

Superlatives, partitives and apparent φ -feature mismatch in Spanish

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Abstract

Adjectival superlatives in Spanish are expressed by a definite determiner and the comparative morpheme *más* 'more/-er' modifying the adjective. While gender and number concord between the determiner, adjective and noun is generally obligatory, there is a subset of cases where it seems to be disrupted: the determiner surfaces as the so-called neuter *lo*, the adjective spells out masculine and there is no overt noun. I argue that this non-canonical pattern is the result of a failed Agree dependency between probes on D and a noun underspecified for φ . Failure to value the probe triggers the emergence of defaults at the point of Vocabulary Insertion: *lo* and masculine morphology on the adjective. The analysis that *lo* as genderless and numberless receives support from coordination patterns.

Keywords: syntax-morphology, φ -agreement, superlatives, partitives, Spanish.

1. Introduction

It is a well-known fact that in Romance languages, determiners and adnominal adjectives agree in φ -features with the noun they modify. This is typically known as ‘nominal concord’ (see Norris, 2017a,b: for an overview). For example, nouns in Spanish are specified for masculine or feminine gender. The inherent gender of the noun determines the gender on the adjective and the determiner.¹ Failure to agree in φ results in ungrammaticality. This is illustrated in (1).²

- (1) a. L-a (maj-a) chica (maj-a)
the-F.SG nice-F.SG girl.F.SG nice-F.SG
- b. *El (maj-o) chica (maj-o)
the.M.SG nice-M.SG girl.F.SG nice-M.SG
‘The nice girl’

This is not a special property of adnominal modifiers. The same pattern obtains when the adjective is in predicative position, i.e. the predicate of a copular verb (Cinque, 1993, 2010: a.o.). In (2), the head noun of the subject of the predication, *chica* ‘girl’, controls the gender and number agreement on the adjectival predicate.

- (2) L-a chica es maj{ -a/ *-o}
the-F.SG girl.F.SG is nice -F.SG/ -M.SG
‘The girl is nice’

Concord is obligatory regardless of whether the copula is individual-level as in (2) or stage-level. This is shown in (3) for Spanish, which marks this distinction morpho-syntactically: *ser* ‘be_{ind}’ vs. *estar* ‘be_{stage}’ (Roy, 2006).

- (3) L-a chica está maj{ -a/ *-o}
the-F.SG girl.F.SG is_{stage} nice -F.SG/ -M.SG
‘The girl is being nice’

The phenomenon of concord extends beyond the positive form of the adjective, and is also found in superlative constructions. Adjectival superlatives in Romance languages are expressed by an obligatory definite determiner and the comparative morpheme *más*, ‘more/-er’, modifying the adjective.³ As expected given the data discussed, the superlative constituent generally shows φ -feature concord with the controlling noun as well: the adjective and the definite determiner must agree in gender and number with the noun, in both adnominal and predicative position. This is illustrated in (4a) and (4b) respectively for Spanish, though the same is found in other Romance languages (see Croitor & Giurgea, 2016; Loccioni, 2018).

¹ Nouns themselves do not spell out gender, but class. That is, the word marker attached to the nominal root is a class exponent (Harris, 1991; Kramer, 2015)

² All the uncited data in the paper come from original fieldwork over the winter of 2021 and summer of 2022. I conducted context-based elicitations in Valladolid, Spain following the guidelines from Matthewson (2004), Bochnak & Matthewson (2015, 2020) and Kibrik (2017) with a total of 12 native speakers of Peninsular Spanish. The speakers were from Valladolid (7), from Madrid (3) and from Córdoba (2). Their judgments are as reported in the paper.

³ This excludes suppletive cases like Spanish *bueno-mejor-el mejor* ‘good-better-the best’.

- (4) a. L-a chica más maj{ -a/ *-o}
 The-F.SG girl.F.SG more nice -F.SG/ -M.SG
 ‘The nicest girl’
- b. L-a chica es l-a más maj{ -a/ *-o}
 The-F.SG girl.F.SG is_{ind} the-F.SG more nice -F.SG/ -M.SG
 ‘The girl is the nicest’

Despite the general obligatoriness of concord, there is a subset of superlatives in which the concord patterns represented in (4) seem to be violated. This is shown in (5): the φ -features on the definite determiner and the superlative adjective do not match those of any potential controller of agreement.⁴

- (5) L-a chica es **lo** más maj-**o** del pueblo.
 The-F.SG girl.F.SG is_{ind} the.NT more nice-M.SG of.the town
 ‘The girl is the nicest thing in the whole town’

The subject of the predication, e.g. *the girl*, which is feminine and singular, does not control the agreement on the adjectival predicate *maj*- ‘nice’ which bears the masculine gender exponent *-o*. In addition, despite the masculine gender exponent on the adjective, the definite determiner is not the expected singular masculine one: *el* ‘the.M.SG’. Instead, the so-called “neuter” determiner surfaces: *lo*. I refer to this construction as Non-Agreeing Predicative Superlatives (NAPS).

While there is no overt noun, the idiomatic interpretation requires something like the placeholder noun *cosa* ‘thing’. In fact, NAPS like (5) seem to be similar to cases like (6), which I will refer to as *cosa*-NPs.

- (6) L-a chica es **l-a cosa** más maj-**a** del pueblo.
 The-F.SG girl.F.SG is_{ind} the-F.SG thing.F.SG more nice-F.SG of.the town
 ‘The girl is the nicest thing in the whole town’

In (6) the noun *cosa* ‘thing.F.SG’ controls the agreement on the determiner and the subsequent concord on the adjective. Both (5) and (6) are truth-conditionally equivalent. These overt *cosa* constructions are regular DPs, and so a question is whether NAPS are also DPs. The presence of the so-called neuter determiner *lo* in NAPS, however, makes (5) resemble modal superlatives like (7), e.g. Larson (2000); Schwarz (2005); Romero (2013); Loccioni (2019).

- (7) L-a chica es lo más maj-a posible.
 the-F.SG girl.F.SG is_{ind} the.NT more nice-F.SG possible
 ‘The girl is the nicest possible’ or ‘The girl is as nice as possible’

It has been argued by Loccioni (2019) that, despite the presence of the determiner, modal superlatives such as (7) are adjectival. Thus, we need to probe whether NAPS are a

⁴ The same construction is not grammatical in Italian, as shown in (1).

(1) * L-a ragazza è **il** più carin-**o** della città.
 The-F.SG girl.F.SG is the.M.SG more nice-M.SG of.the city
 Int.: ‘The girl is the nicest thing in the whole town’

(Antonio Cleani p.c.)

special case of modal superlatives and thus adjectival, or the null counterpart of *cosa*-NPs and thus nominal.

NAPS, therefore, raise several important questions for the syntax of nominals. One of the, perhaps most obvious, questions is what their underlying structure is and how the *lo*...A-M.SG mismatch is obtained. This is of special relevance if NAPS are, as modal superlatives, underlyingly adjectival. These issues are related to the puzzle of the spell-out of D as the so-called “neuter” form. In fact, if it is the case that *lo* is neuter, the gender mismatch between D and the adjective is to be explained as well, as it would entail that Spanish has neuter gender contrary to Ojeda (1984); Harris (1991).

In this paper I address each of these questions with two major goals in mind. First, I show that NAPS are distinct from modal superlatives. In fact, by using syntactic and semantic diagnostics, I argue that NAPS share many properties with partitive constructions, of which *cosa*-NPs are a type, and must thus be nominal. Second, building on Ojeda (1984); Harris (1991), I argue that there is no such a thing as “neuter” in Spanish. D fails to agree with a noun that is underspecified for gender and number features (Preminger, 2014), and as a result it is spelled out as *lo* given the Elsewhere Principle (Kiparsky, 1973; Halle & Marantz, 1993). Masculine morphology on the adjective also surfaces as default, and uniformity in terms of masculine features is achieved post-syntactically. As a result, the DP-internal mismatch is only apparent: D and the head of the AP both spell out the most unmarked gender, i.e. masculine. I, then, discuss some of the predictions that this analysis of NAPS makes with respect to agreement patterns in coordination. Last but not least, I provide the semantic compositional details in an appendix.

2. NAPS ≠ Modal superlatives

The definite determiner *lo* in Spanish can be found in a wide variety of contexts (Bosque & Moreno, 1990). One of these includes modal superlatives, e.g. *the A-est possible*. Modal superlatives are a type of predicative superlative in which the superlative adjective may, but need not, be overtly accompanied by the modal adjective *possible* (Larson, 2000; Schwarz, 2005; Romero, 2013) such as (8) from English.

- (8) Maria wanted to be the prettiest possible.

The relevant reading of modal superlative constructions such as (8) is paraphrasable by amount relatives or equatives (Carlson, 1977; Grosu & Landman, 1998): *Maria wanted to be as pretty as possible*. Modal superlatives are thus different from other types of predicative superlatives in that they do not allow equal ordering relations among the individuals in the relevant comparison class: *John is the tallest* cannot be interpreted as ‘John is as tall as any other individual in the relevant set’.

In Spanish, modal superlatives have the following basic properties: (i) they are introduced by *lo*, (ii) the superlative adjective bears gender and number inflection that matches the subject’s of the predication, and (iii) they can be accompanied by the modal adjective *posible* ‘possible’. In addition, the idiomatic interpretation is that of an equative or an amount relative (Loccioni, 2018, 2019). Some examples include (7) and (9).

- (9) L-a niña es lo más rápid-a posible.
the-F.SG girl.F.SG is_{ind} the.NT more fast-F.SG possible

‘The girl is the fastest possible’ or ‘The girl is as fast as possible’

As both (7) and (9) show, the superlative-modified adjective agrees in feminine singular with the subject of the predication, and it does not expone masculine singular *-o*. This is already one striking, and important, difference between modal superlatives and NAPS, thus, casting doubt on their morpho-syntactic and semantic kinship.

In addition to this difference in gender marking on the adjective, NAPS do not share any other relevant characteristic properties of modal superlatives in Spanish as identified by Loccioni (2018, 2019). These include: (i) incompatibility with modal adjective *posible*; (ii) inability to be paraphrased as equatives; (iii) the ability to license Negative Concord Items (NCIs) in the comparison class; and (iv) unacceptability as predicates of copula *estar*. In this section I probe each of these properties and discuss their implications for the syntax of NAPS, and *cosa*-NPs.

The adjective *posible* and the equative meaning. One of the hallmarks of modal superlatives, as illustrated in (9), is the optional overtiness of the adjective *posible* which contributes the modal flavor. If NAPS are a type of modal superlative, we would expect them to also be compatible with said adjective. However, that is not the case as shown in (10). The same is observed for their *cosa*-NP counterpart in (11).

- (10) * L-a chica es lo más rápid-o posible.
 The-F.SG girl.F.SG is_{ind} the.NT more fast-M.SG possible
 Int.: ‘The girl is the fastest possible’ or ‘The girl is as fast as possible’
- (11) * L-a chica es l-a cosa más rápid-a posible
 The-F.SG girl.F.SG is_{ind} the-F.SG thing.F.SG more fast-F.SG possible
 Int.: ‘The girl is the fastest possible’ or ‘The girl is as fast as possible’

Modal superlatives have an equative or amount relative interpretation (Mendia, 2017; Loccioni, 2019): example (12) is truth-conditionally equivalent to the equative paraphrase in (12a) or the amount relative in (12b).

- (12) Ella quería ser lo más rápid-a posible
 she wanted to.be_{ind} the.NT more fast-F.SG possible
 ‘She wanted to be the fastest possible’
- a. Ella quería ser tan rápid-a como fuera posible
 she wanted to.be_{ind} as.much fast-F.SG as was.3SG.SUBJ possible
 ‘She wanted to be as fast as possible.’ (Equative)
- b. Ella quería ser cuánto más rápid-a posible
 she wanted to.be_{ind} how.much more fast-F.SG possible
 ‘She wanted to be the fastest as possible.’ (Amount Relative)

These interpretations contrast with those available for NAPS in (13) and *cosa*-NPs in (14): the constructions allow neither.

- (13) Ella quería ser lo más rápid-o
 she wanted to.be_{ind} the.NT more fast-F.SG
 ‘She wanted to be the fastest thing’

- a. * Ella quería ser tan rápid-o como fuera posible
 she wanted to.be_{ind} as.much fast-M.SG as was.3SG.SUBJ possible
 Int.: ‘She wanted to be as fast as possible’ (Equative)
- b. * Ella quería ser cuanto más rápid-o pudiera
 she wanted to.be_{ind} how.much more fast-M.SG could.3SG.SUBJ
 Int.: ‘She wanted to be the fastest she could’ (Amount Relative)
- (14) Ella quería ser l-a cosa más rápid-o
 she wanted to.be_{ind} the-F.SG thing.F.SG more fast-F.SG
 ‘She wanted to be the fastest thing’
- a. # Ella quería ser un-a cosa tan rápid-a como
 she wanted to.be_{ind} a-F.SG thing.F.SG as.much fast-M.SG as
 fuera posible
 was.3SG.SUBJ possible
 Int.: ‘She wanted to be the thing that was as fast as possible’ (Equative)
- b. # Ella quería ser cuanto más rápid-a pudiera
 she wanted to.be_{ind} how.much more fast-M.SG could.3SG.SUBJ
 Int.: ‘She wanted to be the fastest thing she could’ (Amount Relative)

The sentences in (13a-b) are syntactically ill-formed due to the lack of feminine agreement which is obligatory in the equative. Changing the gender to feminine would not render an accurate interpretation of the target sentence, however. The paraphrases of (14) are syntactically well-formed but they do not constitute idiomatic paraphrases of the target sentence.

NCI licensing. Modal superlatives have been shown to not license NCIs inside a relative clause that serves as the comparison class (Loccioni, 2018, 2019).⁵ This is shown in (15). In order to avoid any potential confounds with *n*-words in Spanish, the negative indefinite determiner *ningún* ‘no/any’ in (15) occurs in a postverbal adjunct which entails that it must be in the scope of a structurally higher NCI licenser (Vallduví, 1994; Aranovich, 2007).^{6,7}

⁵ Spanish is a Negative Concord language which means that negative or downward entailing elements will trigger the surfacing of multiple *n*-words (Vallduví, 1994; Giannakidou, 1998; Zeijlstra, 2004; Giannakidou & Zeijlstra, 2017). This contrasts with non Negative Concord languages like standard English, which instead of a *n*-word require a Negative Polarity Item (NPI): ??*I didn’t do nothing* vs. *I didn’t do anything*.

⁶ Preverbal *n*-words in Spanish have been shown to have “inherently negative properties” and are roughly equivalent to English *no(-one)*. However, when they occur post-verbally, they must occur in the scope of negation or another NCI-licensor (Bosque, 1980; Laka, 1990; Vallduví, 1994; Aranovich, 2007).

⁷ It is important to note that modal superlatives are perfectly grammatical with an overt relative clause. Thus, the ungrammaticality of (15) must be due to the NCI being unlicensed. See (1) with *cualquier*, (roughly equivalent to free choice *any*).

- (1) Ella es lo más list-a que hay en cualquier sitio de por aquí.
 she is the.NT more smart-F.SG that there.is in any.FC place of by here
 ‘She is the smartest possible that there is anywhere around here’

- (15) * Ella es lo más list-a posible que hay en ningún sitio de por
 she is the.NT more smart-F.SG possible that there.is in no place of by
 aquí.
 here
 Int.: ‘She is the smartest possible that there is anywhere around here’

When we look at NAPS, however, we observe that NCIs like postverbal *ningún* ‘any’ can be licensed. The same is observed for *cosa*-NPs. The relevant examples are in (16).

- (16) a. Ella es lo más list-o que hay en ningún sitio de por aquí.
 she is the.NT more smart-M.SG that there.is in no place of by here
 Int.: ‘She is the smartest thing that there is anywhere around here’
 b. Ella es l-a cos-a más list-a que hay en ningún sitio
 she is the-F.SG thing-F.SG more smart-F.SG that there.is in no place
 de por aquí.
 of by here
 Int.: ‘She is the smartest thing that there is anywhere around here’

In both, (16a) and (16b), *ningún* is found inside of the relative clause. The ability to have an NCI (or an NPI in non Negative Concord languages like standard English) inside the comparison class of superlatives has been tied to the presence of a definite determiner projecting a DP (Herdan & Sharvit, 2006; Bumford & Sharvit, 2021). In other words, if the superlative constituent is headed by a definite D, an NCI or NPI can be licensed inside the comparison class relative clause.⁸

Loccioni (2018, 2019) takes data like (15) as evidence that, despite the overtness of *lo*, modal superlatives are not really nominal, i.e. DPs; they are Degree Phrases denoting definite degree descriptions. The data in (16) show that, unlike modal superlatives, NAPS do license NCIs. This fact follows if NAPS, as opposed to modal superlatives, are nominal headed by a definite D spelled-out as *lo*. Again, these data highlight that modal

⁸ Spanish allows both indicative and subjunctive mood inside relative clauses (Alonso-Ovalle *et al.*, 2022). The choice of mood is not an NCI licenser; the NCI requires the presence of negation inside the relative clause, as shown in (1).

- (1) a. * Quiero un coche que { tiene/ tenga } ningún navegador
 Want1SG a car that has.3SG.PRES.IND/ has.3SG.PRES.SUBJ no navigator
 ‘I want {a specific car/ any car} that has no GPS’
 b. Quiero un coche que no { tiene/ tenga } ningún navegador
 Want1SG a car that NEG has.3SG.PRES.IND/ has.3SG.PRES.SUBJ no navigator
 ‘I want {a specific car/ any car} that does not have any GPS’

However, an NCI is acceptable, though a bit marked for some speakers, if the head of the relative clause is marked definite with the determiner *el* ‘the.M’, as in (2). Therefore, what seems to determine the licensing of NCIs in relative clauses when there is no negation is the definite determiner, and not verbal mood.

- (2) (?) Quiero el coche que { tiene/ tenga } ningún navegador
 Want1SG the.M car that has.3SG.PRES.IND/ has.3SG.PRES.SUBJ no navigator
 ‘I want {the specific car/ any such car} that has no GPS’

superlatives and NAPS have different syntactic properties. The next subsection confirms the DP-status of NAPS.

Predicates of *estar*. The fact that NAPS do license an NCI in the comparison class and have a definite determiner *lo* is indicative that they are nominal, i.e. fully-fledged DPs headed by *lo*. We can empirically test the hypothesis that NAPS are DPs by looking at the predicate of stage-level copula *estar*.

According to Roy (2006), *estar* is incompatible with nominal predicates: *[*estar* DP/NP]. See the contrast between predicates of *estar* in (17) and those of *ser* in (18).

- (17) a. Mario *está* maj-o.
Mario is_{stage} nice-M.SG
'Mario is being nice'
- b. * Mario *está* el chico maj-o
Mario is_{stage} the.M.SG boy.M.SG nice-M.SG
Int.: 'Mario is being the nice boy'
- (18) a. Mario *es* maj-o.
Mario is_{ind} nice-M.SG
'Mario is nice'
- b. Mario *es* el chico maj-o
Mario is_{ind} the.M.SG boy.M.SG nice-M.SG
'Mario is the nice boy'

Given this syntactic restriction on the predicates of *estar*, the prediction is twofold: (i) if modal superlatives are not DPs but DegPs – as argued by Loccioni (2018, 2019) – they will be acceptable in the predicative position of *estar*; (ii) if NAPS are DPs, they will be ungrammatical in that syntactic position. The data are in (19).

- (19) a. L-a estatua *está* lo más suci-a (de todas)
The-F.SG statue.F.SG is_{stage} the.NT more dirty-F.SG of all
'The statue is the dirtiest possible of all' (✓modal superlative + *estar*)
- b. * L-a estatu-a *está* lo más suci-o (del pueblo)
The-F.SG statue-F.SG is_{stage} the.NT more dirty-M.SG of.the town
Int.: 'The statue is the dirtiest thing in town' (*NAPS + *estar*)
- c. * L-a estatua *está* l-a cosa más suci-a (del pueblo)
The-F.SG statue.F.SG is_{stage} the-F.SG thing.F.SG more dirty-F.SG of.the town
Int.: 'The statue is the dirtiest thing in town' (*cosa-NP + *estar*)

Both predictions are borne out: the modal superlative is acceptable with *estar* in (19a), but NAPS in (19b) and *cosa*-NPs in (19c) are not. We can conclude from this that NAPS, just like *cosa*-NPs, must belong to a different syntactic category than modal superlatives. The former, but not the latter, are in fact DPs. As a result, the availability of NCI licensing and unacceptability as predicates of *estar* follow.

Furthermore, the lack of φ -agreement between the subject of the predication and the superlative-modified adjective in predicative constructions also follows from their DP status. In Spanish, when the subject of the predication and the predicate are both DPs, headed by different nouns, there need not be agreement between them; each noun controls DP-internal agreement inside the relevant extended nominal projection. This is illustrated in (20).

- (20) [L-a cerveza] es [un placer]
 the-F.SG beer.F.SG is_{ind} a.M.SG pleasure.M.SG
 ‘Beer is a pleasure’

In (20), *cerveza* ‘beer’ is feminine and controls the agreement within the subject DP, whereas the noun *placer* ‘pleasure’ is masculine and is responsible for the agreement inside the predicate DP. Given the parallelism with other nominals in the language, the element that determines the agreement in NAPS has to be internal to the [*lo más* AP] constituent.

Summary. In this section, I have shown how two apparently similar constructions, both of them involving the determiner *lo* and superlative morpho-syntax and semantics, differ with respect to their syntactic distribution and formal properties. A summary of the diagnostics surveyed is in Table 1.

Table 1. The properties of NAPS, *cosa*-NPs and modal superlatives

	Subj-Pred Agr.	Possible	= Equative	NCIs	Pred. of <i>estar</i>
<i>modal SUP</i>	✓	✓	✓	*	✓
<i>NAPS</i>	*	*	*	✓	*
<i>cosa-NP</i>	*	*	*	✓	*

One of the conclusions that we can draw is that the *lo* found in modal superlatives can be referred to as “abstraction *lo*”: it performs abstraction over degrees as in free and degree relatives (Gutiérrez-Rexach, 1999; Mendia, 2017; Loccioni, 2019).⁹ On the contrary, the *lo* found in NAPS seems to behave like a regular definite determiner.

A direct consequence of considering NAPS as regular DPs is that we should be able to find them in a wider variety of environments, not just copular constructions. In the next section, I show that this is in fact correct and that they pattern like regular partitive constructions ‘N of the N’.

3. NAPS as partitives

Partitive constructions are multi-NP expressions in which N_1 denotes a subpart of N_2 (Selkirk, 1977; Jackendoff, 1977; Schwarzschild, 2006; Falco & Zamparelli, 2019), as

⁹ Free relatives involve movement of an operator to the left periphery of the relevant constituent, usually a CP (Izvorski, 1996; Donati, 1997; Caponigro, 2004). This movement leaves behind a trace or copy which behaves like a variable at LF. The operator then abstracts over this variable (Heim & Kratzer, 1998). Modal superlatives require operator movement and lambda-abstraction at LF (Loccioni, 2019). This abstraction operation is absent from NAPS. For an in-depth analysis of Spanish abstraction *lo* see Mendia (2017).

in (21a) and (21b) for English and Spanish respectively. Bosque & Moreno (1990) and Gutiérrez-Rexach (1999) observe that some constructions with *lo* lack φ -agreement with other elements in the clause, as in (22) from Gutiérrez-Rexach (1999: p.58, ex.57).

- (21) a. (the) 3 bags of the cashews
 b. (l-as) 3 bolsa-s de l-os anacardo-s
 the-F.PL 3 bag.F-PL of the-M.PL cashew.M-PL
- (22) Juan no entendió lo hermos-o de l-a novela
 Juan not understood the.NT beautiful-M.SG of the-F.SG novel.F.SG
 ‘Juan didn’t understand the beautiful thing of the novel’

Just like the partitives in (21), in (22) *lo* refers to the unique thing that is both beautiful and is part of the novel, and the preposition *de* introduces the parthood relation and takes the definite DP as its complement. This is very similar to what we find in NAPS, the only difference is the presence or absence of superlative morphology, i.e. *más*. Thus, it would not be unreasonable to treat (22) on a par with NAPS, the latter being their superlative version. I first start by outlining some of the formal properties of partitives, and then compare these to NAPS.

3.1. Some properties of partitive constructions

One the properties of partitives, as observed in (21b), is the fact that each noun of the multi-NP expression controls DP-internal agreement independently. In addition, partitives show some systematicity with respect to coordination. Namely, (i) the DP containing the numeral can be coordinated to the exclusion of the *de*-PP, suggesting that the numeral and the measure noun form a constituent; and (ii) so can the PP. But (iii) attempting to coordinate the measure noun and the *de*-PP, to the exclusion of the numeral, with the interpretation that the overall sum of each conjunct is as denoted by the numeral results in ungrammaticality (see also Toquero-Pérez, 2023). These coordination patterns are provided in (23).^{10,11}

- (23) a. Recogieron [2 sacos] y [4 bolsas] de los anacardos.
 collected 2 sacks and 4 bags of the cashews
 ‘They collected [2 sacks & 4 bags] of the cashews’ (a total of 6)

¹⁰ It has been argued that partitives (and pseudo-partitives) are structurally different depending on whether they are measuring cardinalities or dense dimensions such as volume or weight (Landman, 2004; Rothstein, 2009, 2017: a.o.). We should note that this is a highly debated topic and that such a structural difference has been challenged by Matushansky & Zwarts (2016); Matushansky *et al.* (2017); Ruys (2017); Toquero-Pérez (2022, 2023). In this paper, I abstract away from the ‘individuating’ vs. ‘measuring’ debate in (pseudo-)partitives, though the proposal has implications for how we might want to address it in the future.

¹¹ The sentence in (23c) has an acceptable parse in which they collected a total of 4 sacks of the cashews and some bags of the nuts. This is what Toquero-Pérez (2023) calls the “Numeral + indefinite plural reading” under coordination. What is being coordinated here is schematized in (1a). The overall sum reading in (23c) would stem, however, from the structure in (1b). The ungrammaticality of (23c) with the relevant reading suggests that the *of*-PP does not form a constituent with the head noun.

- (1) a. [&P [DP 4 sacks of the cashews] & [DP bags of the nuts]]
 b. [NumP 4 [&P [NP boxes of the cashews] & [NP bags of the nuts]]]

- b. Recogieron 2 sacos [de los anacardos] y [de las nueces]
collected 2 sacks of the cashews and of the nuts
'They collected 2 sacks of the cashews and of the nuts'
- c. * Recogieron 4 [sacos de los anacardos] y [bolsas de las nueces].
collected 4 sacks of the cashews and bags of the nuts
Int.: 'They collected 4 [sacks of the cashews] & [bags of the nuts] (a total of 4 things: some of which are sacks of the cashews and some of which are bags of the nuts)

Spanish partitives are also not islands for extraction. In fact, either member of the partitive can be moved. In (24a) the DP containing the measure morpheme has been extracted, while in (24b) the *de*-PP has moved. These are really extractions and not cases of prolepsis or base-generation since extraction leads to ungrammaticality when they are embedded within an island, e.g. complex NP in (25).

- (24) a. ¿[Cuántos sacos]₁ recogieron [t₁ de los anacardos]?
how.many sacks collected of the cashews
'How many sacks of the cashews did they collect?'
- b. ¿[De qué]₁ recogieron [2 sacos t₁]?
of what collected 2 sacks
'What did they collect 2 sacks of ?'
- (25) a. * ¿[Cuántos sacos]₁ compartió Juan el rumor de que recogieron [t₁ de
how.many sacks shared Juan the rumor of that collected of
anacardos]?
cashews
'How many sacks of cashews did Juan share the rumor that they collected?'
- b. * ¿[De qué]₁ compartió Juan el rumor de que recogieron [2 sacos t₁]?
of what shared Juan the rumor of that collected 2 sacks
'What did Juan share the rumor that they collected 2 sacks of?'

3.2. The partitive properties of NAPS

The two DPs involved in NAPS, i.e. *lo más* A and the one embedded in the *de*-PP, show independent agreement patterns. In addition, [*lo más* A] can be coordinated to the exclusion of the PP in (26a); and so can be the PP leaving aside the superlative constituent as in (26b). However, coordinating only the adjective and the PP is ungrammatical as illustrated in (26c).

- (26) a. L-a estatua es [lo más fe-o] y [lo más
the-F.SG statue.F.SG is_{ind} the.NT more ugly-M.SG and the.NT more
suci-o] del pueblo
dirty-M.SG of.the town
'The statue is [the ugliest (thing) and the dirtiest thing] of the town'
- b. L-a estatua es lo más fe-o [del pueblo] y [
the-F.SG statue.F.SG is_{ind} the.NT more ugly-M.SG of.the town and
de la comarca]
of the county

‘The statue is the ugliest (thing) [of the town] & of [of the county]’

- c. *L-a estatua es lo [más fe-o del pueblo] y [the-F.SG statue.F.SG is_{ser} the.NT more ugly-M.SG of.the town and más sucí-o de la provincia] more dirty-M.SG of the province
‘The statue is the [ugliest thing of the town] and [dirtiest thing in the province]’

Therefore, NAPS have the same coordination patterns as partitives. They also behave identically with respect to movement patterns. Both [*lo más* A] and *de*-PP can be extracted out of the containing DP. In (27), I have chosen topicalization to show that it is indeed the *lo*-constituent that moves.

- (27) a. [lo más fe-o]₁, visitó Juan [t₁ del pueblo]
the.NT more ugly-M.SG visited Juan of.the town
‘The ugliest thing, Juan visited of the town’
b. [Del pueblo]₁, visitó Juan [lo más fe-o t₁]
of.the town visited Juan the.NT more ugly-M.SG
‘Of the town, Juan visited the ugliest thing,’

Up until this point, all the diagnostics applied to partitives and NAPS yield the exact same patterns. The diagnostics applied are syntactic in nature and indicate that the [*lo más* A] forms a constituent to the exclusion of the PP. The island data is indicative that the *de*-PP is embedded within the larger DP headed by *lo*.

However, one could in principle argue that the PP is a VP modifier that somehow restricts the comparison class of the superlative. Though this could be a potentially viable hypothesis, it is not supported empirically. In fact, the PP must be DP-internal. In order to argue that the PP must be contained within the larger nominal, we need to resort to a semantic diagnostic concerned with the interpretation of superlatives.

Superlatives can give rise to well-known ambiguities depending on how the comparison class is set, typically associated with focus (Szabolcsi, 1986, 2012; Heim, 1985, 1999; Sharvit & Stateva, 2002: a.o.). Thus, a sentence like (28) can have at least three different interpretations: an absolute one in which the age of the CD by U2 is compared to the ages of other relevant CDs by U2, e.g. (28a); a relative interpretation where the comparison class is set by individuals who bought CDs by U2 for María, and among them Juan bought the oldest one, e.g. (28b); and a different relative reading where the comparison class is determined by the set of individuals that Juan gave a CD by U2 to, and María is the one of those individuals who received the oldest, e.g. (28c).

- (28) Juan dio a María el disco más viejo de U2.
Juan gave to María the disk more old of U2
a. *Absolute*: Juan gave María a CD by U2 that was older than any other relevant CD by U2.
b. *Relative*¹: Juan gave Mary an older CD by U2 than anyone else gave her.
c. *Relative*²: Juan gave Mary an older CD by U2 than he gave anyone else.

Leaving aside the absolute interpretation, the two possible relative readings come about by focusing DP-external material (Farkas & Kiss, 2000; Pancheva & Tomaszewicz, 2012; Tomaszewicz & Pancheva, 2015): the constituents that set the comparison class to relevant CD givers (28b) and CD receivers (28c) do not belong to the DP that hosts the superlative.

Pancheva & Tomaszewicz (2012); Tomaszewicz & Pancheva (2015) note that the comparison class of the superlative cannot be set DP-internally in languages where superlatives are introduced by a definite determiner, e.g. English and Spanish.¹² This entails that an interpretation of (28) like (29) is infelicitous: we are comparing older CDs by U2 than by other bands (e.g. Men at Work, Coldplay, The Beatles etc.).

- (29) # *Relative*^{DP-internal}: Juan gave María an older CD by U2 than by any other relevant band.

We can then use the (un)availability of a DP-internal reading as a diagnostic for the position of the *de*-PP: if the *de*-PP is external to the DP, it will be able to set the comparison class; but if it is DP-internal, the interpretation will be unavailable just like in (29).

That said, a sentence like (30) can have an absolute reading, e.g. (30a) or a DP-external relative reading, e.g. (30b). But crucially, the DP-internal relative reading in (30c) is not available.

- (30) Juan visitó lo más fe-o del pueblo
 Juan visited the.NT more ugly-M.SG of.the town
 ‘Juan visited the ugliest thing of the town
 a. ✓ *Absolute*: Juan visited the ugliest thing of all the things in the town.
 b. ✓ *Relative*^{DP-external}: Juan visited an uglier thing of the town than any other relevant person.
 c. # *Relative*^{DP-internal}: Juan visited an uglier thing of the town than of any other relevant place (the village, the city, the museum etc.).

The unavailability of the DP-internal reading in (30c) is thus strong evidence that the PP must be inside the larger nominal structure and cannot be a clausal adjunct. The fact that it is DP-internal is also further evidence supporting the parallelism with partitives where the *de*-PP is part of the DP headed by the measure noun (Selkirk, 1977; Jackendoff, 1977; Schwarzschild, 2006; Rothstein, 2009, 2017; Scontras, 2014; Toquero-Pérez, 2023).

4. Resolving the puzzle

At this point, there are two issues that need to be addressed: the underlying syntax of NAPS (and by extension partitives) and (ii) the resolution of agreement. The properties of NAPS that we have discussed so far (e.g. NCI licensing, incompatibility with *estar*, and lack of DP-internal relative readings) have led to the conclusion that they are definite

¹² Pancheva & Tomaszewicz (2012); Tomaszewicz & Pancheva (2015) contrast the case of English with Slavic languages such as Bulgarian where superlatives may be introduced by indefinite determiners.

DPs whose head must be *lo*. Constituency-wise, while the *de*-PP is contained within the DP headed by *lo*, it does not form a subconstituent with the superlative modified adjective. However, the adjective and *lo* do form a constituent.

4.1. The theoretical framework

I am assuming a generative approach to syntax as outlined by Chomsky (2000, 2001, 2008) and subsequent work. In particular, I assume that an operation *Agree* establishes a relation between probes with unvalued features (i.e. $uF: _$) and a goal, whose features may but need not be valued, under c-command (Chomsky, 2000, 2001; Arregi & Nevins, 2012; Preminger, 2014).

In addition, I adopt the model of Distributed Morphology (DM) (Halle & Marantz, 1993; Marantz, 1997; Embick & Noyer, 2001; Embick, 2007, 2010; Bobaljik, 2012) according to which word formation is syntactic. Under DM, the terminal nodes provided and manipulated by the syntax are simply bundles of morpho-syntactic features. After spell-out, at PF, these feature bundles are mapped to an exponent via Vocabulary Insertion rules, which are subject to competition as mediated by the Subset Principle (Kiparsky, 1973; Halle & Marantz, 1993; Arregi & Nevins, 2013).

Lexical categories such as noun, verb, adjective etc. are decomposed into category-neutral roots, represented as $\sqrt{\text{ROOT}}$, and a category-determining head, e.g. *n*, *v*, *a*. I will assume that in Spanish, gender features are located on the categorizer *n* (Kramer, 2015; Fuchs *et al.*, 2015), whereas number features are located on a separate head, namely Number (Ritter, 1991). I will also assume that information about noun class is inserted post-syntactically on *n* (Embick, 2010; Kramer, 2015; Kučerová, 2018).

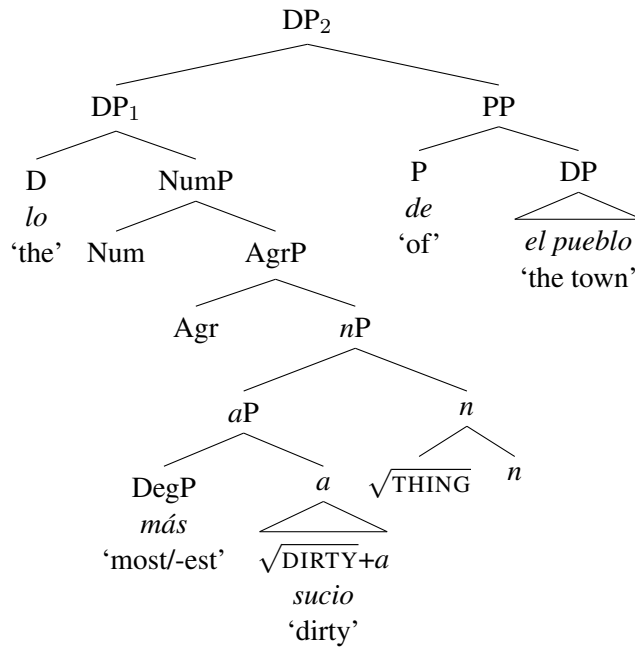
4.2. The syntax of NAPS and *cosa*-NPs

In order to capture these patterns I propose that NAPS have the syntactic structure in (31). First, the *nP* is composed of a categorizer *n*, underspecified for gender features, and a category neutral root $\sqrt{\text{THING}}$. The root and the categorizer constitute a complex head Marantz (1997); Folli & Harley (2005, 2020); Embick (2010); Harley (2014). Following Cinque (1993, 2005, 2010), I assume that the surface order noun > adjective is derived via head movement to an Agr-head. The definite determiner, spelled-out as *lo*, projects on top of the AgrP. As a result, [*lo n* $\sqrt{\text{THING}}$ *más* A] is itself a DP constituent. This DP then takes the *de*-PP as its sister projecting another DP (Hankamer & Mikkelsen, 2008, 2018).¹³

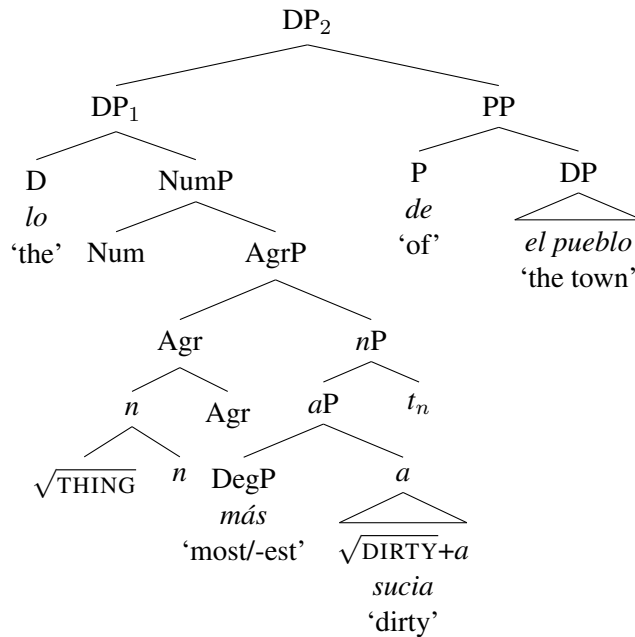
(31) NAPS: *n* and Num are underspecified

a. Before *n*-movement

¹³ Their claim, building on observations by Adger (2013), is actually stronger: both modifiers (i.e. relative clauses) and complements of nouns appear as sisters to the DP.



b. after movement



The structure in (31) comes with several welcome consequences. For starters, the coordination patterns in (26a) and (26b) follow, but (26c) is correctly predicted to be impossible. The extraction patterns in (27) also follow: under the assumption that DPs are phases (Matushansky, 2005; Bošković, 2005; Simpson & Park, 2019; Davis, 2020), the PP is already on the “edge” of the DP and thus the movement out of it is licit. It is of crucial importance that the *de*-PP is not a right-adjoined specifier to an intermediate element D' , but a sister to a maximal projection DP_1 ; this DP_1 can move under the assumption that maximal, but not intermediate, projections can be the target of movement operations, modulo head movement (Chomsky, 1994; Roberts, 2010: a.o.).¹⁴

¹⁴

This is not an unprecedented structure in the literature on nominals. For example, Eguren & Pastor

The maximal projection status of DP_1 is also supported by the fact that argument cliticization in Spanish must target full DPs (Kayne, 1975, 1991; Jaeggli, 1982, 1986: a.o.). In the case of NAPS and partitives, the accusative clitic *lo* can replace DP_1 , as shown in (32) and (33).

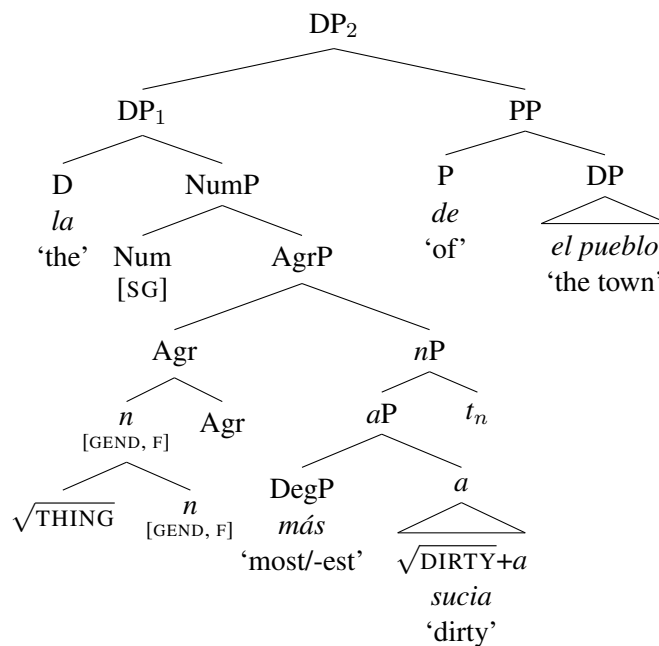
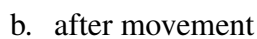
- (32) a. Visitó [lo más sucio] del pueblo
visited.3SG the.NT more dirty-M.SG of.the town
'S/he visited the dirtiest thing of the town'
- b. Lo visitó del pueblo
CL.ACC.3SG visited.3SG of.the town
Lit. 'S/he visited it of the town'
- (33) a. Comió [1 kilo] de los anacardos
ate.3SG one kilo of the cashews
'S/he ate 1kg of the cashews'
- b. Lo comió de los anacardos
CL.ACC.3SG ate.3SG of the cashews
Lit. 'S/he ate it of the cashews'

The syntax for NAPS in (31) also makes the right predictions for *cosa*-NPs. The only difference between the two constructions is the presence of φ -features on the *n* and Num heads: the former has a feminine gender feature and the latter a singular number feature. I take masculine gender to be the unmarked or default gender (Harris, 1991; Picallo, 2002; Kramer, 2015), which I represent using the feature [GEND] following Adamson & Šereikaitė (2019). The feminine is the marked gender and I represent it as being "contained", in the sense of (Bobaljik, 2012), by [GEND].

- (34) *cosa*-NPs: *n* is [GEND, F] and Num is [SG]

- a. Before *n*-movement

(2014) motivate the same structure for Measure Phrases of the type *2 metros de alto/altura* '2 meters of high/height' and show that movement operations can target the MP '2 meters' stranding the PP. Likewise, Bhatt & Homer (2019); Homer & Bhatt (2020) argue that comparative differentials in French like *3 livres de plus* '3 books more' involve a structure similar to (31): [NP [NP 3 livres] [PP de plus]]. They also use movement and cliticization, as we do here, to motivate the structure.



(35) VI rules for $\sqrt{\text{THING}}$
 a. $\sqrt{\text{THING}} \Leftrightarrow \text{cos-}/_\text{[GEND(F)]}$

$$b. \sqrt{\text{THING}} \Leftrightarrow \emptyset$$

4.3. The “apparent” lack of φ -agreement

The question that needs to be addressed now is the concord pattern with NAPS. Namely, (i) how can the determiner surface as *lo* in NAPS and (ii) how can the superlative-modified adjective bear a masculine gender exponent, creating what looks like feature mismatch? If Agree between the φ -probes on D and the available goals in their c-command domain is responsible for the valuation and exponence of gender and number features on the DP, then the particular exponents in NAPS must also arise as a result of this dependency. However, the features involved in that Agree-dependency cannot be ‘masculine’ or ‘feminine’; otherwise D would surface as *el* ‘the.M.SG’ or *la* ‘the.F.SG’.

A possibility to solve this issue would be to assume that the categorizing *n* that $\sqrt{\text{THING}}$ merges with in NAPS bears a different gender feature: a neuter feature [NT], as some of the literature presupposes (Bosque & Moreno, 1990; Gutiérrez-Rexach, 1999: a.o). Nevertheless, this is an unmotivated solution if we consider the Spanish gender system. All Spanish nouns have what Harris (1991: 36) calls “lexical gender”, the property of belonging to a gender class irrespective of their class marker (*gorila* ‘gorilla’ is masculine in spite of ending in ‘-a’): either masculine or feminine but never neuter.¹⁵ To this we have to add the fact that the potential neuter gender marker on adjectives and determiners is always syncretic with the canonical masculine gender marker *-o*. Thus, assuming the existence of a third gender class and that DP-internal probes get neuter gender via agreement with a neuter *n* does not receive independent motivation.¹⁶

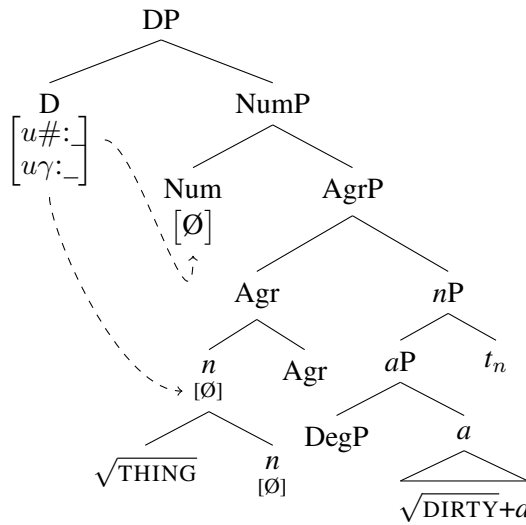
There is an alternative to stipulating a third gender. We can take the feature specifications and subsequent concord facts observed in *cosa*-NPs as the baseline and the key in solving the exponence puzzle in NAPS. In particular, if the terminals in NAPS are as in (31) and have no available φ -features for the probes to copy, the value of those probes will surface as the most unmarked feature in the language: masculine and singular. Thus, the lack of φ -agreement is only apparent. I propose to model this as the result of a failed Agree search (Preminger, 2014): the grammar is only responsible for enforcing the search procedure, but not for its successful culmination. Under this model, failure to Agree does not result in a crash.

According to the syntax in (31), the categorizing *n* head in NAPS is completely underspecified and has no gender features; likewise, the Num head is also underspecified for [SG/PL]. The D head bears a gender and number probe which I represent as follows [$u\gamma$: $_;$ $u\#$: $_;$]. These probes on D search their c-command domain for a potential matching goal. This attempted Agree process is represented in (36), where dashed arrows represent the attempted Agree search and the [\emptyset] represents lack of a feature value on the relevant goal.

(36) Failed Agree ($u\gamma$, *n*) & Failed Agree ($u\#$, Num)

¹⁵ This is different from other languages like German or Greek which do have a particular class of neuter gender (Corbett, 1991).

¹⁶ For additional arguments against the existence of neuter, see Ojeda (1984); Picallo (2002, 2008); Kramer (2015).



Given the φ -underspecification, there is no suitable goal that can value D's probes, causing Agree to fail. We now need a way to calculate the appropriate exponents for DP-internal terminal nodes at PF. Based on the syntactic proposal and the gender agreement facts of Spanish more generally, I take *lo* to be the spell-out of a genderless and numberless D (Picallo, 2008; Kramer, 2015). I propose three VI rules for definite determiners in Spanish as formulated in (37).

(37) VI rules for definite D

- a. $\{[D][u\gamma: \text{GEND}][u\#: \text{SG}]\} \Leftrightarrow el$
- b. $\{[D][u\gamma: \text{GEND}, F][u\#: \text{SG}]\} \Leftrightarrow la$
- c. $\{[D][u\gamma: _][u\#: _]\} \Leftrightarrow lo$

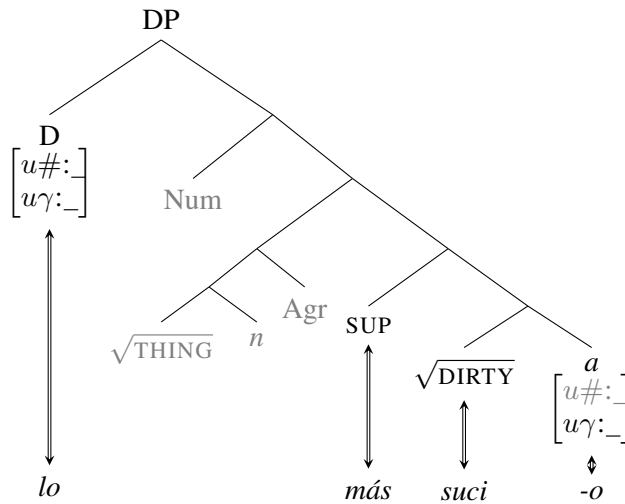
According to these rules in (37), the difference between *el* and *lo* is that the former, but not the latter, has valued gender and number features that can be read at PF. In other words, given the Subset Principle (Kiparsky, 1973; Halle & Marantz, 1993), *lo* is inserted only when the determiner lacks values for both gender and number. If the determiner has any gender and number features, the rule in (37c) will be blocked from applying.

The process of spelling-out a default applies to the adjective too. Under the assumption that concord features on modifiers, such as adjectives, attach in the form of unvalued features which will receive a matching value post-syntactically (Bonet, 2013; Norris, 2014, 2017a,b; Deal, 2016), the adjective will also bear $[u\gamma, u\#]$. Feature valuation on the adjective, triggering a canonical instance of concord, will fail as a result of unsuccessful agreement between the probes on D and their potential goals on Num and *n*. This is shown in (38) where the shaded terminals correspond to zero-exponents. At the point of Vocabulary Insertion, the elsewhere rule in (39) applies spelling-out the $[u\gamma: _]$ as *-o*.^{17,18}

(38) No canonical concord: spelling out the default

¹⁷ The rules on (39) are a simplification, formulated to capture gender exponence in the class of adjectives that are non gender invariant: *buen*-{*o/a*} 'good-{M/F}' vs. *interesante* 'interesting'.

¹⁸ There is no overt singular morpheme in the language, thus the unvalued singular feature is not mapped to any exponent.



(39) VI rules for gender feature matrices (e.g. on adjectives)

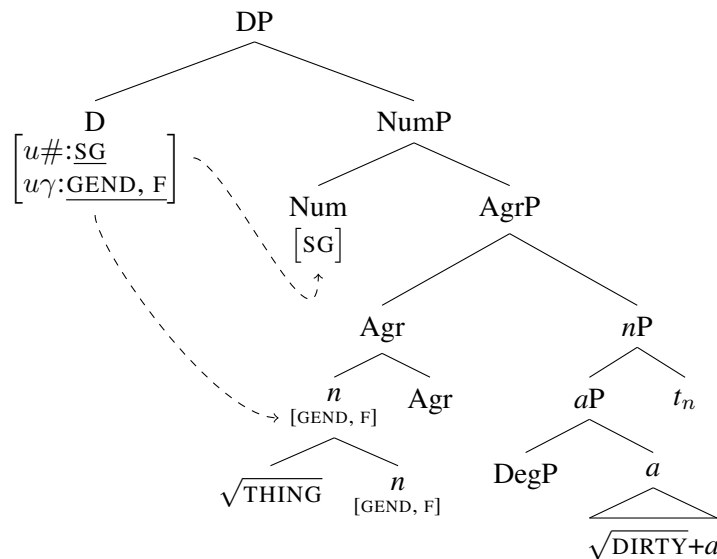
- a. $[u\gamma: \text{GEND}] \Leftrightarrow -o$
- b. $[u\gamma: \text{GEND}, F] \Leftrightarrow -a$
- c. $[u\gamma:] \Leftrightarrow -o$

The end result, represented in (38), has the consequence that the mismatch between D and the adjective is only apparent: the determiner and the adjective both expone a default masculine morpheme *-o* in the absence of any other value for gender and number features. Thus, morphological rules ensure a homogeneous match between inflected terminals within the DP.

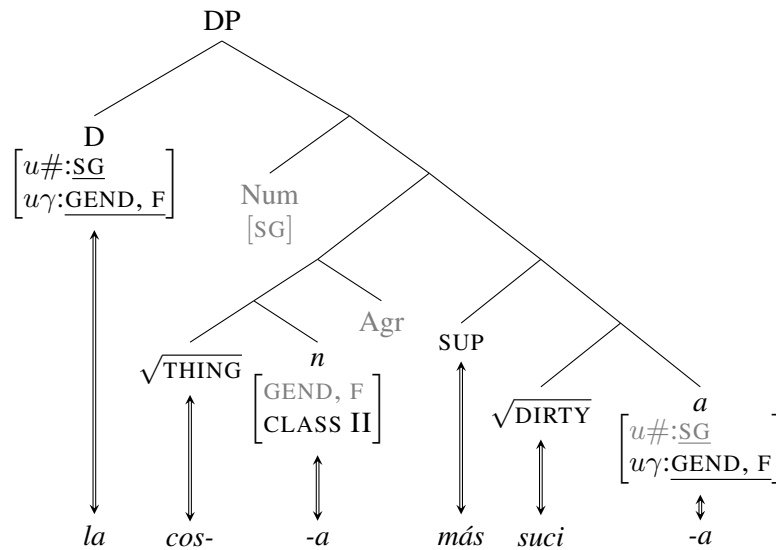
The exponents in (38) contrast with the overt counterpart of NAPS in (34). In those cases, the *n* head that $\sqrt{\text{THING}}$ occurs with bears [GEN, F], and Num is [SG]. D can value its features via Agree, triggering the posterior concord on the adjective. As a result, the rule in (39b) applies expounding *-a* on the adjectival terminal.

The successful Agree relation is illustrated in (40a); the subsequent concord with the adjective and insertion of vocabulary items are shown in (40b). The class marker on the nominal root is expounded as *-a* (Embick, 2010; Kramer, 2015; Kučerová, 2018).

(40) a. $\text{Agree}(u\gamma, n) \ \& \ \text{Agree}(u\#, \text{Num})$



b. Canonical Concord: spelling-out feminine singular

4.4. *lo* and no φ -features: lack of plural agreement

I have argued that the best treatment of *lo* is one where the φ -features on D have failed to be valued. As a result, *lo* spells out a definite determiner that lacks any feature specification. If this is the case, *lo* should lack a plural counterpart (Corbett, 1991). This prediction is borne out as shown by coordination facts. For example, conjoined NAPS in subject position trigger default 3SG agreement on the verb, both in the active (41) and the passive (42). In the latter case, the passive participle also shows default masculine singular agreement, i.e. *-o*.

- (41) [Lo más sucio-o del pueblo] y [lo más obsceno-o de la novela]
 the.NT more dirty-M.SG of.the town and the.NT more obscene-M.SG of the novel
 novel

‘The dirtiest thing of the town and the most obscene thing of the novel’

- a. caus-ó un escándalo televisivo.
 cause-3SG.PST a scandal television
 ‘caused a TV scandal’
 b. * causa-ron un escándalo televisivo.
 cause-3PL.PST a scandal television
 ‘caused a TV scandal’

- (42) [lo más famos-o del pueblo] y [lo más alt-o de la iglesia]
 the.NT more famous-M.SG of.the town and the.NT more tall-M.SG of the church
 church

- a. * fue-ron sacad-os en televisión
 was-3PL shown-M.PL in TV
 b. fue sacad-o en televisión
 was.3SG shown-M.SG in TV

‘was shown on TV’

On the contrary, the corresponding *cosa*-counterparts require 3PL agreement with the verb, as both (43) and (44) show. Furthermore, in the case of the passive in (44), feminine plural agreement with the passive participle is obligatory.

- (43) [L-a cosa más sucia del pueblo] y [l-a cosa
the-F.SG thing.F.SG more dirty-F.SG of.the town and the-F.SG thing.F.SG
más obscena de la novela]
more obscene-F.SG of the novel
‘The dirtiest part of the town and the most obscene part of the novel’
- a. * caus-ó un escándalo televisivo.
cause-3SG.PST a scandal television
- b. causa-ron un escándalo televisivo.
cause-3PL.PST a scandal TV.
‘caused a TV scandal’
- (44) [L-a cosa más sucia del pueblo] y [l-a cosa
the-F.SG thing.F.SG more dirty-F.SG of.the town and the-F.SG thing.F.SG
más alta de la iglesia]
more tall-F.SG of the church
- a. fue-ron sacad-as en televisión
was-3PL shown-F.PL in TV
- b. * fue sacad-a en televisión
was.3SG shown-F.SG in TV
‘were shown on TV’

We can account for these patterns by adopting a view in which the resolution of gender features in coordination involves set intersection (Wechsler & Zlatić, 2003; Adamson & Šereikaitė, 2019), while the resolution of number requires set union, i.e. mereological fusion of the united elements (Link, 1983; Krifka, 1990).¹⁹ I schematize these in (45) and (46), where ‘ \oplus ’ represents the join of A and B in a lattice structure:

- (45) $\{A, B\} \cap \{A\} = A$ Set intersection (gender)
- (46) $\{A\} \cup \{B\} = \{AB\} = A \oplus B$ Set union (number)

In (41) and (42), the two conjoined DPs have no valued φ -features as a result of the failed Agree, which entails that the feature matrices to be intersected for gender or united for number are empty. The result is default masculine gender and unmarked singular number, which are reflected on the inflection of the past participle and the verb respectively.²⁰ This is represented in the structures in (47) for both gender and number:

¹⁹ I remain neutral about the actual semantics of coordination. What is important is to establish a difference between the computation of gender and number features in coordinate structures. For semantic analyses of coordination, I refer the reader to Partee & Rooth (1983); Link (1983); Krifka (1990); Schein (1993); Winter (2001).

²⁰ For evidence that the singular is the morpho-syntactically unmarked number, as opposed to plural, see Cowper (2005); Nevins (2007, 2011); Cowper & Hall (2009); Coon & Keine (2021).

- (47) a. Gender on Coordinated NAPS b. Number on coordinated NAPS
- $$\begin{array}{ccc}
 \text{DP} & & \text{DP} \\
 \{ \} \Leftarrow \text{MASCULINE} & & \{ \} \Leftarrow \text{SINGULAR} \\
 \swarrow \quad \cap \quad \searrow & & \swarrow \quad \cup \quad \searrow \\
 \text{DP} \quad \quad \text{DP} & & \text{DP} \quad \quad \text{DP} \\
 \{ \} \quad \quad \{ \} & & \{ \} \quad \quad \{ \}
 \end{array}$$

With respect to the gendered and numbered counterparts in (43) and (44), the feature matrices of each conjunct DP are not empty but specified for both gender and number. Both DPs are $[u\varphi: \text{GEND}, \text{F}; \text{SG}]$ and thus, their intersection and union is non-empty: $[u\varphi: \text{GEND}, \text{F}; \text{PL}]$. Each operation is represented separately in (48a) and (48b):

- (48) a. Gender on coordinated *cosa*-NPs b. Number on coordinated *cosa*-NPs
- $$\begin{array}{ccc}
 \text{DP} & & \text{DP} \\
 \{[\text{GEND}, \text{F}]\} & & \{[\text{PL}]\} \\
 \swarrow \quad \cap \quad \searrow & & \swarrow \quad \cup \quad \searrow \\
 \text{DP} \quad \quad \text{DP} & & \text{DP} \quad \quad \text{DP} \\
 \{[\text{GEND}, \text{F}]\} \quad \{[\text{GEND}, \text{F}]\} & & \{[\text{SG}]\} \quad \{[\text{SG}]\}
 \end{array}$$

The analysis proposed in this section makes a further prediction about the coordination of NAPS and a gendered and numbered NP. If the feature matrices of NAPS are unvalued, a coordinated DP consisting of a NAPS conjunct and a DP with valued features should give the result in (49):

- (49) DP_{NAPS} and $\text{DP}_{[\text{GEND}, \text{F}; \text{SG}]}$
- $$\begin{array}{lcl}
 \{ \} & \cap & \{[\text{GEND}, \text{F}]\} = \{ \} \Leftarrow \text{MASCULINE (default)} \\
 \{ \} & \cup & \{[\text{SG}]\} = \{[\text{SG}]\}
 \end{array}$$

With respect to gender, there is no element that intersects between the two DPs which should give rise to an empty set. As a result, the coordinated DP as a whole should receive default masculine features. On the contrary, given that number represents set union, as long as one of the DPs has valued number features, the DP as a whole will inherit those. These predictions are borne out as illustrated by the passive example in (50):

- (50) [Lo más larg-o de la cocina] y [l-a lavadora]
 the.NT more long-M.SG of the kitchen and the-F.SG washing.machine.F.SG
 ‘The longest thing of the kitchen and the washing-machine ...’ $\{ \} + \{ \text{F}, \text{SG} \}$
- a. fue sacad-o por la ventana
 was.3SG taken.out-M.SG by the window
 ‘was taken out through the window’ $\{ \text{M}, \text{SG} \}$
- b. *fue sacad-a por la ventana
 was.3SG taken.out-F.SG by the window
 ‘was taken out through the window’ $*\{ \text{F}, \text{SG} \}$
- c. *fue-ron sacad-os por la ventana
 was-3PL taken.out-M.PL by the window
 ‘were taken out through the window’ $*\{ \text{M}, \text{PL} \}$

- d. *fue-ron sacad-as por la ventana
 was-3PL taken.out-F.PL by the window
 ‘were taken out through the window’ *{F, PL}

In (50), the coordinated DP subject consists of a non-agreeing superlative and a feminine singular DP. The only grammatical option for the VP is (50a): the passive auxiliary is inflected for third person singular, and the passive participle is both singular and masculine. Any deviation from that pattern is unacceptable.²¹

The data support the hypothesis that masculine features must be controlling the agreement with the passive participle, and the singular features must be controlling the agreement on both the auxiliary verb and the passive participle. Given that none of the two conjunct DPs has valued masculine features, which could have led to their intersection upon coordination, these features must have been inserted by default. With respect to number, the singular features on the second conjunct must have been inherited by the topmost DP node as a result of set union.

5. Conclusion

In this paper I have concentrated on a subset of *lo*-constructions in Spanish which I referred to as NAPS. One of the peculiarities of these constructions was the surface lack of φ -agreement between a superlative-modified adjective and the local determiner. In fact, the adjective spells out masculine gender (e.g. *-o*) and the determiner surfaces as *lo*, rather than *el*.

After showing that NAPS have different syntactic properties than other constructions introduced by *lo*, such as modal superlatives and amount relatives, whose distribution is that of Degree or Adjective Phrases, I propose that NAPS are similar to partitive constructions. In particular, they are the counterpart of a nominal construction involving the feminine noun *cosa* ‘thing’. NAPS are therefore regular DPs headed by a definite determiner. The peculiarity is that these nominals are underspecified for number and gender features, as opposed to their *cosa*-counterparts. *lo* is the result of a failed Agree search in the syntax which prevents feature valuation on the determiner and blocks the operation of concord in the canonical sense. However, at Vocabulary Insertion, the surviving unvalued features trigger the application of a rule spelling out default ‘masculine’ morphology on the relevant terminals, giving rise to what actually looks like concord.

The analysis has several implications for our understanding of *lo*-constructions in particular. First, it is consistent with the observations made at least since Ojeda (1984); Harris (1991) that Spanish lacks a neuter gender class. Second, it also lends support to the hypothesis that *lo* is both numberless and genderless (Picallo, 2008; Kramer, 2015). Such a hypothesis makes correct predictions for the resolution of gender and number features in coordinated DPs (e.g. NAPS & NAPS = ‘masculine singular’, and NAPS & DP_[GEND, F; SG] = ‘masculine singular’). The formal implementation advocated for here

²¹ The order of NAPS & DP_[GEND, F; SG] has not been chosen arbitrarily. I decided to include the feminine singular DP as a second conjunct to show that the agreement patterns on the auxiliary and passive participle are not the result of Closest Conjunct Agreement (CCA). If they were, we would expect that the option in (50b) should be acceptable, i.e. the feminine singular DP is closer and linearly adjacent to the verb. Its unacceptability indicates that CCA is not involved.

could be generalized to other so-called “neuter” contexts in the language.

In addition, at a more general level, I have established a parallelism between NAPS and partitives with respect to their syntax. The proposal presupposes that the PP-complement of partitives must be merged higher than traditionally thought (Selkirk, 1977; Jackendoff, 1977; Rothstein, 2009, 2017: a.o.), along the lines of Hankamer & Mikkelsen (2008, 2018); Matushansky & Zwarts (2016); Matushansky *et al.* (2017); Ruys (2017). This is in line with the argument that complements of relational nouns are structurally higher than *nP* and *nP*-internal modifiers (Baggio, 2020).

Furthermore, the parallelism, raises an even more important question: if the structure of partitive DPs is as proposed here, what is the relation between the semantic ambiguities in the domain of partitives and their syntactic representation? While the paper does not provide a definitive answer, it introduces a novel approach to address the problem: the individuating vs. measuring ambiguity (e.g. *3 bags of nuts* = ‘three individual bags containing nuts’ or ‘three bags worth of nuts’) observed in this domain should not be reduced to a large-scale structural ambiguity, as the one proposed by Rothstein (2009) and subsequent work; in particular because DP-internal complements and modifiers may adjoin/merge higher than traditionally assumed. Instead, any syntactic differences need to be more nuanced and abstract.

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References

- Adamson, Luke, & Šereikaitė, Milena. 2019. Gender Representation and Defaults in Lithuanian. *Glossa* 4(1): 1–35.
- Adger, David. 2013. *A syntax of substance*. Cambridge: MIT Press.
- Alonso-Ovalle, Luis, Menéndez-Benito, Paula, & Rubinstein, Aynat. 2022. Event-dependent modal projection: The case of Spanish subjunctive relative clauses. In Özge Bakay, Breanna Pratley, Eva Neu, & Payton Deal (eds), *North East Linguistic Society (NELS) 52*, 15–28. GLSA Publications.

Aranovich, Raúl. 2007. Negative polarity and scalar semantics in Spanish. *Linguisticae Investigationes* 30: 181–216.

Arregi, Karlos, & Nevins, Andrew. 2012. *Morphotactics: Basque auxiliaries and the structure of spellout*. Dordrecht: Springer.

Arregi, Karlos, & Nevins, Andrew. 2013. Contextual neutralization and the Elsewhere Principle. In Ora Matushansky, & Alec Marantz (eds), *Distributed Morphology Today: Morphemes for Morris Halle*, 199–221. MIT Press.

Baggio, Pietro. 2020. Introducing arguments and modifiers in the noun phrase. *Linguistic Inquiry* 52: 393–407.

Bhatt, Rajesh, & Homer, Vincent. 2019. Differentials cross-linguistically. In Daniel Altshuler, & Jessica Rett (eds), *The Semantics of Plurals, Focus, Degrees and Times: Essays in honor of Roger Schwarzschild*, 217–238. Cham, Switzerland: Springer.

Bobaljik, Jonathan. 2012. *Universals in Comparative Morphology*. Cambridge, MA: MIT Press.

Bobaljik, Jonathan, & Harley, Heidi. 2017. Suppletion is local: Evidence from Hiaki. In Heather Newell, Maaike Noonan, Glyne Piggott, & Lisa Travis (eds), *The Structure of Words at the Interfaces*, 141–159. UK: Oxford University Press.

Bochnak, Ryan, & Matthewson, Lisa (eds). 2015. *Methodologies in Semantic Fieldwork*. New York: Oxford University Press.

Bochnak, Ryan, & Matthewson, Lisa. 2020. Techniques in complex semantic fieldwork. *Annual Review of Linguistics* 6: 261–283.

Bonet, Eulalia. 2013. Agreement in two steps (at least). In Ora Matushansky, & Alec Marantz (eds), *Distributed morphology today: Morphemes for Morris Halle*. Cambridge, MA: MIT press.

Bošković, Željko. 2005. On the locality of left branch extraction and the structure of NP. *Studia Linguistica* 59(1): 1–45.

Bosque, Ignacio. 1980. *Sobre la Negación*. Madrid: Cátedra.

Bosque, Ignacio, & Moreno, Juan Carlos. 1990. Las construcciones con *lo* y la denotación del neutro [constructions with *lo* and the denotation of the neuter]. *Lingüística* 2: 5–50.

Bumford, Dylan, & Sharvit, Yael. 2021. Negative Polarity Items in Definite Superlatives. *Linguistic Inquiry* 52: 1–39.

Caponigro, Ivano. 2004. The semantic contribution of *wh*-words and type shifts: Evidence from free relatives crosslinguistically. In Robert Young (ed.), *Semantics and Linguistic Theory (SALT) 14*, 38–55. CLC Publications.

- Carlson, G. 1977. Amount Relatives. *Language* 53: 520–542.
- Chomsky, Noam. 1994. *Bare Phrase Structure*. Cambridge, MA: MIT press.
- Chomsky, Noam. 2000. Minimalist inquiries: the framework. In Roger Martin, David Michaels, & Juan Uriagereka (eds), *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, 89–156. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), *Ken Hale: A Life in Linguistics*, 1–52. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2008. On Phases. In Robert Freidin, Carlos Otero, & Maria Luisa Zubizarreta (eds), *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud*, 133–166. Cambridge: MIT Press.
- Cinque, Guglielmo. 1993. On the evidence for partial *N* movement in the Romance *DP*. In Guglielmo Cinque, Jan Koster, Jean-Yves Pollock, & Rafaella Zanuttini (eds), *Paths towards universal grammar: essays in honor of Richard S. Kayne*, 287 – 309. Georgetown University Press.
- Cinque, Guglielmo. 2005. Deriving Greenberg’s Universal 20 and its exceptions. *Linguistic Inquiry* 36: 315–332.
- Cinque, Guglielmo. 2010. *The Syntax of Adjectives*. MIT press.
- Coon, Jessica, & Keine, Stefan. 2021. Feature Gluttony. *Linguistic Inquiry* 52: 655–710.
- Corbett, Greville. 1991. *Gender*. Cambridge, UK: Cambridge University Press.
- Cowper, Elizabeth. 2005. A note on Number. *Linguistic Inquiry* 36: 441–445.
- Cowper, Elizabeth, & Hall, Daniel Currie. 2009. Argumenthood, pronouns, and nominal feature geometry. In Jila Ghomeshi, Ileana Paul, & Martina Wiltschko (eds), *Determiners: Universals and Variation*, 97–120. Johns Benjamins.
- Croitor, Blanca, & Giurgea, Ion. 2016. Relative superlatives and Deg-raising. *Acta Linguistica Hungarica* 63: 411–442.
- Davis, Colin. 2020. *The Linear Limitations of Syntactic Derivations*. Ph.D. thesis, MIT.
- Deal, Amy Rose. 2016. Plural exponence in the Nez Perce *DP*: a DM analysis. *Morphology* 26: 313–339.
- Donati, Caterina. 1997. Comparative clauses as free relatives: A raising analysis. *Probus* 9(2): 145–166.
- Eguren, Luis, & Pastor, Alberto. 2014. Measure phrases with bare adjectives in spanish. *Natural Language and Linguistic Theory* 32: 459–497.

Embick, David. 2007. Blocking Effects and analytic/synthetic alternations. *Natural Language and Linguistic Theory* 25(1): 1–37.

Embick, David. 2010. *Localism versus Globalism in Morphology and Phonology*. Cambridge, MA: MIT Press.

Embick, David, & Noyer, Rolf. 2001. Movement operations after syntax. *Linguistic Inquiry* 32: 555–595.

Falco, Michelangelo, & Zamparelli, Roberto. 2019. Partitives and partitivity. *Glossa: a journal of general linguistics* 4: 1–49.

Farkas, Donka, & Kiss, Katalin. 2000. On the comparative and absolute readings of superlatives. *Natural Language and Linguistic Theory* 18: 417–455.

Folli, Raffaella, & Harley, Heidi. 2005. Flavors of *v*: Consuming results in Italian and English. In Roumyana Slabakova, & Paula Kempchinsky (eds), *Aspectual inquiries*, 95–120. Dordrecht: Kluwer.

Folli, Raffaella, & Harley, Heidi. 2020. A Head Movement approach to Talmy's typology. *Linguistic Inquiry* 51: 425–470.

Fuchs, Zuzanna, Polinsky, Maria, & Scontras, Gregory. 2015. The differential representation of number and gender in Spanish. *The Linguistic Review* 32: 703–737.

Giannakidou, Anastasia. 1998. *Polarity Sensitivity as (non)veridicality*. Amsterdam: John Benjamins Publishing Company.

Giannakidou, Anastasia, & Zeijlstra, Hedde. 2017. The Landscape of Negative Dependencies: Negative Concord and N-Words. In Martin Everaert, & Henk van Riemsdijk (eds), *The Wiley Blackwell Companion to Syntax, Second Edition*, 1–38. Oxford: Blackwell.

Grosu, Alexander, & Landman, Fred. 1998. Strange Relatives of the Third Kind. *Natural Language Semantics* 6(2): 125–170.

Gutiérrez-Rexach, Javier. 1999. The structure and interpretation of Spanish degree neuter constructions. *Lingua* 109: 35–63.

Halle, Morris, & Marantz, Alec. 1993. Distributed Morphology and the pieces of inflection. In Kenneth Hale, & Samuel Jay Keyser (eds), *The View from Building 20*, 111–176. Cambridge, MA: MIT Press.

Hankamer, Jorge, & Mikkelsen, Line. 2008. Definiteness marking and the structure of Danish pseudopartitives. *Journal of Linguistics* 49(1): 61–84.

Hankamer, Jorge, & Mikkelsen, Line. 2018. Structure, architecture and blocking. *Linguistic Inquiry* 44: 317–346.

- Harley, Heidi. 2014. On the identity of roots. *Theoretical Linguistics* 40: 225–276.
- Harris, James. 1991. The exponence of gender in Spanish. *Linguistic Inquiry* 22: 27–62.
- Heim, Irene. 1985. Notes on comparatives and related matters. Unpublished Ms. University of Texas-Austin.
- Heim, Irene. 1999. Notes on superlatives. Unpublished Ms. MIT.
- Heim, Irene, & Kratzer, Angelika. 1998. *Semantics in Generative Grammar*. Malden, MA: Blackwell.
- Herdan, Simona, & Sharvit, Yael. 2006. Definite and Nondefinite Superlatives and *NPI* Licensing. *Syntax* 9(1): 1–31.
- Homer, Vincent, & Bhatt, Rajesh. 2020. Measuring cardinalities: Evidence from differential comparatives in French. In Peter Hallman (ed.), *Interactions of Degree and Quantification*, 271–303. Leiden: Brill.
- Izvorski, Roumyana. 1996. The syntax and semantics of correlative proforms. In Kiyomi Kusumoto (ed.), *North East Linguistic Society (NELS) 26*, 133–148. GLSA.
- Jackendoff, Ray. 1977. *X' Syntax*. Cambridge, MA: MIT press.
- Jaeggli, Osvaldo. 1982. *Topics in Romance Syntax*. Dordrecht Holland: Foris Publications.
- Jaeggli, Osvaldo. 1986. Three issues in the theory of clitics: Case, doubled NPs, and extraction. In *The Syntax of Pronominal Clitics*, 15–42. Orlando, FL: Academic Press.
- Kayne, Richard. 1975. *French Syntax: the Transformational Cycle*. Cambridge, MA: MIT Press.
- Kayne, Richard S. 1991. Romance clitics, Verb movement, and PRO. *Linguistic Inquiry* 22: 647–686.
- Kibrik, Aleksandr Evgen'evič. 2017. *The Methodology of Field Investigations in Linguistics: Setting up the Problem*. Walter de Gruyter.
- Kiparsky, Paul. 1973. “Elsewhere” in Phonology. In Stephen Anderson, & Paul Kiparsky (eds), *A Festschrift for Morris Halle*, 93–106.
- Kramer, Ruth. 2015. *The Morphosyntax of Gender*. Oxford University Press.
- Krifka, Manfred. 1990. Boolean and non-boolean ‘and’. In László Kálmán, & László Pólos (eds), *Papers from the Second Symposium on Logic and Language*, 161–187. Budapest: Akadémiai Kiadó.
- Kučerová, Ivona. 2018. ϕ -features at the syntax-semantics interface: Evidence from nom-

inal inflection. *Linguistic Inquiry* 49: 813–845.

Laka, Itziar. 1990. *Negation in Syntax: On the Nature of Functional Categories and Projections*. Ph.D. thesis, MIT.

Landman, Fred. 2004. *Indefinites and the Types of Sets*. Oxford University Press.

Larson, Richard. 2000. ACD in AP. In *19th West Coast Conference in Formal Linguistics*, 4–6. Somerville, MA: Cascadilla Proceedings Project.

Link, Godehard. 1983. The logical analysis of plurals and mass terms: A lattice-theoretical approach. In Rainer Bäuerle, Christoph Schwarze, & Arnim von Stechow (eds), *Meaning, Use and Interpretation of Language*, 302–323. Berlin: De Gruyter.

Loccioni, Nicoletta. 2018. *Getting “the most” out of romance*. Ph.D. thesis, University of California, Los Angeles.

Loccioni, Nicoletta. 2019. The Romance of Modal Superlatives as Degree Descriptions. In Katherine Blake, Forrest Davis, Laelyn Lamp, & Joseph Rhyne (eds), *Proceedings of the Semantics and Linguistic Theory 29*, 219–237. University of California, Los Angeles, CA: LSA Publications.

Marantz, Alec. 1997. No escape from syntax: Don’t try morphological analysis in the privacy of your own lexicon. In Alexis Dimitriadis, Laura Siegel, Clarissa Surek-Clark, & Alexander Williams (eds), *University of Pennsylvania Working Papers in Linguistics*, 201–225. University of Pennsylvania.

Matthewson, Lisa. 2004. On the methodology of semantic fieldwork. *International Journal of American Linguistics* 70: 369–415.

Matushansky, Ora. 2005. Going through a phase. In Martha McGinnis, & Norvin Richards (eds), *Perspectives on phases*, 151–81. Cambridge, MA: MIT Working Papers in Linguistics.

Matushansky, Ora, Ruys, Eddy, & Zwarts, Joost. 2017. On the structure and composition of pseudo-partitives. Handout from *Séminaire LaGraM, UMR 7023 Paris*, January 16.

Matushansky, Ora, & Zwarts, Joost. 2016. Making space for measures. In Andrew Lamont, & Katerina Tetzloff (eds), *North East Linguistic Society (NELS) 47*, volume 2, 261–274. GLSA Amherst.

Mendia, Jon Ander. 2017. *Amount relatives redux*. Ph.D. thesis, University of Massachusetts, Amherst.

Nevins, Andrew. 2007. The representation of third person and its consequences for person-case effects. *Natural Language and Linguistic Theory* 25: 273–313.

Nevins, Andrew. 2011. Multiple agree with clitics: person complementarity vs. omnivorous number. *Natural Language and Linguistic Theory* 29: 939–971.

- Norris, Mark. 2014. *A Theory of Nominal Concord*. Ph.D. thesis, UC Santa Cruz.
- Norris, Mark. 2017a. Description and analyses of nominal concord (pt i). *Language and Linguistic Compass* 11: 1–15.
- Norris, Mark. 2017b. Description and analyses of nominal concord (pt ii). *Language and Linguistic Compass* 11: 1–20.
- Ojeda, Almerindo. 1984. A note on the Spanish neuter. *Linguistic Inquiry* 15(1): 171–173.
- Pancheva, Roumyana, & Tomaszewicz, Barbara. 2012. Cross-linguistic differences in superlative movement out of nominal phrases. In N. Arnett, & Ryan Bennett (eds), *West Coast Conference on Formal Linguistics (WCCFL) 30*, 292–302. Cascadilla Proceedings Project.
- Partee, Barbara Hall, & Rooth, Mats. 1983. Generalized Conjunction and Type Ambiguity. In R. Bäuerle, C. Schwarze, & Arnim von Stechow (eds), *Meaning, Use and Interpretation of Language*, 362–383. de Gruyter.
- Picallo, Carme. 2002. Abstract Agreement and Clausal Arguments. *Syntax* 5(2): 116–147.
- Picallo, Carme. 2008. Gender and number in Romance. *Lingue e Linguaggio* 8: 47–66.
- Preminger, Omer. 2014. *Agreement and its failures*. Cambridge: MIT Press.
- Ritter, Elizabeth. 1991. Two functional categories in noun phrases: Evidence from Modern Hebrew. In Susan Rothstein (ed.), *Syntax and Semantics 25: Perspectives on Phrase Structure: Heads and Licensing*. Academic Press.
- Roberts, Ian. 2010. *Agreement and head movement: clitics, incorporation, and defective goals*. Cambridge: The MIT Press.
- Romero, Maribel. 2013. Modal superlatives: a compositional analysis. *Natural Language Semantics* 21: 79–110.
- Rothstein, Susan. 2009. Individuating and measure readings of classifier constructions: Evidence from Modern Hebrew. *Brill's Journal of Afroasiatic Languages and Linguistics* 1: 106–145.
- Rothstein, Susan. 2017. *Semantics for Counting and Measuring*. Cambridge, UK: Cambridge University Press.
- Roy, Isabelle. 2006. *Non-verbal predication: A syntactic account of predicational copular sentences*. Ph.D. thesis, University of Southern California.
- Ruys, Eddy G. 2017. Two Dutch *many*'s and the structure of pseudo-partitives. *Glossa: a journal of general linguistics* 2: 1–33.

-
- Schein, Barry. 1993. *Plurals and events*. Cambridge, Massachusetts: MIT Press.
- Schwarz, Bernhard. 2005. Modal Superlatives. In Effi Georgala, & Jonathan Howell (eds), *Proceedings of Semantics and Linguistic Theory 15*, 187–204. Cornell University, Ithaca, NY: CLC Publications.
- Schwarzschild, Roger. 2006. The Role of dimensions in the syntax of noun phrases. *Syntax* 9(1): 67–110.
- Scontras, Gregory. 2014. *The Semantics of Measurement*. Ph.D. thesis, Harvard University.
- Selkirk, Elisabeth. 1977. Some remarks on noun phrase structure. In Peter Culicover, Thomas Wasow, & Adrian Akmajian (eds), *Formal Syntax*, 285–386. New York: Academic Press.
- Sharvit, Yael, & Stateva, Penka. 2002. Superlative expressions, context, and focus. *Linguistics and Philosophy* 25: 453–504.
- Simpson, Andrew, & Park, Soyoung. 2019. Strict vs. Free word order patterns in Korean nominal phrases and Cyclic Linearization. *Studia Linguistica* 73(1): 139–174. ISSN 14679582. doi:10.1111/stul.12093.
- Szabolcsi, Anna. 1986. Comparative superlatives. In Naoki Fukui, Tova Rapoport, & Elizabeth Sagey (eds), *MIT Working Papers in Linguistics*, volume 8, 245–266. Cambridge, MA: MIT Press.
- Szabolcsi, Anna. 2012. Compositionality without word boundaries: *(the) more* and *(the) most*. In Anca Chereches (ed.), *Semantics and Linguistic Theory (SALT) 22*, 1–25. CLC Publications.
- Tomaszewicz, Barbara, & Pancheva, Roumyana. 2015. Focus association and the scope of superlative *-est*. In Nadine Bade, Polina Berezovskaya, & Schöller Anthea (eds), *Sinn und Bedeutung* 20, 748–460. Tübingen.
- Toquero-Pérez, Luis Miguel. 2022. There is no MEAS, only MUCH: the case of *3 kgs of cashews*. Handout from presentation at the 13th annual meeting of *California Universities Semantics and Pragmatics*, at UCLA.
- Toquero-Pérez, Luis Miguel. 2023. The syntax of individuating and measuring pseudo-partitives in Alasha Mongolian. *Journal of East Asian Linguistics* 32: 551–593.
- Vallduví, Enric. 1994. Polarity items, *n*-words and minimizers in catalan and spanish. *Probus* 6: 263–294.
- Wechsler, Stephen, & Zlatić, Larisa. 2003. *The Many Faces of Agreement*. Stanford, CA: CSLI Publications.
- Winter, Yoad. 2001. *Flexibility Principles in Boolean Semantics*. Cambridge, MA: MIT

Press.

Zeijlstra, Hedde. 2004. *Sentential negation and Negative Concord*. Ph.D. dissertation, University of Amsterdam.