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# Clausal doubling and verum marking in Spanish

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**Abstract:** This paper offers a description and analysis of the clausal doubling construction, and contrasts it with predicate doubling based on their formal and verum-related properties. The study shows that the behavior of both patterns can be captured by extending the analysis of predicate doubling by Muñoz Pérez and Verdecchia (2022. Predicate doubling in Spanish: On how discourse may mimic syntactic movement. *Natural Language & Linguistic Theory* 40(4). 1159–1200). Basically, both doubling constructions have the same structure, with a contrastive topic in the left periphery; they differ, however, in the nature of the constituents carrying this function. The proposal derives from this single factor all formal and interpretative differences between the constructions. Moreover, the paper provides evidence to distinguish these phenomena from other verum-marking strategies in Spanish.

Keywords: clausal doubling; predicate doubling; verum; constrastive topic; Spanish

### 1 Introduction

Spanish exhibits several grammatical strategies for marking what we call here *verum-like* meanings. This umbrella term aims to encompass interpretations usually captured under the labels of *verum focus*, *polarity focus*, *emphatic polarity* and the like, i.e., cases in which there is an emphasis on the truth of a proposition or on its polarity value. For instance, a verum-like meaning can be signaled by introducing certain markers in the utterance; this is the case of the positive polarity particle *sí* in (1a), as discussed by Villa-García and González Rodríguez (2020), among others. A similar effect obtains in other cases via movement; in (1b), the verum-like discourse value follows from fronting an indefinite phrase (Leonetti and Escandell-Vidal 2009).

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<sup>1</sup> Throughout the paper, we signal focal prominence with small caps both in Spanish examples and English glosses.

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Finally, there are doubling structures that do not involve movement that also related in systematic ways to this sort of discourse-meaning; this is illustrated in (1c) with a predicate doubling construction (Muñoz Pérez and Verdecchia 2022).

- Juan sí trabajó. (1) a. Juan yes worked 'Juan did work.'
  - h ALGO leíste. something read 'You did read something.'
  - Comprar vino, compró vino. wine bought wine 'As for buying wine, she DID buy wine.'

In this paper, we aim to describe a doubling pattern that has not been addressed in previous literature and that systematically introduces a verum-like interpretation. We dub this construction *clausal doubling*. Superficially, the pattern involves a fronted embedded sentence that repeats a whole clause within the main structure, e.g., (2). For ease of presentation, we call the left and right duplicates Clause 1 and Clause 2 respectively.<sup>2</sup>

(2) [CLAUSE 1 Que compró vino], [CLAUSE 2 COMPRÓ vino]. that bought wine bought wine 'As for buying wine, she did buy wine.'

At first sight, clausal doubling looks very similar to the predicate doubling construction in (1c). The most obvious difference between both patterns is that the leftmost verb in clausal doubling is finite, while it needs to be an infinitival form in predicate doubling. Thus, the question arises on whether the similarity between both constructions is merely superficial and they are actually unrelated, or perhaps there is a deeper connection between them and there is a common syntactic functioning at play.

The main objective of this paper is to offer a first analysis of the formal and interpretative properties of clausal doubling. We do this by comparing the construction to predicate doubling and showing that while there are important differences between both patterns, there are also non-trivial similarities. We contend that clausal doubling and predicate doubling can be analyzed in basically the same terms: extending the account for predicate doubling in Muñoz Pérez and Verdecchia (2022),

<sup>2</sup> Unless otherwise stated, Spanish grammaticality judgments 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 clausal doubling is a productive pattern.

we argue that the dislocated constituent marked as Clause 1 in (2) is a contrastive topic. All contrasts between both constructions reduce to the nature of their corresponding contrastive topics.

In addition to this, the paper also provides further evidence to discriminate between different types of verum-like constructions in Spanish. Basically, we demonstrate that clausal doubling and predicate doubling exhibit properties that distinguish them from the verum-like patterns in (1a) and (1b). While we do not focus on accounting for this distinction, we believe that our treatment of clausal doubling suggests some interesting conjectures to explore in future research.

The structure of the paper is as follows. Section 2 describes the formal and discourse-related properties of clausal doubling. The characterization of the construction is based on a comparison with predicate doubling and other Spanish patterns that trigger verum-like interpretations. Section 3 offers a unified analysis for clausal doubling and predicate doubling along the lines proposed by Muñoz Pérez and Verdecchia (2022). Section 4 demonstrates how this approach accounts for all differences in both constructions. Finally, Section 5 contains the conclusions of the paper.

## 2 Describing clausal doubling

In this section, we introduce the main features of clausal doubling. Given that the construction has not been previously described in the literature, we first list some of its basic grammatical properties, and then we analyze its information structure. In each case, we establish a number of similarities and differences with the better understood predicate doubling construction.

## 2.1 Formal properties

As mentioned, clausal doubling in Spanish involves the repetition of an entire sentence in a left-dislocated position. In syntactic terms, Clause 1 is a CP that must be headed by the declarative complementizer que 'that', e.g., (2).<sup>3</sup>

<sup>3</sup> There seems to be some dialectal variation on the expression of Clause 1. For instance, it is normal for Chilean Spanish speakers to produce doubling patterns in which the first clause starts with de 'of'.

<sup>(</sup>i) ¡De que tomamos cerveza, tomamos cerveza! of that drank.1<sub>PL</sub> beer drank.1<sub>PL</sub> beer 'As for drinking beer, we DID drink beer!'

As for its distribution, clausal doubling can repeat both the content of the matrix clause, e.g., (2), or the content of an embedded clause, i.e., it can occur long-distance as in (3).

(3)Que Juan levó el libro, sé que lo LEYÓ. that Juan read the book know that it read 'As for Juan reading the book, I know that he DID read it.'

Clausal doubling is restricted to declarative main sentences; it becomes unacceptable if the matrix CP is interrogative, e.g., (4).

(4) \* Que Juan leyó el libro, ¿lo leyó? that Juan read the book it 'As for Juan reading the book, DID he read it?'

In this regard, the construction differs from predicate doubling, which can be found with interrogative matrix CPs.

libro, ¿lo leyó? (5)Leer el to.read the book it read 'As for reading the book, DID she read it?'

This does not entail that the rightmost duplicate clause must be declarative. As can be seen in (6), Clause 2 is headed by the interrogative complementizer si 'whether'. Note also that the complementizer heading CLAUSE 1 must be declarative even in this scenario.4 This means that clausal doubling may exhibit a 'mismatch' between the complementizers heading both clauses.

- (6) A: ¿Iuan va a llegar temprano? Juan goes to arrive early 'Will Iuan arrive early?'
  - a llegar temprano, no sé B: Que va si va a llegar not know whether goes to arrive that goes to arrive early, temprano, pero seguro viene. but sure comes 'As for arriving early, I don't know whether he will arrive early, but he will come for sure.

<sup>4</sup> The presence of the interrogative complementizer si is restricted to cases in which the main predicate receives a parenthetical reading, that is, when it is interpreted as an evidential (Simons 2007). Note that when this condition is not met, the doubling pattern with si heading CLAUSE 2 is unacceptable. This follows from the information structure of the construction. See below for more details.

<sup>(</sup>i) \*{Que/si} llovió, Lucía me preguntó si that/whether rained Lucía me asked whether rained 'As for raining, Lucía asked me whether rained.'

Another property of clausal doubling is that all constituents within Clause 2 must have a counterpart within Clause 1, and vice versa. Typically, Clause 2 contains anaphoric elements referring to parts of CLAUSE 1. This can be seen, for instance, in (7a), in which Clause 2 contains the object clitic lo 'it' referring to the definite DP el auto 'the car' that appears in the dislocated CP. When any of the clauses includes a constituent that does not have a counterpart in the other, the doubling pattern becomes unacceptable, e.g., (7b).

- (7) a. Que compré el auto<sub>i</sub>, lo<sub>i</sub> compré. that bought the car it bought 'As for me buying the car, I DID buy it,'
  - b. \* Que compré, compré el that bought bought the car

This property accounts for the contrast in (8). Given that null objects in Spanish require an indefinite antecedent (Campos 1986), only the example in (8a) licenses this kind of element.

- Que Cosmo<sub>i</sub> compró manzanas<sub>i</sub>, pro<sub>i</sub> compró  $\emptyset_i$ . (8) a. that Cosmo bought apples 'As for Cosmo buying apples, he DID buy some.'
  - \* Que Cosmo, compró las manzanas, pro, compró Ø, that Cosmo bought the apples bought

The corollary that follows from these patterns is that clausal doubling is subject to a condition of semantic parallelism: CLAUSE 1 must express exactly the same proposition as Clause 2. That is, if Clause 1 expresses a proposition p, Clause 2 must also express p.5

Moreover, this construction does not allow either some alternations that are arguably propositionally the same. For example, the doubling pattern is strongly unacceptable if CLAUSE 1 is in active voice and Clause 2 in passive, e.g., (i). For space reasons, we do not discuss these cases here.

(i) \*Que Juan leyó el libro, el libro fue leído por Juan. that Juan read the book the book was read Juan 'As for Juan reading the book, the book was read by Juan.'

<sup>5</sup> In fact, this semantic condition seems to be even stronger, since it also holds for non-truthconditional contents. Thus, for instance, clausal doubling does not allow that the verbs included in CLAUSE 1 and CLAUSE 2 are propositional synonyms. This is shown in (i) with the pair enojarse/enfardarse, which are truth-conditionally equivalent in Spanish.

<sup>(</sup>i) \* Que Juan se enojo, se enfadó. that Juan se got.mad se got.mad 'As for Juan getting mad<sub>1</sub>, he DID get mad<sub>2</sub>.'

(9) 
$$\underbrace{\begin{bmatrix} \text{Clause 1} & \cdots \\ p \end{bmatrix}}_{p} \cdots \underbrace{\begin{bmatrix} \text{Clause 2} & \cdots \\ p \end{bmatrix}}_{p}$$

This means that clausal doubling follows a more "rigid" scheme than predicate doubling, as the left-dislocated element in the latter can be either a bare infinitive, e.g., (10), or an infinitival clause, e.g., (1c). Thus, while the arguments and adjuncts in the dislocated constituent are mandatory in clausal doubling constructions, they are optional with predicate doubling.

(10) Comprar, compró el auto. to.buy bought the car 'As for buying, she bought the car.'

The semantic parallelism between both duplicates attested in clausal doubling also holds for polarity markers. That is, both clauses must always express the same polarity values (11a). If this condition is not satisfied, the doubling pattern leads to unacceptability, e.g., (11b) and (11c).

- (11) a. *Que no trabajó*, *no* TRABAJÓ. that not worked not worked 'As for not working, she did not work indeed'.
  - b. \*Que trabajó, no trabajó. that worked not worked 'As for working, she did not work indeed'.
  - c. \*Que no trabajó, TRABAJÓ.
    that not worked worked
    'As for not working, she did work.'

In predicate doubling, by contrast, there is no such constraint: the duplicate predicates may have distinct polarity, e.g., (12a). Instead, the pattern exhibits a different type of restriction: negation cannot appear within the left-dislocated predicate, e.g., (12b).

- (12) a. *Trabajar, (no)* TRABAJÓ. to.work not worked 'As for working, she did (not) work'.
  - b. \*No trabajar, (no) trabajó.
    not to.work not worked
    'As for not working, she did (not) work'.

Finally, both doubling patterns also differ in the possibility of displaying *genus-species* splits. In predicate doubling constructions, the dislocated predicate can contain a bare noun that is a hypernym of its counterpart within the matrix clause, e.g., (13a). However, clausal doubling does not permit this sort of mismatch, e.g., (13b).

- (13)a. Comer pescado, come atún. to.eat fish eats tuna 'As for eating fish, she eats TUNA.'
  - \*Oue come pescado, come atún. that eats fish eats tuna 'As for eating fish, she eats TUNA.'

## 2.2 Informative properties

Clausal doubling in Spanish triggers an interpretation related to verum focus, i.e., it introduces some kind of emphasis on the truth of the proposition denoted by both duplicate clauses. As is commonly attested with verum constructions, a clausal doubling sentence repeating the proposition p requires a specific context to be felicitously uttered. These are typically contexts in which  $\neg p$  is salient, e.g., scenarios in which someone asserts  $\neg p$ , such as (14A), or asks a polar question ?p with some bias towards  $\neg p$ , such as (14A').

(14)A: María did not buy wine.

A': Did María really buy wine?

B: Que compró vino, compró vino. that bought wine bought wine 'As for buying wine, she DID buy wine.'

As noticed originally by Vicente (2007), predicate doubling also allows for this verum interpretation. Thus, the construction provides felicitous answers in exactly the same contexts as clausal doubling.

(15)A: María did not buy wine.

A': Did María really buy wine?

B: Comprar vino. COMPRÓ vino. to.buv wine bought wine

'As for buying wine, she DID buy wine.'

Perhaps because of the contextual restriction mentioned before, clausal doubling is infelicitous in out of the blue contexts.7

<sup>6</sup> For a discussion of different verum-marking strategies, see Matthewson and Glougie (2018:

<sup>7</sup> See Gutzmann et al. (2020) and Goodhue (2022) for a discussion of the infelicity of verum focus constructions in out of the blue contexts.

(16)(No previous context) # Oue compró vino, compró vino. that bought wine bought wine 'As for buying wine, she DID buy wine.'

The same observation applies to predicate doubling.

(17)(No previous context) # Comprar vino, compró vino. wine bought wine to.buy 'As for buying, she DID buy wine.'

As previous examples show, clausal doubling typically assigns a contrastive accent to the main finite verb; this is traditionally considered a strategy to signal a verum-like interpretation (González Rodríguez 2007). Moreover, the construction also allows for adjectives like seguro 'sure', e.g., (18a), or obvio 'obvious', e.g., (18b), to carry the contrastive accent. As discussed by Leonetti and Escandell-Vidal (2009: 179), constructions in which the propositional content is embedded under elements like these are also means of expressing verum meanings in Spanish.<sup>8</sup> Thus, these patterns further suggest that clausal doubling expresses a verum-like reading.

- Que levó el libro, seguro que lo levó. (18)a. that read the book sure that it read 'As for reading the book, for sure she read it.'
  - b. Que trabajó, es obvio que trabajó. that worked is obvious that worked 'As for working, it is obvious that she worked.'

Despite the data discussed so far, there are some properties of clausal doubling that distinguish it from standard means of verum focus marking. First, as shown in (19), repeated from (11a), the duplicate clauses can contain negation.

**<sup>8</sup>** Take for instance the following example:

<sup>¿</sup>Vino A: Juan? came Juan 'Did Juan come?' B: Obvio que vino. obvious that came 'Obviously he DID come.'

(19)Que no trabajó, no trabajó. that not worked not worked 'As for not working, she did not work,'

The acceptability of a sentence like (19) is unexpected under the assumption that clausal doubling expresses verum focus. As Villa-García and González Rodríguez (2020) point out, verum focus marking cannot co-occur with negative particles (e.g. no), since they express contradictory polarity values. For instance, the positive polarity particle si 'yes' in Spanish is incompatible with sentential negation.

(20)\*AMaría sí la llamaron. no DOM María yes not her called 'They certainly did not call María.' (Villa-García and González Rodríguez 2020: 464)

The same observation applies to sentences like (1b), which mark a verum-like interpretation through fronting of an indefinite phrase: they are incompatible with no 'not'.

(21)Bastante trabaio (\*no) tengo. enough work not have 'I do have (\*not) enough work.' (Leonetti and Escandell-Vidal 2009: 198)

Second, a clausal doubling construction repeating a proposition p does not necessarily require a context in which  $\neg p$  is salient in order to be felicitous. As the dialog in (22) shows, in some cases the construction is acceptable in nondenying contexts.

- (22)A: Juan leyó el libro. Iuan read the book 'Juan read the book.'
  - B: Que lo leyó, lo LEYÓ, pero parece que no lo entendió. that it read it read but seems that not it understood 'As for reading, he DID read it, but it seems that he didn't understand it.'

This introduces a stark contrast with the behavior of "true" verum focus constructions in Spanish. Consider, for example, the dialog in (23). As can be seen, the answer containing the particle si 'yes' is infelicitous in the absence of a salient antecedent with contrasting polarity.

(23) A: Está lloviendo mucho. is raining heavily.'

B: #Sí está lloviendo mucho.

yes is raining heavily

'It is raining heavily.'

(Villa-García and González Rodríguez 2020: 467)

The same happens with the fronting strategy in (24B): its use is not adequate in this context.<sup>10</sup>

(24) A: Está lloviendo mucho.
is raining heavily
'It is raining heavily.'
B: #ALGO está llovien

B: #ALGO está lloviendo. something is raining 'There is some rain.'

Sí, está lloviendo mucho.yes is raining heavily'Yes, it is raining heavily.'

These examples convey the interpretation that the speaker accepts the expressed proposition, and therefore introduce no contrast or emphasis related to polarity.

**10** As an anonymous reviewer suggests, a potential explanation for the acceptability difference between (22B), on one hand, and (23B) and (24B), on the other, could stem from the fact that in (22B) the proposition  $\neg q = he \ didn't \ understand \ it$  licenses a verum interpretation on p, even if  $\neg p$  is not available or salient. However, as the following dialogs show, both (23B) and (24B) remain unacceptable even when a contrasting proposition  $\neg q$  is added to the example. We thank the reviewer for bringing this to our attention.

- (i) A: Está lloviendo mucho.
  - is raining heavily.'
  - B: #Si está lloviendo mucho, pero no tanto como ayer. yes is raining heavily but not so.much as yesterday
  - B': # ALGO está lloviendo, pero no tanto como ayer.
    something is raining but not so.much as yesterday
    'It is raining heavily, but not as much as yesterday.'

<sup>9</sup> The example in (23B) should be distinguished from superficially similar sentences that do not express verum focus, e.g., (i).

Thus, these data points show that clausal doubling cannot be considered a verum focus marking strategy in the conventional sense, i.e., it cannot be grouped together with the positive particle si. Instead, these last two properties make clausal doubling reminiscent of another emphatic pattern that is available in Spanish: the sí que 'yes that' construction (Batllori and Hernanz 2013; Kocher 2023; Villa-García and González Rodríguez 2020).

(25)que trabajó. **Iuan** sí Juan yes that worked 'Iuan certainly worked.'

According to the description provided by Villa-García and González Rodríguez (2020), the si que construction patterns with clausal doubling in scenarios like (19) and (22), i.e., it is compatible with sentential negation and can be felicitously uttered in nondenying contexts. They account for these properties by claiming that sí que "does not determine the polarity value of the construction – it is not a polarity marker like si – but instead modifies the whole proposition expressing the speaker's commitment to the propositional content" (2020: 465).

This general characterization fits well with clausal doubling. That is, when the construction repeats a proposition p, this does not seem to be directly related with the polarity of p; this explains why the distribution of the pattern goes beyond contexts in which  $\neg p$  is salient. Instead, the construction puts emphasis on the truth of p, no matter the (internal) polarity of this proposition. In this regard, clausal doubling behaves much like constructions such as (26).

(26)Es verdad que no trabajó. is true that not worked 'It is true that she didn't work.'

Villa-García and González Rodríguez (2020) make very similar claims regarding the interpretation of si que, i.e., they argue that the pattern expresses the speaker's commitment to the truth of p. Thus, clausal doubling must be grouped together with sí que rather than with the traditional polarity marker sí, at least regarding this type of interpretation and the distributional properties that stem from it.<sup>11</sup>

<sup>11</sup> This does not mean that clausal doubling and sí que are synonymous or have identical distributions. For instance, sí que is incompatible with interrogative sentences, e.g., (i), which starkly contrasts with clausal doubling examples such as (6).

<sup>(</sup>i) \*No sé sí que va a llegar. si not know whether yes that will to come 'I don't know if she is going to come.'

The predicate doubling construction seems to function just like clausal doubling regarding these properties: it can be used in non-denying contexts, e.g., (27), and is compatible with sentential negation, e.g., (12a). These patterns further elaborate the observations by Muñoz Pérez and Verdecchia (2022) and Verdecchia (2023), who assume that predicate doubling expresses verum focus in a more canonical sense (i.e., similarly to sí, which is the most common means of verum-marking in the language).

- (27) A: Juan leyó el libro. Juan read the book 'Juan read the book.'
  - lo leyó, pero no sé si lo entendió. B: to.read it read but not know if it understood 'As for reading, he DID read it, but I don't know if he understood it.'

A further similarity between predicate doubling and clausal doubling is that both trigger a continuation effect: their use suggests that something else needs to be said in order to resolve the matter under discussion. As a control, consider the dialog in (28). In this case, the reply by speaker B states that Juan did read the book, and settles the issue.

(28) A: ¿Leyó el libro Juan? read the book Juan 'Did Juan read the book?'

> B: Lo leyó. read it 'He read it.'

In contrast, answering the same question with predicate doubling, e.g., (29B), or clausal doubling, e.g., (29B'), leads to a very different discourse effect. In these cases, while the responses fully address the question, they also suggest (and even require) a contrasting continuation. Potential follow-ups for this example go in the line of but he didn't understand it, or but he didn't like it, and so on. In fact, without such an explicit continuation, the most natural response by speaker A would be asking something like but what?.

- (29)A: ¿Levó el libro Juan? read the book Juan 'Did Iuan read the book?'
  - B: Que leyó libro, lo LEYÓ, pero no lo entendió. that read the book it read but not it understood 'As for reading the book, he DID read it, but he didn't understand it.'

R'٠ Leer el libro, lo leyó, pero no lo entendió. to.read the book it read but not it understood 'As for reading the book, he DID read it, but he didn't understand it.'

Despite these similarities, the constructions exhibit an important difference regarding focus. As shown in (30a), predicate doubling can license narrow focus (Muñoz Pérez 2017; Muñoz Pérez and Verdecchia 2022). In contrast, clausal doubling sentences involving narrow focus are deviant, e.g., (30b).

- Comprar, compró vino (no cerveza). (30)to.buy bought wine not beer 'As for buying, she bought wine (not beer).'
  - \*Que compró (vino), compró vino (no cerveza). that bought wine bought wine not beer 'As for buying, she bought wine (not beer).'

As the pair shows, while predicate doubling allows focusing the direct object vino 'wine', this is impossible under clausal doubling. Similar contrasts arise systematically for narrow focus on other constituents.

#### 2.3 Interim summary

Up until now, we have presented the most salient features of clausal doubling and compared them to predicate doubling. Table 1 offers a schematic summary of our discussion.

As can be seen, the constructions overlap in a number of properties, but also display non-trivial differences. In the following section, we provide an analysis for these traits.

	Clausal doubling	Predicate doubling
Different polarity between duplicates	×	<u>√</u>
Negation within the dislocated constituent	✓	×
Genus-species splits	×	✓
Behavior similar to sí que 'yes that'	✓	✓
Out-of-the-blue contexts	×	×
Continuation effect	✓	✓
Narrow focus	×	✓

## 3 Analysis

Building on Muñoz Pérez and Verdecchia's (2022) proposals, we contend that the properties of clausal doubling and predicate doubling can be captured under a common analysis: what both structures have in common is that their leftmost duplicate constituents function as a contrastive topic in the sense of Büring (2003). The key factor distinguishing both patterns is the "size" of the dislocated constituent; in clausal doubling, the contrastive topic is a CP denoting a proposition; in predicate doubling, it is a verb or verb phrase (v/vP) denoting a predicate. To illustrate, consider the following examples:

- (31)a. Que compró vino, compró vino. that bought wine bought wine 'As for buying wine, she DID buy wine.'
  - b. Comprar vino, compró vino. to.buy wine bought wine 'As for buying wine, she DID buy wine.'

According to our proposal, the contrastive topic in (31a) denotes the proposition she bought wine, as shown in (32a). In contrast, the dislocated phrase in (31b) denotes the "unsaturated" predicate to buy wine, as sketched in (32b).

- (32)¶que compró vino ≈ she bought wine
  - b.  $[comprar vino] \approx \lambda x$ . x bought wine

As we show below, all contrasts between clausal doubling and predicate doubling described in the previous section reduce to this single difference. Before moving forward with our analysis, we introduce the core features of Büring's (2003) account of contrastive topics.

Contrastive topics introduce the reading that there are other topics with their corresponding comments that are relevant in context. Take the example in (33). Given the proper intonation, with Fred carrying a B-accent and beans carrying an A-accent (Jackendoff 1972), the sentence in (33B) is interpreted as implying that other people ate other things, e.g., Mary ate the eggplant, George ate the tuna, Elaine ate the carrots, and so on.

(33)A: What did you all eat? B: [Fred]<sub>CT</sub> ate [THE BEANS]<sub>F</sub>. (Büring 2003: 519)

Büring (2003) captures this interpretation within the Question Under Discussion model of discourse (Roberts 1996, 2012). According to Büring, contrastive topics signal the presence of a complex discourse strategy, in which a superquestion encompasses (i) the immediate question under discussion (iQUD) and (ii) at least another relevant

question. Thus, whereas focus relates a declarative sentence S to a set of alternative propositions, i.e., the *f-value* of S (Rooth 1992, 1996), a contrastive topic relates a sentence S to a set of alternative questions, i.e., the *CT-value* of S.

To retrieve the relevant CT-value introduced by a contrastive topic, we adopt a two-step computation in line with Büring (2003: 509). The schematic algorithm in (34) illustrates the process.

#### (34)CT-VALUE FORMATION

For a sentence S containing a contrastive topic,  $[S]^{ct}$  obtains from

- a. calculating the question Q whose denotation is congruent with the f-value of S, and
- b. calculating the set of questions that obtain from replacing the CT-marked element in Q for salient alternatives.

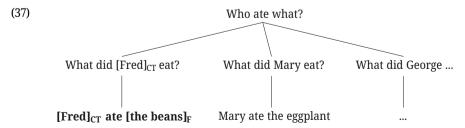
Take as an example the answer in (33B). The subrule in (34a) is aimed at retrieving the iQUD for this utterance, i.e., the question O such that  $[0] = [Fred]_{CT}$  ate [the beans]<sub>F</sub>V. The f-value of a sentence obtains from replacing the f-marked constituent for a variable standing for salient alternatives. Thus, [[Fred]<sub>CT</sub> ate [the beans]<sub>F</sub>] is equivalent to a set of propositions of the form Fred ate x. Under the assumption that a question denotes the set of its potential answers (Hamblin 1973), the question what did Fred eat? matches the f-value of (33B). This result is captured in (35).

(35) 
$$[(33B)]^f = \{ [Fred]_{CT} \text{ ate } x \mid x \in D_e \} = \text{What did } [Fred]_{CT} \text{ eat?}$$

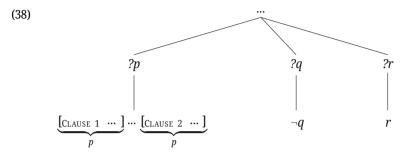
As a second step, the subrule in (34b) retrieves a set of questions by replacing the CT-marked constituent in (35) for contextually relevant alternatives. This set of guestions is the *CT-value* of the utterance in (33B).

[(33B)]]<sup>ct</sup> = {{
$$y \text{ ate } x \mid x \in D_e$$
} |  $y \in D_e$ } = {What did Fred eat?, What did Mary eat?, What did George eat? ...}

As Büring (2003: 520) points out, this type of result can be summarized in a D(iscourse)tree like (37). This representation shows that an utterance containing a contrastive topic not only answers its iQUD, but also evokes a set of alternative questions that altogether address a superquestion, e.g., who ate what?. The need to address these alternative questions explains the potential continuations detected for the answer in (33).



Coming back to clausal doubling, we contend that when the construction asserts the proposition p twice, it makes a twofold discourse contribution: first, it answers an iQUD ?p; second, it evokes a set of polar questions about other propositions, e.g., ?q, ?r. The following discourse tree captures the gist of the proposal.



Let's see how this fits with CLAUSE 1 being a contrastive topic. Take the example in (2), repeated for convenience in (39). As can be seen, the leftmost duplicate clause is taken here to function as a contrastive topic.

(39) [*Que compró vino*]<sub>cr</sub>, [compró *vino*]. that bought wine bought wine 'As for buying wine, she did buy wine.'

As discussed, clausal doubling patterns together with *sí que* 'yes that' in a number of properties. According to Villa-García and González Rodríguez (2020) and Kocher (2023), the *sí que* pattern is the realization of a left-peripheral verum-like element. While these authors make different claims on the nature and exact position of this projection within the external layer of the sentence, they all take it to scope over the proposition and to express some form of sentence mood. We make some of these assumptions part of our analysis of clausal doubling. In particular, we take that the construction recruits a head occupying a high position in the syntactic spine. We remain agnostic about whether it is a head introducing mood values, as proposed by Lohnstein (2016) and Kocher (2023), or whether its mood-related interpretation obtains through other means (e.g., pragmatics).

At a pre-theoretical level and just for expository purposes, we follow Villa-García and González Rodríguez in calling this head  $X^0$ . We propose that clausal doubling involves focus marking of  $X^0$ , as depicted in (40).

[Que compró vino]<sub>CT</sub>,  $X^0_F$  [compró vino].

At a semantic level, we follow traditional ideas on the functioning of verum focus and conceive  $X^0$  as a predicate over propositions (Höhle 1992). Basically, it denotes an identity

function  $\lambda p.p$ . When focused,  $X^0$  emphasizes the truth of p (in contrast to the falsehood of p) and, therefore, allows the speaker to expresses their commitment towards p.

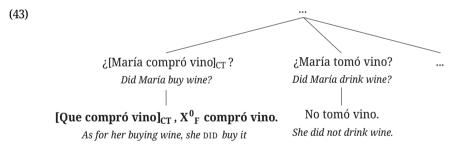
With these assumptions in mind, we can apply the algorithm in (34) to the structure in (40). The iQUD for (40) obtains from replacing the focused  $X^0$  for a variable ranging over functions making p true or making p false. We dub this variable  $\tau$ . Since (40) expresses the proposition p = she bought wine, its f-value is the set {it is true that she bought wine, it is false that she bought wine}. These alternatives are equivalent in their denotation to the polarity-based contrast between p and  $\neg p$ , and therefore are congruent with a question denoting p and  $\neg p$ , i.e., the polar question p.

(41)  $[(40)]^f \approx \{ \tau(\text{she bought wine}) \mid \tau \in \{ \text{it is true that } p, \text{ it is false that } p \} \} \approx [did [\text{she buy wine}]_{CT}?]$ 

Once we get the iQUD for (40), we can calculate its CT-value by replacing the contrastive topic p for alternative propositions.

(42) 
$$[(40)]^{ct} \approx \{ \tau(p) \mid p \in D_t \} \approx \{ \text{did she buy wine?, did she drink water?, } \ldots \}$$

As with the previous example, the discourse structure associated to (40) can be schematized in the discourse tree in (43). The fact that the contrastive topic signals the presence of these alternative questions accounts for the continuation effect observed before in Section 2.2, that is, for the fact that a clausal doubling sentence suggests a continuation contrasting with the dislocated clause.<sup>13</sup>



This proposal follows very closely the analysis that Muñoz Pérez and Verdecchia (2022) advance for predicate doubling. The only relevant difference between the

<sup>12</sup> In principle, this is equivalent to propose that  $\tau$  ranges over a set of two functions: the identity function and negation (Goodhue 2022). This does not entail that the meaning of  $\tau$  can be totally reduced to that of a polarity head. As discussed later, we take  $X^0$  to be a syntactic head distinct from Neg<sup>0</sup>, which occupies a much lower position in the syntactic spine.

<sup>13</sup> These discourse trees do not pretend to be exhaustive representations of the relevant discourse structures, e.g., other potential answers could address questions such as *did María drink wine?* in (43).

treatment of both constructions relies in the size of their corresponding dislocated constituens: while clausal doubling has a dislocated embedded CP expressing a full proposition, predicate doubling has a verbal projection denoting a predicate.

To see the similarity of both analyses in more detail, consider the sentence in (44). Notice that the dislocated infinitive functions as a contrastive topic.

(44) $[Comprar]_{CT}$ ,  $compró [vino]_{F}$ . bought wine to.buy 'As for buying, she bought wine,'

As we did before, we apply the algorithm in (34). First, we retrieve the iOUD for (44).

(45) 
$$[(44a)] \nearrow \text{ she bought } x \mid x \in D_e \} \approx [\text{what did she [buy]}_{CT}?]$$

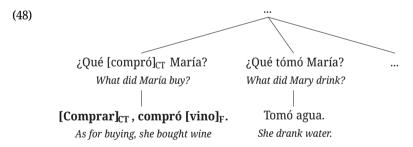
Then, we obtain a set of alternative questions by replacing the CT-marked element in the iQUD for alternative predicates.

(46) 
$$[(44a)]^{ct} \approx \{\text{she } R \mid R \in D_{e,et}\} \approx \{\text{what did she buy?, what did she sell?, ...}\}$$

The implicit answers to these alternative questions explain the continuation effect also attested in this construction.

(47)Comprar, compró vino, pero tomó agua. bought wine but drank water to.buy 'As for buying, she bought wine, but she drank water.'

This can be summarized in the following discourse tree.



The fact that basically the same analysis can account for both structures provides a basis for capturing their similarities and differences. In particular, the next section demonstrates that most contrasts between these patterns reduce to the type of constituent that functions as a contrastive topic in each case.

# 4 Repeating predicates versus repeating propositions

The proposed analyses capture all the relevant differences between clausal doubling and predicate doubling attested in Section 2. As said, we argue that all the contrasts between these doubling patterns follow straightforwardly from the nature of the constituent functioning as a contrastive topic.

To begin with, consider again the asymmetry regarding narrow focus marking. As shown in (30), only predicate doubling allows narrow focus on constituents within the clause. We repeat the examples below for convenience.

- (49)Comprar, compró vino (no cerveza). bought wine not beer to.buv 'As for buying, she bought wine (not beer).'
  - \*Que compró vino, compró vino (no cerveza). b. that bought wine bought wine not beer 'As for buying wine, she bought wine (not beer).'

Given that Clause 1 and Clause 2 have the same meaning, and Clause 1 functions as a contrastive topic, it follows that no part of Clause 2 may have a different informative status. In other words, no constituent within Clause 2 may be interpreted as narrow focus. This restriction further explains why clausal doubling always has a verum-like interpretation: because the relevant head X<sup>0</sup> is external to the proposition, i.e., outside of Clause 2.

A similar logic applies to predicate doubling, although with different results. In this construction, the dislocated constituent functioning as a contrastive topic is a verb or a verbal projection, i.e., a predicate. Thus, it follows that the clause-internal occurrence of this element cannot have a different informative status and cannot function as the focus of the sentence. This prediction is borne out in examples like the following.

(50)\*Comprar, he COMPRADO un libro (no vendido). to.buy have bought a book not sold 'As for buying, I have BOUGHT a book (not sold).'

However, all other elements in this sentence that are not the lexical verb comprar 'to buy' are "free" to function as the focus of the sentence because they do not convey information that is already part of the contrastive topic. So, for instance, the direct object un libro 'a book' could be the focus of this sentence (given the right context).

(51)Comprar, comprado un libro (no una revista). he have bought book not a to.buy a magazibe 'As for buying, I have bought A BOOK (not a magazine).'

As can be seen, the different "size" of the element functioning as contrastive topic accounts for why predicate doubling is more flexible than clausal doubling with respect to narrow focus marking: all constituents that are not within the dislocated predicate can function as focus.

Importantly, predicate doubling preserves the possibility of f-marking the head X<sup>0</sup>. This explains why this construction also has the possibility of being interpreted as verum focus, and why it patterns together with clausal doubling in the relevant contexts.

A stark difference between predicate doubling and clausal doubling is that only the former can exhibit genus-species splits, e.g., (52). As shown before, these patterns consist of the presence of a bare noun in the dislocated phrase that is an hypernym of its counterpart within the clause.

- (52)Comer pescado, come ATÚN. to.eat fish eats tuna 'As for eating fish, she eats TUNA.'
  - b. Oue come pescado, come atún. that eats fish eats tuna 'As for eating fish, she eats TUNA.'

Again, we argue that the contrast in (52) is derived from the nature of the contrastive topic in each construction. Following Cann (2011), we understand hyponymy as an inclusion relation.

(53)Hyponymy (Cann 2011: 459) 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.

Muñoz Pérez and Verdecchia (2022) argue that genus-species splits involve narrow focus on the semantic properties defining the hyponym as a specific type of individual within the kind denoted by the hypernym. For instance, the focal structure of the example in (52a) can be roughly described as in (54): the noun atún 'tuna' contains at least one additional property [+C] that distinguishes it from the noun pescado 'fish'; this feature needs to be f-marked.

(54) 
$$\underbrace{\text{comer pescado}_{[+A][+B]}}_{\text{PREDICATE 1}} \left[ \underbrace{\text{CLAUSE ...}}_{\text{PREDICATE 2}} \underbrace{\text{come atún}_{[+A][+B]}}_{\text{PREDICATE 2}} \right] \qquad \textit{cf.} \text{ (52a)}$$

This analysis explains why the pattern cannot surface "backwards", with the hyponym within the dislocated phrase, e.g., (55): because the hypernym has no extra feature that can be focused within the clause.

(55)\*Comer atún, come PESCADO. to.eat tuna eats fish 'As for eating tuna, she eats FISH.'

Under this account, the contrast between (52a) and (52b) is explained straightforwardly: clausal doubling does not allow genus-species effects because, as discussed, it does not admit narrow focus within CLAUSE 2. Predicate doubling allows these splits as another instance of narrow focus marking.

Finally, as seen in Section 2.1, clausal doubling requires both duplicates to have the same polarity.

- (56) a. Oue no trabaió, no trabaió. that not worked not worked 'As for not working, she did not work indeed'.
  - \*Que trabajó, no trabajó. b. that worked not worked 'As for working, she did not work indeed'.
  - c. \*Oue no trabajó, trabajó. that not worked worked 'As for not working, she DID work.'

This also follows from the "size" of the dislocated constituent. We take that no 'not' is the spell-out of a Neg<sup>0</sup> head within the clause. As discussed by Zeijlstra (2013: 804), negation is a category for which, in principle, there is no obvious fixed position within the syntactic skeleton: its only requirement is having scope over the predicate, so it could be anywhere between CP and vP.

$$[CP \ C \ ...[NegP \ no \ ...[VP \ ...]]$$

We take that *no* 'not' is an element in the domain of the syntactic projection in which the proposition is built, i.e., we assume that polarity markers are internal to the proposition. Since, as shown in (9), Clause 1 and Clause 2 need to express the same proposition, then either both contain no or none of them contains no, i.e., their sentential polarity must be the same.

We also showed that predicate doubling does not obey the same restriction and that, in fact, it does not allow *no* to appear within the dislocated predicate.

- Trabaiar, (no) Trabaió. (58)a. to.work not worked 'As for working, she DID (not) work'.
  - b. \*No trabajar, (no) trabajó. not to.work not worked 'As for not working, she DID (not) work'.

This follows straightforwardly from the proposal in Muñoz Pérez and Verdecchia (2022) that the dislocated predicate is a vP, a constituent that must always be below NegP. For this reason, the leftmost predicate cannot contain negation.

The line of reasoning provided throughout this section can be summarized in the following way. Clausal doubling is a construction that has a proposition p being interpreted as a contrastive topic, and a predicate over p that emphasizes the truth of p, i.e., the head X<sup>0</sup>. Thus, all mechanisms intervening in the functioning of clausal doubling are relative to p as a unit; they do not "see" subparts of p. This, for instance, explains why clausal doubling, while expressing a verum-like meaning, is compatible with sentential negation, e.g., (19): because  $X^0$  takes the whole proposition p as argument, no matter *no* 'not' is within the internal structure of *p*.

Such account immediately poses interesting questions: why are the sentences in (20) and (21), repeatead for convenience in (59) and (60), unacceptable? Why are the particle si and the fronting of indefinites incompatible with sentential negation? Do their verum-like meaning also rely on  $X^0$ , or perhaps there is another syntactic head that can provide this sort of interpretation?

- (59)\*AMaría sí no la llamaron. DOM María yes not her called 'They certainly did not call María.' (Villa-García and González Rodríguez 2020: 464)
- (60)Bastante trabajo (\*no) tengo. enough work not have 'I do have (\*not) enough work.' (Leonetti and Escandell-Vidal 2009: 198)

The analysis provided here suggests an answer: maybe (59) and (60) involve focus of a polarity head within the proposition, and that is the reason negation is incompatible with them. So, the conjecture is that verum-like meanings in Spanish may result from focusing elements outside and within the proposition. Villa-García and González Rodríguez (2020) and Kocher (2023) discuss related hypotheses based on the behavior of the sí que 'yes that' construction.

## 5 Concluding remarks

In this paper, we have presented a description and analysis of a previously unstudied doubling pattern in Spanish: clausal doubling. We have compared this grammatical pattern to predicate doubling, and we have demonstrated that both constructions share a parallel structure, namely one with a dislocated contrastive topic in the left periphery. We have also argued that the key factor distinguishing both constructions lies in the nature of the projection functioning as contrastive topic in each case. Specifically, while predicate doubling has a verb or verb phrase that denotes a predicate as a contrastive topic, the clausal doubling construction has a finite CP that denotes a full proposition. This distinction leads to a series of interpretative and formal differences. These include the possibility of marking narrow focus, the availability of genus-species splits, and the distribution of polarity markers.

On a separate note, we have provided further evidence that verum-like constructions in Spanish must be grouped in different categories. Specifically, we have shown that clausal doubling and predicate doubling pattern together with si que 'yes that', but constrast with the insertion of the positive polarity marker si 'yes' and the fronting of indefinite phrases. Our analysis suggests that this difference stems from focusing different heads in each family of constructions. This is a conjecture that requires further research.

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