finalmente hablé   con Cosmo$_i$. Hablé   con él$_i$ ayer.
       finally   talked.1SG with Cosmo   talked.1SG with he yesterday
       'I finally talked to Cosmo. I talked to him yesterday.'

    c.   Finalmente hablé   con Cosmo$_i$. Hablé   con ese idiota$_i$
             finally   talked.1SG with Cosmo   talked.1SG with that idiot
             ayer.
             yesterday
             'I finally talked to Cosmo. I talked to that idiot yesterday.'

Saab (2017) offers an enlightening discussion on how pronominalization patterns in predicate doubling mimic intersentential anaphora. Part of his argument is based on the distribution of indefinite null objects in Spanish. As Campos (1986) points out, Spanish allows object drop when the antecedent is a bare noun.

(12)   A: ¿Compraste cerveza?
             bought.2SG beer
           'Did you buy beer?'

        B: Sí, compré.
           yes bought.1SG
           'Yes, I bought (beer).'

This, however, is not possible when the antecedent is a definite DP.

(13)   A: ¿Compraste la   cerveza?
             bought.2SG the beer
            'Did you buy the beer?'

        B: * Sí, compré.
            yes bought.1SG
           'Yes, I bought (the beer).'

In these contexts, the insertion of an accusative pronoun referring to the antecedent DP is mandatory.

(14)   A: ¿Compraste la   cerveza$_i$?
             bought.2SG the beer
           'Did you buy the beer?'

        B: Sí, la$_i$ compré.
           yes it bought.1SG
           'Yes, I bought it.'

Crucially, the same pattern is attested in predicate doubling constructions, i.e., object drop in the clause is only possible when the antecedent in PREDICATE 1 is a bare noun. If the dislocated predicate contains a definite DP, then PREDICATE 2 must include an accusative pronoun. Note that it is far from obvious why an anaphoric restriction of this sort would hold between PREDICATE 1 and PREDICATE 2 if they constitute syntactic copies.

(15)   a.   Comprar cerveza, compré.
           to.buy   beer   bought.1SG
           'As for buying beer, I bought (beer).'

b. * Comprar la   cerveza, compré.
   to.buy   the beer   bought.1SG
   'As for buying beer, I bought (beer).'

c. Comprar la   cerveza, la compré.
   to.buy   the beer   it bought.1SG
   'As for buying beer, I bought it.'

Now, consider again Vicente's account. According to his proposal, these doubling patterns involve movement of the full vP to Spec,C and the subsequent deletion of the lower copy; the occurrence of the verb that is pronounced within the TP is due to v-T movement. This seems to be correct for sentences like (15a), as (16a) shows. However, such analysis fails at capturing the contrast between (15b) and (15c), since nothing in the derivation in (16b) explains why these cases require insertion of the accusative clitic.

(16)   a. [$_{v\text{P}}$ Comprar cerveza]$_i$, [$_{\text{TP}}$ compré   [$_{v\text{P}}$ ~~comprar cerveza~~]$_i$]
          to.buy   beer   bought.1SG   to.buy   beer

       b. [$_{v\text{P}}$ Comprar la   cerveza]$_i$, [$_{\text{TP}}$ compré   [$_{v\text{P}}$ ~~comprar la   cerveza~~]$_i$]
          to.buy   the beer   bought1SG   to.buy   the beer

In sum, we can conclude that PREDICATE 1 and PREDICATE 2 (i) are not required to be formally identical, and (ii) are related through anaphora. These features go against what would be expected under an analysis based on multiple copy pronunciation.

## 2.2   Island effects without movement

As Zubizarreta (1999) and many others point out, *hanging topics* in Spanish may be introduced by prepositional markers such as *con respecto a* 'with respect to' or *en cuanto a* 'as for'.

(17)   Con respecto a la   cena, voy   a preparar-la tindevrano. temprano.
       with respect   to the dinner go.1SG to prepare-it   early
       'As for dinner, I'll prepare it early.'

The same type of prepositional expression may be used to introduce an infinitive or infinitival phrase in the left periphery of the sentence that is doubled within the clause by a finite verb, e.g., (18). While it is not evident that these constructions behave exactly as more "standard" instances of predicate doubling, e.g., those in (4), we maintain our terminology and also refer to these verbal duplicates as PREDICATE 1 and PREDICATE 2.

(18)   a. Con respecto a comprar, compré   un auto.
          with respect   to to.buy   bought.1SG a   car
          'As for buying, I bought a car.'

       b. Con respecto a comprar el   auto, ya   lo compré.
          with respect   to to.buy   the car   already it bought.1SG
          'As for buying the car, I bought it already.'

Our main concern at introducing these examples is that PREDICATE 1 occupies a position within a left-peripheral PP, i.e., the infinitival phrase forms a constituent together with the prepositional expression. Therefore, the relevant syntactic structure for the examples in (18) should be the one in (19).

(19)
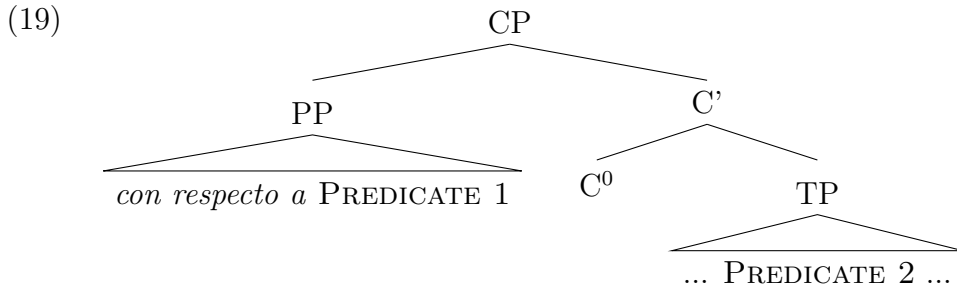
Given that there is no c-command relation between PREDICATE 1 and PREDICATE 2 in this type of configuration, it may be concluded that these elements are not related through movement. Therefore, the examples in (18) do not involve multiple copy spell-out, but base-generation of the PP containing PREDICATE 1.

While a movement-based analysis does not seem to be tenable for these constructions, they display similar locality restrictions to those attested with "standard" predicate doubling. That is, just as in the examples in (7), introducing PREDICATE 1 together with a prepositional expression allows locating PREDICATE 2 in an embedded clause.

(20)   a.   Con respecto a comprar, Cosmo dice   que Eliana compró   un
            with respect to to.buy   Cosmo say.3SG that Eliana bought.3SG a
            libro.
            book
            'As for buying, Cosmo says that Eliana bought a book.'

       b.   Con respecto a comer, quiero   comer pizza.
            with respect to to.eat want.1SG to.eat pizza
            'As for eating, I want to eat pizza.'

However, these constructions are also sensitive to island effects; namely, placing PREDICATE 2 within an adjunct (21a), a preverbal subject (21b), a coordinate structure (21c), or a relative clause (21d) leads to unacceptability.

(21)   a.   * Con respecto a comprar, Eliana fue   al   cine   después de
              with respect to to.buy   Eliana went.3SG to.the cinema after   of
              comprar un libro.
              to.buy   a book
              'As for buying, Eliana went to the cinema after buying a book.'

       b.   * Con respecto a comprar, que Eliana haya   comprado un libro me
              with respect to to.buy   that Eliana have.3SG bought   a book me
              sorprendió.
              surprised.3SG
              'As for buying, that Cosmo bought a book surprised me.'

c. * Con respecto a comprar, Eliana compró   un libro y   vendió   una
    with respect   to to.buy   Eliana bought.3SG a   book and sold.3SG a
    revista.
    magazine
    'As for buying, Eliana bought a book and sold a magazine.'

d. * Con respecto a comprar, vi   a   la mujer que compró   el
    with respect   to to.buy   saw.1SG DOM the woman that bought.3SG the
    libro.
    book
    'As for buying, I saw the woman who bought the book.'

Our point here is straightforward: a doubling pattern for which a movement account does not seem to be tenable exhibits restrictions that are reminiscent of those attested in A'-movement. This suggests that there must be an explanation for island-like constraints in predicate doubling that is independent of syntactic movement.[4] We will tackle this issue in section 3.3. For the moment, it is necessary to conclude that island effects like those exemplified in (8) cannot be taken to support a multiple spell-out account of Spanish predicate doubling, as island sensitivity is also attested in doubling constructions with base-generation.[5]

2.3   No independent motivation for fronting of infinitival phrases

Vicente's (2007, 2009) analysis of the predicate doubling construction has two main ingredients: (i) either v^0 or vP move to Spec,C due to topic-related reasons, and (ii) the gap of v^0 or vP receives pronunciation. However, Spanish does not display any patterns overtly exploiting the derivational step in (i). That is, there is no construction fitting the schemes in (22), with movement of v^0 or vP leaving behind a silent gap.[6]

---

[4] A similar conclusion can be drawn from doubling patterns with finite verbs, which seemingly involve a base-generated CP in the left periphery.

(i)   Que compró   el libro, lo compró.
        that bought.3SG the book it bought.3SG
        'As for her/him buying the book, she/he bought it.'

These constructions display island effects just like standard instances of predicate doubling.

(ii) * Que compró   el libro, vi   a   la mujer que lo compró.
        that bought.3SG the book saw.1SG DOM the woman that it bought.3SG
        'As for buying the book, I saw the woman who bought it.'

We leave the argument based on these constructions for another time, as the topic deserves separate discussion.

[5] Cable (2004) also arrives to the conclusion that island sensitivity is not a proper argument for movement in predicate doubling, although he does it on different grounds.

[6] The lack of patterns like (22a) may be taken to follow from Vicente's (2009) account. He follows Abels (2001) and Landau (2006) in assuming that multiple copy spell-out is a means to save a morphologically deviant structure. In a sentence like (i), the chain C = $\{v^0, v^0\}$ requires its highest link to be overt. Pronunciation of the lower link is enforced to prevent a violation of the Stranded Affix Filter, since the inflectional morphology of the verb ($-e$) cannot be spelled-out by itself.

(i) [$_v$ Comprar], [$_v$ compr] [$_T$ –é]   un auto.
        to.buy   buy   PAST.1SG a   car
    'As for buying, I bought a car.'

(22) a. $[_{CP}\ v^0\ [_{C'}\ C_{TOP}\ ...\ [_{TP}\ T\ [_v\ \bcancel{v^0}\ ...]]]]$
      b. $[_{CP}\ v\text{P}\ [_{C'}\ C_{TOP}\ ...\ [_{TP}\ T\ \bcancel{v\text{P}}\ ]]]$

To put it in slightly different terms, there is no evidence for the claim that Spanish grammar displays topic fronting of infinitives and infinitival clauses other than Vicente's account of predicate doubling. While this does not constitute an argument against his proposal, it does bring a broader empirical problem to the table: when discussing whether the construction involves movement or base-generation, we are also discussing whether v^0 and vP can undergo topic movement in Spanish. Besides of Vicente's claims, the answer to this question seems to be "no".

There are patterns that seemingly support the hypothesis that infinitival clauses in Spanish move for topic-related reasons. Consider the pair in (23). As can be seen, this contrast could tentatively be analyzed as involving overt and null realizations of a lower vP.[7]

(23) a. $[_{v\text{P}}$ Ver   sus   películas], quiero $[_{v\text{P}}$ ver-las].
          to.see her/his movies   want.1SG   to.see-them
          'As for watching her/his films, I want to watch them.'

      b. $[_{v\text{P}}$ Ver   sus   películas], quiero.
          to.see her/his movies   want.1SG
          'As for watching her/his films, I want.'

However, this analysis would be arguably wrong, as (23b) seems to involve a case of *null complement anaphora* (Depiante 2001, Brucart and MacDonald 2012). For instance, Depiante (2001) shows that extraction of a clitic through clitic climbing is impossible from null complement anaphora. As the following pair shows, predicate doubling in (24a) is perfectly fine with clitic climbing, while the alleged sentence involving vP movement in (24b) is not. Thus, the contrast between (23a) and (23b) cannot be reduced to a matter of pronunciation, but requires positing distinct underlying structures.

(24) a. Ver   sus   películas, las   quiero   ver.
          to.see her/his movies   them want.1SG to.see
          'As for watching her/his films, I want to watch them.'

      b. * Ver   sus   películas, las   quiero.
          to.see her/his movies   them want.1SG

This explanation does not extend straightforwardly to the pattern in (22b), as it predicts that the head v^0 should be the only element within vP that is spelled-out twice. In other words, there is no principled reason for the occurrence of *un auto* 'a car' within the clause to require pronunciation in (ii).

(ii) * $[_{v\text{P}}$ Comprar un auto], $[_v$ compr] $[_T$ –é]   ~~un auto.~~
          to.buy   a   car   buy   PAST.1SG a   car
          'As for buying a car, I did buy.'

Even ignoring this technical issue and assuming that Vicente predicts that there are no constructions like (22b) in Spanish, the fact remains that there is no independent motivation for the claim that v^0 or vP undergo topicalization.

[7]Importantly, note that vPs in Spanish cannot be topicalized via CLLD.

(i) * $[_{v\text{P}}$ Ver   sus   películas]$_i$, lo$_i$ quiero.
          to.see her/his movies   it want.1SG
          'As for watching her/his films, I want it.'

An argument supporting vP movement in Spanish could be drawn from reconstruction effects in the predicate doubling construction. Roughly speaking, if PREDICATE 1 and PREDICATE 2 are related through movement, then constituents within PREDICATE 1 should be able to be interpreted within the clause via reconstruction.

Vicente (2007: 84) offers the following examples regarding Condition A (25a), Condition B (25b) and Condition C (25c). As can be observed, predicate doubling seemingly displays reconstruction effects.

(25)   a.   Reírse   de sí   mismo$_i$, Juan$_i$ se ha   reído.
              to.laught.SE of him self   Juan   SE have.3SG laughed
              'As for laughing at himself$_i$, Juan$_i$ has laughed.'

        b.   *Reírse   de él$_i$,   Juan$_i$ se ha   reído.
              to.laught.SE of him Juan   SE have.3SG laughed
              'As for laughing at him$_i$, Juan$_i$ has laughed.'

        c.   *Reírse   de Juan$_i$, él$_i$ se ha reído.
              to.laught.SE of Juan   he SE has laughed
              'As for laughing at Juan$_i$, he$_i$ has laughed.'

However, as Vicente notices, none of these patterns actually requires positing reconstruction of vP within the clause, as the relevant binding relation takes place within the dislocated predicate itself. This is compatible with both a (remnant) movement or a base-generation account. Under a movement approach, the fronted vP contains a copy of the subject in its specifier position (Huang 1993), e.g., (26a). Under base-generation, a PRO in Spec,vP grants the same results, e.g., (26b).[8]

(26)   a.   [$_{CP}$ [$_{vP}$ ~~SUBJ~~$_i$ ... DP$_i$] [$_{C'}$ C [$_{TP}$ SUBJ [$_{T'}$ T ~~vP~~]]]]   *movement*
        b.   [$_{CP}$ [$_{vP}$ PRO$_i$ ... DP$_i$] [$_{C'}$ C [$_{TP}$ SUBJ [$_{T'}$ T vP]]]]   *base-generation*

Vicente also offers the example of variable binding in (27).[9] While he does not discuss it, the relative acceptability of this sentence could be taken to support a movement analysis, as the bound interpretation of the pronoun arguably requires a copy of the subject (and not PRO) occupying Spec,vP.

---

[8]As Martin Salzmann (p.c.) and one anonymous reviewer point out, the reconstruction and the base-generation analyses make different predictions regarding Condition C in sentences involving embedding (Takano 1995). According to the reconstruction account, the sentence in (i.b) should lead to a Condition C violation, given that the dislocated vP would be interpreted within the clause. As can be seen, this prediction is not borne out. The pattern in (i.b) is acceptable, as predicted by the base-generation approach.

(i)   a.   *Él$_i$ sabe   que amo   a   Jorge$_i$.
           he know.3SG that love.1SG DOM Jorge
           'He$_i$ knows that I love Jorge$_i$.'

       b.   Amar a   Jorge$_i$, él$_i$ sabe   que lo   amo.
           to.love DOM Jorge   he know.3SG that him love.1SG
           'As for loving Jorge$_i$, he$_i$ knows I love him.'

[9]According to Vicente (2007), this sentence is acceptable. However, we and our informants find it, at least, deviant. In any case, we find no contrast between this example and the one in (29d) below, which is taken to involve base-generation.

(27)　　? Reírse　　　de sus_i chistes, todo_i mal humorista se ríe.
　　　　　to.laught.SE of his jokes　every bad comedian SE laughs.3SG
　　　　　'As for laughing at his_i own jokes, every_i bad comedian laughs.'

However, the possibility of giving (27) a bound reading seems to stem from the fact that it is a present tense sentence. As pointed out by Fox and Sauerland (1996), generic present tense can trigger illusory scope and binding effects on universal quantifiers. This explanation accounts for the otherwise surprising contrast between (27) and the past tense example in (28).

(28)　　* Reírse　　　de sus_i chistes, todo_i mal humorista se reía.
　　　　　to.laught.SE of his jokes　every bad comedian SE laughed.3SG
　　　　　'As for laughing at his_i own joke, every_i bad comedian laughed.'

The unacceptability of (28) suggests that an account based on PRO is preferable. Further support for this approach comes from cases in which PREDICATE 1 is within a base-generated PP, e.g., (18). Consider the following examples.
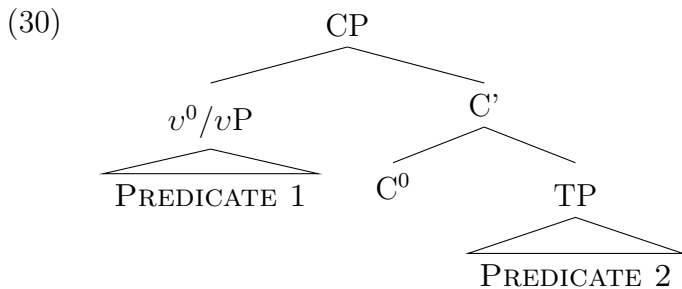
(29)　a.　En cuanto a reírse　　　de sí mismo_i, Juan_i se ha　　　reído.
　　　　　　in about to to.laught.SE of him self　Juan SE have.3SG laughed
　　　　　　'As for laughing at himself_i, Juan_i has laughed.'
　　　b.　* En cuanto a reírse　　　de él_i, Juan_i se ha　　　reído.
　　　　　　　in about to to.laught.SE of him Juan SE have.3SG laughed
　　　　　　　'As for laughing at him_i, Juan_i has laughed.'
　　　c.　* En cuanto a reírse　　　de Juan_i, él_i se ha　　　reído.
　　　　　　　in about to to.laught.SE of Juan he has laughed
　　　　　　　'As for laughing at Juan_i, he_i SE has laughed.'
　　　d.　? En cuanto a reírse　　　de sus_i chistes, todo_i mal humorista se
　　　　　　　in about to to.laught.SE of his jokes　every bad comedian SE
　　　　　　　ríe.
　　　　　　　laughs3SG
　　　　　　　'As for laughing at his_i own jokes, every_i bad comedian laughs.'
　　　e.　* En cuanto a reírse　　　de sus_i chistes, todo_i mal humorista se
　　　　　　　in about to to.laught.SE of his jokes　every bad comedian SE
　　　　　　　reía.
　　　　　　　laughed.3SG
　　　　　　　'As for laughing at his_i own jokes, every_i bad comedian laughed.'

As can be observed, these sentences exhibit the same binding effects as the predicate doubling examples in (25), (27) and (28). Since prepositional expressions like *en cuanto a* 'as for' do not involve movement, an explanation in terms of reconstruction is untenable for the paradigm in (29). Thus, it follows that a base-generation approach is the most likely solution for the entire pattern.

In sum, reconstruction effects in the predicate doubling construction do not support the claim that Spanish has vP fronting. Given the general lack of evidence for this operation, we contend that an alternative account dispensing with it is preferable.

3   A base-generation analysis of predicate doubling

We propose an analysis of Spanish predicate doubling in which there is no movement relation between PREDICATE 1 and PREDICATE 2, i.e., the verbs in the construction are not copies but are independently generated. We propose that the basic syntactic scheme for the predicate doubling construction follows the lines sketched in (30), in which v^0 represents a bare infinitive, e.g., (4a), while vP stands for an infinitival phrase, e.g., (4b). In both cases, the constituent in Spec,C is base-generated. Following Vicente (2009), we assume that these elements receive infinitival morphology by default, cf. (6).

(30)

```
                          CP
                 ╱                ╲
          v⁰/vP                    C'
         ╱      ╲             ╱          ╲
   ‾‾‾‾‾‾‾‾‾‾        C⁰                TP
   PREDICATE 1                    ╱        ╲
                             ‾‾‾‾‾‾‾‾‾‾‾‾
                             PREDICATE 2
```

In principle, instances of predicate doubling with prepositional expressions, e.g., (18), should receive a similar analysis. However, in what follows we focus on the "standard" and more traditional cases of predicate doubling only, e.g., (4). While this obeys space considerations, we also believe that a more systematic study is required before advancing an account for this variety of predicate doubling.

A base-generation account of Spanish predicate doubling faces two immediate challenges. First, it needs to explain why the construction exhibits island restrictions as those in (8) if it does not involve syntactic movement. Second, an analysis of predicate doubling rejecting the hypothesis that PREDICATE 1 and PREDICATE 2 are copies must be able to account for the most salient property of the construction: lexical identity between the verbs. As the example from Vicente (2009: 170) in (31) illustrates, the verbs within both predicates need to be the same.
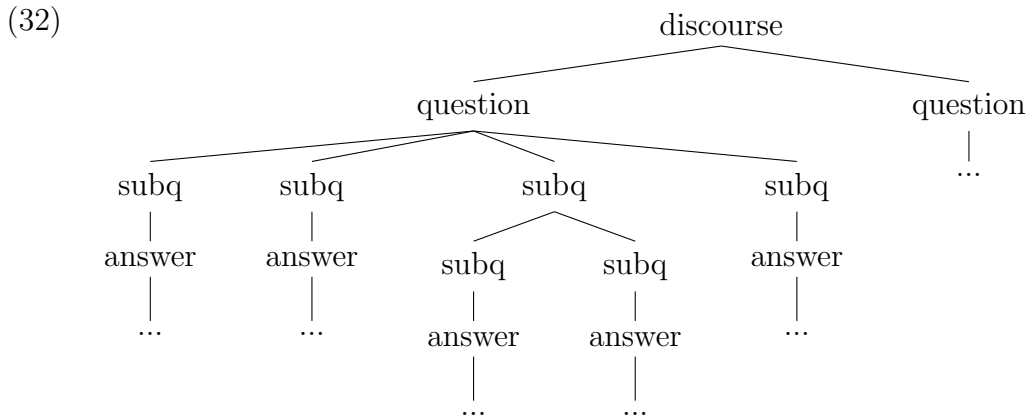
(31)   * Viajar,   Juan ha   volado a Amsterdam.
         to.travel Juan have.3SG flown   to Amsterdam
         'As for traveling, Juan has flown to Amsterdam.'

Our proposal is that PREDICATE 1 is a base-generated *contrastive topic* in the sense of Büring (2003). As we show below, this analysis not only derives the discourse properties of predicate doubling, but also explains why the construction displays island effects and a lexical identity requirement. Before advancing our account, we introduce some basic aspects of Büring's theory of contrastive topics.

3.1   Contrastive topics

Büring's (2003) account of contrastive topics is framed within the *Question Under Discussion* model of discourse (Roberts 1996). In short, this framework analyses utterances as in relation to an implicit or explicit question that is being addressed, i.e., the question under discussion (QUD). For instance, a sentence like *Cosmo likes chicken* can be taken

to answer the QUD *what does Cosmo like?*, which in turn can be taken to partially answer the "bigger" QUD *what is Cosmo like?*. Thus, the model advances a hierarchical model of discourse that can be represented through trees such as (32).

(32)

```
                              discourse
                    ┌─────────────┴──────────────┐
                 question                      question
        ┌────┬──────┬─────────┬────────┐          │
      subq  subq   subq      subq      │         ...
        │    │    ┌──┴──┐      │
     answer answer subq subq answer
        │    │    │    │    │
       ...  ...  answer answer ...
                  │    │
                 ...  ...
```

The organization of these discourse trees borrows from alternative semantics (Rooth 1992). A declarative sentence like (33a) is taken to answer the implicit/explicit QUD in (33b), which denotes the set of possible answers depicted in (33c); the set of propositions in (33c) also constitutes the focus semantic value (*f-value*) of (33a).

(33)   a. Cosmo bought [a car]$_F$.
       b. What did Cosmo buy?
       c. $[\![(33a)]\!]^f = [\![(33b)]\!] = \{$Cosmo bought a car, Cosmo bought a book, ...$\}$

This information can be captured in a discourse tree like (34). Here, (33a) is sister to its alternative propositions and daughter to its QUD in (33b).

(34)   What did Cosmo buy?
           ┌──────────────────┬──────────────────┐
    Cosmo bought [a car]$_F$ Cosmo bought a book   Cosmo bought ...
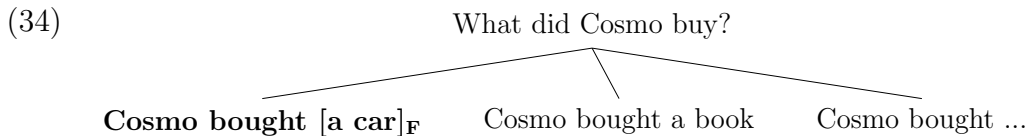
We reserve the term *immediate QUD* to refer to cases in which the question meaning of the QUD is a subset of the *f*-value of its answer, e.g., $[\![(33b)]\!] \subseteq [\![(33a)]\!]^f$. Throughout this paper, this will also be represented as a mother-daughter relation in a discourse tree.

According to Büring, whereas focus relates a declarative sentence to a set of alternative propositions, a contrastive topic relates a sentence to a set of alternative questions (i.e., a set of sets). Consider the example in (35). The answer in (35B) has two prosodically prominent constituents: the focused phrase *the beans* is assigned an A-accent, while the proper noun *Fred* is marked as a contrastive topic by means of a B-accent (Jackendoff 1972); this intonation pattern suggests a potential continuation in which other people ate other things, e.g., *Mary ate the eggplant*, *George ate the tuna*, *Elaine ate the carrots*, and so on.

(35)   A: What did you people eat?
   B: Well, [Fred]$_{CT}$ ate [the beans]$_F$.

As Büring puts it, this "continuation effect" indicates the presence of a complex discourse structure, in which both narrow focus and contrastive topic function as variables introducing each of them a set of alternatives. To retrieve the relevant discourse structure, Büring advances the two-step algorithm in (36).

(36)   CT-Value formation (Büring 2003: 519)
   a.   Replace the focus with a wh-word and front the latter; if focus marks the finite verb or negation, front the finite verb instead.
   b.   Form a set of questions from the result of (36a) by replacing the contrastive topic with some alternative to it.

If applied to the sentence in (35B), this procedure yields (i) its immediate QUD (37a), and (ii) a set of alternative questions (37b). This latter object is what Büring (2003) calls the *CT-value* of the utterance in (35B), i.e., $[\![(35B)]\!]^{ct}$.

(37) $[Fred]_{CT}$ ate $[the\ beans]_F$
   a. $[Fred]_{CT}$ ate $\longrightarrow$ What did $[Fred]_{CT}$ eat?
        what
   b.   What did x eat? $\longrightarrow$ {What did Fred eat?, What did Mary eat?, ...} = $[\![(35B)]\!]^{ct}$

The information in (37) can be summarized as in the discourse tree in (38). In short, this representation shows that an utterance containing a contrastive topic completely answers its immediate QUD, but also evokes a set of alternative questions that altogether address a "bigger" question, e.g., *who ate what?*; this is the "continuation effect" attested before. With Büring, we assume that evoking alternative questions is part of the conventional meaning of contrastive topics, while the content of those questions is standard conversational implicature.

(38)
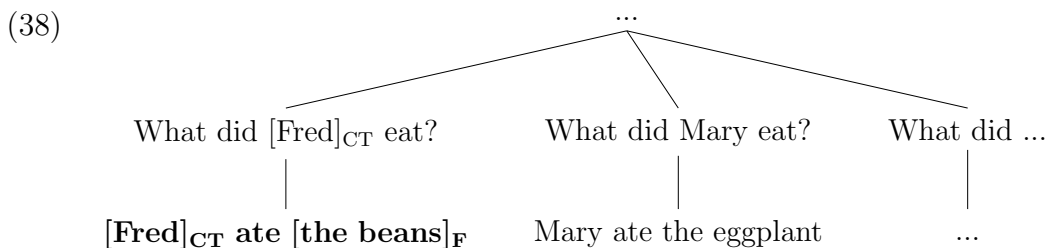
In what follows, we show that the dislocated predicate in Spanish predicate doubling functions as a contrastive topic in exactly the same sense. That is, a sentence with predicate doubling answers an immediate QUD and evokes a set of alternative questions. To retrieve the relevant discourse structures and show that Predicate 1 displays the behavior of a contrastive topic, we will appeal to Büring's CT-Value Formation algorithm in (36). This procedure, however, requires a slight modification to be applied to contrastive topics involving some form of doubling. As a working solution, we advance the following addendum.

(39)   If the CT-marked constituent is dislocated outside the clause, replace with it its correlate within the clause in order to form the QUD.

This is independently required for cases such as (40), for which the two-step process in (36) is taken to proceed as follows.

(40)   As for [Fred]$_{CT}$, he ate [the beans]$_F$
    a. As for [Fred]$_{CT}$, he ate $\longrightarrow$ What did [Fred]$_{CT}$ eat?
      what
    b. What did x eat? $\longrightarrow$ {What did Fred eat?,
                                          What did Mary eat?, ...}

3.2   The information structure of predicate doubling

Vicente (2007) observes that predicate doubling constructions have a *verum focus* type of interpretation, i.e., they emphasize the positive polarity of a proposition. Verum focus in Spanish is typically realized by assigning contrastive accent to the positive polarity marker *sí* 'yes' (Escandell-Vidal 2011); in the dialogue in (41), this form is employed to refute the proposition in (41A).

(41)   A: Jorge no leyó   el libro.
         Jorge not read.3SG the book
         'Jorge didn't read the book.'
    B: SÍ lo leyó,   (pero no lo entendió).
         yes it read.3SG but not it understood.3SG
         'He did read it, (but he didn't understand it).'

As noticed by Vicente, predicate doubling can be used in the same context to express roughly the same meaning. In these cases, the contrastive accent must fall on the main finite verb.

(42)   A: Jorge no leyó   el libro.
         Jorge not read.3SG the book
         'Jorge didn't read the book.'
    B: Leer,   lo LEYÓ,   pero no lo entendió.
         to.read it read.3SG but not it understood.3SG
         'As for reading, he did read it, but he didn't understand it.'

The verum focus interpretation is not a defining ingredient of the construction. As observed by Muñoz Pérez (2017), predicate doubling allows to focus elements other than the polarity of the proposition. The examples in (43) show that direct objects (43a), complements of prepositions (43b), subjects (43c), and adverbs (43d) may also be focused.

(43)   a.   Comprar, compré   EL AUTO, no la moto.
         to.buy   bought.1SG the car   not the motorcycle
         'As for buying, I bought THE CAR, not the motorcycle.'
    b.   Hablar, hablé   con COSMO, no con Eliana.
         to.talk talked.1SG with Cosmo   not with Eliana
         'As for talking, I talked to COSMO, not to Eliana.'
    c.   Comprar, compró   COSMO el asado, no yo.
         to.buy   bought.3SG Cosmo   the meat, not I
         'As for buying, COSMO bought the meat, not me.'

d. Comprar, compré HOY el auto, no ayer.
     to.buy   bought.1SG today the car not yesterday
     'As for buying, I bought the car TODAY, not yesterday.'

Notice that all these examples involve narrow focus. Broad focus, on the other hand, is strongly unacceptable together with predicate doubling.

(44) A: ¿Qué pasó?
        what happened
        'What happened?'

     B: # Comprar, compré el auto.
        to.buy   bought.1SG the car
        'As for buying, I bought the car.'

Thus, predicate doubling requires narrow focus on some constituent. As discussed, narrow focus is one of the key components to calculate the CT-value of a sentence, the other one being the contrastive topic itself. We advance the hypothesis that what we have called PREDICATE 1 in the predicate doubling construction is a contrastive topic; or, to put it in slightly different terms, we take that a doubling pattern on a verbal projection is a means to indicate that a predicate must be interpreted as a contrastive topic in Spanish. The representation in (45) summarizes our proposal.

(45) $\underbrace{\text{PREDICATE 1}}_{contrastive\ topic}$, [$_{\text{CLAUSE}}$ ... PREDICATE 2 ... $\underbrace{\text{X}^0/\text{XP}}_{focus}$ ...]

The immediate prediction of this scheme is that predicate doubling must always involve a "continuation effect" as the one described regarding (35B). That is, if the construction involves a contrastive topic, its use must evoke a complex discourse structure composed of an immediate QUD and a set of alternative questions to that QUD. Moreover, the relevant discourse structure must be able to be retrieved by applying the rules of CT-Value Formation in (36) over (i) the focus of the sentence and (ii) PREDICATE 1.

Consider the dialogue in (46), which does not involve predicate doubling. The answer by speaker B in (46) completely addresses the question *what did Jorge read?*. Whatever happened to the book is irrelevant, as the reply "only cares" about the thing that was read by Jorge.

(46) A: ¿Qué leyó Jorge? ¿El libro o el artículo?
        what read.3SG Jorge the book or the article
        'What did Jorge read? The book or the article?'

     B: Leyó [el artículo]$_{\text{F}}$.
        read.3SG the article
        'He read the article.'

Compare this interpretation to an answer involving predicate doubling. B's response in (47B) suggests a continuation in which something else but reading has been done with the book. Assume a context in which Jorge was supposed to read the book and the article, but he did not have enough time to do both. In this scenario, it may be even inferred by speaker A that Jorge did not properly read the book, but he just had a look at it.

(47) A: ¿Qué leyó   Jorge? ¿El libro o el   artículo?
          what read.3SG Jorge   the book or the article
          'What did Jorge read? The book or the article?'

      B: [Leer]$_{CT}$, leyó   [el   artículo]$_F$, (el   libro solo lo ojeó).
          to.read   read.3SG the article   the book only it had.a.look.at.3SG
          'As for reading, he read the article, (the book, he had a look at it).'

The "continuation effect" attested in (47B) indicates that there is a "bigger" question at play that encompasses the QUD *what did Jorge read?*. While the sentence in (47B) fully addresses this question, it also indicates that the "bigger" question is not fully answered, and that there are alternative partial questions that should be addressed before the main issue is completely solved. In other words, (47B) displays the discourse structure that defines contrastive topics.

If the analysis sketched in (45) is on the right track, the discourse structure for (47B) should be retrievable from applying CT-Value Formation to the constituents designated as F and CT, i.e., (36a) must replace the DP *el artículo* 'the article' for a wh-pronoun, and (36b) must replace the infinitive *leer* 'to.read' for a series of alternatives. The first step is represented in (48), which returns the immediate QUD of the utterance. Notice that the addendum in (39) is required to derive the right result.

(48)   [Leer]$_{CT}$, Jorge leyó $\longrightarrow$ ¿Qué [leyó]$_{CT}$ Jorge?
       qué
       To   read,   Jorge   read   *What did Jorge read?*
       what

The second step calculates the CT-value of (47B) from its immediate QUD by replacing the CT-marked constituent in (48) with alternatives to it. In this case, the verb *leyó* 'read' is replaced with verbs such as *ojear* 'have a look at'; in (49) we informally use the notation R to name a variable for a verb.

(49)   ¿Qué R Jorge? $\longrightarrow$ {¿Qué leyó Jorge?, ¿Qué ojeó
                                            Jorge?, ...}
       What did Jorge   *{What did Jorge read?,   What did*
       R?   *Jorge have a look at?, ... }*

This successfully derives the "continuation effect" described regarding (47B): the sentence containing predicate doubling fully answers its immediate QUD, but also introduces at least one relevant and alternative possibility of addressing the more general issue. This can be summarized in the discourse tree in (50).

(50)

¿Qué [leyó]$_{CT}$ Jorge?   ¿Qué ojeó Jorge?   ...
What did Jorge read?   *What did Jorge have a look at?*

[Leer]$_{CT}$, Jorge leyó [el artículo]$_F$ Jorge ojeó el libro
As for reading, Jorge read the article.   *Jorge had a look at the book.*

18

Now, consider the dialogue in (51), which contains a sentence with predicate doubling expressing verum focus. Suppose for it a scenario in which Jorge has a school assignment in which he had to read a book and write a report about it. In (51A), the teacher asks some friend of Jorge whether he read the book. The answer in (51B) fully addresses this question, but also suggests a continuation that, in a sense, contradicts the response; that is, (51B) roughly expresses the idea that while Jorge did read the book, the assignment is not ready to be handed to the teacher for some reason. Potential continuations go in the line of *but he didn't finish the report*, or *but he forgot his homework*, and so on. In fact, without an explicit continuation, the teacher's most natural response to (51B) would be something like *but what?*

(51)   A: ¿Leyó   el   libro Jorge?
            read.3SG the book Jorge
            'Did Jorge read the book?'

      B: [Leer   el   libro]$_{CT}$, lo LEYÓ.
            to.read the book   it read.3SG
            'As for reading the book, he did read it.'

While verum focus is phonologically expressed here as contrastive accent on the finite verb, the lexical verb itself is not assigned a focal interpretation. For concreteness, we follow Samko (2016) and Goodhue (2018) in assuming that verum focus involves focus marking of a polarity head Σ (Laka 1990, Holmberg 2016), e.g., (52); we take that this underlying structure is spelled-out as in (51B) due to T to Σ movement, i.e., the inflected verb is a complex head that contains Σ. In semantic terms, this analysis entails that a proposition p marked with verum focus is contrasted with its negation $\neg p$.

(52)   [Leer   el   libro]$_{CT}$, Σ_F lo leyó.
            to.read the book   it read.3SG
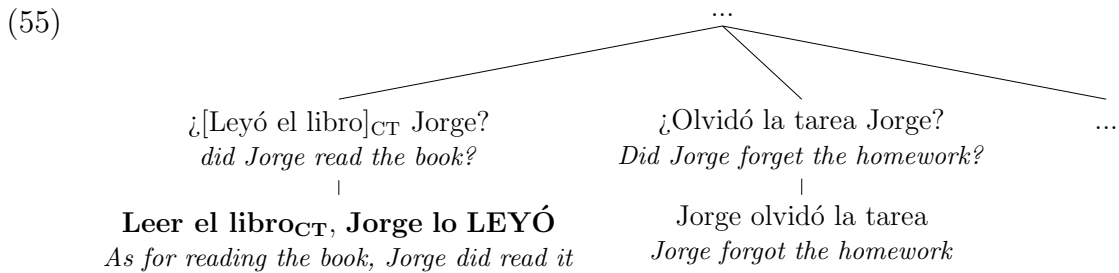   'As for reading the book, he DID read it.'

As in the previous example, the "continuation effect" attested in (51B) can be retrieved by applying Büring's CT-Value Formation. We interpret the rule in (36a) as requiring fronting of the verb containing the focused Σ head in its structure. The result is the one intended by Büring: a verum focus utterance as (51B) answers the polar question *did Jorge read the book?*.

(53)   [Leer el libro]$_{CT}$, Jorge lo $\longrightarrow$ ¿[Leyó   el   libro]$_{CT}$
       LEYÓ   Jorge?
       To read the book, Jorge read it   *Did Jorge read the book?*

As a second step, a set of alternative polar questions is formed by replacing the contrastive topic in the QUD with contextually salient alternatives as indicated in (36b). We informally use the notation P to signal a variable that replaces a predicate.

(54)   ¿P Jorge? $\longrightarrow$ {¿Leyó el libro J.?, ¿Olvidó la tarea J.?,
                                        ... }
       Did   Jorge   {*Did J. read the book?, Did J. forget the*
       P?   *homework?, ...*}

This derives the "continuation effect" described regarding (51). Once again, the result can be schematized in a discourse tree.[10]

(55)

```
                                        ...
                  _____/  |  _____
                 /                      |                      \
    ¿[Leyó el libro]_CT Jorge?    ¿Olvidó la tarea Jorge?       ...
     did Jorge read the book?      Did Jorge forget the homework?
                 |                      |
    Leer el libro_CT, Jorge lo LEYÓ   Jorge olvidó la tarea
    As for reading the book, Jorge did read it   Jorge forgot the homework
```

In his description of Spanish predicate doubling, Vicente (2007: 64) employs a distinction between contradictory and non-contradictory verum focus. The former emphasises the truth of a proposition p in contrast to $\neg p$, while the latter establishes a contrast between the truth of p and a different proposition q. Vicente argues that predicate doubling in Spanish involves non-contradictory verum focus. This can be seen, for instance, in (42), where the proposition $p = he\ read\ the\ book$ is contrasted to $q = he\ didn't\ understand\ it$.

The account sketched above derives this meaning without the need of distinguishing between two primitive notions of verum focus. As mentioned regarding (52), verum focus on p always involves a contrast with its negation $\neg p$, i.e., contradictory verum focus. The non-contradictory interpretation observed by Vicente comes from one of the alternative questions introduced by the contrastive topic, i.e., in the case of (42), the dislocated verb *leer* 'to read', e.g., (56). In other words, the non-contradictory value of verum focus in predicate doubling constructions is nothing but the "continuation effect" introduced by PREDICATE 1.

---

[10]As an anonymous reviewer points out, predicate doubling in Spanish is also acceptable if the doubled predicate is a modal.

(i) A: ¿Podés   ir   al   cine   hoy?
        can.2SG to.go to-the cinema today
        'Can you go to the cinema today?'

     B: Poder, puedo (ir al   cine), pero no debo.
        can.INF can.1SG go to-the cinema but not should.1SG
        'I CAN (go to the cinema), but I SHOULDN'T.'

This is expected under the present account. In this example, PREDICATE 1 signals the presence of alternative questions involving other modal auxiliaries, with which the dislocated verb contrasts, e.g., *should I go to the cinema?*, *must I go to the cinema?*, etc. This analysis can also account for the fact that not all auxiliaries can be doubled. As Vicente (2007: 63) observes, *ser* 'be' (passives) and *haber* 'have' (perfect tenses) cannot be dislocated in predicate doubling constructions. Given that these verbs lack lexical content, they cannot be used contrastively. In consequence, they cannot function as contrastive topics.

(ii) a. * Ser, la revista ha   sido leída.
            to.be the magazine have.3SG been read
            'As for being, the magazine has been read.'

      b. * Haber, Juan ha   leído el libro.
            to.have Juan have.3SG read the book
            'As for having (done something), Juan has read the book.'

(56)
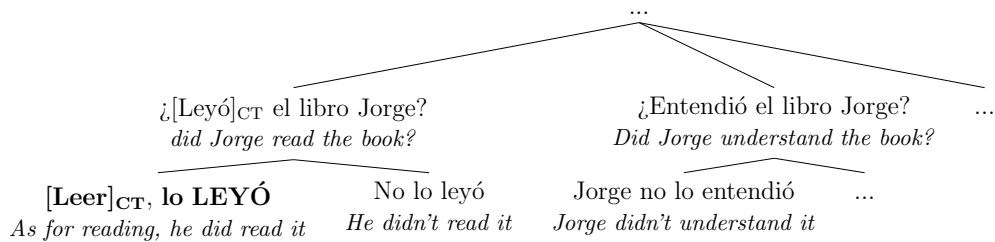
As seen, analysing PREDICATE 1 as a contrastive topic allows to capture the discourse functioning of Spanish predicate doubling; we take the fact that PREDICATE 1 can be introduced through topical markers like *con respecto a* 'with respect to', e.g., (18), to further support this characterization. The observation that predicate doubling introduces a contrastive topic interpretation has been previously made for other languages, e.g., Aboh and Dyakonova (2009) for Russian or Jo (2013) for Korean, although none of these authors have attempted to derive syntactic properties of the construction from it.

The fact that PREDICATE 1 always functions as a contrastive topic introduces a systematic correlation between form and discourse that allows to explain the syntactic properties of Spanish predicate doubling. To begin with, this predicts that the immediate QUD of a predicate doubling sentence must always contain the material in PREDICATE 1. At the technical level, this follows from the CT-Value Formation algorithm in (36), as it retrieves the immediate QUD for a given sentence by (i) replacing its focus with a variable, and (ii) keeping its contrastive topic; we take that alternative procedures should be able to derive a similar result.

At the discourse level, this entails that when PREDICATE 1 is uttered, the speaker is "announcing" what the immediate QUD she is going to address is about. As discussed, contrastive topics designate a piece of information in the immediate QUD that (i) addresses a "bigger question", and (ii) makes the immediate QUD distinct from the remaining members of the CT-value; thus, contrastive topics signal the "main point" of the immediate QUD, i.e., they are *at-issue* in the sense of Simons et al. (2010: 323). It follows, then, that at the point when the infinitive *comprar* 'to buy' in (57) is pronounced, the hearer can already know that the subsequent clause will be about someone buying something (in some place, at some time, in some manner, etc.), as the immediate QUD must necessarily be built around the verb *comprar* for the contrastive topic to receive an adequate interpretation.

(57)   [Comprar]$_{CT}$, Ivo compró   [el   auto]$_F$.
        to.buy   Ivo bought.1SG the car
        'As for buying, Ivo bought the car.'

Since PREDICATE 1 points to a question that must be answered by the clause, we propose to model the discourse relation between both parts of the sentence as a congruence condition.

(58)   CONGRUENCE CONDITION FOR PREDICATE DOUBLING
       Given a sentence with the structure in (45), there must be a question Q with
       PREDICATE 1 as its main predicate such that $[\![Q]\!] \subseteq [\![\text{CLAUSE}]\!]^f$.

Take again the sentence in (57). A verb like *comprar* 'to buy' can be the main predicate of a huge number of questions: *who bought the sofa?*, *when did Elaine buy the salad?*,

what did Ivo buy?, etc. Among these, there must be a question that is able to function as an immediate QUD for the the proposition *Ivo bought the car*, which is the asserted content in (57). In this case, the question *what did Ivo buy?* complies with the condition.

(59)   a. ⟦What did Ivo buy?⟧ = {Ivo bought the car, Ivo bought the ... }
   b. ⟦Ivo bought [the car]$_\text{F}$⟧^{f} = {Ivo bought the car, Ivo bought the ... }
   c. ⟦What did Ivo buy?⟧ ⊆ ⟦Ivo bought [the car]$_\text{F}$⟧^{f}

Since the set of possible answers for a question about PREDICATE 1 in (57) is a subset of the f-value of the non-dislocated material in (57), this predicate doubling sentence is predicted to be well-formed (at least regarding its information structure). An informal way of corroborating this result is by constructing a dialogue in which the proposed QUD is addressed by the clause. As the example in (60) illustrates, the non-dislocated material in (57) is able to answer a question about buying.

(60)   A: ¿Qué compró   Ivo?
          what bought.3SG Ivo
        'What did Ivo buy?

   B: Ivo compró   [el   auto]$_\text{F}$.
        Ivo bought.3SG   the car
        'Ivo bought the car.'

The condition in (58) is built on discourse and information structure considerations. However, it must be considered a *semantic* requirement on predicate doubling rather than a pragmatic one. That is, congruence is basically defined as the ability of the assertion expressed by the clause to answer a question with PREDICATE 1 as the main predicate; context is not involved in this characterization. The sole role of context in our approach is to make a predicate doubling sentence felicitous or infelicitous, which is a consideration that applies to any syntactic construction.

3.3   Island effects

As discussed, predicate doubling exhibits island restrictions. That is, the doubling pattern becomes unacceptable if PREDICATE 2 is inside a syntactic island, e.g., an adjunct (8a), a preverbal subject (8b), a coordinate structure (8c), or a relative clause (8d). We claim that this effect is not due to (narrow) syntactic constraints, but follows from independently motivated discourse principles. Concretely, we maintain that the examples in (8) are unacceptable because they violate the congruence condition in (58). In most cases, the factor explaining this is the asserted content of the sentence being *irrelevant* to its intended contrastive topic; we take that an assertive sentence is *relevant* if it answers its immediate QUD (Büring 2003: 541). The explanation is slightly different for coordinate structures.

Consider the example in (8a), repeated for convenience in (61). As can be seen, PREDICATE 2 here appears within an adjunct island.[11]

(61)   * Comprar, Eliana fue   al   cine   después de comprar un libro.
          to.buy   Eliana went.3SG to.the cinema after   of to.buy   a   book

---

[11]For the sake of simplicity, we only consider predicate doubling constructions involving bare infinitives and not infinitival phrases. The analysis extends straightforwardly to the latter.

'As for buying, Eliana went to the cinema after buying a book.'

The condition in (58) requires the immediate QUD of this sentence to have *comprar* 'to buy' as its main predicate, i.e., the question should be about someone buying something (in some place, at some time, etc.). The problem is that no question complying with this condition is a subset of the f-value of the clause in (61).[12]

(62) a. ⟦What did E. buy?⟧ $\not\subseteq$ ⟦E. went to the c. after buying [a book]$_F$⟧^{f}
     b. ⟦Who bought the book?⟧ $\not\subseteq$ ⟦[E.]$_F$ went to the c. after buying a book⟧^{f}
     c. *and so on...*

The inability to satisfy the congruence condition reflects the fact that the assertion in (61) is irrelevant to any question "announced" by its contrastive topic. Take as an example the question *¿qué compró Eliana?* 'what did Eliana buy?'. As the dialogue in (63) demonstrates, the assertion in (61) is unable to answer it. In other words, there is a mismatch between the contrastive topic and the rest of the sentence. Roughly speaking, they seem to be talking about different things, i.e., about an event of buying and about an event of going to the cinema, respectively.

(63) A: ¿Qué compró   Eliana?
            what bought.3sg Eliana
            'What did Eliana buy?'
     B: # Eliana fue   al   cine   después de comprar un libro.
          Eliana went.3sg to.the cinema after   of to.buy   a   book
          'Eliana went to the cinema after buying a book.'

The same explanation can be extended to the remaining island domains in (8). Consider the case of preverbal subjects. As seen in (8b), repeated below in (64), the doubling pattern is unacceptable if PREDICATE 2 occurs within a subject island.

(64) * Comprar, que Eliana haya   comprado un libro me sorprendió.
      to.buy   that Eliana have.3sg bought   a book me surprised
      'As for buying, that Eliana bought a book surprised me.'

As in the previous case, there seems to be no question with *comprar* 'to buy' as its main predicate that satisfies the congruence condition for this sentence.

(65) a. ⟦What did E. buy?⟧ $\not\subseteq$ ⟦That E. bought [a book]$_F$ surprised me⟧^{f}
     b. ⟦Who bought the book?⟧ $\not\subseteq$ ⟦That [E.]$_F$ bought a book surprised me⟧^{f}
     c. *and so on...*

This is because the asserted proposition *that Eliana bought a book surprized me* is irrelevant to a question about buying. This is shown in the dialogue below with the question *¿qué compró Eliana?* 'what did Eliana buy?'.

---

[12]Since these sentences are unacceptable, it becomes difficult to identify where the focus is supposed to be. The location of the F-marking in (62), (65), (68) and (71) is in attempt to comply with the congruence condition and is for expository purposes only. In any case, there is no focus structure that can make these examples congruent.

(66) A: ¿Qué compró   Eliana?
          what bought.3SG Eliana
          'What did Eliana buy?'

      B: # Que Eliana haya   comprado un libro me sorprendió.
          that Eliana have.3SG bought   a book me surprized
          'That Eliana bought a book surprized me.'

The explanation for relative clauses follows the same line of reasoning. Consider again the example in (8d), repeated below in (67).[13]

(67) * Comprar, vi   a   la mujer que compró   el libro.
        to.buy   saw.1SG DOM the woman that bought.3SG the book
        'As for buying, I saw the woman who bought the book.'

The congruence condition in (58) states that there must be a question with *comprar* as its main predicate denoting a subset of the f-value of the clause in (67). As illustrated in (68), there is no such question.

(68) a. $[\![$What did the w. buy?$]\!]$ $\not\subseteq$ $[\![$I saw the w. who bought $[$the book$]_{\text{F}}]\!]^f$
      b. $[\![$Who bought the book?$]\!]$ $\not\subseteq$ $[\![$I saw $[$the woman$]_{\text{F}}$ who bought the book$]\!]^f$
      c. *and so on...*

Just as before, the main assertion in (67) does not provide a relevant answer for a question about buying. Take the question *¿qué compró Eliana?* 'what did Eliana buy?'. As the dialogue in (69) shows, the clause in (67) does not address this question.

(69) A: ¿Qué compró   la mujer?
          what bought.3SG the woman
          'What did the woman buy?'

      B: # Vi   a   la mujer que compró   el libro.
          saw.1SG DOM the woman that bought.3SG the book
          'I saw the woman who bought the book.'

---

[13]Vicente (2007: 80) points out that predicate doubling improves if the DP that contains the relative clause is indefinite. Note that this contrast is unexpected under a movement-based approach.

(i)   Ganar, solo he   visto a   uno que haya   ganado.
      to.win only have.1SG seen DOM one that have.3SG won
      'As for winning, I have only seen a person who has won.'

(ii) * Ganar, solo he   visto al   que ha   ganado.
        to.win only have.1SG seen DOM.the that have.3SG won
        'As for winning, I have only seen the person who has won.'

A potential explanation in terms of the analysis developed here can be sketched as follows. First, the clause in (i) constitutes an acceptable answer to the QUD *did any person win?*. In this case, the matrix predicate *he visto* 'have seen' seems to receive a parenthetical interpretation (see discussion below), as the embedded clause constitutes the "main point" of the utterance. Thus, the clause does answer a question with *ganar* 'to win' as its main predicate, and thus satisfies the congruence condition. As for (ii), the embedded proposition cannot be taken to answer the QUD *did any person win?*, as the definite determiner already presupposes that someone won. Since the clause in (ii) does not answer a question with *ganar* 'to win' as its main predicate, this predicate doubling sentence is predicted to be ill-formed.

As for coordinate structures, consider the example in (8c), repeated in (70).

(70) * Comprar, Eliana compró   un libro y   vendió   una revista.
         to.buy   Eliana bought.3SG a   book and sold.3SG a   magazine
         'As for buying, Eliana bought a book and sold a magazine.'

Once again, there seems to be no question with *comprar* 'to buy' as its main (and only) predicate that satisfies the congruence condition for the clause of this sentence.[14]

(71) a. ⟦What did E. buy?⟧ ⊈ ⟦E. bought [a book]$_F$ and sold a magazine⟧^{f}
      b. ⟦Who bought the book?⟧ ⊈ ⟦[[E.]$_F$ bought a book and sold a magazine⟧^{f}
      c. *and so on...*

In this case, the explanation for the violation of congruence is different. The clause in (70) seems to be answering not one, but two questions. That is, besides of a QUD about buying, the sentence expresses a proposition relevant to a question about selling. This is shown in the dialogue in (72).

(72) A: ¿Qué compró   y   qué vendió Eliana?
           what bought.3SG and what sell.3SG Eliana
           'What did Eliana buy and what did she sell?'
      B: Eliana compró   [un libro]$_F$ y   vendió   [una revista]$_F$.
           Eliana bought.3SG a   book   and sold.3SG a   magazine
           'Eliana bought a book and sold a magazine.'

Since the clause in (70) answers two questions with distinct main predicates, it must also involve two completely different sets of propositional alternatives. In particular, it follows that the verb *comprar* 'to buy' cannot function as a contrastive topic for both assertions.[15]

Coming back to the issue of irrelevance, the reader may have noticed that each of the replies in the dialogues in (63), (66) and (69) entails a proposition that could potentially answer its corresponding question. For instance, the sentence (69B) entails the proposition *p = the woman bought the book*; notice that *p* is expressed in the syntactic island. The

---

[14]There is a growing consensus that the Coordinate Structure Constraint (CSC) is not a syntactic restriction on movement, but a symmetry requirement that should be understood in semantic terms (Salzmann 2012, de Vries 2017). This approach offers an alternative line of analysis for (70), as the dislocation pattern in this sentence is asymmetric in the relevant sense. Thus, even if our approach is not on the right track, the argument remains that the unacceptability of (70) no longer supports a movement-based analysis of predicate doubling.

[15]As noticed by an anonymous reviewer, this predicts that the pattern must become acceptable if the contrastive topic is clearly restricted to only one of the assertions. This can be done by replacing the conjunction *y* 'and' for the adversative *pero* 'but' (i) or by introducing some kind of phonological pause between the first coordinate and the second one (ii). As can be seen, the prediction is borne out.

(i)   Comprar, compró   un libro, pero vendió   una revista.
      to.buy   bought.3SG a   book but sold.3SG a   magazine
      'As for buying, she bought a book, but she sold a magazine.'

(ii) Comprar, compró   un libro, y   vendió   una revista   también.
      to.buy   bought.3SG a   book and sold.3SG a   magazine too
      'As for buying, she bought a book, and she sold a magazine, too.'

reason why p is not able to address the question in (69A) is because p is *not-at-issue* within the structure of (69B), i.e., it is not part of the asserted content of the sentence (Potts 2005, Simons et al. 2010). This characterization is supported, for example, by the observation that p is entailed by both (69B) and its negative counterpart *no vi a la mujer que compró el libro* 'I didn't see the woman who bought the book', which is predicted under the hypothesis that not-at-issue content projects (Simons et al. 2010). The same properties hold for the replies in (63) and (66): they contain syntactic islands expressing propositions that are not-at-issue and, therefore, cannot address their corresponding questions.

These observations are key to understand why the clauses in (61), (64) and (67) are irrelevant to their intended contrastive topics. We assume that a proposition p is at-issue if *?p* addresses the QUD in some way (Simons et al. 2010). Under this definition, we contend that the propositional content of adjuncts, preverbal subjects, and relative clauses is systematically not-at-issue, in the sense that it is never intended to address the QUD that makes the whole sentence relevant.[16] In other words, a sentence containing one of these islands is structured as answering a question Q_1, while the proposition encoded in the island answers a question Q_2; from these two, only Q_1 is supposed to be *under discussion*. When the main predicate of Q_2 is intended to function as a contrastive topic, two problems arise. First, the contrastive topic erroneously "announces" that the immediate QUD of the sentence is Q_2 rather than Q_1; as already discussed, the assertion in the sentence is in fact irrelevant to Q_2. Second, a predicate that is not-at-issue cannot function as a contrative topic, as these are supposed to be at-issue by definition, i.e., they answer a "bigger question" and evoke a set of alternative questions. Thus, the impossibility of applying predicate doubling to a verb within an adjunct, a preverbal subject or a relative clause is expected.[17]

This analysis makes clear predictions about the distribution of the predicate doubling construction. As has been extensively discussed in the literature, certain embedding predicates can be interpreted *parenthetically*, i.e., with the asserted content of the utter-

---

[16]See also Ambridge and Goldberg (2008) for the claim that islands encode presupposed, i.e., non asserted, information.

[17]A prediction that arises from this analysis is that nominals within these domains cannot function as constrastive topics either. As the following dialogue shows, this seems to be borne out. The reply in B' is particularly telling, as the proper noun *Cosmo* is generated as part of a hanging topic and is only connected through anaphora to the temporal adjunct.

(i) A: ¿Quién compra qué?
          who   buy.3SG what
          'Who buys what?'

    B: * Vayamos al   cine   mientras [Cosmo]$_{CT}$ compra la   cena.
          go.1PL   to.the cinema while   Cosmo   buy.3SG the dinner
          'Let's go to the cinema while Cosmo buys dinner.'

    B′: * En cuanto a [Cosmo]$_{CT}$, vayamos al   cine   mientras compra la   cena.
          in about to Cosmo   go.1PL   to.the cinema while   buy.3SG the dinner
          'As for Cosmo, let's go to the cinema while he buys dinner.'

For completeness, notice that a very similar sentence is acceptable if the hanging topic *Cosmo* is interpreted as a *familiar topic* (Frascarelli and Hinterhölzl 2007).

(ii) Hablado de Cosmo, vayamos al   cine   mientras compra la   cena.
      speaking of Cosmo, go.1PL   to.the cinema while   buy.3SG the dinner
      'Speaking of Cosmo, let's go to the cinema while he buys dinner.'

ance being expressed in the embedded clause rather than in the matrix domain (Urmson 1952, Hooper and Thompson 1973, Simons 2007, Hunter 2016). For example, in (73) it is the content of the completive clause what constitutes an answer to the question. The matrix predicate functions as an evidential of sorts, signaling the source and reliability of the information in the embedded clause (Simons 2007).

(73) A: Who was Louise with last night?
      B: I heard that $\underbrace{\text{she was with Bill}}_{\textit{at-issue}}$.

Analogous examples can be built in Spanish with interesting consequences. Consider the dialogue in (74), in which the answer to the question is expressed within a complex NP, a domain that is traditionally considered an extraction island. Following Simons, we take that the matrix predicate *escuché el rumor* 'I heard the rumour' in (74B) exhibits a parenthetical interpretation, and that the "main point" of the utterance is expressed in the embedded clause. This allows the proposition $p = el\ vecino\ compró\ una\ Ferrari$ 'the neighbour bought a Ferrari' to be at-issue relative to the QUD.

(74) A: ¿Qué compró   el   vecino?
          what bought.3SG the neighbour
          'What did the neighbour buy?'
      B: Escuché   el   rumor (de) que compró   una Ferrari.
          heard.1SG the rumour of that bought.3SG a   Ferrari
          'I heard the rumour that he bought a Ferrari.'

According to our proposal, if the clause within the complex NP is at-issue, and the sentence is able to answer a question about buying, then predicate doubling of *comprar* 'to buy' should be acceptable on (74B).[18] As the example in (75B) shows, this prediction is borne out. The context in (75A) is meant to facilitate the interpretation that there are other questions besides the one about buying that could be relevant to the discussion.[19]

(75) A: ¿Qué hizo   tu   vecino   con toda la plata qué ganó?
          what did.3SG your neighbour with all   the money that won.3SG
          ¿Compró   algo   interesante, por lo menos?
          bought.3SG something interesting by it less
          'What did your neighbour do with all the money he won? Did he buy something interesting, at least?'
      B: Comprar, escuché   el   rumor (de) que compró   una Ferrari.
          to.buy   heard.1SG the rumour of that bought.3SG a   Ferrari

---

[18]According to Vicente (2007, 2009), this type of doubling is deviant. However, we find sentences like (75B) perfectly acceptable. This is also the judgement of our informants.

[19]Doubling patterns introduced by prepositional markers such as *con respecto a* 'with respect to', e.g., (18), are also acceptable if PREDICATE 2 is within a Complex NP island and the matrix predicate receives a parenthetical interpretation, e.g., (i). This further supports our conclusion in section 2.2 that these constructions do not involve movement.

(i)   Con respecto a comprar, escuché   el   rumor de que compró   una Ferrari.
      with respecto to to.buy   heard.1SG the rumour of that bought.3SG a   Ferrari
      'As for buying, I heard the rumour that she/he bought a Ferrari.'

'As for buying, I heard the rumour that he bought a Ferrari.'

This shows that predicate doubling is not subject to the same island restrictions as A'-movement, as a movement-based analysis predicts. Moreover, the pattern further supports our claim that the distribution of the construction is based on discourse-related factors. Under the assumption that parenthetical predicates are omitted from the computation of alternatives, the sentence in (75B) satisfies the congruence condition for predicate doubling.

(76) $[\![$What did the neighbour buy?$]\!] \subseteq [\![$ (...) he bought [a Ferrari]$_\mathrm{F}]\!]^f$

An anonymous reviewer points out that not all matrix predicates can receive parenthetical readings. Consider, for instance, the sentence in (77B). In this case, the phrase *Juan apoyó la propuesta* 'Juan supported the proposal' cannot function as an evidential marker, i.e., it does not indicate the source of the speaker's information. Consequently, the embedded clause cannot be interpreted as the "main point" of the utterance, and the proposition p = *Juan bought the car* is not-at-issue.

(77) A: ¿Qué compró   el   vecino?
         what bought.3SG the neighbour
         'What did the neighbour buy?'

      B: # Juan apoyó   la   propuesta de que comprara   un auto.
         Juan supported.3SG the proposal   of that bought.3SG a   car
         'Juan supported the proposal that he bought a car.'

If, as claimed before, the doubling of a predicate appearing within a complex NP depends on the parenthetical interpretation of the matrix clause, one would expect that the sentence in (77) does not allow the doubling of the embedded verb *comprara* 'she/he bought'. This prediction is borne out.

(78) * Comprar, Juan apoyó   la   propuesta de que comprara un auto.
        to.buy   Juan support.3SG the proposal   of that buy.3SG   a   car
        'As for buying, Juan supported the proposal that he bought a car.'

Given that the matrix clause cannot be interpreted parenthetically, the clause in (78) can only answer questions about supporting, e.g., *what did Juan support?*. However, PREDICATE 1 "announces" that the immediate QUD involves an event of buying, e.g., *what did Juan buy?*. Therefore, the assertion in the clause is irrelevant to the intended contrastive topic, and the sentence does not comply with the congruence condition.

(79) a. $[\![$What did J. buy?$]\!] \not\subseteq [\![$J. supported the p. that he bought [a car]$_\mathrm{F}]\!]^f$
      b. $[\![$Who bought a car?$]\!] \not\subseteq [\![$[J.]$_\mathrm{F}$ supported the p. that he bought a car$]\!]^f$
      c. *and so on...*

A corollary of the analysis developed here is that "island effects" concerning Spanish predicate doubling are, in a sense, illusory. That is, no structural restriction on movement is at play simply because predicate doubling does not involve syntactic movement.

The reader might have noticed that our account resembles the mechanisms advanced within functional explanations of island restrictions (e.g., Erteschik-Shir 1973, Van Valin 1993, Ambridge and Goldberg 2008). These proposals share the intuition that constraints on long distance dependencies arise from clashes of information structure properties. While our analysis certainly supports the idea that non narrow syntactic principles have a part in explaining island phenomena, we do not believe these can (completely) replace structural accounts.[20] Our conjecture is that some of the mechanisms identified throughout this section might be concomitant factors in more traditional island phenomena, conspiring with structural restrictions to prevent certain types of movement. Further research is needed to corroborate this preliminary hypothesis.

As a cautionary note, we need to stress that our treatment of island effects is not immediately translatable to whatever language displaying predicate doubling patterns. There are non-trivial variables that need to be controlled before. First, we find no reason to assume that predicate doubling must always involve contrastive topic marking. It could be the case that doubling predicates in other languages express focus, non-contrastive topics, and so on; our account does not make any predictions regarding these scenarios. Second, even if predicate doubling in a language is shown to signal contrastive topics, it could still be the case that the construction involves syntactic movement and not base-generation; in this scenario, our account is meant to complement a narrow syntactic approach to islands.

3.4   Lexical identity

Predicate doubling in Spanish requires lexical identity: the verbs within Predicate 1 and Predicate 2 must be the same. Vicente (2007, 2009) argues that this condition follows from the fact that both predicates are related through movement and, therefore, are copies. As mentioned, he offers the example in (80).[21]

(80)   * Viajar,   Juan ha   volado a Amsterdam.
         to.travel Juan have.3SG flown   to Amsterdam

---

[20]For instance, complex NPs in Spanish are opaque for wh-extraction no matter they are at-issue or not. This suggests that there is a structural restriction at play.

[21]This sort of mismatch is acceptable if Predicate 1 is introduced within a prepositional expression like *con respecto a* 'with respect to'.

(i)   Con respecto a viajar, Juan ha volado a Amsterdam.
      with respect to to.travel Juan has.3SG flown to Amsterdam
      'As for travelling, Juan has flown to Amsterdam.'

In this context, Predicate 1 has a non-contrastive topic interpretation. We conjecture that this follows from prepositional expressions like *con respecto a* 'with respect to' being able to point to a non-immediate QUD. This hypothesis is further supported by the acceptability of sentences like (ii), in which the hanging topic introduces a non-contrastive topic that is merely thematically related to the QUD determining the focus structure of the sentence.

(ii)   Con respecto a tu   orientación política, basta   con decir que votaste   por ese tipo.
       with respect   to your orientation political is.enough with to.say that voted.2SG for that dude
       'As for your political orientation, it is enough to say that you voted for that guy.'

If our conjecture is on the right track, the unacceptability of the examples in (21) should be explained as the impossibility to accommodate a (non-immediate) QUD relating Predicate 1 and the main assertion within each sentence. For instance, in (21a) there is no question about an event of buying (e.g., *what did Eliana buy?*) that might be addressed by a question about going to the cinema (e.g., *when did Eliana go to the cinema?*).

'As for traveling, Juan has flown to Amsterdam.'

We claim that this sort of restriction does not constitute a conclusive argument for multiple copy spell-out, and that the unacceptability of patterns like (80) can be explained under the approach developed here. Our account follows the same line of reasoning as for island effects: the contrastive topic and its clause are not congruent. The condition in (58) requires the immediate QUD of the sentence in (80) to have the verb *viajar* 'to travel' as its main predicate. However, there is no question complying with this requirement whose denotation is a subset of the f-value of the clause.

(81)   ⟦Where did Juan travel?⟧ $\nsubseteq$ ⟦Juan has flown [to Amsterdam]$_F$⟧^{f}

This approach successfully deals with verbs that are semantically related but are different at the denotational level, e.g., *viajar* 'to travel' and *volar* 'to fly'. Propositional synonyms (Cruse 2004: 158) are more problematic. Take the pair *enojarse/enfadarse* 'to get angry', which are truth-conditionally equivalent. A predicate doubling sentence containing both of these verbs is ill-formed.

(82)   * Enojar-me,   me   enfadé.
          to.get.angry-CL.1SG CL.1SG got.angry.1SG
          'As for getting angry$_1$, I did get angry$_2$.'

Since these verbs are supposed to be propositionally equivalent, our account predicts that (82) should be acceptable. In fact, the congruence condition in (58) should be trivially satisfied, as both verbs are equivalent for the calculus of alternatives, i.e., the denotation of the question *¿te enfadaste?* 'did you get angry?' should be identical to the f-value of *me enojé* 'I did get angry'.

At first glance, these data seem not only to be problematic for our approach, but also to support a movement-based account of predicate doubling. However, strict lexical identity is a requirement attested in several Spanish constructions that do not involve movement. Consider for instance the case of informative tautologies of the form *if p, p* (83a). This kind of conditionals triggers an emphasis on the positive polarity of the predicate occurring in the apodosis. As Saab (2019) notices, both verbs in the construction must be the same; replacing the second verb with a propositional synonym leads to a deviant sentence and the intended meaning is lost (only a metalinguistic interpretation is available). Since the leftmost verb in the construction is within an island, a movement-based explanation is not available in this case.

(83)   a.   Si me   enojo,   me   enojo.
                if CL.1SG get.angry.1SG CL.1SG get.angry.1SG
        b.   ?? Si me   enojo,   me   enfado.
                if CL.1SG get.angry.1SG CL.1SG get.angry.1SG
                'When I get angry, I really get angry.'

Verb doubling unconditionals display a similar lexical identity requirement (Quer and Vicente 2009, Šimík 2020). As shown in (84), the verbs in the construction cannot be distinct, even if they are propositional synonyms. As Quer and Vicente argue, this constraint cannot be explained as an instance of multiple copy pronunciation because the rightmost verb is within a syntactic island.

(84) a. Voy   a ir,   se   enoje   quien se   enoje.
          go.1SG to to.go CL.3SG get.angry.3SG who   CL.3SG get.angry.3SG

      b. *Voy   a ir,   se   enoje   quien se   enfade.
          go.1SG to to.go CL.3SG get.angry.3SG who   CL.3SG get.angry.3SG

          'I will go, no matter who gets angry'.

The examples in (83) and (84) show that lexical identity cannot be considered a strong argument for a copy-based account of predicate doubling. As seen, this condition holds in constructions for which a movement approach is untenable. It must be the case, then, that a base-generation analysis of predicate doubling is compatible with the lexical identity condition. The natural question that arises is how to account for such a condition.

We contend that the unacceptability of (82) arises as a consequence of *synonymy avoidance*, a well-known principle that demands that all contrasts in form also introduce a contrast in meaning (Clark 1987, 1990, Murphy 2003, Cann 2011). We conjecture that this effect is particularly strong when two synonyms appear in the same discourse context. That is, while two lexical items can function as synonyms in independent utterances, an emphasis on their differences is made when uttered in proximity.[22]

Pullum and Rawlins (2007: 284) exploit exactly the same intuition to account for the behavior of the construction X_1 *or no* X_2, e.g., *argument or no argument*. According to them, X_1 and X_2 must have the same denotation for the construction to be acceptable. This raises the question of why synonyms such as *insects* and *bugs* cannot participate in the construction, e.g., **bugs or no insects*. They argue that this restriction follows from the speaker's tendency to distinguish the meaning of two different forms in proximity, which leads to understand them as having distinct denotations. They predict that whenever two synonyms X_1 and X_2 cannot appear in the X_1 *or no* X_2 scheme, they can be found in locutions such as *not just* X_1, *but* X_2 and that they can even switch positions, i.e., *not just* X_2, *but* X_1. Their prediction is borne out.

This pattern can be replicated with the pair of synonyms in (82). As can be seen in (85), the Spanish equivalent of the X_1 *or no* X_2 construction also forbids employing synonyms, no matter they are truth-conditionally equivalent.

(85) a. Enojado o no enojado, vas   a ir.
          angry   or not angry,   go.2SG to go
          'Angry or not angry, you are going.'

      b. *Enojado o no enfadado, vas   a ir.
          angry   or not angry,   go.2SG to go
          'Angry$_1$ or not angry$_2$, you are going.'

As predicted, these elements may appear in the *not just* X_1, *but* X_2 construction, e.g., (86a), and can also switch positions, e.g., (86b). This shows that they are interpreted as having distinct meanings.

---

[22]An informal explanation for this effect can be posited in terms of the *Manner Maxim* (Grice 1975); see Murphy (2003) and Horn (2006) for similar treatments of synonymy avoidance. According to this maxim, utterances should be as transparent as possible. In this sense, one would expect that if a single meaning needs to be expressed twice, a speaker should employ the same form twice rather than using two distinct forms. When the latter happens, an inference arises that both terms have distinct meanings.

(86)   a.   Juan no estaba solo enojado, sino enfadado.
              Juan not was.3SG only angry,   but angry
              'Juan was not just angry$_1$, but angry$_2$.'

         b.   Juan no estaba solo enfadado, sino enojado.
              Juan not was.3SG only angry,   but angry
              'Juan was not just angry$_2$, but angry$_1$.'

Following Pullum and Rawlins (2007), we contend that any pair of synonym verbs in the predicate doubling construction prompts the speaker/hearer to posit a (perhaps imaginary, Cann 2011: 461) distinction between their denotations. Under this assumption, the sentence in (82) does not comply with the congruence condition in (58), since the predicate that "announces" the immediate QUD is taken to be semantically distinct from the predicate within the clause.

(87)   ⟦Did I get angry$_1$?⟧ ⊄ ⟦I [$_\Sigma$ did]$_F$ get angry$_2$⟧^{f}

4   Further predictions

4.1   Genus-species effects and partial identity

The Spanish predicate doubling construction displays some exceptions to the lexical-identity requirement. Following Cable (2004), we refer to the first of these as *genus-species* splits. As can be seen in (88), the relevant examples involve a mismatch between the lexical content of bare nouns within the duplicates. As noticed by Cable, these patterns offer additional evidence supporting a base-generation analysis of predicate doubling.

(88)   a.   Comer pescado, como   (solo) [atún]$_F$.
              to.eat fish   eat.1SG only tuna
              'As for eating fish, I (only) eat tuna.'

         b.   Leer   libros, leo   (solo) [novelas]$_F$.
              to.read books read.1SG only   novels
              'As for reading books, I (only) read novels.'

There are two important conditions that these constructions must meet in Spanish. First, the focus of the sentence must necessarily fall on the bare noun within PREDICATE 2, e.g., obtaining a verum focus interpretation is impossible in these cases.

(89)   a.   * Comer pescado, COMO atún.
              to.eat fish   eat.1SG tuna
              'As for eating fish, I do eat tuna.'

         b.   * Leer   libros, LEO   novelas.
              to.read books read.1SG novels
              'As for reading books, I do read novels.'

Second, the bare noun within PREDICATE 2 must be an *hyponym* of its counterpart in PREDICATE 1. This is respected in (88), where *atún* 'tuna' is a hyponym of *pescado* 'fish',

and *novelas* 'novels' is a hyponym of *libros* 'books'. As shown in (90), the inverse pattern, i.e., with the *hyperonym* within PREDICATE 2, leads to unacceptability.[23]

(90) a. * Comer atún, como   pescado.
           to.eat tuna eat.1SG fish
           'As for eating tuna, I eat fish.'

      b. * Leer   novelas, leo   libros.
           to.read novels   read.1SG books
           'As for reading novels, I read books.'

We argue that the patterns in (88) follow straightforwardly from the analysis advanced so far. In short, these sentences are acceptable because their clauses still manage to answer the immediate QUD "announced" by the contrastive topic. That is, despite of the differences between PREDICATE 1 and PREDICATE 2, the clause within (88a) successfully answers a question about eating fish, while the clause within (88b) successfully answers a question about reading books.

As mentioned, *hyponymy* is a defining component of these patterns. We take the definition of this lexical relation from Cann (2011: 459).

(91) X is a hyponym of Y if it is the case that anything is such that it has the properties expressed by X then it also has the properties expressed by Y.

According to (91), hyponymy can be informally understood as an inclusion relation. For instance, if a noun N_1 has the semantic features [+A][+B], a noun N_2 with the features [+A][+B][+C] is its hyponym. Following this example, we contend that the information structure of predicate doubling constructions with genus species splits follows the scheme in (92). As can be seen, we take that focus is assigned to whatever semantic feature(s) characterizing the hyponym as a specific type of individual within the kind denoted by the hyperonym in PREDICATE 1. Notice that, according to this representation, there actually is identity between PREDICATE 1 and PREDICATE 2: both consist on the lexical verb plus the features of the hyperonym.

(92) $\underbrace{\text{V ... N}_{[+A][+B]}}_{\text{PREDICATE 1}}$ [$_{\text{CLAUSE}}$ ... $\underbrace{\text{V ... N}_{[+A][+B]}}_{\text{PREDICATE 2}}$ $\underbrace{_{[+C]}}_{focus}$]

In line with this representation, we argue that predicate doubling sentences exhibiting genus-species splits address questions requiring the specification of a subkind within a

---

[23]Vicente (2009: 170) argues that Spanish predicate doubling does not exhibit genus-species effects. To support this claim, he offers the following example.

(i)   * Leer   un tebeo   japonés, Juan ha leído Akira.
        to.read a comic.book Japanese Juan has read Akira
        'As for reading a Japanese comic book, Juan has read Akira.'

We find that this pattern improves significantly if the proper noun is a well-known representative of a certain class, and the nominal within PREDICATE 1 is a bare noun.

(ii) Leer   cuentos, leo   Borges.
       to.read tales   read.1SG Borges
       'As for reading short tales, I read Borges.'

kind.[24] According to the congruence condition in (58), the sentence in (88a) involves an immediate QUD that has *comer pescado* 'eat fish' as its main predicate; this question must denote a subset of the f-value of *como atún* 'I eat tuna'. As shown in (93), this follows for the question *¿qué pescado como?* 'what fish do I eat', in which the noun *pescado* 'fish' restricts the set of possible answers to subkinds of fish.[25]

(93)   ⟦What fish do I eat?⟧ ⊆ ⟦I eat [tuna]$_F$⟧^{f}

Similarly, the predicate doubling sentence in (88b) addresses a question asking which subkinds of books are the ones that the speaker reads.

(94)   ⟦What books do I read?⟧ ⊆ ⟦I read [novels]$_F$⟧^{f}

Another pattern introducing an exception to the lexical-identity requirement is exemplified in (95). As can be seen, PREDICATE 1 contains an argument headed by the indefinite determiner *un* 'a', while PREDICATE 2 has the (proximal) demonstrative pronoun *este* 'this' occupying the same position. Unlike the examples in (10), this mismatch does not involve an anaphoric relation between *un auto* 'a car' and *este auto* 'this car', as the latter needs to be interpreted deictically, i.e., referring to a salient car in the discourse context. We refer to these and similar mismatches as *partial identity* cases.

(95)   Comprar un auto, voy   a comprar [este]$_F$ auto, no aquel.
       to.buy   a   car   go.1SG to buy   this   car   not that
       'As for buying some car, I will buy this car, not that one.'

While problematic for a movement-based analysis of predicate doubling, this pattern can be easily accounted for the current approach. In (95), PREDICATE 1 "announces" a question about buying a car, i.e., *¿qué auto compré?* 'what car did I buy?' , that is congruent with the assertion in the clause.

(96)   ⟦What car did I buy?⟧ ⊆ ⟦I bought [this]$_F$ car⟧^{f}

In sum, two cases of predicate doubling that seemingly ignore the lexical-identity requirement receive a straightforward analysis under the hypothesis that PREDICATE 1 is a base-generated contrastive topic. As discussed, the existence of these patterns is, in principle, unexpected under a movement-based account.

---

[24]This explains why genus-species splits are attested with nouns only. Bare nouns, both as mass nouns like *pescado* 'fish' in (88a) or as bare plurals like *libros* 'books' in (88b), have been observed to denote kinds (Carlson 1977, Chierchia 1998), a property that other lexical classes, e.g., verbs, simply do not share. Therefore, it is rather unsurprising that a syntactic pattern expressing inclusion relations between kinds is restricted to bare nouns.

[25]These questions can be obtained by applying Büring's (2003) CT-Value Formation algorithm in (36) to the abstract representation in (92). As a first step, the QUD of this representation would be formed by replacing the focused feature [+C] for the wh-element *what*. Assuming that the lexical verb is *to eat*, and that the features [+A][+B] correspond to the noun *fish*, the resulting question would be equivalent to *what fish do you eat?*. From this question, a set of alternative questions can be formed by replacing the CT-marked segment (i.e., the predicate *eat fish*) for contextually relevant alternatives.

4.2 Asymmetries with factive clauses

As is well-known, factive clauses induce weak island effects. Roughly speaking, this means that they allow argument extraction but ban adjunct movement.[26] Crucially, clauses selected by both cognitive (97) and emotive factives (98) introduce the same kind of restriction on syntactic movement.

(97) a. ¿A quién sabés   que invitó   Jorge a la fiesta?
          to who   know.2SG that invited3SG Jorge to the party
          'Who do you know that Jorge invited to the party?'

      b. * ¿Cómo sabés   que bailó   Jorge?
          how   know.2SG that danced.3SG Jorge
          'How do you know that Jorge danced?'

(98) a. ¿A quién lamentás   que haya   invitado Jorge a la fiesta?
          to who   regret.2SG that have.SUBJ.3SG invited   Jorge to the party
          'Who do you regret that Jorge invited to the party?'

      b. * ¿Cómo lamentás   que haya   bailado Jorge?
          how   regret.2SG that have.SUBJ.3SG danced Jorge
          'How do you regret that Jorge danced?'

If predicate doubling involved A'-movement, we would expect it to display the same behaviour with both cognitive and factive emotives, just as wh-movement does in (97) and (98). However, predicate doubling with verum focus interpretation exhibits an asymmetry regarding factive clauses: while it is possible to double a verb appearing in a complement clause embedded under a cognitive factive predicate, e.g., (99a), it is unacceptable with clauses selected by emotive factives, e.g., (99b).

(99) a. Leer, sé   que leyó.
          to.read know.1SG that read.3SG
          'As for reading, I know that he did read.'

      b. * Leer, lamento   que haya   leído.
          to.read regret.1SG that have.3SG read
          'As for reading, I regret that he did read.'

We claim that the asymmetry in (99) can be straightforwardly explained under the analysis proposed here. As observed by Hooper and Thompson (1973) and Simons (2007), cognitive factives, unlike emotive factives, may exhibit parenthetical interpretations in certain contexts. As previously discussed, this means that the main point of the utterance can be contained in the embedded clause and the cognitive factive can function as a kind of evidential, signaling the source and reliability of the information in its complement. Consider, for instance, the contrast between the answers (100) and (101): while the clause embedded under the cognitive factive *discovered* can be taken to answer the question *what did Eliana buy?*, the one selected by the emotive factive *regretted* cannot.

(100) A: What did Eliana buy?

---

[26]This is a simplification for expository purposes, as weak islands cannot be reduced to the argument-adjunct distinction. See Szabolcsi and Lohndal (2017) for a complete overview.

B: Jorge discovered that she bought a book.

(101) A: What did Eliana buy?
       B: # Jorge regretted that she bought a book.

Coming back to the asymmetry in (99), we argue that predicate doubling involving cognitive factives is acceptable as a consequence of the fact that they can have parenthetical readings. To begin with, notice that the sentence in (99a) can answer the polar question *did Eliana read the book?*:

(102) A: ¿Leyó   el   libro Eliana?
            read.3SG the book Eliana
          'Did Eliana read the book?'

       B: Leer,   sé   que lo leyó.
          to.read know.1SG that it read.3SG
          'As for reading, I know that she did read it.'

In this case, the matrix verb *sé* 'I know' is interpreted parenthetically, and the embedded clause constitutes the main point of the utterance. In other words, the sentence addresses the QUD *did Eliana read the book?*, and not the question *what do you know?*. Since the immediate QUD can be taken to include PREDICATE 1 as its main predicate, the sentence in (102B) satisfies the congruence condition for predicate doubling and, hence, the doubling pattern is correctly predicted to be acceptable (note that this explanation follows the same line of reasoning as for the cases involving Complex NP islands (75)).

(103)   ⟦Did Eliana read the book?⟧ ⊆ ⟦(...) Σ_F she did read the book⟧^{f}

Regarding emotive factives, note that the sentence in (99b) cannot be taken to answer the question *did Eliana read the book?*:

(104) A: ¿Leyó   el   libro Eliana?
              read.3SG the book Eliana
            'Did Eliana read the book?'

       B: * Leer,   lamento   que lo haya   leído.
              to.read regret.1SG that it have.SUBJ.3SG read
            'As for reading, I regret that she did read it.'

As mentioned, emotive factives cannot be interpreted parenthetically.[27] A sentence like *I regret that Eliana did read the book* cannot answer a polar question about reading, e.g., *did*

---

[27]While this is a widely accepted claim, the literature has observed some exceptions. Particularly, it has been noticed that emotive factives can embed announcements in certain contexts. In these uses, the complement clause is not presupposed, but it is taken as new information, i.e., the regret is what is asserted (Abbott 2000).

(i)   a. We regret that children cannot accompany their parents to commencement exercises. (Karttunen 1974: 191)

      b. We regret to inform you that your insurance policy is hereby canceled. (Simons 2007: 1051)

As expected, predicate doubling is acceptable in these contexts (Verdecchia 2021).

(ii) A: ¿Perdió Federer?
          lost.3SG Federer

Eliana read the book?. In consequence, the congruence condition for predicate doubling is not met and the doubling pattern is unacceptable:

(105) ⟦Did Eliana read the book?⟧ ⊄ ⟦I regret that Σ_F Eliana did read the book⟧^{f}

5   Concluding remarks

Predicate doubling in Spanish has been analyzed as an instance of multiple copy pronunciation, i.e., what we have called here PREDICATE 1 and PREDICATE 2 are taken to be elements pertaining to the same movement chain. In this paper, we have shown that there is no empirical motivation for this analysis. To begin with, the nominals within these predicates are not required to be identical, but seem to be related through anaphoric means; this behaviour is at odds with what is expected under copy theory. Second, putative "island effects" in the construction do not offer support for an account based on multiple copy spell-out, as doubling patterns that do not involve movement also display similar restrictions. Finally, there is no independent motivation for the claim that bare infinitives and infinitival clauses undergo topic movement in Spanish, not even from reconstruction effects in the predicate doubling construction itself.

We have advanced a base-generation analysis of predicate doubling that derives the seemingly movement-related properties of the construction from independently motivated discourse principles. To begin with, we showed that PREDICATE 1 is a contrastive topic in Büring's (2003) sense, i.e., it introduces a set of alternative questions to the immediate QUD. As a follow-up of this analysis, we posit that the relation between PREDICATE 1 and the rest of the sentence can be captured as a congruence condition: PREDICATE 1 "announces" an immediate QUD that must be answered by the clause.

The congruence condition allows to explain why predicate doubling exhibits island effects. In these configurations, the congruence condition is not satisfied, as the clause is irrelevant to any immediate QUD "announced" by PREDICATE 1. This is because the proposition that could potentially answer the question is not-at-issue when expressed within certain domains that happen to be islands. The key exception are complex NP islands in which the embedding predicate can be interpreted parenthetically. In these cases, the embedded clause expresses the "main point" of the sentence, and therefore allows predicate doubling. A similar explanation was offered for the requirement that both predicates in the construction contain instances of exactly the same lexical verb: this is needed for congruence to be satisfied.

'Did Federer lose?'

B: Perder, lamento   informarte   que perdió, pero clasificó.
   to.lose regret.1SG to.inform-you that lost.3SG but classified.3SG

'As for losing, I regret to inform you that he did lose, but he classified.'

Given that in these cases the embedded clause constitutes the main point of the utterance, the congruence condition for predicate doubling is met (i.e., the sentence can function as an answer for an immediate QUD with PREDICATE 1 as its main predicate).

(iii) ⟦Did Federer lose?⟧ ⊆ ⟦ (...)Σ_F Federer did lose⟧^{f}

Importantly, it should be noted that these uses of emotive factives trigger mood alternation: they embed an indicative clause rather than a subjunctive one (RAE-ASALE 2009: §25). This explains why the answer in (104) can only be interpreted presuppositionally.

Our proposal is further supported by two phenomena that find no straightforward account under a movement-based analysis of predicate doubling. On one hand, availability of genus-species splits is successfully captured within our analysis. On the other, we account for the asymmetrical availability of predicate doubling with cognitive and emotive factives under the observation that only the former can be interpreted parenthetically.

If on the right track, our treatment of Spanish predicate doubling demonstrates that defining traits of movement dependencies can also be obtained through non-narrow syntactic means. That is, sensitivity to islands cannot be considered an infallible diagnosis for movement, and the copy operation cannot be the only linguistic mechanism responsible for reduplicative patterns. Discourse seems to be able to mimic these features to a certain extent.

Acknowledgements

References

Abbott B (2000) Presuppositions as nonassertions. Journal of pragmatics 32(10):1419–1437

Abels K (2001) The predicate cleft construction in Russian. In: Franks S, Yadroff M (eds) Proceedings of Formal Approaches to Slavic Linguistics, Michigan Slavic Publications, Bloomington, Indiana, vol 9, pp 1–19

Aboh EO, Dyakonova M (2009) Predicate doubling and parallel chains. Lingua 119(7):1035–1065, DOI 10.1016/j.lingua.2008.11.004

Alexiadou A (2006) Left dislocation (including CLLD). In: Everaert M, van Riemsdijk H (eds) The Blackwell Companion to Syntax, Volume I, Blackwell Publishing, Oxford, pp 668–699

Ambridge B, Goldberg AE (2008) The island status of clausal complements: evidence in favor of an information structure explanation. Cognitive Linguistics 19(3), DOI 10.1515/cogl.2008.014

Brucart JM, MacDonald JE (2012) Empty categories and ellipsis. In: Hualde JI, Olarrea A, O'Rourke E (eds) The Handbook of Hispanic Linguistics, Wiley-Blackwell, Malden, MA, pp 579–601

Büring D (2003) On D-trees, beans, and B-accents. Linguistics and Philosophy 26:511–545, DOI 10.1023/a:1025887707652

Cable S (2004) Predicate clefts and base-generation: Evidence from Yiddish and Brazilian Portuguese, manuscript, MIT.

Campos H (1986) Indefinite object drop. Linguistic Inquiry 17(2):354–359

Cann R (2011) Sense relations. In: Maienborn C, von Heusinger K, Portner P (eds) Semantics: An International Handbook of Natural Language Meaning. Volume 1, Mouton de Gruyter, Berlin, pp 456–479

Carlson GN (1977) Reference to kinds in English. PhD thesis, University of Massachusetts, Amherst

Chierchia G (1998) Reference to kinds across language. Natural Language Semantics 6(4):339–405, DOI 10.1023/a:1008324218506

Cho E, Nishiyama K (2000) Yoruba predicate clefts from a comparative perspective. In: Carstens V, Parkinson F (eds) Advances in African Linguistics, no. 4 in Trends in African Linguistics, Africa World Press, Trenton, pp 37–49

Chomsky N (1995) The Minimalist Program. MIT Press, Cambridge, MA

Cinque G (1977) The movement nature of left dislocation. Linguistic Inquiry 8(2):397–412

Clark EV (1987) The principle of contrast: a constraint on language acquisition. In: MacWhinney B (ed) Mechanisms of Language Acquisition, Routledge, London, pp 1–33

Clark EV (1990) On the pragmatics of contrast. Journal of Child Language 17(2):417–431, DOI 10.1017/s0305000900013842

Cruse A (2004) Meaning in Language: An Introduction to Semantics and Pragmatics. Oxford University Press, Oxford

Depiante MA (2001) On null complement anaphora in Spanish and Italian. Probus 13(2), DOI 10.1515/prbs.2001.003

Erteschik-Shir N (1973) On the nature of island constraints. PhD thesis, MIT, Massachusetts, MA

Escandell-Vidal V (2011) Verum focus y prosodia: cuando la duración (sí que) importa. Oralia: Análisis del discurso oral 14:181–202

Fanselow G, Mahajan A (2000) Towards a minimalist theory of wh-expletives, wh-copying, and successive cyclicity. In: Lutz U, Müller G, von Stechow A (eds) Wh-scope marking, John Benjamins, Amsterdam, pp 195–230

Fox D, Sauerland U (1996) Illusive scope of universal quantifiers. North East Linguistics Society 26(1):71–85

Francom J (2012) Wh-movement: Interrogatives, Exclamatives, and Relatives. In: Hualde JI, Olarrea A, O'Rourke E (eds) The handbook of Hispanic linguistics, Wiley-Blackwell, Malden, MA, pp 533–556

Frascarelli M, Hinterhölzl R (2007) Types of topics in German and Italian. In: Schwabe K, Winkler S (eds) On Information Structure, Meaning and Form: Generalizations across languages, John Benjamins Publishing Company, Amsterdam, pp 87–116, DOI 10.1075/la.100.07fra

Goodhue D (2018) On asking and answering biased polar questions. PhD thesis, McGill University

Grice H (1975) Logic and conversation. In: Cole P, Morgan J (eds) Syntax and Semantics 3: Speech acts, Academic Press, New York, pp 41–58

Holmberg A (2016) The syntax of yes and no. Oxford University Press, Oxford

Hooper J, Thompson S (1973) On the applicability of root transformations. Linguistic inquiry 4(4):465–497

Horn LR (2006) Speaker and hearer in neo-Gricean pragmatics. Journal of Foreign Languages 164:2–25

Huang J (1993) Reconstruction and the structure of VP: Some theoretical consequences. Linguistic Inquiry pp 103–138

Hunter J (2016) Reports in discourse. Dialogue & Discourse 7(4):1–35, DOI 10.5087/dad.2016.401

Jackendoff R (1972) Semantic Interpretation in Generative Grammar. MIT Press, Cambridge, MA

Jo JM (2013) Predicate contrastive topic constructions: Implications for morphosyntax in Korean and copy theory of movement. Lingua 131:80–111, DOI 10.1016/j.lingua.2013.02.003

Karttunen L (1974) Presupposition and linguistic context. Theoretical linguistics 1(1-3):181–194

Kobele GM (2006) Generating copies: An investigation into structural identity in language and grammar. PhD thesis, University of California

Koopman H (1984) The syntax of verbs: From verb movement rules in the Kru languages to Universal Grammar. Foris, Dordrecht

Laka I (1990) Negation in syntax. on the nature of functional categories and projections. PhD thesis, MIT, Cambridge, MA

Landau I (2006) Chain resolution in Hebrew V(P)-fronting. Syntax 9(1):32–66, DOI 10.1111/j.1467-9612.2006.00084.x

López L (2009) A derivational syntax for informational structure. Oxford University Press, Oxford

Murphy ML (2003) Semantic relations and the lexicon: Antonymy, synonymy and other paradigms. Cambridge University Press

Nunes J (2004) Linearization of Chains and Sideward Movement. The MIT Press, Cambridge, MA

Olarrea A (2012) Word order and information structure. In: Hualde JI, Olarrea A, O'Rourke E (eds) The handbook of Hispanic linguistics, Wiley-Blackwell, pp 603–628

Muñoz Pérez C (2017) Cadenas e interfaces. PhD thesis, University of Buenos Aires, Buenos Aires

Muñoz Pérez C (2021) Island effects with infinitival hanging topics. Snippets 40:4–6

Potts C (2005) The Logic of Conventional Implicatures. Oxford University Press, New York

Pullum GK, Rawlins K (2007) Argument or no argument? Linguistics and Philosophy 30(2):277–287

Quer J, Vicente L (2009) Semantically triggered verb doubling in Spanish unconditionals, Handout from the 19th Colloquium on Generative Grammar (CGG19).

RAE-ASALE (2009) Nueva gramática de la lengua española, vol 2. Espasa Libros, Madrid

Roberts C (1996) Information structure: Towards an integrated formal theory of pragmatics. In: Yoon JH, Kathol A (eds) OSUWPL Volume 49: Papers in Semantics, The Ohio State University Department of Linguistics, Columbus, pp 35–57

Rooth M (1992) A theory of focus interpretation. Natural Language Semantics 1(1):75–116

Saab A (2011) On verbal duplication in River Plate Spanish. In: Berns J, Jacobs H, Scheer T (eds) Romance Languages and Linguistic Theory, John Benjamins Publishing Company, Leiden, pp 305–322, DOI 10.1075/rllt.3.18saa

Saab A (2017) Varieties of verbal doubling in Romance. Isogloss A journal on variation of Romance and Iberian languages 3(1):1, DOI 10.5565/rev/isogloss.43

Saab A (2019) Sobre el *locus* de la expresividad. Paper presented at the Pontificia Universidad Católica del Perú

Salzmann M (2012) Deriving reconstruction asymmetries in Across The Board movement by means of asymmetric extraction + ellipsis. In: Ackema P, Alcorn R, Heycock C, Jaspers D, Van Craenenbroeck J, Vanden Wyngaerd G (eds) Comparative Germanic syntax: The state of the art, vol 191, John Benjamins Publishing, pp 353–386

Samko B (2016) Syntax & information structure: The grammar of English inversions. PhD thesis, UC Santa Cruz

Šimík R (2020) Doubling unconditionals and relative sluicing. Natural Language Semantics 28(1):1–21

Simons M (2007) Observations on embedding verbs, evidentiality, and presupposition. Lingua 117(6):1034–1056, DOI 10.1016/j.lingua.2006.05.006

Simons M, Tonhauser J, Beaver D, Roberts C (2010) What projects and why. In: Li N, Lutz D (eds) Proceedings of SALT 20, CLC Publications, pp 309–327

Szabolcsi A, Lohndal T (2017) Strong vs. weak islands. The Wiley Blackwell Companion to Syntax, Second Edition pp 1–51

Takano Y (1995) Predicate fronting and internal subjects. Linguistic Inquiry pp 327–340

Trinh T (2009) A constraint on copy deletion. Theoretical Linguistics 35(2-3):183–227, DOI 10.1515/thli.2009.011

Urmson JO (1952) Parenthetical verbs. Mind LXI(244):480–496, DOI 10.1093/mind/lxi.244.480

Van Valin R (1993) A synopsis of Role and Reference Grammar. In: Van Valin R (ed) Advances in Role and Reference Grammar, John Benjamins, Amsterdam, chap 1, pp 1–164

Verdecchia M (2021) Impossible Presuppositions. On factivity, focus, and triviality. Glossa: a journal of general linguistics 6(1):1–29

Vicente L (2007) The syntax of heads and phrases: A study of verb (phrase) fronting. PhD thesis, Leiden University, Leiden

Vicente L (2009) An alternative to remnant movement for partial predicate fronting. Syntax 12(2):158–191, DOI 10.1111/j.1467-9612.2009.00126.x

de Vries M (2017) Across-the-board phenomena. In: Everaert M, van Riemsdijk H (eds) The Wiley Blackwell Companion to Syntax, Wiley Online Library, pp 1–31

Zubizarreta ML (1999) Las funciones informativas: tema y foco. In: Bosque I, Demonte V (eds) Gramática Descriptiva de la Lengua Española, Espasa Calpe, Madrid, chap 64, pp 215–244