



Camacho, José. 2021. The structure of plural last names in Spanish and other languages. *Glossa: a journal of general linguistics* 6(1): 140, pp. 1–38. DOI: <https://doi.org/10.16995/glossa.5773>



Open Library of Humanities

The structure of plural last names in Spanish and other languages

José Camacho, University of Illinois Chicago, US, jcamach@uic.edu

An associative plural functional head is proposed for Spanish plural last names. Spanish plural last name noun phrases appear with a plural determiner and a singular or plural noun. Last names marked as singular are interpreted as a group, whereas plural ones are interpreted as collection of individuals (additive reading), although both pattern like fully plural DPs. Based on a comparison with first names, I propose that last names involve a null nominal head that encodes the meaning ‘group’, dominated by an plural category, which is realized as the plural morpheme on the determiner. When the last name is plural, a second plural-like category NUM head, located in the lower part of the structure and shared with common nouns, forces the additive reading. The last name number patterns are shown to be similar to those of N-N compounds, this parallelism is derived from a common underlying semantic predication, realized as a relator phrase. The paper also surveys crosslinguistic pluralization patterns, proposing potential patterns of variation: the presence/absence of the null nominal and the structural location of the associative plural head.



1. Background: Number agreement in the DP

Languages with number agreement inside nominal phrases (henceforth determiner phrases, DPs) mark it with overt morphology across different categories. In Spanish, for example, gender and number agreement must be shared between a determiner (D), an adjective (A) and a noun (N), as shown in (1)a. In this example, the feminine, plural *niñ-a-s* imposes the same gender and number features on D and A, encoded in *-a* and *-s* respectively. Any mismatch in any of the three agreeing categories results in ungrammaticality, as exemplified in (1)b, where D is plural but N and A are singular. Since the gender and number of the determiner and the adjective depend on the features of the noun, it is generally assumed that D and A inherit gender and number from it or a functional category related to it (see below).

- (1) a. l-a-s niñ-a-s bolivian-a-s
 the-F-PL girl-F-PL bolivian-F-PL
 ‘The Bolivian girls’
- b. *l-a-s niñ-a bolivian-a
 the-F-PL girl-F.SG bolivian-F.SG

The DP’s number feature further triggers agreement with the verb if the DP is the subject, as seen in (2) and schematically represented in (3). In (2)a, verbal morphology encodes 3rd person, plural agreement through the morpheme *-on*.

- (2) a. L-a-s niñ-a-s bolivian-a-s llegar-on.
 th-F-PL girl-F-PL bolivian-F-PL arrived-3.PL
 ‘The Bolivian girls arrived.’
- b. *L-a-s niñ-a-s bolivian-a-s lleg-ó.
 th-F-PL girl-F-PL bolivian-F-PL arrived-3.SG

- (3) $[_{DP_i} \quad D_i \quad N_i] \text{ Infl}_i$
 ↑ ↑ ↑ ↑

Several researchers have also focused on how to represent number inside the DP as part of the exploration of the role and the typology of functional categories in both DPs and CPs within generative syntax. At stake is whether number should be represented through a separate functional category or as a feature hosted by a lexical category like N, and whether that separation makes better distributional and interpretive predictions than the alternative. Specifically, Ritter (1988; 1991; 1992) proposed that number is encoded in a functional category, NUM, which she hypothesized in order to explain the word order and other properties of the Hebrew nominal construction known as the construct state. NUM has subsequently been adopted to account for different aspects of the distribution of DPs in different languages (Bernstein 1991; 1993b; Carstens 1991; Delfitto & Schrotten 1991; Piccallo 1991; 2008). For example, NUM provides a way

to explain the patterns observed in Spanish nominal ellipsis under coordination, as in *el libro azul y los rojos* ‘the blue book and the red (ones)’, where the second noun is an unpronounced version of the first one. The relevant observation is that the two versions of the noun can be interpreted as having identical gender but not identical number, a fact that follows if NUM but not gender is separate from N and the null N is interpreted identically to the first one (Leonetti 1999; Lipták & Saab 2014).

Borer (2005) has advanced the idea that content related to number is further divided into two distinct functional categories, a Classifier and # (see also Alexiadou, Haegeman & Stavrou 2007; Mathieu 2012; Mathieu & Zareikar 2015). Assuming that any noun denotes a mass (*coffee*, for example), Classifier converts this mass denotation into a divided entity (*a coffee*), whereas # counts or pluralizes that resulting denotation (*three coffees*).

From a slightly different perspective, den Dikken (2001) has proposed an analysis of so-called pluringuars, morphologically singular words such as *committee* that can trigger plural agreement on the verb in certain varieties of English (*the committee enter the room*). In this analysis, pluringuars contain a null plural category *pro* separate from the lexical word, that encodes plurality and triggers plural agreement on the verb.

In sum, research into the syntactic expression of number inside the DP has postulated a much more complex structure than meets the eye, with at least one and possibly two functional heads that encode different aspects of number, as well as other unexpressed categories that can encode plurality under certain circumstances. However, no consensus exists on how many of these categories exist and what are the parameters of variation across languages in terms of meaning and relative hierarchical position and how this variation interacts with other aspects of the grammar.

In this paper I extend this research paradigm in two specific aspects: the types of number-related functional heads available and how they interact with other aspects of grammar, namely the taxonomy of null categories and the properties of compounds. I explore a case in which DP internal agreement breaks down, allowing us to separate the contribution of different plural-marking heads. Specifically, last names and brand names in Spanish can agree with the verb in plural, as seen in (4). As expected, the determiner is marked with a plural *-s*, but the last name itself (*Moya*) is not. In other words, whatever grammatical mechanism forces plural agreement in (2) seems to break down in examples like (4). Since the determiner and the verb are plural, the natural place to look for the source of the agreement mismatch is the internal structure of these DPs.

- (4) L-o-s Moya vinier-on ayer.
 the-M-PL Moya.SG came-3.PL yesterday
 ‘The Moyas came yesterday.’

Given this mismatch, our first question is how does the DP become plural in the absence of a plural nominal? Second, how can the last name remain singular (i.e. why is agreement not required)? Third, since last names can also be marked as plural for some speakers with a change in semantic interpretation, how is systematic variation derived? When the last name is plural, it is interpreted as “individuals sharing the same last name” (an *additive* reading), as opposed to the preferred *group* reading that the singular last name produces. Finally, why does the pattern only affect last names?

The analysis is built on the idea that plural proper names encode a special type of plural that has been described and analyzed in several languages, an *associative plural*. This plural has a distinct morpheme in languages such as Gitksan, Hungarian or Japanese, and is generally restricted to proper names, and sometimes categories referring to human definites, as described in section 2.2. Expanding on previous analyses of the syntactic structure of associative plurals and their semantic interpretation (Kratzer 2009), I propose that plural last names involve a functional head located in the higher part of the DP that encodes associative plurality and a second number-related functional head located in the lower part of the DP, which encodes plurality related to individuation. The interplay of these two plural heads accounts for the morphological patterns and semantic interpretations observed earlier. Additionally, based on contrasts between first and last names, I suggest that plural last names involve a null nominal.

From a syntactic point of view, last names have the structural properties of associative plurals, or put differently, despite the absence of distinct morphology, Spanish plural last names are just a subtype of associative plurals as observed in Hungarian, for example.

The paper also explores the relationship between proper name number agreement patterns and N-N compounds such as *mujer-astronauta* ‘astronaut woman’, and suggests that the reason plural last names and N-N compounds show these parallelisms stems from the fact that they both encode an abstract predicational relationship between the two Ns or between the members of the set of individuals related as a family. For example, an *astronaut woman* is a woman who is an astronaut, *Moyas* are individuals associated to the family *Moya*.

The paper is organized as follows: section 2 presents the distribution of plural last names (2.1), and associative plurals (2.2). Section 3 introduces the analysis; in 3.1, the semantic interpretation of associative plurals is given; in 3.2, I show that first and last names have different distributions and argue for a null nominal for the latter; in 3.3, I present cases in which last names are obligatorily plural; 3.4 introduces the parallelism with N-N compounds and why that parallelism holds, and section 3.5 proposes parameters of crosslinguistic variation. Section 4 draws the conclusions and further questions raised by the paper.

2. Plural last names

2.1. The distribution of plural last names in Spanish

Like plural common nouns, plural last names in preverbal subject position obligatorily require overt determiners in Spanish, as shown by the contrast between (5)a and (5)b, without a determiner.¹ Furthermore, plural agreement between the DP and the verb in (5)a indicates that the DP is plural, as overt plural marking on the determiner (-s) suggests. Consequently, singular agreement with the verb is ungrammatical, as seen in (6).

- (5) a. L-o-s Sánchez llegar-on a su casa.
 the-M-PL Sánchez.SG arrived-3.PL to POSS house
 ‘The Sanchez arrived home.’
- b. *Sánchez llegar-on a su casa.
 Sánchez arrived-3.PL to POSS house
- (6) *L-o-s Sánchez lleg-ó a su casa.
 the-M-PL Sánchez.SG arrived-3.SG to POSS house

Whereas the contrast between (5)a and (6) illustrates that verbal inflection must match the plural features of D, (5)a also shows that D and the last name need not agree in plural features, since the last name has the same morphological shape as the corresponding singular.

The mismatching pattern with a singular last name illustrated in (5)a is the preferred option for all speakers I have consulted. In the case of *Sánchez*, the absence of plural marking might follow from a phonological constraint that generally disfavors directly adding -s to a noun ending in a non-nasal consonant, although common nouns usually add an epenthetic vowel -e in such cases e.g. *árbol-e-s* ‘tree-EPEN-PL’. In the examples at hand, the epenthesis solution results in marginal to ungrammatical outputs for last names ending in /s/ (or /θ/ in Peninsular Spanish), as seen in (7).

- (7) a. ??l-o-s Sánchec-e-s
 the-M-PL Sanchec-EPEN-PL

¹ Saab and Lo Guercio (2020) assume that all instances of pluralized names are predicative, not referential (in their terminology), since the absence of plurality is a necessary condition for a referential interpretation. Preverbal subjects show this, since this is the only position in which plural names are absolutely impossible, as seen in (i). But notice that bare common plurals are also impossible in preverbal subject position, at least for monolingual speakers, and that the determiner is also absent from (i), suggesting that factors other than (or perhaps in addition to) referentiality are at stake in the ungrammaticality of (i) and (5). We will assume that number plays an important role in the syntax of last names, but we don’t assume that referentiality is exclusively derived from the absence of number.

(i) *Juane-s llegar-on a la fiesta.
 Juan-PL arrived-3.PL to the party

- b. *l-o-s Iglesias-e-s
the-M-PL Iglesias-EPEN-PL

Last names ending in a vowel, /r/, /l/ or a nasal consonant can alternate for some speakers between not adding overt plural marking and adding -s, as seen in (8)–(9).² In such cases, the preferred interpretation for *Velasco* in (8)a is that the name refers to a group, the Velasco family (the group reading), so that this sentence need not be true of any individual named Velasco, as long as it is true of the group as a whole. A secondary, less-salient interpretation allows for the last name to refer to the individuals of the Velasco family (the *pseudo-additive* reading). On the other hand, *Velasco-s* in (8)b can only refer to the individuals that either belong to the *Velasco* family, or who happen to share the same family name (the additive meaning). Consequently, this sentence is pragmatically odd because it is not likely that all people who share a common last name will be important. The essential difference between the singular and the plural is, therefore, whether the last name obligatorily refers to individuals (the additive meaning), or whether it refers to a group or indirectly to members of that group (the pseudo-additive meaning). The unavailability of the group interpretation with plural marking is particularly salient with a quantifier like *todos* ‘all’, as seen in (8)c.

- (8) a. L-o-s Velasco s-on importantes.
the-M-PL Velasco-SG be-3.PL important
‘The Velasco family is important.’
- b. L-o-s Velasco-s s-on importantes.
the-M-PL Velasco-PL be-3.PL important
‘The Velasco family members are important.’
- c. #Tod-o-s l-o-s Velasco-s abandonar-on l-a cas-a.
all-M-PL the-M-PL Velasco-PL left-3.PL the-F.SG house-F.SG
‘All (individuals named) Velasco left the house.’ (no group/family reading)
- (9) a. ??L-o-s Borbón gobernar-on España.
the-M-PL Bourbon governed-3.PL Spain
- b. L-o-s Borbon-e-s gobernar-on España.
the-M-PL Bourbon-EPEN-PL governed-3.PL Spain
‘The Bourbons governed Spain.’

² Names of royal dynasties only appear in plural, as (9) shows. Dynasties are also the only possible plural marking of last names for speakers of Catalan. There appears to be pragmatic saliency effects regarding what constitutes a dynasty or famous family. For example, whereas (9)b is the preferred form, *??los Perones* ‘the Perones’ is highly marked, despite the fame of the Perón family.

The obligatorily additive reading with the plural explains why (10)b sounds marginal: on the one hand, we have a strong pragmatic preference to interpret the last name as referring to the famous movie-making *Almodovar* family and perhaps indirectly to its members, on the other hand, the plural requires an additive interpretation in which they are separate individuals who happen to share the same last name and make movies, an interpretation that is at odds with our real-world knowledge.

- (10) a. L-o-s Almodóvar hace-n cine.
 the-M-PL Almodovar.SG do-3.PL cinema
 b. ??L-o-s Almodóvar-e-s hace-n cine.
 the-M-PL Almodovar-EPEN-PL do-3.PL cinema
 ‘The Almodovars make movies.’

The most salient interpretation of the number-mismatched option is that of a group, but it is still possible to have a pseudo-additive reading that applies to individual members, an issue I will return to below.

These contrasts do not hold for first names, which seem to follow the patterns of common nouns when pluralized, as seen in (11). Specifically, first names must match the determiner in number, as seen in (11)b.

- (11) a. L-a-s Juan-a-s de este mundo vive-n en ciudades
 the-F-PL Juan-F-PL of this world live-3.PL in cities
 ‘The Juanas of this world live in cities.’
 b. *?L-a-s Juan-a de este mundo vive-n en ciudades.
 the-F-PL Juan-F.SG of this world live-3.PL in cities
 ‘The Juanas of this world live in cities.’

Prenominal adjectives that appear with a last name agree with the determiner, not with the last name, as shown in (12).

- (12) a. L-o-s famos-o-s Velasco s-on gente importante.
 the-M-PL famous-M-PL Velasco.SG be-3.PL people important.SG
 ‘The famous Velascos are important people.’
 b. *L-o-s famos-o Velasco s-on gente importante.
 the-M-PL famous-M.SG Velasco.SG be-3.PL people important.SG

Regardless of whether the last name is singular or plural, these DPs can appear in stubbornly distributive contexts (Schwarzschild 2011), confirming that they are plural DPs. These contexts force a meaning that requires reference to individuals. Thus, mismatched *los Velasco* in (13)a can be the antecedent of a plural reflexive anaphor, and it is also compatible with the distributive

quantifier *cada* ‘each’ in (13)b. In other words, the first example is interpreted as saying that each member of the Velasco group always thinks about him or herself, and in the second one, each Velasco member lifts 100 kilos, rather than doing it collectively. Since these environments require true semantic plurality to be grammatical, we may conclude that *Los Velasco* is a true plural.

- (13) a. L-o-s Velasco siempre piensa-n en sí mismo-s.
 the-M-PL Velasco.SG always think-3.PL in themself-PL
 ‘The Velasco always think about themselves.’
- b. En una competición, l-o-s Velasco puede-n levantar 100 kilos cada uno.
 in a competition, the-M-PL Velasco.PL can-3.PL lift 100 kilos each one
 ‘In a competition, the Velascos can lift 100 kilos each.’

Based on the data seen so far, these DPs somehow denote plurality without a plural lexical head, and that this plurality is partitioned differently depending on whether the last name is singular or plural: when the last name is plural, only the additive reading is possible, when the last name is singular, the DP can be interpreted as a group or as the pseudo-additive members of that group. To confirm this observation, a combination of a singular D and a plural last name is ungrammatical, regardless of whether the verb is singular or plural, as seen in (14).

- (14) a. *El Velasco-s llegaro-n ayer.
 the.SG Velasco-PL arrived-3.PL yesterday
 ‘The Velascos arrived yesterday.’
- b. *El Velasco-s lleg-ó ayer.
 the.SG Velasco-PL arrived-3.SG yesterday
 ‘The Velascos arrived yesterday.’

Bare plural last names are possible in object position, and under those circumstances, they must be plural, as seen in in (15).

- (15) a. Eligiero-n a Velasco-s.
 elected-PL DOM Velasco-PL
 ‘They elected Velascos.’
- b. #Eligiero-n a Velasco.
 elected-PL DOM Velasco.SG (ungrammatical with a plural reading of *Velasco*)

To complicate matters further, speakers have two different patterns for numerals: a larger group of speakers requires a plural last name with a numeral, as in (16)a, and disallows the singular, as in (16)b. Another group of speakers has the opposite pattern, allowing only a singular last name, in (16)b. This distinction is seemingly orthogonal to whether plural *Velascos* is accepted or not in general.

- (16) a. Cinco Velasco-s llegar-on a la reunión.
 five Velasco-PL arrived-PL to the gathering
- b. Cinco Velasco llegar-on a la reunión.
 five Velasco.SG arrived-PL to the gathering
 ‘Five Velasco family members arrived at the meeting.’

The unmarked singular pattern in (16)b is more widely acceptable with brand names or locations, as illustrated in (17), which could be used in the context of going to a wine store and asking for different types of wines.

- (17) Quisiera dos rioja y tres malbec.
 would.like two rioja.SG and three malbec.SG
 ‘I would like two rioja wines and three malbec wines.’

In general, brand names have a similar distribution to last names, as pointed out by an anonymous reviewer, with a similar type of semantic difference: the plural requires an individual reading, the singular can be interpreted as a group or, less directly, a set of individuals, as illustrated in (18).

- (18) a. L-a-s Fender(s) s-on excelente-s guitarra-s.
 the-F-PL Fender(PL) be-3.PL excellent-PL guitar-PL
 ‘Fenders are excellent guitars.’
- b. L-o-s Toyota(s) dura-n mucho.
 the-M-PL Toyota(PL) last-3.PL a lot
 ‘Toyotas last a lot.’

Unlike last names, brands typically do not refer to humans, hence the type of group they form is different. In both cases, overt plural marking sounds more natural with some brands than with others, which may be due to the relative pragmatic saliency of the brand and the last name, a fact that can be derived from the semantic analysis in section 3.1.

Bare brand names in object position that are interpreted as a group of individuals must be plural, as seen in (19)a-b, just like last names. A singular would be possible with a reading of “the X brand”, not interpreted as a group formed by distinct individuals, as shown in (20).

- (19) a. El gobierno municipal compró Toyota-s.
 the government municipal bought Toyota-PL
 ‘The municipal government bought Toyotas.’
- b. *El gobierno municipal compró Toyota.
 the government municipal bought Toyota.SG

- (20) El gobierno municipal eligió (a) Toyota.
 the government municipal bought DOM Toyota.SG
 ‘The municipal government selected Toyota.’

Common nouns, on the other hand, never show the feature mismatch described for last names and brands, and consequently, they do show different interpretations depending on feature mismatches. (21) illustrates that the only grammatical option is full agreement in singular between D, N and the verb, as in (21)a, or in plural as in (21)b. (21)c-d show the ungrammatical mismatching options. Notice that an elliptical structure such as (21)e does allow for a singular *comité* ‘committee’ with a plural D and a plural verb.

- (21) a. El comité aprobó la moción.
 The.SG committee.SG approved.3.SG the motion
 ‘The committee approved the motion.’
- b. L-o-s comité-s aprobar-on la moción.
 the-M-PL committee-PL approved-3.PL the motion
- c. *El comité aprobar-on la moción.
 the.SG committee.SG approved-3.PL the motion
- d. *L-o-s comité aprobar-on la moción.
 the-M-PL committee.SG approved-3.PL the motion
- e. L-o-s e del comité aprobar-on la moción.
 the-M-PL e of-the committee.SG approved-3.PL the motion
 ‘Those in the committee approved the motion.’

In sum, the properties of last names and brands are presented in **Table 1**.

	<i>Velasco/brand name (sg.)</i>	<i>Velascos/Brand name (pl.)</i>	<i>Count Noun (sg.)</i>	<i>Count Noun (pl.)</i>
Interpretation	Group/additive	Additive	Additive	Group/additive
Plural feature mismatch	Yes	No	No	No
Bare PL as object	#	Required	Possible	Possible
Numerals	✗/✓ ¹	✓/✗ ¹	✗	✓
Anaphors, distributive predicates	✓	✓	✗	✓

Table 1: Summary of plural last name/brand DP properties.

¹These cells represent two different sets of speakers.

These data present four puzzles: first, when the last name is singular, where does the plurality of the DP come from? Second, why can the last remain singular? Third, how can we account for the group and additive interpretations? Fourth, why is this pattern only possible with last names?

2.2. Names and morphological marking

According to the data seen in the previous section, plural-marked last names must be interpreted additively, whereas singular last names can be interpreted as a group or pseudo-additively. Turkish is similar to Spanish: the plural suffix *-lar* appears to be optional on the last name, but when it appears, it is interpreted as additive (Görgülü 2011). Unlike Spanish, however, a singular last name in Turkish can only be interpreted as a group, not distributively. This systematic correlation between morphological marking and interpretation of the last name extends to other languages that use two plural morphemes, one of them a regular plural and the other an associative plural, a type of plural marking that certain languages use with select types of nominals based on the implicational scale in (22) (Moravcsik 2003; Daniel & Moravcsik 2013). This scale signals that marking of any element as an associative plural implies marking of elements to the left of that element. Yup'ik, for example, restricts associative plurals to proper names, Central Pomo, to proper names and definite kin nouns.

(22) proper name > definite kin noun > definite title noun > other definite human noun.

An associatively marked proper name denotes a focal individual and a group related to them in some salient way. For example, the focal individual in (23)a is *Kovács* and the group depends on some contextually salient relation that could include family ties or some other association. By contrast, the regular plural in (23)b refers to all the individuals who share the same property (“being a Kovács”, Dékány 2021).

- (23) *Hungarian*
- a. Kovács-ék
Kovacs-APL
'Kovacs and them'
 - b. Kovács-ok
Kovacs-PL
'The Kovács individuals'

Several other languages use the associative plural as special marking for proper names. Forbes (2018) observes that the regular plural in Gitksan is incompatible with proper names, which can appear with the associative plural.³ Japanese plural *-ra* only has the group reading, whereas the

³ The described distinction in Gitksan separates the class of determinates from common nouns. Determinates include proper names, pronouns, human-Wh pronouns, demonstratives and ascending kinship terms.

associative *-tati* has primarily a group, but also possibly an individual reading (Aoyagi, p.c. and Nakanishi & Tomioka 2004; Nakanishi & Ritter 2008). In Persian, Ghomeshi & Massam (2009) note that proper names are marked with an associative construction.

A third type of language expresses the same meaning differences through different morphological properties. For some varieties of Greek, the distinction is realized as an additional vowel, so that a regular plural *-i* directly attached to the root has the additive interpretation (cf. (24)a), whereas the addition of the *-e* suffix + the plural *-i* suffix gives the group reading, as in (24)b.

- (24) *Greek* (Panagiotidis, p.c.)
- a. Papadopoul-i
Papadopoulos-PL
'A collection of individuals with the last name "Papadopoulos"'
 - b. Papadopoul-e-i
Papadopoulos-SUFF-PL
'Members of the Papadopoulos family'

All these languages, but particularly the ones with overt associative marking, suggest a systematic correlation between the interpretation of the plural last name and the type of morphological marking, specifically, the associative plural always provides a group interpretation and the regular plural, where available, produces an additive reading. I will return to this issue in section 3.1.

Finally, a group of languages that includes English and Dutch, among others, only has plural marking on the last name. In such cases, the group and individual interpretations do not correlate with any formal mechanism.⁴

- (25) *English*
The Smiths

- (26) *Dutch* (anonymous reviewer)
De Smitt-en
the Smith-PL

⁴ Jambrović (2021a; 2021b) argues that last names have a different morphological structure than common nouns, based on minimal pairs (i)–(iii), which suggest that last names regularize plural morphology. He proposes that name roots are recategorized as count nouns within a distributed morphology framework. He further relates this recategorization to the meaning of proper names, following Thomsen (1997). However, this difference is not related to group/additive interpretation, as far as I can tell.

	Root	Proper name	Common noun	
(i)	child	the Childs	the children	(English)
(ii)	Wiese	Wiese-s	Wiese-n	(German)
	meadow	Wiese-PL	meadow-PL	
(iii)	ló	Ló-k	lov-ak	(Hungarian)
		horse	Ló-PL	horse-PL

3. The structure of last names

3.1. Plurality with last names

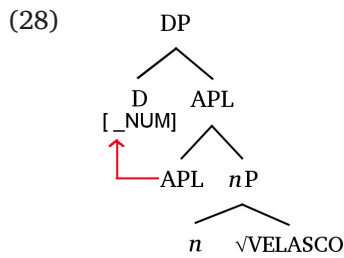
The distribution presented in section 2 suggests that the plurality of the DP does not come from the last name, but rather from a different category. At the same time, the availability of last names marked as plural in (8)b and the required plural marking for bare last names in object position in (15) and (19) suggest that last names may also have a functional category related to plurality. The existence of two separate number-related heads for last names is further supported by the data from associative plural-marking languages like Persian, Hungarian or Gitksam presented in section 2.2, that show distinct morphology for regular and associative plurals. These two heads may co-appear in Gitksam (Forbes 2018: 224), forcing an additive interpretation in those cases.

As suggested, Borer (2005) has independently proposed encoding plurality in two separate functional heads independently of associativity: the structurally higher classifier that counts and the lower head that divides the mass referent into parts (#). In the case of last names in Spanish, I propose that the plural on the determiner encodes the higher-head plural, corresponding to the associative plural in associative-marking languages and the plural on the last name, when present, realizes the lower plural head, Borer's #.

Nakanishi & Tomioka (2008) have explicitly made the connection between the two types of plural in Japanese and Borer's structural partition for plurals in general, proposing that the lower head corresponds to the regular or additive plural (NUM), whereas the higher head GRP hosts the associative head. Dékány (2021) argues that the associative plural is higher in Hungarian, and Forbes (2018) proposes that the associative appears in the specifier of DP, whereas the regular plural appears lower, in the specifier of a nominal AspP in Gitksam. Görgülü (2011) extends this analysis to Turkish, arguing that a plural last name signals an associative plural. In sum, there seems to be a general agreement that the associative plural is structurally higher than the regular plural, and that the two plurals may correspond to Borer's (2005) two types of plurals.

Let us first look at cases with a plural D and singular last name, as in (27)a. Assuming a Distributed Morphology framework (cf. Halle & Marantz 1993; Embick & Noyer 2007; Bobaljik 2017, among others), unmarked plural last names should include at a minimum the items in (27)b, with the structure in (28). In Distributed Morphology, roots are acategorical elements that merge with a categorial functional head, in this case *n*, to create a noun (*nP*). This phrase merges with the associative plural head (APL), which in turn merges with D to form a full Determiner Phrase. The associative head carries a plural feature that values the unvalued number feature on the determiner, which is spelled out as the morpheme *-s*.

- (27) a. Lo-s Velasco
 the-PL Velasco.SG
 b. D, APL, *n*, $\sqrt{\text{Velasco}}$

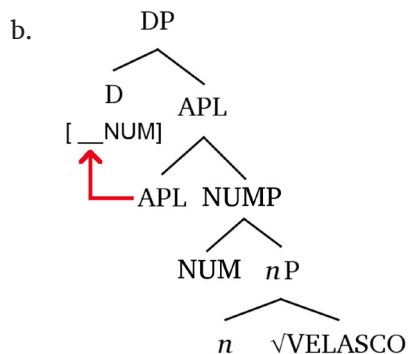


I adopt the agreement theory proposed by Pesetsky & Torrego (2001; 2004; 2006; 2007), who assume that agreement-related features have two separate dimensions: whether they are valued or unvalued, and whether they are interpretable or uninterpretable. Interpretable features have a semantic correlate, whereas uninterpretable ones take part in grammatical relations but are not interpreted semantically. For example, plurality on a noun has semantic content, but plurality on an adjective simply reflects the fact that the adjective agrees with another plural. Following Pesetsky & Torrego's proposal, I assume that feature valuation and interpretability are independent of each other.

Within this system, a probe is an unvalued element that seeks a value for a given feature from a goal, which can be structurally higher or lower within a certain domain; technically, the probe can c-command or be c-commanded by the goal (cf. Baker 2008). Assuming this framework, D is a probe seeking a number value, which it obtains from a plural APL. The morphological reflex of this value is the *-s* affix on the determiner.

For the cases where both D and the last name appear with plural morphology (see (29) a), I propose that plurality is instantiated in different functional heads, namely APL and NUM, as in (29)b. Once again, APL values the determiner's number feature. The lower NUM head individuates the reference of the *nP*, converting it into a plural noun. In this sense, overtly marked plurality entails the presence of NUM.

- (29) a. Lo-s Velasco-s
the-PL Velasco-PL



The syntactic structure in (29)b is instantiated through different morphemes, which are realized following lexical insertion rules in the Distributed Morphology framework. The rule for plurality in (30)a inserts the affix *-s* for plural in the context where D is present, (30)b does so in the context of NUM and (30)c does so in the context of APL.

- (30) a. [PL] \leftrightarrow *-s*/ D
 b. [PL] \leftrightarrow *-s*/ NUM
 c. [PL] \leftrightarrow *-s*/ APL

Consider the cases of singular last names with a plural D, in such instances, APL values D, and following (30)a and c, *-s* appears on D and APL. Since APL is a null head, these two affixes are fused into a single *-s*. An alternative possibility would be that APL does not have an overt morpheme associated with it, so in the absence of another category such as D or A, that plural feature will not be realized. Example (20), repeated as (31) could be analyzed that way: in the absence of D, the APL feature cannot be realized and surfaces as singular.

- (31) El gobierno municipal eligió (a) Toyota.
 the government municipal bought DOM Toyota.SG
 ‘The municipal government selected Toyota.’

Turning to the interpretative aspects of associative plurals, Kratzer (2009) proposes a feature [group] whose semantic interpretation appears in (32). This meaning of this feature provides an individual *x* and a group of contextually determined associates of *x*.

- (32) $[[\text{group}]]^{\text{sc}} = \lambda x. \text{Group}(x)(c)$.

Nakanishi & Ritter (2008) and Forbes (2018) extend this proposal to associative plurals in Japanese and Gitksan respectively. The meaning of the Japanese associative plural *-tati* is given in (33): when the associative function for *-tati* applies to a type $\langle e \rangle$ proper name like *Mika*, the nominal is interpreted as “a group that consists of Mika and her associates with respect to *c* (Nakanishi & Ritter 2008: 4),” where *c* is a given context. Since the proper name lacks descriptive content, no property is shared across the members of the group beyond being part of that group, resulting in the associative meaning “Mika and her associates”. When the associative function applies to a common noun like *female* that denotes a type $\langle e, t \rangle$, the descriptive content determines membership in the group, namely “a female and a group of female associates,” giving rise to the so-called pseudo-additive interpretation.

- (33) $[[\text{-tati}]]^c = \lambda x: x \text{ is human. group}(x)(c)$
 “*-tati* combines with a human individual *x* and yields a group that consists of *x* and his/ her associate(s) with respect to the contextual parameter *c*”

Descriptions of associative plurals going back to Corbett & Mithun (1996) note that it involves two distinct components, namely reference to a group and a focal member within that group (non-homogeneous reference). The main difference between Kratzer, Nakanishi & Ritter and Forbes’s analyses and the one proposed by Dékány (2021) is whether the non-homogeneous and group components are represented as separate features or are part of the lexical meaning of the associative morpheme. Dékány (2021: 234), following insights from Corbett & Mithun (1996), proposes that the associative plural head includes two separate features: one for non-atomicity (i.e. a group) and a second feature that indicates that this group is not homogeneous, to capture the fact that associative plurals generally involve a focal individual. Dékány suggests that these two features are overtly realized as different suffixes in Yup’ik, as seen in (34), where *-nku* conveys the non-homogeneous feature and *-t/-k* encode plurality (plural or dual respectively). She further argues that the non-homogeneity feature may be null in languages like Turkish.

(34) *Yup’ik* (Corbett & Mithun 1996: 11–2)

- a. Cuna-nku-t ayag-tu-t.
Chuna-APL-PL go-IND-3.PL
‘Chuna and his family/friends left.’
- b. Cuna-nku-k ayag-tu-t.
Chuna-APL-DU go-IND-3.DU
‘Chuna and his friend left.’

Extending the analysis to Spanish last names, the meaning of (27)a will be “the group composed of Velasco and associates,” which could be either her family, or individuals who happen to share the same last name.⁵ This is precisely the ambiguity that we observe with non-matching last names. In the case of plural last names, such as (29)a, the additional Num head associated with the last name introduces a sum structure to the meaning of the name. The [group] feature then applies in a similar way as with common nouns, yielding “a group formed by a Velasco and other Velasco individuals”.⁶

The associative plural in Yup’ik, Gitksan and Hungarian have a clear focal referent and a group of associates, the non-homogeneity feature. Note, however, that this property derives from the contextual index in Kratzer’s analysis, so in principle one could conceive of a context where

⁵ Notice that nothing in principle prevents the group of associates to be business associates, for example. Whether the limits of the group are established through some pragmatic inference or whether they are encoded in the content of the last name itself is a matter that I will leave open.

⁶ Dedicated associative plurals typically appear with human-referring nominals. The proposed analysis deviates from this observation in the case of brand names, which do not refer to humans. In Hungarian at least, brand names cannot be used with associative plurals (Éva Dékány, p.c.).

In certain varieties of Spanish, the suffix *-ada* seems to be an appositive plural when applied to last names: *la camachada* would refer to the family formed by *Camacho* family members, with primarily a group reading.

non-homogeneity does not apply. In Dékány’s feature separation, non-homogeneity is encoded in a separate feature, but again, one could conceive of languages in which that feature is absent and the group-reference remains. In fact, I believe this is the situation with Spanish last names that lack the non-homogeneity feature, yielding a group reading that does not require a focal reference.

3.2. First and last names

The analysis developed so far does not explain the differences between first and last names observed in section 2. Recall that last names show the singular/plural alternation that corresponds to a group-like or additive reading respectively, whereas first names do not show that alternation, and have to be plural, like common nouns. At first sight, there is no reason to believe that first and last names differ semantically, whether one believes they are type <e> or whether their meaning comes from a naming predicate (Matushansky 2006; 2008; Ghomeshi & Massam 2009). In this section, I will propose an important structural difference: last names include a null N, whereas first names do not.

Bernstein, Ordóñez & Roca (2019) note that the honorific *don/doña* ‘mister/miss’ can only appear in singular with first names (see (35)), an observation that Saab (2021) derives from the proposal that proper names lack a Num head.⁷

- (35) a. doñ-a Ana
 HON-F.SG Ana
 ‘Ms. Ana’
 b. *doñ-a-s Ana(-s)
 HON-F.PL Ana(-PL)

The interesting point about *don/doña* in the current context is that for many speakers, *don/doña* cannot appear with last names, as seen in (36). A search of several Spanish corpora (CREA, Corpus del español, Corpus del Español Mexicano Contemporáneo) found over 7,000 tokens of *don/doña*, all of them followed by first names, none by a last name, suggesting that for many speakers *don/doña* is only possible with first names. The name of the characters in the famous Mexican TV series, *el chavo del 8*, illustrates this point, all of the characters with *don/doña* are followed by a first name (*don Ramón, doña Florinda, doña Clotilde*), and the only last name with an honorific uses *señor* ‘mister’ (*el señor Barriga*).

- (36) a. *don Velasco
 HON.M.SG Velasco.SG

⁷ The ultimate reason why the honorific is incompatible with a category headed by Num is not obvious. Honorifics can be plural, as in the case of *los señores González* ‘the Mr-PL Gonzalez’ in Spanish.

- b. *don-es Velasco(-s)
 HON.M-PL Velasco(-PL)

An anonymous reviewer finds (36) grammatical, suggesting the dialectal variation. It is possible that *don/doña* has different properties for this group of speakers. In this sense, *don* appeared in examples without a complement in the corpus, for example *dígame, don* ‘tell me, sir’. In this example, it looks like *don* has properties closer to *señor/señora* ‘sir/madam’, which can appear with last names across dialects (see also Berstein, Ordóñez & Roca 2019 on the historical evolution of honorifics in Romance).

For varieties that show the pattern in (36), restricting *don/doña* to first names, if the honorific requires a numberless nominal head, as Saab (2021) proposes, the ungrammaticality of (36) suggests that the complement of *don/doña* does not have those properties. I suggest that the last name appears with a null category, such as the one in (37).⁸

- (37) los e Velasco
 the Velasco

What is the nature of this null category? Spanish has a productive type of nominal ellipsis, illustrated in (38), where the null element is interpreted as *análisis* ‘analysis’ in (38)a and as *libro* ‘book’ in (38)b. Importantly, the determiner does not require the same number feature as the antecedent, as illustrated in (38)b, where the determiner *los* is plural but the antecedent *libro* ‘book’ is singular. In this sense, the relationship between the determiner and the antecedent shows the same kind of mismatch as the determiner and the last name.

- (38) a. El e_i de Pérez es un excelente análisis.
 the e of Pérez is an excellent analysis
 ‘Perez’s is an excellent analysis.’
 b. el libro_i azul y los e_i rojos
 the.SG book.SG blue.SG and the-PL e red-PL
 ‘The blue book and the red ones’

While last names and nominal ellipsis share the possibility of a mismatch in number, the nature of the null categories in (37) and (38) must be different, because of the distribution of word markers with indefinite determiners. When the elided DP is headed by an indefinite determiner, as in (39), the determiner must include a gender or word-marker vowel (*un-o* ‘a-M’ / *un-a* ‘a-F’),

⁸ Saab & Lo Guercio (2020) propose that predicate uses of proper names have a null head with the feature [human]. The current proposal shares the idea of a null head, although I do not necessarily assume that its presence is related to the predicative vs. referential use of the last name. Furthermore, I believe the presence of the feature [human] derives from the associative meaning, as in other languages with overt associative marking.

as seen in (39)a vs. (39)b (Bernstein 1993a). With last names, the pattern is the opposite: the only possibility is *un* and not *un-o*, as seen in (40).

- (39) a. l-o-s libr-o-s de Marta y un-o e de Miguel
 the-M-PL book-M-PL of Marta and one-M.SG e of Miguel
 ‘Marta’s books and one of Miguel’s’
 b. *l-o-s libr-o-s de Marta y un e de Miguel
 the-M-PL book-M-PL of Marta and one.SG e of Miguel
- (40) a. *Llegaron l-a-s García(s) y un-o/a e Velasco.
 arrived the-F-PL García(PL) and one-M/F e Velasco
 b. Llegaron l-a-s García(s) y un e Velasco.
 arrived the-F-PL García(PL) and one.SG e Velasco
 ‘The Garcia (women) and a Velasco arrived.’

This difference suggests that the null category associated with last names includes the word-marker head, whereas the nominal ellipsis null category does not. The presence of this null category may explain another interesting difference between first and last names. A few first names can alternate between masculine and feminine, as shown in (41). The masculine can be unmarked for the masculine as *Juan* in (41)a, optionally unmarked as *Jesús* in (41)b, or marked with an *-o* as *Alejaⁿdr-o* in (41)c. In all three cases, the feminine appears with *-a*. Last names never alternate in this way, as seen in (42)–(43). Thus, although last names can end in *-a* (*Moya*) or in *-o* (*Velasco*), they do not ever alternate between the two, as shown in (42)b–(43)b. In this sense, the last names *Moya* and *Velasco* can refer to masculine or feminine referents, as signaled by the determiner. If gender is associated with a null category in first names, as Saab & Lo Guercio (2020) propose, these data would suggest that the null category I have proposed for last names is minimally different in lacking gender.

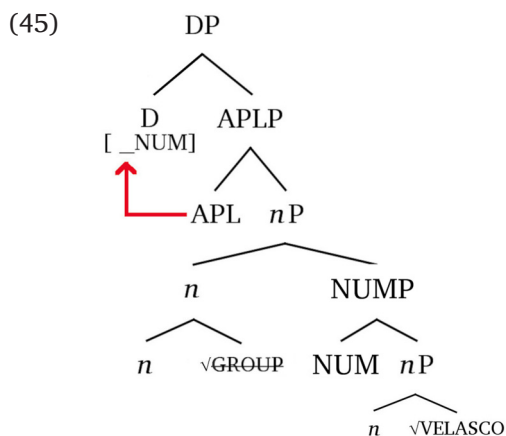
- (41) a. Juan, Juan-a
 Juan.M Juan-F
 b. Jesús(o) Jesus-a
 Jesus(M) Jesus-F
 c. Alejaⁿdr-o Alejaⁿdr-a
 Alejaⁿdr-M Alejaⁿdr-F
- (42) a. l-o-s/l-a-s Moya
 the-M-PL/the-F-PL Moya
 b. *l-o-s/*l-a-s Moyo
 the-M-PL/the-F-PL Moyo

- (43) a. l-o-s/l-a-s Velasco
 the-M-PL/the-F-PL Velasco
 b. *l-o-s/*l-a-s Velasca
 the-M-PL/the-F-PL Velasca

In terms of its content, the last name null head has the meaning of Kratzer's (2009) [group] in (44), which in turn allows it to be selected by the APL head. In this sense, the null head is similar to the pronominal head postulated for pluringuars like *committee* in British English (cf. den Dikken 2001), but surprisingly, that null plural head is absent from the Spanish counterparts *grupo* 'group' or *comité* 'committee', which do not have any overt plural properties.

- (44) $[[[\text{group}]]]^{s,c} = \lambda x. \text{Group}(x)(c)$

Putting these observations together, the resulting structure for last names is presented in (45), where the null element is represented with a crossed-out root. I will return to the relationship between the null nominal and NUMP in section 3.4.



3.3. Obligatory plural last names

I now turn to the two contexts that require obligatory plurals for all speakers, namely bare last names in complement position and bare last names with numerals. The first context was illustrated for last names in (15), repeated as (46), in the context of a differentially marked object. Notice that (46)b is grammatical if the last name is interpreted as singular, but not in the relevant plural reading.

- (46) a. Eligiero-n a Velasco-s.
 elected-PL DOM Velasco-PL
 'They elected Velascos.'

- b. #Eligiero-n a Velasco.
elected-PL DOM Velasco.SG

These examples are interpreted with an additive reading, specifically, they cannot mean that the family Velasco was elected as a group, but rather that individuals named Velasco were elected. This suggests that the last name appears with lower NUM head, and the plural -s instantiates NUM and possibly APL as well, since D is absent. This would be consistent with the impossibility of interpreting (46)b as a plural, since in that case the plural would not be recoverable from the surface form in any way, given the absence of an overt determiner.

The second environment in which last names and brand names are obligatorily plural involves numerals. Recall from the presentation of the examples in (16) that when a numeral appears, some speakers require singular marking and others require plural marking on the last name. This second group of speakers is illustrated in (47).

- (47) a. Cinco Velasco-s llegar-on a la reunión.
five Velasco-PL arrived-PL to the gathering
b. *Cinco Velasco llegar-on a la reunión.
five Velasco.SG arrived-PL to the gathering
'Five Velasco family members arrived to the meeting.'

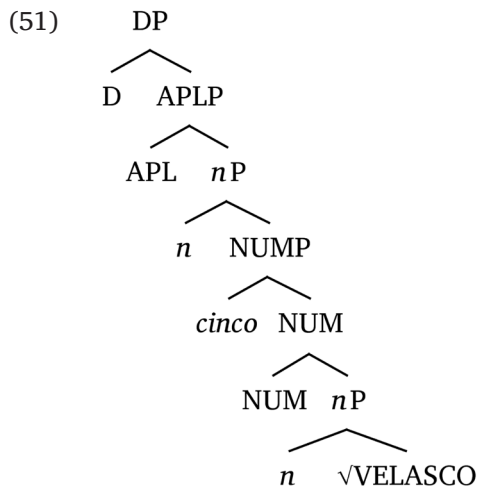
The proposal for the group of speakers that only accept a plural last name with a numeral is that a numeral must merge with a plurally specified NUM head for semantic reasons. This same pattern can be observed with common nouns in (48).

- (48) a. *cinco niño
five child.SG
b. cinco niño-s
five child-PL
'five children'

As seen in (49)–(50), the numeral can only appear to the right of an overt determiner with common nouns and with last names. This order indicates that the determiner is structurally higher than the numeral. I suggest that the numeral merges with a plural NUM as shown for last names in the structure in the structure in (51). Since NUM overtly realizes plurality, the pattern in (48) follows.

- (49) a. la-s/una-s cinco niña-s
the-PL/some-PL five girl-PL
'the/some five girls'

- b. *cinco la-s/una-s niña-s
 five the-PL/some-PL girl-PL
- (50) a. la-s/una-s cinco Velasco-s
 the-PL/some-PL five Velasco-PL
 ‘the/some five Velasco (women)’
- b. *cinco la-s/una-s Velasco-s
 five the-PL/some-PL Velasco-PL

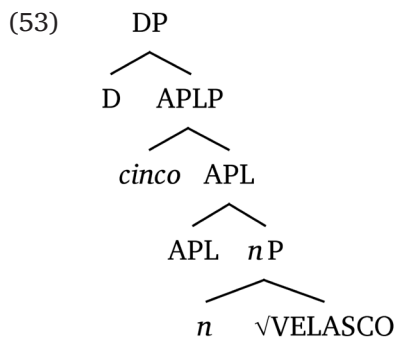


This structure correctly predicts that it should still be possible to get a plural D in those cases, as seen in (52).

- (52) L-o-s cinco Velasco-s llegar-on a la reunión.
 the-M-PL five Velasco-PL arrived-PL to the gathering
 ‘The five Velascos arrived at the meeting.’

For the subset of speakers who have a preference for a singular last name (i.e. the opposite pattern to the one in (47)), one possible account would be that the numeral merges higher than NUM, namely with APL, as seen in (53). In that case, the difference between both dialects is the type of plural that the numeral requires. For the speakers that require a plural last name, the numeral requires a head that denotes an additive plural, whereas for the speakers that allow for a singular last name, the numeral only requires a head that denotes a pseudo-additive plural, as in the structure in (53). In those cases, following the analysis proposed, NUM is not present and the last name therefore appears as singular (cf. Dékány 2011: Chapt. 9.5 for a proposal to derive plurality in two different ways).⁹

⁹ For this account to be right, it is crucial that APL is restricted to last names, because common nouns must be plural with numerals in all dialects.



This analysis also predicts that the DP should be plural, as we see in (54), because APL has a group interpretation with a pseudo-partitive reading, as described earlier.

- (54) L-o-s cinco Velasco llegar-on a la reunión.
 the-M-PL five Velasco.SG arrived-PL to the gathering
 ‘The five Velascos arrived at the meeting.’

3.4. Last names and N-N compounds

The agreement patterns observed for last name DPs resemble those of N-N compounds such as *mujer-araña* ‘spider-woman’ (cf. Kornfeld 2009, Licerias, Klassen & Contro Castaldo 2020, Moyna 2011, Piera 1995, Toquero-Pérez 2020). In Licerias et al.’s (2020) study, monolingual speakers of Spanish strongly preferred marking plurality on the first noun, followed by marking it on both, while the least preferred option was marking it only the right-hand N, as the numbers in parenthesis in (55) indicate on a scale of 1–5.

- (55) a. *mujere-s-araña* (3.8)
 woman-PL-spider.SG
 ‘spider-women’
 b. *mujere-s-araña-s* (2.4)
 woman-PL-spider-PL
 ‘spider-women’
 c. **mujer-araña-s* (2.1)
 woman.SG-spider-PL

The plural marking pattern in (55) mirrors the distribution of plural marking in last names, as schematized in (56): in both cases, plural marking is obligatory on the left-hand N in the compound or the null N in last name structure; marking of both Ns or the determiner and last name is slightly less preferred, and marking of the right-hand N or the last name only is the least preferred option.

- (56) a. **Last names:** [N_{∅PL} Velasco_{SG}] ?[N_{∅PL} Velascos_{PL}] *[N_{∅SG} Velascos_{PL}]
 b. **N-N compounds:** [mujeres_{PL} araña_{SG}] ?[mujeres_{PL} arañas_{PL}] *[mujer_{SG} arañas_{PL}]

The parallelism between last names and N-N compounds further extends to cases such as (57), which illustrates the possibility of intensifying the meaning of a name by repeating it and stressing the first token. These reduplicated sequences show an identical pattern to the preceding ones: the first N can be singular or plural, as in (57)a-b, but pluralizing the second one is dispreferred, as in (57)c. This pattern suggests that the first iteration of the last name is the head, as with compounds.¹⁰

- (57) a. Lo-s KENNEDY Kennedy
 the-PL KENNEDY.SG Kennedy.SG
- b. Lo-s KENNEDY-S Kennedy
 the-PL KENNEDY.PL Kennedy.SG
- c. *Lo-s KENNEDY Kennedy-s
 the-PL KENNEDY.SG Kennedy-PL
 ‘The real Kennedys’

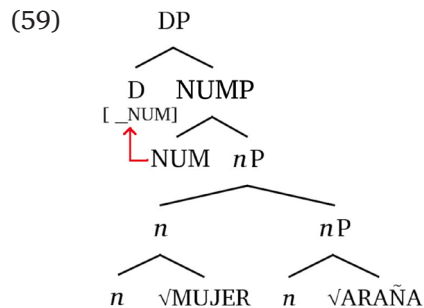
The traditional explanation for the left-headed N-N plural-marking pattern is that the plural morpheme is attached to the N-head, which, as suggested, is on the left (cf. Piera 1995). Because of this directionality, an analysis of N-N compounds as incorporation of one root to the other, along the lines of Harley (2009) cannot be extended to these cases. In this analysis, the second N, *araña* adjoins to the first one, forming a compound root as in (58). This complex would raise to the number head, which would be realized as the *-s* affix attached to the right-edge of *mujer-araña*, as shown in (58)). This result is not what speakers consider most acceptable. Furthermore, to derive *mujeres-araña*, the preferred option, the head *mujer* would have to raise to the number head before *araña* adjoins to it.

- (58) [[mujer]-[araña]-PL]

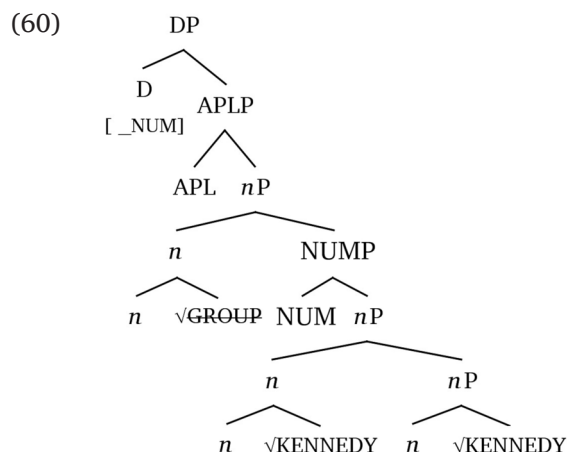
By contrast, number location on the first N fits well with the structure proposed for last names, with a few important differences: N-N compounds have an overt N instead of a null *group*, consequently, the higher number head cannot be an associative plural but a regular plural, because the associative plural is linked to a null *group* and restricted to last names, following the scale in (22). *Mujeres araña* would involve compounding of a single NUM + *nP* with another *nP*, as in (59). NUM values D’s number feature (realized as *-s*), and is also realized on the *nP* *mujer*. Following the syllabic constraints of Spanish, an epenthetic vowel *-e* is inserted, resulting

¹⁰ An anonymous reviewer questions whether the first N is the head of the compound in these reduplicated cases, pointing that in similar cases in English, the first token is a modifier of the second head N: *a KENNEDY Kennedy is a FAMOUS Kennedy*. The same holds for Spanish, with two important differences: the default position for modifiers is postnominal (*un Kennedy famoso* ‘a famous Kennedy’) and N-N compounds are left-headed, unlike the corresponding ones in English, which are right-headed: *police dog*. These two differences make it more plausible to propose that the first token is the head in reduplicative compounds in Spanish.

in *mujeres-araña*. In the case of *mujeres-arañas*, the second *nP* is also dominated by an additional Num head, which then is realized as *-s*.¹¹



In the case of the reduplicated N examples of (57), the structure in (60) combines the last name, which includes the null nominal, with the N-N compound structure. The head of the compound *KENNEDY-Kennedy* is the first *Kennedy*, dominated by NUM. As above, this predicts that the plural morpheme will be affixed to that first N. Above NUM is the structure corresponding to the last name, headed by the null group nominal and its corresponding APL head, which will be realized as a plural morpheme on the determiner. This example corresponds to (57)b.

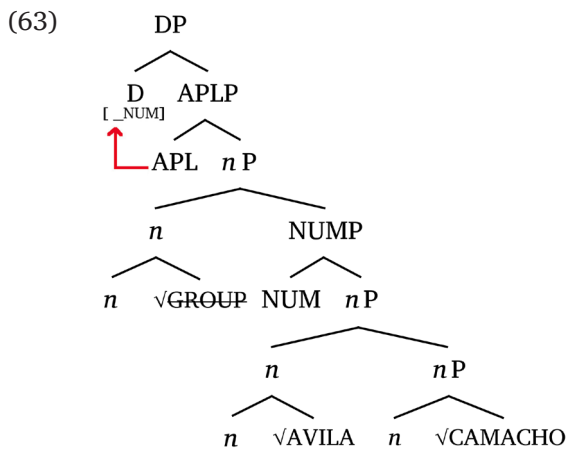
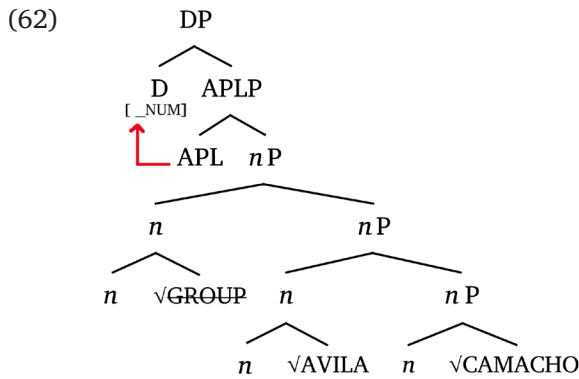


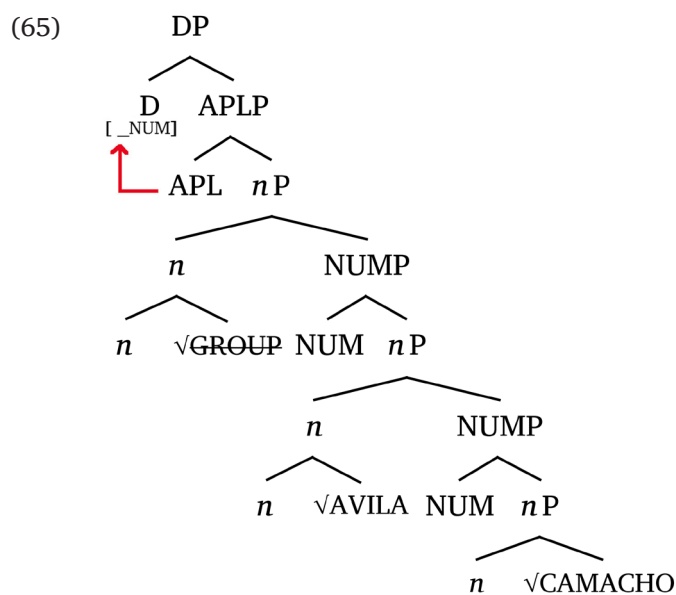
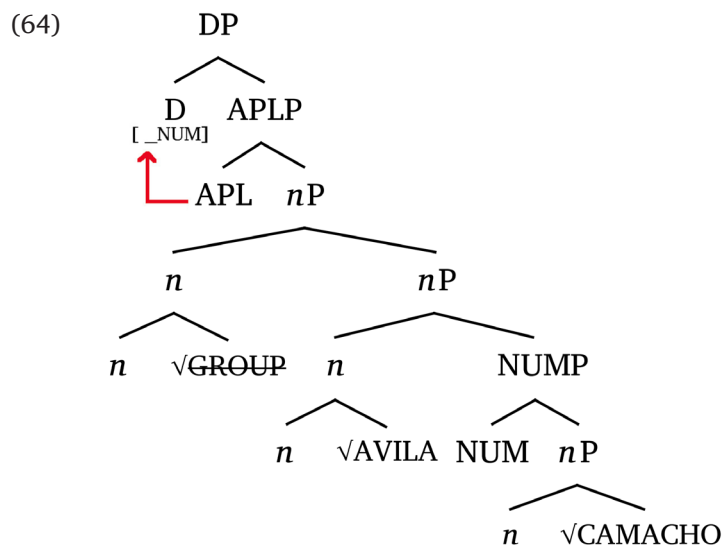
A slightly different pattern arises with cases where the father and the mother's last names are used simultaneously, as is frequent in many Spanish-speaking countries. Once again, the preferred pattern is to mark the plural on the determiner only, as in (61)a, the title of a book about a Mexican political dynasty. The alternatives in (61)b-c are much less frequent, I only found one instance of each in a google search. Marking on both last names, as in (61)d had a few google hits, suggesting it is also possible.

¹¹ The notion of lexical integrity (the morphological units are not accessible to syntactic rules cf. Bresnan & Mchombo 1995, among others) would raise issues with respect to this structure, assuming that *nP* is the relevant lexical integrity domain.

- (61) a. Hermanos generales y gobernante-s. Lo-s Ávila Camacho
 brother- PL general-PL and political.leader- PL the-PL Avila Camacho
 ‘the Avila Camacho’
- b. ?lo-s Ávila-s Camacho
 the-PL Avila-PL Camacho
- c. ?lo-s Ávila Camacho-s
 the-PL Avila Camacho-PL
- d. ?lo-s Ávila-s Camacho-s
 the-PL Avila-PL Camacho-PL

The structure of (61)a would be similar to that of *los Velasco*, with an APLP but without NUM, as seen in (62). (61)b, on the other hand, would be an instance in which *Ávilas Camacho* has the same structure as *mujeres araña*, with the difference that it has the additional null APLP component above, as seen in (63). (61)c, on the other hand, corresponds to a compound that joins constituents at the *n*-level, where the plural is attached to the full compound, as in (64). This alternative does not seem to be productively available for regular N-N compounds. Finally, (61)d corresponds to the merger of two Num levels, dominated by APLP, as in (65).





Appositive examples involving kinship terms such as the ones in (66) include a last name and exemplify the connection between N-N compounds and last name. These cases share some properties of N-N compounds in the sense that the preferred pattern is to have plural morphology expressed on the first N only, as shown in (66)a, or on both, as in (66)b, which are attested examples referring to two famous sisters in Dominican history. The common noun cannot be singular in these cases, as seen in (66)c-d, unlike with single last names, as seen in (67).

- (66) a. la-s hermana-s Mirabal
 the-PL sister-PL Mirabal.SG

- b. la-s hermana-s Mirabale-s
the-PL sister-PL Mirabal-PL
- c. *la-s hermana Mirabal
the-PL sister.SG Mirabal.SG
- d. *la-s hermana Mirabale-s
the-PL sister.SG Mirabale-PL
'the Mirabal sisters.'
- (67) a. la-s Mirabal
the-PL Mirabal.SG
- b. la-s Mirabale-s
the-PL Mirabal-PL

This unavailability of (66)c-d follows from the independently proposed structural difference between N-N compounds and last names: compounds have NUM which values D and is attached to the closest *nP*, so if NUM is plural, it must appear on the common noun. Plural last names, on the other hand, have the additional null category related to the associative plural, so the associative plural appears on D.

3.4.1. On the relationship between compounding and last names

The previous section has presented evidence that N-N compounds have a similar distribution as last names with respect to plural marking, which raises the question of what connects them. I suggest that the connection stems from the semantic relationship that both N-N compounds and last names share. I further argue that this semantic relation may be syntactically instantiated, following den Dikken (2006).

The relationship between the null nominal and the last name is parallel to that of N-N compounds from a semantic perspective as well. The last name resembles a restrictive clause: 'the family that is Velasco', just as the N-N compound *mujer-araña* 'spider-woman' is 'a woman who is like a spider.' Toquero-Pérez (2020) has identified about a dozen types of semantic relationships between the two nouns in an N-N compound, which include resemblance, location, possession, cause, etc. Arguably, these are subsets of a more abstract predication. In fact, Guevara & Scalise (2009: 107) propose that compounds involve an implicit grammatical relationship between the constituents [X R Y], which is not spelled out by any lexical item. According to them, when R is explicit, the full phrase is no longer a morphological compound. In a similar vein, Gaeta & Ricca (2009) distinguish morphological compounds (*honeymoon*) from syntactic phrases (*luna de miel* 'moon of honey' 'honeymoon'). Let us then assume, following these authors, that the primitive [X

R Y] relationship can be spelled out in at least two different ways: as an N-N compound or as a syntactic phrase of the type N of N.

This general approach is in the same spirit as den Dikken (2006), who proposes that a syntactic relator mediates a primitive predication between a subject and predicate. This relator can be instantiated in a number of ways, depending on the language and the construction. For example, Den Dikken (2006) considers all the examples in (68) as instances of a primitive predication in which the order of the subject and the predicate varies (Pred-S in (68)a, S-Pred in (68)b–d) and whether or how the relator is overtly instantiated as *es* ‘is’ or *de* ‘of’ or not explicitly realized, as in (68)c.

- (68) a. El tonto de Santiago
the dumb of Santiago
‘Dumb Santiago’
- b. Santiago es tonto.
Santiago is dumb
‘Santiago is dumb.’
- c. Considero a Santiago tonto.
consider DOM Santiago dumb
‘I consider Santiago dumb.’
- d. I consider Santiago to be dumb.

This proposal suggests a way to capture the commonality between last names and N-N compounds. Following den Dikken (2006), they both involve predicational relations syntactically realized as a Relator. For N-N structures, the first N would be in the specifier of RP, and the second one in the complement position. For last names, the null nominal in the last name would be in the specifier of RP, and the last name would be the complement.

3.5. Crosslinguistic patterns

In this section, I briefly survey crosslinguistic patterns of last name pluralization. Given the analysis proposed, we expect variation along at least two different dimensions: first, is there a formal distinction between group and additive readings? Second, is that distinction formalized through a specialized associative morpheme? Based on these two dimensions, we can establish the preliminary crosslinguistic classification in **Table 2**.

The proposed analysis for Spanish can be extended to different languages that mark last-name plurality through a morpheme, particularly if they show the associative and pseudo-additive interpretations. If that is the case, last names would generally have an associative-related functional head that establishes the semantic interpretations discussed earlier. Morphological

Yes		No
Dedicated morphology	Non-dedicated morphology	
Akan, Basque, ¹² Gitksam, Hungarian, Japanese, Magahi, Hindi, Persian	Brazilian Portuguese, Quechua, Spanish, Turkish	Catalan, ¹³ Dutch, English, Hindi, Italian, Magahi, Mandarin ¹⁴

Table 2: Morphological distinction between singular and plural last names.

expression of this high plural head will vary: Spanish, Brazilian Portuguese and Turkish express it through regular plural morphology, whereas Basque, Gitksam, Hungarian, perhaps Hindi, Japanese and Persian have distinct associative morphemes. In languages like Dutch, English, Italian and Catalan, plural morphology presumably also realizes the high plural head, but lower NUM is not realized.¹⁵ As presented earlier, Dékány (2021) argues that the reason why associativity is realized with regular plural morphology may be that the non-homogeneity feature is null.

Languages also vary depending on whether the associative plural only has a group reading or whether it can be distributive. As mentioned, Turkish only allows collective readings for associative plurals (Görgülü 2011). When *-lar* is interpreted as associative, it can only be interpreted collectively, as shown in (69).

(69) *Turkish* (Görgülü 2011: 75)

Ahmet-ler biz-e gel-di.

Ahmet-PL we-DAT come-PAST

(i) ‘Ahmet and his family/friends/associates came to us together (collective)’

(ii) *‘Ahmet and his family/friends/associates came to us at different times (distributive)’

¹² The nationality and occupation suffix *-foɔ* is used to pluralize last names in Akan (Augustina Owusu, p.c.), and similarly place-of-origin *-(t)arrak* signals plurality in Basque (Leire Escalada and Gorka Elordieta, p.c.).

¹³ Like the more restrictive version of Spanish, Catalan allows for a plural determiner and a singular last name, with the exception of dynasties, where plural is possible (Francesc Roca, p.c.)

¹⁴ Mandarin can convey the associative and pseudo-additive meaning through the *-ren* ‘person’, although the preferred form for the pseudo-additive meaning involves modification with *de* (Xuehua Xiang, p.c.):

(i) Chen-jia-ren dou shi hao-ren.
Chen-family-person all COP good-people
‘The Chen family are all good people.’

(ii) xing Chen de ren’
surname Chen de person
‘People named Chen’

¹⁵ Quechua *-kuna* does not semantically behave like a typical plural (Liliana Sánchez, p.c.), so I leave it aside for now.

Spanish, on the other hand, allows for a distributive interpretation in either case (cf. (13)). One important difference between both languages is that Spanish shows independent plural marking on both the determiner and the last name, which I have suggested, signals independently available NUM for the last name. It is therefore possible that the relevant difference between both languages is the availability of the lower-level NUM head. If so, this would mean that the cases of $D_{PL} - N_{SG}$ also involve NUM for the last name, but that it is spelled out as singular.

Another possible difference relates to the relative position of APL in Turkish and Spanish. In Turkish, Görgülü shows that *-lar* is higher than the genitive/possessive marker with proper names and lower with common nouns. Dékány (2021: 224) argues that the same structural difference holds for Hungarian.¹⁶ In fact, Görgülü (2011) and Dékány (2021: 224) argue that APL is higher than D. If that is the case, the group denotation takes scope over any possible distributive operator in Turkish and Hungarian, but not in Spanish.

Finally, languages seem to vary with respect to whether a null nominal appears with first names. In the proposed analysis, first and last names in Spanish are distinguished by the presence of the null nominal, because, as we saw, they show different distributions in important respects, specifically in the fact that first names do not show the $D_{PL} - N_{SG}$ pattern. However, other languages do not show differences between first and last names (Japanese, Akan to a certain extent), so presumably no null nominal is present.

Note, incidentally, that the definite determiner does not seem to play a direct role in the interpretive facts. Some of these languages have plural definite determiners (Spanish, Brazilian Portuguese, Italian, etc.), whereas others do not (Akan, Japanese, Turkish, for example). This seems to argue against accounts of plurality that rely on a primary partition between languages with determiners and those without (cf. Chierchia 1998).

4. Conclusion

Based on the distribution of plural last names, this paper proposes the extension of the associative plural overtly found in languages like Yup'ik to Spanish. I have also argued that the different features connected to associativity (group-interpretation and non-homogeneity) are partially independent of each other, and that non-homogeneity is absent in Spanish. In line with previous studies on associativity, the data from Spanish plural last names is best seen as involving two separate locations for plurality: on the one hand, a lower one, overtly realized when syntactically present, forces an additive meaning; on the other hand, the higher

¹⁶ The higher APL position may explain the unexpected suffix *-e* that precedes the plural suffix in Greek, if the suffix represents a functional projection that separates the regular plural from the associative one.

associative, realized on the determiner, produces a group reading. In line with previous work, I derive the pseudo-additive reading from the semantic interpretation of the feature *group*. This feature introduces a single participant and derives membership in the group from a contextually defined relationship. In some cases, this relationship is based on family-ties, in others, on some other link between group members. I have also suggested that associative plurality is expressed on a null head in Spanish, with different properties from other null nominal heads found in this language.

The structure of plural last names shows interesting parallelism with N-N compounds that have similar plural marking patterns. I have suggested these similarities derive from a common semantic predication structure realized as a relator phrase, with the null associative head and the first N as subjects of this predication, and the last name and the second N as predicates, respectively. However, one important difference between them is the type of plural involved: only last names have an associative plural, N-N compounds have a regular plural, and this difference becomes apparent in appositive structures that combine a kinship term and a last name.

Finally, the paper proposes a taxonomy of last-name plural marking that divides languages into two classes: those that overtly mark associativity and those that do not encode associativity. The first type of language may instantiate associativity through a specialized morpheme that encodes a high plural with group-semantics (including pseudo-additive), or do so with regular plural morphology. Independently of this associative plurality, these languages express additive plurality with a regular plural, typically lower than the associative. The second type of language lacks associativity altogether, although if associative group semantics underly the structure of plural pronouns, as argued by Kratzer (2009), then this last type of language would simply be an instance where associativity does not reach the highest point in the scale in (22).

Whether the associative null nominal category in Spanish is a requirement for associative plurality or just a property of Spanish remains an open question. As far as I know, silent heads have not been proposed in the context of associative plurals in other languages, perhaps with the exception of Dékány's (2021) suggestion that the non-homogeneous feature may be null in Turkish, so I am inclined to think that a null head is not a necessary condition for associativity. On the other hand, the properties of this head are different from potential overt counterparts, in particular *comité* 'committee' or *grupo* 'group', suggesting that the null category not only encodes plurality, but it encodes associative plurality.

Several issues remain open, for one is there a principled, derivable reason for the fact that the scale in (22) constrains associative plurality? A second important question is what are the differences between an additive and a pseudo-additive reading? We have seen that Turkish does

not allow for distributive readings, but Spanish does, and I have also suggested that numerals may combine with the additive plural in some varieties of Spanish and with the pseudo-additive plural in others, but are there principled differences between them? Dékány (2011: Chapt. 9.5, quoted in Dékány 2021: 76) suggests that there may be two ways to arrive at non-atomic reference, either creating multiple individuals one at a time (additive interpretation) or creating a group of individuals in one fell swoop, via a [-atomic] or [group] feature (pseudo-additive interpretation), and these two modes may derive the distribution of numerals more generally.

Abbreviations

DOM = differential object marking, DU = dual, EPEN = epenthetic vowel, F = feminine, M = masculine, PL = plural, POSS = possessive, SG = singular, SUFF = suffix

Acknowledgements

Several people have greatly contributed to the development of this paper, first and foremost, three anonymous reviewers, whose detailed comments were instrumental in revisions of the initial version. Éva Dékány, Clarissa Forbes and Phoebos Panagiotidis have been extremely kind and patient discussing Hungarian, Gitksan and Greek data. Versions of this paper were presented virtually at the Morphology and Syntax Workshop (University of Chicago) and WCCFL 39 (U. of Arizona). I am grateful to the audiences for comments. Additionally, many people have contributed with judgements, comments, clarification, ideas, etc. In alphabetical order, Deepak Alok, Hiroshi Aoyagi, Karlos Arregi, Ümit Atlamaz, Laura Collantoni, Roberta D'Alessandro, Veneeta Dayal, Éva Dékány, Marcela Depiante, Marcel den Dikken, Gorka Elordieta, Leire Escalada, Bruno Estigarribia, Clarissa Forbes, Próspero García, Patricia González Darriba, Silvia Gumiel, Sam Jambrović, Ángel Jiménez, Luis López-Carretero, Gabriel Martínez Vera, Jason Merchant, Marcello Modesto, Andrés Napurí, Francisco Ordóñez, Augustina Owusu, , Silvia Pérez-Cortés, Isabel Pérez Jiménez, Jorge Pérez Silva, Françesc Roca, Miguel Rodríguez Mondoñedo, Andrés Saab, Liliana Sánchez, Roger Schwarzschild, Laura Stigliano, Xuehua Xiang and Pablo Zdrojewski. Finally, thanks to Johan Rooryck, the editor of *Glossa*. I thank all of them for their time and patience, all errors are mine.

Competing Interests

The author has no competing interests to declare.

References

- Alexiadou, Artemis & Haegeman, Liliane & Stavrou, Melita. 2007. *Noun phrase in the generative perspective*. Berlin: Mouton de Gruyter. DOI: <https://doi.org/10.1515/9783110207491>
- Baker, Mark. 2008. *The syntax of agreement and concord*. Cambridge: Cambridge University Press. DOI: <https://doi.org/10.1017/CBO9780511619830>
- Bernstein, Judy. 1991. DPs in French and Walloon: Evidence for parametric variation in nominal head movement. *Probus* 3(2). 101–126. DOI: <https://doi.org/10.1515/prbs.1991.3.2.101>
- Bernstein, Judy. 1993a. The syntactic role of word markers in null nominal constructions. *Probus* 5(1–2). 5–38. DOI: <https://doi.org/10.1515/prbs.1993.5.1-2.5>

- Bernstein, Judy. 1993b. *Topics in the syntax of nominal structure across Romance*. New York, NY: City University of New York dissertation.
- Bernstein, Judy & Ordóñez, Francisco & Roca, Francesc. 2019. On the emergence of personal articles in the history of Catalan. In Bouzouita, Miriam & Breitbarth, Anne & Danckaert, Lieven & Witzense, Elisabeth (eds.), *Cycles in language change*, 88–107. Oxford: Oxford University Press. DOI: <https://doi.org/10.1093/oso/9780198824961.003.0006>
- Bobaljik, Jonathan David. 2017. Distributed morphology. In *Oxford research encyclopedia of linguistics*. Oxford University Press. Retrieved from <http://oxfordre.com/linguistics/view/10.1093/acrefore/9780199384655.001.0001/acrefore-9780199384655-e-131>. DOI: <https://doi.org/10.1093/acrefore/9780199384655.013.131>
- Borer, Hagit. 2005. *Structuring sense: Volume I: In name only*. Oxford University Press. DOI: <https://doi.org/10.1093/acprof:oso/9780199263905.001.0001>
- Bresnan, Joan & Mchombo, Sam A. 1995. The lexical integrity principle: Evidence from Bantu. *Natural Language & Linguistic Theory* 13(2). 181–254. DOI: <https://doi.org/10.1007/BF00992782>
- Carstens, Vicki. 1991. *The morphology and syntax of determiner phrases in Kiswahili*. Los Angeles, CA: UCLA dissertation.
- Chierchia, Gennaro. 1998. Reference to kinds across language. *Natural Language Semantics* 6(4). 339–405. DOI: <https://doi.org/10.1023/A:1008324218506>
- Corbett, Greville G. & Mithun, Marianne. 1996. Associative forms in a typology of number systems: Evidence from Yup'ik. *Journal of Linguistics* 32(1). 1–17. Retrieved from <http://www.jstor.org/stable/4176343>. DOI: <https://doi.org/10.1017/S0022226700000736>
- Corpus del español. 2012–2019. Mark Davis. <https://www.corpusdelespanol.org/> (accessed 2021/09/15)
- Corpus del Español Mexicano Contemporáneo (CEMC). (<http://www.corpus.unam.mx/cemc>), software AMATE ver. 1.0 (accessed 2021/9/15)
- Daniel, Michael & Moravcsik, Edith. 2013. The associative plural. In Dryer, Matthew S. & Haspelmath, Martin (eds.), *The world atlas of language structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. Retrieved from <https://wals.info/chapter/36>
- Dékány, Éva. 2011. *A profile of the Hungarian DP: the interaction of lexicalization, agreement, and linearization with the functional sequence*. Tromsø: University of Tromsø dissertation.
- Dékány, Éva. 2021. *The Hungarian nominal functional sequence*. New York: Springer. DOI: https://doi.org/10.1007/978-3-030-63441-4_5
- Delfitto, Denis & Schroten, Jan. 1991. Bare plurals and the number affix in DP. *Probus* 3(2). 155–185. DOI: <https://doi.org/10.1515/prbs.1991.3.2.155>
- den Dikken, Marcel. 2001. Plurilinguals, pronouns and quirky agreement. *The Linguistic Review* 18(1). 19–41. DOI: <https://doi.org/10.1515/tlir.18.1.19>
- den Dikken, Marcel. 2006. *Relators and linkers: The syntax of predication, predicate inversion, and copulas*. Cambridge, MA: MIT Press. DOI: <https://doi.org/10.7551/mitpress/5873.001.0001>

- Embick, David & Noyer, Rolf. 2007. Distributed morphology and the syntax-morphology interface. In Ramchand, Gillian & Reiss, Charles (eds.), *The Oxford handbook of linguistic interfaces*,. Oxford: Oxford University Press. DOI: <https://doi.org/10.1093/oxfordhb/9780199247455.013.0010>
- Forbes, Clarissa. 2018. Number, names, and animacy: Nominal classes and plural interactions in Gitksan. In Mathieu, Éric & Myriam, Dali & Zareikar, Gita (eds.), *Gender and noun classification*, 203–233. DOI: <https://doi.org/10.1093/oso/9780198828105.003.0010>
- Gaeta, Livio & Ricca, Davide. 2009. Composita solvantur: Compounds as lexical units or morphological objects? *Rivista di Linguistica* 21. 35–70. Retrieved from <http://hdl.handle.net/2318/133892>
- Ghomeshi, Jila & Massam, Diane. 2009. The proper D connection. In Ghomeshi, Jila & Paul, Ileana & Wiltschko, Martina (eds.), *Determiners: Universals and variation*, 67–96. Benjamins. DOI: <https://doi.org/10.1075/la.147.02gho>
- Görgülü, Emrah. 2011. Plural marking in Turkish: Additive or associative? *Working Papers of the Linguistics Circle of the University of Victoria* 21(1). 70–80.
- Halle, Morris & Marantz, Alec. 1993. Distributed morphology and the pieces of inflection. In Hale, Ken & Keyser, Samuel J. (eds.), *The View from building 20*, 111–176. Cambridge, MA: MIT Press.
- Harley, Heidi. 2009. Compounding in distributed morphology. In Lieber, Rochelle & Štekauer, Pavol (eds.), *The Oxford handbook of compounding*, 129–144. Oxford: Oxford University Press. DOI: <https://doi.org/10.1093/oxfordhb/9780199695720.013.0007>
- Jambrović, Samuel. 2021a. Common names and proper nouns: Morphosyntactic evidence of a complete nominal paradigm. *Proceedings of the Linguistic Society of America* 6. 815–828. DOI: <https://doi.org/10.3765/plsa.v6i1.5022>
- Jambrović, Samuel. 2021b. When roots become names. An issue of locality. Poster presented at the 39th Annual Meeting of the West Coast Conference on Formal Linguistics (WCCFL), University of Arizona, held virtually.
- Kornfeld, Laura Malena. 2009. IE, Romance: Spanish. In Lieber, Rochelle & Štekauer, Pavol (eds.), *The Oxford handbook of compounding*, 145–177. New York: Oxford University Press. DOI: <https://doi.org/10.1093/oxfordhb/9780199695720.013.0023>
- Kratzer, Angelika. 2009. Making a pronoun: Fake indexicals as windows into the properties of pronouns. *Linguistic Inquiry* 40(2). 187–237. DOI: <https://doi.org/10.1162/ling.2009.40.2.187>
- Leonetti, Manuel. 1999. El artículo. In Bosque, Ignacio & Demonte, Violeta (eds.), *Gramática descriptiva de la lengua española* 1. 787–890. Madrid: Espasa-Calpe.
- Liceras, Juana M., Klassen, Rachel & Contro Castaldo, Isabel. 2020. Compuestos n-n y derivación en español y portugués brasileño: en la encrucijada morfológica, sintaxis y semántica. *Revista de Filología* 40. 125–145. DOI: <https://doi.org/10.25145/j.refiull.2020.40.07>
- Lipták, Anikó & Saab, Andrés. 2014. No N-raising out of NPs in Spanish: ellipsis as a diagnostic of head movement. *Natural Language & Linguistic Theory* 32(4). 1247–1271. DOI: <https://doi.org/10.1007/s11049-014-9247-7>

- Mathieu, Éric. 2012. Flavors of Division. *Linguistic Inquiry* 43(4). 650–679. DOI: https://doi.org/10.1162/ling_a_00110
- Mathieu, Éric & Zareikar, Gita. 2015. Measure words, plurality, and cross-linguistic variation. *Linguistic Variation* 15(2). 169–200. DOI: <https://doi.org/10.1075/lv.15.2.02mat>
- Matushansky, Ora. 2006. Why Rose is the Rose: On the use of definite articles in proper names. *Empirical issues in syntax and Semantics* 6. 285–307. Retrieved from <http://www.cssp.cnrs.fr/eiss6/matushansky-eiss6.pdf>
- Matushansky, Ora. 2008. On the linguistic complexity of proper names. *Linguistics & Philosophy* 31(5). 573–627. DOI: <https://doi.org/10.1007/s10988-008-9050-1>
- Moravcsik, Edith. 2003. A semantic analysis of associative plurals. *Studies in Language* 27(3). 469–503. DOI: <https://doi.org/10.1075/sl.27.3.02mor>
- Moyna, María Irene. 2011. *Compound words in Spanish theory and history*. Amsterdam: Benjamins. DOI: <https://doi.org/10.1075/cilt.316>
- Nakanishi, Kimiko & Ritter, Elizabeth. 2008. *Plurality in languages without a count-mass distinction*. Retrieved from https://www.researchgate.net/publication/265918613_PLURALITY_IN_LANGUAGES_WITHOUT_A_COUNT-MASS_DISTINCTION
- Nakanishi, Kimiko & Tomioka, Satoshi. 2004. Japanese Plurals Are Exceptional. *Journal of East Asian linguistics* 13(2). 113–140. DOI: <https://doi.org/10.1023/B:JEAL.0000019058.46668.c1>
- Pesetsky, David & Torrego, Esther. 2001. T-to-C Movement: Causes and consequences. In Kenstowicz, Michael & Keyser, Samuel J. (eds.), *Ken Hale: A life in language*, 355–426. Cambridge, MA: MIT Press. DOI: <https://doi.org/10.7551/mitpress/4056.003.0014>
- Pesetsky, David & Torrego, Esther. 2004. Tense, case and the nature of syntactic categories. In Guéron, Jaqueline & Lecarme, Jaqueline (eds.), *The syntax of time*, 495–538. Cambridge, MA: MIT Press. DOI: <https://doi.org/10.7551/mitpress/6598.003.0021>
- Pesetsky, David & Torrego, Esther. 2006. Probes, goals and syntactic categories. In Otsu, Yukio (ed.), *Proceedings of the Seventh Tokyo Conference on Psycholinguistics*, 25–60. Tokio: Hituzi Syobo Publishing Company.
- Pesetsky, David & Torrego, Esther. 2007. The syntax of valuation and the interpretability of features. In Karimi, Simin & Samiiian, Vida & Wilkins, Wendy (eds.), *Phrasal and clausal architecture: Syntactic derivation and interpretation*, 262–294. Amsterdam: Benjamins. DOI: <https://doi.org/10.1075/la.101>
- Picallo, M. Carme. 1991. Nominals and nominalization in Catalan. *Probus* 3. 279–316. DOI: <https://doi.org/10.1515/prbs.1991.3.3.279>
- Picallo, M. Carme. 2008. Gender and number in Romance. *Lingue e Linguaggio* 7(1). 47–66. DOI: <https://doi.org/10.1418/26709>
- Piera, Carlos. 1995. On Compounding in English and Spanish. In Campos, Héctor & Kempchinsky, Paula (eds.), *Evolution and revolution in linguistic theory. Studies in honor of Carlos P. Otero*, 1–13. Washington, DC: Georgetown University Press.

- Real Academia Española: Banco de datos (CREA) [en línea]. *Corpus de referencia del español actual*. <<http://www.rae.es>> [accessed on 9/5/2021]
- Ritter, Elizabeth. 1988. A head-movement approach to construct-state noun phrases. *Linguistics* 26(6). 909–930. DOI: <https://doi.org/10.1515/ling.1988.26.6.909>
- Ritter, Elizabeth. 1991. Two functional categories in noun phrases. In Rothstein, Susan (ed.), *Perspectives on phrase structure: Heads and licensing*, 37–62. San Diego, CA: Academic Press. DOI: <https://doi.org/10.1163/9789004373198>
- Ritter, Elizabeth. 1992. Cross-linguistic evidence for number phrase. *Canadian Journal of Linguistics/Revue canadienne de Linguistique* 37(2). 197–218. DOI: <https://doi.org/10.1017/S0008413100021952>
- Saab, Andrés. 2021. A short note on honorifics and personal articles in Spanish and Catalan and its consequences for the theory of proper names. *Isogloss.Open Journal Romance Linguistics* 7. 1–14. DOI: <https://doi.org/10.5565/rev/isogloss.142>
- Saab, Andrés & Lo Guercio, Nicolás. 2020. No name: The allosemy view. *Studia Linguistica. A Journal of General Linguistics* 74(1). 60–97. DOI: <https://doi.org/10.1111/stul.12116>
- Schwarzschild, Roger. 2011. Stubborn distributivity, multiparticipant nouns and the count-mass distinction. In Lima Suzi, Mullin & Kevin & Smith, Brian (eds.), *Proceedings of NELS 39*, 661–678. Amherst, MA: GLSA.
- Thomsen, Hanne Erdman. 1997. On the proper treatment of proper names. *Nordic Journal of Linguistics* 20(1). 91–110. DOI: <https://doi.org/10.1017/S0332586500004029>
- Toquero-Pérez, Luis Miguel. 2020. The semantics of Spanish compounding: An analysis of NN compounds in the Parallel Architecture. *Glossa. A Journal of General Linguistics* 5(1). 41. DOI: <https://doi.org/10.5334/gjgl.901>

