

## A NOTE ON THE LOCUS AND FUNCTION OF FORMAL GENDER \*

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**ABSTRACT.** This note tries to assess the syntactic locus of grammatical Gender in the nominal structure with evidence mainly drawn from Spanish. Data from ellipsis resolution and its licensing in a variety of contexts, and for different types of syntactic objects, suggest the conjecture that noun classifying devices, such as grammatical Gender, may constitute the inflectional correlate of hierarchically organized, and possibly universal, nominality descriptors. Such descriptors would be coded in the structural space that, under different theoretical proposals, has been labelled as ‘lexical phase’, ‘first phase’ or ‘little-*n*’ space.

**Keywords:** Gender, number, ellipsis, bare nominals, singularia/pluralia tantum, pronouns.

**RESUMEN:** Esta nota tiene el objetivo de evaluar la posición sintáctica del género gramatical en la estructura nominal principalmente en base a la evidencia que ofrece el español. Los datos relativos a la resolución y legitimación de la elipsis en una variedad de contextos, y para diversos tipos de objetos sintácticos, sugieren la conjetura de que los mecanismos de clasificación nominal, tales como el género gramatical, podrían constituir el correlato flexivo de descriptores de nominalidad organizados jerárquicamente y posiblemente universales. Tales descriptores se codificarían en el espacio estructural que distintas propuestas teóricas denominan ‘fase léxica’, ‘primera fase’ o ‘espacio *n*’.

**Palabras clave:** Género, número, elipsis, nombres escuetos, singularia/pluralia tantum, pronombres.

### 1. A linguistic imperfection?

This paper examines some aspects of nominal inflection. It focuses in particular on noun classification with evidence drawn mainly from Spanish where noun classification surfaces as formal Gender. Under a minimalist lens, this feature is a puzzling grammatical element because it seems uncongenial to the idea of optimal design. Unlike the so-called edge/EPP feature, formal Gender appears to be computationally inert as it does not block or trigger constituent displacement. Unlike structural Case, it does not render an argument active (or visible) for syntactic operations, and it appears to be parasitic on Number for Agreement/checking relations. In Spanish, Gender is also largely unpredictable on the basis of either interpretive or purely formal criteria (see Harris 1981; Roca 1989). The label ‘imperfection’, in the sense given in Chomsky (1995),

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appears to fit such a grammatical category. The present study constitutes an attempt to inquire the possible function of such apparent misfit from optimal design desiderata.

From the point of view of acquisition, an interesting aspect of grammatical Gender is its early learnability in Spanish, which is unexpected given its apparently low, or null, computational profile. The literature on acquisition shows that, despite its apparent lack of computational import, and its very limited semantic content, children are aware of Gender marking quite early in the acquisition stage. By age 2;7/3 on average (Lew-Williams & Fernald 2007), Spanish children know that grammatical Gender is a characteristic trait of nominals. Note that their awareness of the category cannot be confused with, and is independent of, some morphophonological errors they may make in its instantiation with respect to the normative, or adult-like form. Children do not simply take one of the two possible available forms and over-regularize its use for each and every noun. They neither omit grammatical Gender altogether by filtering it out of their production. Its formal relation, albeit limited, with the nouns for animates showing sexual bi-morphism does not foster its acquisition. Franceschina (2005) points out that one clear trend that emerges cross-linguistically is that children do not begin by analyzing the set of sex-related Gender marking and proceed to extend their command to inanimates. Sex-related Gender is not acquired earlier than the purely formal one and, moreover, children ignore this extra-linguistic information, paying more attention instead to syntactic and morpho-phonological cues (Pérez-Pereira 1991).

In the discussion that follows, I examine some syntactic evidence to assess the syntactic locus of Gender features in nominal structures, and conjecture that noun classification simply externalizes, in the inflectional domain of nominals, some basic properties of the linguistic system. I motivate my conclusions on the basis of empirical evidence and recent theoretical proposals that argue for the adoption of a much more abstract conception of syntactic constructs than those we have generally been considering.

## 2. Gender marking in Spanish. A short survey.

As is well known all nouns are assigned one of two possible formal Genders in Spanish, either the so-called ‘masculine’ or the ‘feminine’, which are more or less evenly distributed within the set of nouns (Fuchs et al. 2015). One of the traditionally assumed functions of Gender, or noun class, is that of concord controller (see Hockett 1958; Corbett 1991; Corbett & Fraser 2000). Together with grammatical Number, concord is reflected in the categories syntactically related to the noun, namely determiners, adjectives and some verb forms, as well as anaphoric or bound interpreted pronouns. Consider example (1) in Spanish:<sup>1</sup>

- (1) *Todas las puertas traseras fueron decapadas para poderlas pintar*  
*all<sub>F,PL</sub> the<sub>F,PL</sub> doors<sub>F,PL</sub> back<sub>F,PL</sub> were scraped<sub>F,PL</sub> to can-them<sub>F,PL</sub> paint*  
 ‘All the back doors were scraped in order to be able to paint them’

Grammatical Number, the other inflectional element involved in the alliteration of concord in (1) is a more common and widespread category than Gender

<sup>1</sup> See Matushansky 2013 and all references cited there for a recent overview of different proposals concerning the copy/checking mechanisms involved in concord control.

-or noun class- in the languages of the world, although natural languages use only a few of the possibilities that could logically be used to express Number. The grammatical expression of values for grammatical Number is quite limited, ranging from just the two values singular/plural (as in Spanish or English) up to five (according to Corbett 2006). The possible ways to grammatically express Number can cross-linguistically be formalized by different combinations of features. Harley & Ritter (2002) for example, have proposed that the possibilities can be captured by combining the features [plural], [augmented] and [group]. Be as it may in the case of Number, a cross-linguistic formalization in terms of abstract features is not straightforwardly conceivable in the case of Gender or noun classification systems, for various reasons. A significant percentage of languages of the world do not classify nouns into grammatical types at all, and among the ‘noun classifying/gendered languages’ there is a great deal of variation in the number of classes or types into which languages may classify nouns, ranging from a minimum of two to a dozen or more (Corbett 1991, 2011).

A very brief survey is enough to show that grammatical Gender cannot be related to any interpretive or real-world related property for inanimate nouns in Spanish. The list (2) shows minimal pairs of nouns with the prototypical Spanish terminations /-o/, /-a/ corresponding to the ‘masculine’ and ‘feminine’ classes respectively.<sup>2</sup>

(2)	puerto / puerta ‘harbour’ / ‘door’	pasto / pasta ‘pasture’ / ‘pasta’	libro / libra ‘book’ / ‘pound’
	rumbo / rumba ‘direction’ / ‘rumba’	caso / casa ‘case’ / ‘house’	ojo / hoja ‘eye’ / ‘leaf’

As Gender markers, the terminations /-o/, /-a/ have a number of exceptions. The following nouns show the feminine termination /-a/ but are masculine: *clima* ‘climate’, *día* ‘day’, *dilema* ‘dilemma’, *diploma* ‘diploma’, *esquema* ‘scheme’, *idioma* ‘language’, *mapa* ‘map’, *pentagrama* ‘pentagram’, *planeta* ‘planet’, *problema* ‘problem’, *programa* ‘program’, *teorema* ‘theorem’, and *sistema* ‘system’, among others. To a lesser extent, the opposite also obtains with some feminine nouns with a /-o/ termination: *dinamo* ‘dynamo’, *libido* ‘libido’, *mano* ‘hand’, *nao* ‘ship’). The terminations /-o/, /-a/ can also have a function similar to a derivational morpheme, indicating properties like size (*huerto*<sub>M</sub> ‘vegetable garden’ / *huerta*<sub>F</sub> ‘large vegetable garden’); count *versus* mass (*leño*<sub>M</sub> ‘log’ / *leña*<sub>F</sub> ‘fire wood’); individual *versus* collective denotations (*banco*<sub>M</sub> ‘bank’ / *banca*<sub>F</sub> ‘banking group’); or nouns of professions and the activity being practiced (*veterinario/-a*<sub>M/F</sub> ‘veterinary surgeon<sub>M/F</sub>’ / *veterinaria* ‘veterinary science’). To complete this short survey, consider also that terminations other than /-o/, /-a/ can correspond to either the masculine or the feminine class: *valle*<sub>M</sub> ‘valley’ / *calle*<sub>F</sub> ‘street’; *iris*<sub>M</sub> ‘iris’ / *pelvis*<sub>F</sub> ‘pelvis’; *papel*<sub>M</sub> ‘paper’ / *piel*<sub>F</sub> ‘skin’; *arroz*<sub>M</sub> ‘rice’ / *coz*<sub>F</sub> ‘kick’; *tapiz*<sub>M</sub> ‘tapestry’ / *cicatriz*<sub>F</sub> ‘scar’; *capital*<sub>M</sub> ‘financial resources’ / *capital*<sub>F</sub> ‘capital city’; *frente*<sub>M</sub> ‘war front’ / *frente*<sub>F</sub> ‘forehead’; among many others.

<sup>2</sup> An anonymous reviewer also points out that a phonological account in terms of abstract allomorphy would not make it predictable either.

Formal Gender surfacing with /-o/ /-a/ terminations can also be related to a non-linguistic property or the entity, such as the natural sex of the named individuals (ex. *gato/gata* ‘cat<sub>M/F</sub>’; *juez/jueza* ‘judge<sub>M/F</sub>’; *león/leona* ‘lion/lioness’). However, the relation between this biological trait and formal Gender is not systematic. In a number of cases, nouns for sexed individuals are grammatically either masculine or feminine, as in the so-called epicene nouns: *ballena* ‘whale’, *criatura* ‘creature/baby’, *hiena* ‘hyena’, *jirafa* ‘giraffe’, *oveja* ‘lamb’, *pantera* ‘panther’, or *víctima* ‘victim’, among many others, are grammatically feminine, whereas *hipopótamo* ‘hipopotamus’, *orangután* ‘orangutan’, *topo* ‘mole’, *tiburón* ‘shark’, *avestruz* ‘ostrich’, among many others, are masculine. Similar examples of Gender marking idiosyncrasies can be provided for many other languages having formal Gender systems. Without unnecessarily extending the lists or regularities and exceptionalities, it can be said that grammatical Gender is in large measure unpredictable on the basis of interpretive criteria. As a result, in a large number of cases the grammatical class that a noun belongs to has to be inferred either by morpho-phonological cues or should simply be stored in memory. It may be facilitated in the acquisition stage by cues provided by determiners (*la testuz* ‘the<sub>F</sub> forehead<sub>F</sub> (of an animal)’ / *el avestruz* ‘the<sub>M</sub> ostrich<sub>M</sub>’), diminutive or augmentative morphemes (*valle<sub>M</sub>* ‘valley’/*vallecito* ‘valley-DIMIN.’; *calle<sub>F</sub>* ‘street’/*callecita* ‘street-DIMIN.’; *mano<sub>F</sub>* ‘hand’ / *manaza* ‘hand-AUGM.’), or by modifying adjectives (*diente blanco* ‘white<sub>M</sub> tooth<sub>M</sub>’ / *frente ancha* ‘wide<sub>F</sub> forehead<sub>F</sub>’).

This brief presentation of idiosyncrasies raises questions of how a theory of grammar may account for such absence of systematicity and, in more general terms, how to account for the pervasive variation in noun classifying devices. Either a language may lack such a device (Basque, for example), or nominal classification may surface in a variety of forms. They range from either a purely formal system, as in Spanish, to systems that sort into several domains comprising the types of entities nouns may denote (expressing biological sex or animacy, as well as being a vegetable, a deity, an animal, an object made with a specific component, an atmospheric event or an edible item, among other classifications that, for a number of possible reasons, may historically have been, or still are, relevant to a community of speakers.<sup>3</sup> The overarching question is why languages use a grammatical device such as nominal classification, independently of whether or not it can be realized with such a variety of means. Within a Minimalist approach to grammar, there seem to be two major approaches to account for how variation phenomena should be conceived, leading -roughly speaking- to two major research strategies and procedures. One line adopts the view that Principles of UG allow for spaces of variation by leaving possible options for their realization. Variation is encoded in the properties of features hosted in a universally fixed structure of functional projections. Under that approach, what we may call a Gender/Noun class parameter could perhaps be posited, together with the boundaries within which it may vary. A second approach takes the view that the principles of grammar are not only few but also invariant (that is, not parameterized). Under this second view, language diversity is the result of different externalization paths or realizations within the core components of the system.

<sup>3</sup> See, for example, Déchaine et al. 2014 for the descriptive content of noun class prefixes in Shona (Bantu), or that of prenominal noun classifiers in Kanjobal (Mayan) in Zabala 1990, just to mention only two non-related languages.

I will consider grammatical Gender, or noun classification systems, under this second approach and conjecture that noun classifying devices, together with grammatical Number, possibly are the inflectional correlates of hierarchically organized nominality descriptors coded in the structural space that, according to different theoretical approaches, has been labelled as ‘lexical phase’, ‘first phase’, or ‘little-*n*’ space. My tenet that the expression of formal Gender is inflectional, as grammatical Number is, appears to be at odds with some empirical facts brought up by recent approaches to the lexicon. The following section addresses that issue.

### 3. Gender as a nominalizer

Constructionist approaches have proposed an analytic view of the lexicon by arguing that syntax operates on sub-word elements (Halle & Marantz 1993 et seq.). Under the Distributive Morphology (DM) approach, some studies have suggested relating formal Gender to the requirement of having to assign a categorial label to an otherwise acategorial root. According to this general proposal, categorial labels have the function of assigning an interpretation to the conceptual space encoded by a bare root, which is an element devoid of grammatical properties. Roots are assumed to be unmanageable by the syntactic system unless they are grammaticalized or lexicalized by a categorizer that imposes an interpretive perspective on them. Under that assumption, Gender has been assigned the role of *nominalizer*, that is, the main constituent feature, or property, of a so-called ‘little-*n*’. Glossing over different implementations, what we may call ‘the categorizer hypothesis’ can be represented as in (3). It recasts under a DM approach the traditional tenet that Gender is an inherent nominal feature, without considering it a property of roots or of noun stems (see, among others, Ferrari-Bridgers (2005, 2008); Alexiadou et al. 2007; Lowenstamm 2008; Acquaviva 2009; Kramer 2014; Merchant 2014; Saab (2010, to appear) and Panagiotidis 2015 for different implementations of that general hypothesis).

$$(3) \quad [ \dots [ \underline{n}_{\text{GENDER/NOUN CLASS}} [ \dots \sqrt{\text{ROOT}} ] ] ]$$

This proposal has been adopted to explain the different behavior of Gender and Number in ellipsis contexts. It is well known that nominal ellipsis allows Number mismatches (see Leonetti 1999; Depiante & Masullo 2001; Brucart 2004; Eguren 2010; Nunes & Zocca 2010; Saab 2010; Gallego 2011; Merchant 2014, among others). The examples in (4), where the deleted fragment is within brackets, show that Number mismatches are allowed under deletion:<sup>4</sup>

- (4) a. Los relojes analógicos y el <sup><reloj></sup> digital  
       *the clocks analogical and the* <sup><clock></sup> *digital*  
       ‘The analogical clocks and the digital (one)’  
   b. Una lámpara de madera y tres <sup><lámparas></sup> de metal  
       *a lamp of wood and three* <sup><lamps></sup> *of metal*  
       ‘A wooden lamp and tree metal (ones)’

<sup>4</sup> I will not discuss the many factors involved in licensing ellipsis in Spanish or the syntactic contexts favoring it. See, for a critical overview of different proposals, Ticio 2016.

- c. María admira a su hermana pero Pedro envidia a las <sup><hermanas></sup>  
*Maria admires to POSS<sub>SING</sub> sister but Pedro envies to the<sub>PLUR</sub>* <sup><sisters></sup>  
 suyas  
 POSS<sub>PLUR</sub>  
 ‘Maria admires her sister but Pedro envies his (sisters)’

Exponents of grammatical Number behave like those of Tense and Mood in some deletion contexts in the sense that the deleted material may not inflectionally coincide with that of its phonologically specified antecedent, as in the examples (5). The data observed in (4) and (5) follow the generalization that ellipsis resolution appears to be blind to inflectional morphology (Lasnik 1995, among others):

- (5) a. Yo no toco el violín, pero Juana puede <sup><tocar el violín></sup>  
*I not play<sub>1.SING.PRES.</sub> the violin, but Juana can* <sup><to-play the violin></sup>  
 b. Vosotros protestasteis y Juan no fue capaz <sup><de protestar></sup>  
*you<sub>2.PLUR</sub> complained<sub>2.PLUR.PRES.</sub> and Juan not was able* <sup><to protest></sup>  
 c. Nosotras leemos el periódico pero vosotros no <sup><leeis-2.PLUR el periódico></sup>  
*we<sub>1.FEM.PLUR</sub> read<sub>1.PLUR</sub> the newspaper but you<sub>2.MASC.PLUR</sub> not* <sup><read the newspaper></sup>

Gender alternation is not allowed under nominal ellipsis, in particular if the nominal construction functions as an argument of predication, as shown in (6).<sup>5</sup>

- (6) a. \*Juan admira a su hermana pero Pedro envidia al <sup><hermano></sup>  
*Juan admires to POSS<sub>SING</sub> sister<sub>FEM,SING</sub> but Pedro envies to the<sub>MASC,SING</sub>*  
 suyo <sup><brother></sup>  
 POSS<sub>MASC,SING</sub>.  
 ‘Juan admires his sister but Pedro envies his <sup><brother></sup>,’
- b. (\*)? Juan admira a su hermano pero Pedro envidia a la <sup><hermana></sup>  
*Juan admires to POSS<sub>SING</sub> brother<sub>MASC,SING</sub> but Pedro envies to the<sub>FEM,SING</sub>*  
 suya <sup><sister></sup>  
 POSS<sub>FEM,SING</sub>.  
 ‘Juan admires his brother but Pedro envies his <sup><sister></sup>,’
- c. (\*)? El gato de pelo largo y la <sup><gata></sup> de pelo corto estaban  
*the<sub>MASC</sub> cat<sub>MASC</sub> of hair long and the<sub>FEM</sub>* <sup><cat></sup> *of hair short were*  
 en la azotea  
*on the roof*  
 ‘the long-haired cat<sub>MASC</sub> and the short-haired <sup><cat.FEM></sup> were on the roof’

<sup>5</sup> An anonymous reviewer points out that speakers marginally favor the alternation abstractly represented in (i a), and exemplified in (6 b, c), over the alternation (i b), exemplified in (6 a, d). The difference in acceptability is probably related to the grammatical fact that masculine is the unmarked Gender in Spanish:

- (i) a. (\*)? ... [ ... ANTECEDENT<sub>MASC</sub> ] ... [ ... <deletion<sub>FEM</sub>> ... ]  
 b. \* ... [ ... ANTECEDENT<sub>FEM</sub> ] ... [ ... <deletion<sub>MASC</sub>> ... ]

- d. \*Mientras María admiraba a las actrices cómicas Pedro alababa a  
*while Maria admired to the<sub>FEM</sub> actresses comic<sub>FEM.PLUR</sub> Pedro praised to*  
 los <sup><actores></sup> trágicos  
*the<sub>MASC.PLUR</sub> tragic<sub>MASC.PLUR</sub>*  
 ‘While Maria admired the comic actresses Pedro praised the tragic <sup><actors></sup>’

Under the assumptions represented in the schema (3) for nominal constructions, Gender is not purely inflectional but a constitutive feature of the ‘little-*n*’ category. Any element, such as grammatical Gender, contained in this syntactic space cannot undergo ellipsis if strict identity for the value of Gender is not respected, as is abstractly represented in (7):

$$(7) [ [_{\text{DET}} \dots [_{\text{INFL}} \dots [_{\text{Num}}] [_{\text{n (Gender-A)}} \dots \sqrt{\text{ROOT}} ] ] ] ] \dots [ [_{\text{DET}} \dots [_{\text{INFL}} \dots [_{\text{Num}}] [_{\text{n (Gender-B)}} \dots \sqrt{\text{ROOT}} ] ] ] ] ]$$

/

\*DELETION

/

The representation depicted above, with its corresponding assumptions, descriptively covers the contrasts observed in (4) and (6). Some proponents of that approach include the additional requirement that ellipsis is licensed by a diacritic syntactic feature [E] in the functional head [Num] selecting the ‘little-*n*’ space (see Merchant 2014; Saab (2010, to appear)).<sup>6</sup> Some analyses of constructions containing bare count nouns, like the one exemplified in (8), put into question whether or not these elements are licensed for ellipsis under the diacritic [E] feature hypothesis just mentioned.

- (8) Necesitas *bolígrafo*  
*need.2.SG ballpen*

Bare count nouns appear in the unmarked singular and do not denote individual objects but name kinds -or types- of entities. To denote tokens (or instantiations) of a type, the syntactic category minimally hosting a bare noun merges with Number and with a Determiner, phonologically null or overt, among other possible functional elements.<sup>7</sup> Bare count nominals like the one exemplified in (8) are not licensed by a null Determiner, have no quantificational force, and are not interpreted as singular because they are underspecified for Number. They are subject to very strict distributional conditions in Spanish as they can only be in object position of a restricted class of categories: that of intensional verbs of the types *necesitar* ‘to need’, *buscar* ‘to look for’, *desear* ‘to desire’, *ofrecer* ‘to offer’, *poseer* ‘to possess’, *utilizar* ‘to use’, *pedir* ‘to ask for’, *contratar* ‘to contract’ or *encontrar* ‘to find’; the object of light verbs like *tener* ‘to have’, *llevar* ‘to wear’, *hacer* ‘to do’ or *dar* ‘to give’; and the complement of a handful of prepositions (*en* ‘in’, *a* ‘to’, *sin* ‘without’ or *con* ‘with’, among some others). Examples of such a distribution are in (9 a-c).<sup>8</sup>

<sup>6</sup> Such contextual formulation of the ellipsis operation is reminiscent of the notion of *filter* proposed in Chomsky & Lasnik 1977. The assumption that there is diacritic syntactic feature in Num licensing ellipsis departs from accounts treating this phenomenon as an interface (PF) effect triggered by deaccenting (Tancredi 1992; Chomsky & Lasnik 1993), or from a sideward-like copy and deletion mechanism (Ticio 2016).

<sup>7</sup> See Longobardi 1994; Szabolcsi 1994; Cinque 2005, among others.

<sup>8</sup> See, for references and discussion, the papers in Bosque (ed) 1996.

- (9) a. Juana *busca/ofrece/posee/utiliza* coche  
*Juana looks for/offers/owns/uses car*  
 b. Juan *tiene/lleva* corbata  
*Juan has/wears tie*  
 c. Madurar *en barrica* / Escribir *con pluma* / Quedarse *sin entrada*  
*to ripen in barrel / to write with pen / to remain without ticket*

Espinal 2010 has analyzed them as lacking Determiner and Number projections, arguing that they conform to a bare N structure ('little *n*', following the hypothesis under discussion) in the contexts listed above and abstractly depicted in (10):

- (10) a. ... [VP V<sub>INTENSIONAL/LIGHT</sub> [*n* ...]]  
 b. ... [PP P [*n* ...]]

If bare nouns truly lack an inflectional tier, the syntactic feature [E] that purportedly licenses ellipsis and assumed to be in the functional head [Num] cannot be selected. Even cases like (11) —with no Gender alternation present— should arguably be disallowed. They are, however, grammatical:<sup>9</sup>

<sup>9</sup> An anonymous reviewer suggests that the elided bare count nouns exemplified in (11 a-c) may not constitute instances of ellipsis but cases of indefinite object drop, like the ones examined in Campos 1986. In my view, an analysis of bare count nominals as indefinites with a null determiner, as the reviewer suggests, may not be adequate. Those elements lack any quantificational force, have the lowest possible scope and obey stricter selectional conditions than the bare mass nouns or bare plurals examined in Campos 1986. Bare count nouns, like the ones examined here, are never affected by the shifting operations that are known to characterize indefinites (Carlson 1977): they are unable to shift over verbs of propositional attitude, as shown in (i a); over negation, as shown in (i b); and over some time adverbs or adverbial phrases, as shown in (i c). The English translations under each example provide an approximate interpretation of the constructions in (ii):

- (i) a. Quiere llevar maleta  
*wants<sub>3,SING</sub> to carry suitcase*  
 'S/he wants to be a suitcase carrier'  
 b. No tenemos coche  
*not have<sub>1,PLUR}</sub> car*  
 'We aren't car owners'  
 c. Utilizan pincel repetidamente/muchas veces (para restaurar este tipo de objetos)  
*use<sub>3,PLUR}</sub> brush repeatedly /many times (to restore these types of objects)*  
 'They are recurrent brush users (to restore these types of objects)'

Moreover, and unlike the bare mass nouns and the bare plurals examined in Campos 1986, the nominal gap can appear inside an island such as a complex NP or a sentential subject, as shown in (ii a, b) respectively:

- (ii) a. María decía que Juan aún busca piso mientras Ana hacía correr el rumor de  
*M. was saying that J. still looks for apartment while A. was spreading the rumor (of*  
 que ya tiene <sup>< piso ></sup>  
*that) already has*  
 b. Juan presume de no necesitar corbata pero que nunca lleve <sup>< corbata ></sup> *cuesta de creer*  
*J. boasts about not needing tie but that never wear<sub>3,SING}</sub> is hard to believe*

We can additionally add that bare count nouns cannot undergo processes of backwards anaphora, which are only possible with grammatically referential expressions (see Vergnaud & Zubizarreta (1992) and references cited there):



- (11) a. No llevas corbata, pero tampoco necesitas <sup><corbata></sup> (para asistir a  
*not wear*<sub>2.SING</sub> *tie*, *but neither need*<sub>2.SING</sub> <sup><tie></sup> (to go to  
 la ópera)  
*the opera*  
 ‘You are not wearing (a) tie, but (you) neither need (one) to go to the opera’
- b. Buscan piso aunque ya tienen <sup><piso></sup>  
*seek*<sub>3.PLUR</sub> *apartment although already have*<sub>1.PLUR</sub> <sup><apartment></sup>  
 ‘(They) are looking for (an) apartment although (they) already have (one)’
- c. Juan busca compañera pero no encontrará <sup><compañera></sup> porque  
*Juan looks for companion but not will find*<sub>3.SING</sub> <sup><companion></sup> *because*  
 es un pelmazo  
*is*<sub>3.SING</sub> *a bore*  
 ‘Juan is looking for (a) companion but (he) will not find (one) because  
 (he) is a bore’

Bare noun ellipsis may be licensed by a variety of factors. Some researchers have related it to interpretive requirements on discourse linking, which can be triggered either by adverbs highlighting contrastivity or by application of a notion of “extended partitivity” (Eguren 2010).<sup>10</sup> Independently of these types of constructions and the conditions for their licensing, other questions remain related to how one would account for a number of idiosyncrasies in the expression of Number, as well as some other types of Gender mismatches in ellipsis contexts. I will consider each of these issues in turn.

#### 4. Inherent/lexical Number

As is well known, the morphological realization of Number does not always correspond either to the optional [±plural] realization of countable nouns or to the ‘numeral classifier’ reading of pluralized mass nouns (such as *three wines* or *several coffees*). Consider the cases of *singularia tantum* in the list (12) or *pluralia tantum* in (13 a, b):

- (12) caos, grima, sed, tez, salud, basura, a.o.  
 ‘chaos’, ‘disgust’/‘shivers’, ‘thirst’, ‘complexion’, ‘health’, ‘garbage’

- 
- (iii) \*Como ya *la*<sub>i</sub> he arreglado, podemos conservar el whisky en *barrica*<sub>i</sub>  
*as already it have*<sub>1.SING</sub> *fixed*, *can*<sub>1.PLUR</sub> *preserve the whisky in cask*

<sup>10</sup> The partitive reading of these constructions is evidenced by the Catalan counterparts of examples (11 a-c), which are all ungrammatical if the partitive clitic *en/ne*, is absent:

- (i) CAT a. No portes corbata, però tampoc \*(en) necessites (cf. (11 a))  
 b. Busquen pis, tot i que ja \*(en) tenen (cf. (11 b))  
 c. En Joan busca companya però no \*(en) trobarà perquè és un pesat (cf. (11 c))

The clitic *en/ne* pronominalizing a bare noun is invariable, that is uninflected for Gender and Number. Note however that a bare count noun must be realized in one of the two possible Gender forms (i.e. *corbata* ‘tie’<sub>FEM</sub>, *pis* ‘apartment’<sub>MASC</sub>, *companya* ‘companion’<sub>FEM</sub> in (i a-c). Under the hypothesis being examined, the obligatory expression of Gender in these types of bare count nouns can be attributed to a morphological well-formedness condition blocking bare stems when vocabulary items are inserted (ex.\*/*corbat-/*).

- (13) a. albricias, antípodas, bártulos, celos, modales, víveres, a.o.  
 ‘congratulations’, ‘opposites’, ‘gear’, ‘jealousy’, ‘manners’, ‘provisions’
- b. tijeras, gafas, pantalones, tenazas, ojeras, a.o.  
 ‘scissors’, ‘glasses’, ‘trousers’, ‘pliers’, ‘bags (under someone’s eyes)’

The nouns in (12) can be described as defective for Number just as one could arguably describe epicene nouns like *jirafa* ‘giraffe<sub>FEM</sub>’ or *hipopótamo* ‘hippopotamus<sub>MASC</sub>’ as being ‘masculine defective’ or ‘feminine defective’ respectively. *Singularia* or *pluralia tantum* nouns do not form a natural class, as they display a variety of denotations: among other things, they may refer to collectives, groups of entities lacking discernable boundaries, or items whose integrating parts have either some sort of internal cohesion or form a unique object (Acquaviva 2008). Whatever their denotations, Number cannot be considered purely inflectional in these cases, but must be seen rather as ‘lexical’ or inherent in a similar way to grammatical Gender. Hence, Number is also a good candidate for the ‘little-*n* area’ in these cases, and we could assume that inherent (or ‘lexical’) Number is an abstract independent category in the little-*n* space, as represented in (14).<sup>11</sup> I have labelled it ‘NUMBER’ (small capitals) to facilitate the discussion at this point.

- (14) [DET ... [... [<sub>n</sub> (Gender) ... ‘NUMBER’ ... √ROOT ]]]

This analysis allows us to compare certain cases of Number mismatch with those of Gender under the ‘little-*n*’ hypothesis we are still considering. In Spanish, some *pluralia tantum* expressions of the types (13 b) that denote objects composed of integrating parts such as *tijeras* ‘scissors’ or *pantalones* ‘trousers’, among a few others, have a singular version (ex. *tijera* and *pantalón*, lit. ‘scissor’ and ‘trouser’ respectively). Both versions of the noun do not induce any change in meaning with respect to Number, and one or other may be used according to the dialect, the idiolect, or the register used by the speaker. Ellipsis with alternating Number may show some degrees of unacceptability:

- (15) a. <sup>(??)</sup>Sus pantalones están limpios pero el <sup><pantalón></sup>tuyo está  
 POSS.3.PLUR *trousers* are clean PLUR but the SING yours SING is  
 arrugado y sucio<sup>12</sup>  
 wrinkled SING and dirty SING

<sup>11</sup> I disregard the hypothesis that Number bundles with Gender in the categorizing *n* head, as in the hypothetical representation (i):

- (i) [DET ... [... [<sub>n</sub> (Gender, Number) ... √ROOT ]]]

The above representation recaptures, under the little-*n* approach being discussed, Ritter’s (1993) hypothesis that Gender and Number are hosted in a unique functional head in Romance. Behavioral experiments in language production and comprehension have shown that the two categories have different syntactic representation and different processing loci. See Fuchs et al. (2015) and all references cited there for a recent overview and discussion of the evidence.

<sup>12</sup> Note that the *pluralia tantum* expression *sus pantalones* ‘his/her trousers’ in the antecedent of example (15 a) refers to one piece of clothing, not many. The elided *pluralia tantum* <*tijeras*> ‘scissors’ denotes also a unique object in (15 b). Recall that the possessive in Spanish formally agrees with the formal Gender and Number of the possessed object, not with the Gender and Number of the expression denoting the intended possessor.

‘His/her trousers are clean but yours is wrinkled and dirty’.

- b. <sup>(\*)??</sup> Saca esta tijera de la mesa y pon estas <sup><tijeras></sup> en el cajón  
*remove*<sub>2.SING</sub> *this scissor from the table and put*<sub>2.SING</sub> *these in the drawer*

We could assume that lexical/inherent Number may have a matching correlate in the inflectional domain, as represented in (16):

- (16) [DET ... [INFL ... [Num] ... [<sub>n</sub> (Gender) ... “NUMBER” ... √ROOT ]]]

The hypothesis that an abstract feature, or an abstract projection corresponding to lexical or inherent Number—in the ‘little-*n* area’— has to be related to an inflectional correlate has already been suggested in Acquaviva 2008 for *singularia* and *pluralia tantum* cases exemplified in (12) and (13), as well as for a handful of mass nouns that can display Number alternations. A list of such items in Spanish is provided in (17). Similar examples hold for other languages (see, for example, Tsoulas 2009 for Greek). The constructions in (18) from different languages –and taken from various sources– exemplify the use of the plural version of such mass nouns.

- (17) *nieve/nieves* (‘snow(s)’)      *agua/aguas* (‘water(s)’)  
*lluvia/lluvias* (‘rains(s)’)      *ceniza/cenizas* (‘ash(es)’)  
*sopa/sopas* (‘soup(s)’)      *humo/humos* (‘smoke(s)’),  
*gente/gentes* (‘people(s)’)      *oscuridad/oscuridades* (‘obscurity(es)’)  
*baba/babas* (‘drool(s)’)      *profundidad/profundidades* (‘depth(s)’)

- (18) a. FR. ... où sont les neiges d’antan? [Villon. *Ballade des dames du temps jadis*]  
*where are the*<sub>PLUR</sub> *snows of former times?*

Dans nos obscurités, allume le feu qui ne s’éteint jamais [Com. Taizé]  
*(with)in* *POSS*<sub>1.PLUR</sub> *obscurities light up the fire that extinguishes never*

- b. SP. *Las cenizas de Gabo se repartieron entre México y Colombia* [RPP.4/4/2014]  
*the*<sub>PLUR</sub> *ashes of Gabo were divided between Mexico and Colombia*

*Los humos de soldadura son una mezcla de partículas y gases*<sup>13</sup>  
*the*<sub>PLUR</sub> *smokes of welding are a mixture of particles and gases*

- c. CAT. No s’ha menjat les sopes del plat  
*(s/he) has not eaten the*<sub>PLUR</sub> *soups of the dish*

*Les pluges van causar inundacions de carrers i desbordament de rieres*  
*the*<sub>PLUR</sub> *rains caused floods of streets and overflowing of streams*

- d. ENGL. Exploration of the ocean *depths* has revealed an amazing array of new lifeforms<sup>14</sup>

<sup>13</sup> From ‘El soldador y los humos de soldadura’, accessed at <www.olasan.euskadi.eus>.

<sup>14</sup> From <www.telegraph.co.uk/technology/5309790/htm>.

According to Acquaviva 2008, cases of these types conform to a denotation somewhat similar to the inherent or ‘defective’ Number exemplified above, as the expressions invoke collections, accumulations, aspectual readings, or groups of entities whose occurrence or appearance is indistinguishable. He notes that the alternation does not change the referential properties of these nouns or their countability (because they are all mass nouns), and suggests that Number can be realized in two structural positions. One of them would correspond to the inflectional area and the other would be realized as a constitutive element of the ‘little-*n*’ space, as we have informally represented in (16). One can see now that Number-alternating mass nouns exhibit the unacceptable ‘Gender behavior’ under ellipsis observed in (6), as those nouns do not allow deletion under alternation, as shown in (19). It must be pointed out that such ellipsis constructions have a lesser degree of unacceptability as compared to the types of Gender alternations exemplified in (6), which are considered generally worse than the alternations in (15). It is possible that the difference in acceptability is related to the experimental evidence showing that that concord-matching violations in Gender appear to be more disruptive or conspicuous than those involving Number:<sup>15</sup>

- (19) a. ??(\*)El agua del río y las <sup><aguas></sup> del mar  
           *the*<sub>SING</sub> *water* *of the river* *and the*<sub>PLUR</sub> <sup><waters></sup> *of the sea*
- b. ??(\*)Las nieves del Kilimanjaro y la <sup><nieve></sup> de Baqueira  
           *the*<sub>PLUR</sub> *snows* *of the Kilimanjaro* *and the*<sub>SING</sub> <sup><snow></sup> *of Baqueira*
- c. ??(\*)Les gusta la lluvia de Bilbao pero no las <sup><lluvias></sup> de Ranchipur  
           *(they)* *love the*<sub>SING</sub> *rain* *of Bilbao* *but not the*<sub>PLUR</sub> <sup><rains></sup> *of Ranchipur*
- d. ??(\*)Como abono, utilizaban las cenizas volcánicas y la  
           *as fertilizer, (they) used the*<sub>PLUR</sub> *ashes volcanic*<sub>PLUR</sub> *and the*<sub>SING</sub>  
           <sup><ceniza></sup> *vegetal*  
           <sup><ash></sup> *vegetable*<sub>SING</sub>
- e. ??(\*)No puedes dormir con este calor pero puedes  
           *not can*<sub>2.SING</sub> *sleep with this*<sub>SING</sub> *heat*<sub>SING</sub> *but can*<sub>2.SING</sub>  
           *soportar los* <sup><calores></sup> *del verano*  
           *cope with the*<sub>PLUR</sub> <sup><heats></sup> *of the summer*

The above examples show that Number can behave in a similar fashion to Gender in some types of ellipsis constructions. Acquaviva’s 2008 assumption that the lexical/inherent Number of *singularia* and *pluralia tantum* and Number alternating mass nouns must have a correlate in the inflectional area, as suggested in (16), may suggest a partial explanation for the behavior of singular

<sup>15</sup> These experiments, which support the independence of the categories Gender and Number, have examined speech error analyses, concord-matching violations and pronominal reference tracking. In the latter case, it appears that selection of the appropriate antecedent for a pronoun is sooner achieved when cued by Number than when cued by Gender information. See, among others, Vigliocco & Nicol 1998; De Vicenzi & Di Domenico 1999; Igoa et al. 1999; Antón-Méndez et al. 2002.

collectives of the types *committee*, *couple*, *faculty*, *family*, or *team*, among others, that are known to show quirky Number behavior with verbal concord, pronouns anaphorically interpreted, and distributive anaphors.<sup>16</sup>

- (20) La familia ha/han expresado su            desacuerdo y no firmarán  
*the family has/have expressed* POSS<sub>(its/their)</sub> *disagreement and not will*<sub>3,PLUR</sub> *sign*  
 el documento  
*the document*
- (21) <sup>(?)</sup>El equipo se estaba/estaban insultando unos a otros  
*the team was/were*                   *insulting*   *each other*

A detailed analysis for these constructions is beyond the scope of this note.<sup>17</sup> One may speculate however that the alternating verbal concord and the plural anaphora effects exemplified above may be understood under the distributed Number analysis (16). These types of collective expressions (or ‘plurilinguals’) show a formal singular in the functional/inflectional projections superordinate to the *n* category (cf. \**Estos/los comité* ‘these/the<sub>PLUR</sub> committee’) but they appear to contain a semantic plural in the ‘lexical’ or ‘first phase’ projection. The verb, or the anaphoric expressions related to them, may be sensitive to such interpreted (or semantic) plurality.

The preceding discussion suggests that there would be no inconsistency in assuming a similar ‘split’ analysis for Gender/noun class, as in (22), where lexical projections correlate with independent inflectional exponents. The quoted “GENDER” and “NUMBER” in the little-*n* area are for expository purposes so far:

- (22) [DET ... [INFL ... [Num] [Gender/Noun class] [*n* ... “GENDER”... “NUMBER” ... ]]]

The assumption that the locus of formal Gender/noun class and grammatical Number is in the inflectional area has already been proposed in Picallo (1991, 2008); Bernstein 1993; Fábregas & Pérez-Jiménez 2010. Evidence that both Gender and Number must be constituent elements of the inflectional area in Romance is provided by the behavior of pronouns in deletion contexts, to which I turn in the next section.

## 5. Pronouns

Pronominal categories have been assumed to be complex structures that display (in full or in part) the functional architecture of nominals (Postal 1969; Abney 1987; Cardinaletti & Starke 1999; Déchaine & Wiltschko 2002, among others). They may be conceived as syntactically rootless elements formed by hierarchically organized functional projections for Person, Number and Gender (or a subset of these). Their value for Gender in particular may induce presuppositions about their possible denotations. For pronominal anaphora, we should assume that the denotation of pronouns is resolved in concord with the inflectional -in other words, formal- content of their assumed antecedents. Pronouns are blind to the possible lexical idiosyncrasies of the expressions naming the entities they denote. They appear to be only sensitive to the specification of

<sup>16</sup> Many thanks to an anonymous reviewer for calling these types of cases to my attention.

<sup>17</sup> See, for a detailed discussion and for different analyses of these constructions, Elbourne 1999; den Dikken 2001, and the references cited in these works.

values expressed in the functional layers of their intended co-referring nominals, independently of whether those expressions denote animates or inanimates (23 a, b), count or mass items (24 a, b), or have nominal antecedents with lexical/inherent number, as shown in (25 a, b):

- (23) a. Sólo con mirarla, *esta taza se rompe*  
*just with looking-at-PRON<sub>FEM,SING</sub>, this<sub>FEM</sub> cup<sub>FEM</sub> breaks*  
 ‘Just with looking at it, this cup breaks’  
 b. Sólo con mirarla, *Juana enrojece*  
*just with looking-at-PRON<sub>FEM,SING</sub>, Juana blushes*  
 ‘Just with looking at her, Juana blushes’
- (24) a. Si *lo* sumerges en agua caliente, el azúcar  
*if (you) PRON<sub>MASC,SING</sub> submerge in water<sub>FEM</sub> hot<sub>FEM</sub>, the<sub>MASC</sub> sugar<sub>MASC</sub>*  
 se disuelve  
*SE dissolves*  
 ‘If you submerge it in hot water, sugar dissolves’  
 b. Si *las* sumerges en agua caliente, las chaquetas se encogen  
*if (you) PRON<sub>FEM,PLUR</sub> submerge in water<sub>FEM</sub> hot<sub>FEM</sub>, the<sub>FEM,PLUR</sub> jacquets<sub>FEM,PLUR</sub> SE shrink*  
 ‘If you submerge them in hot water, the jacquets shrink’
- (25) a. Toma *los bártulos* y cárgalos en el camión  
*take the<sub>PLUR,MASC</sub> gear<sub>PLUR,TANTUM,MASC</sub> and load-PRON<sub>MASC,PLUR</sub> in the truck*  
 b. Toma *la basura* y cárgala en el camión  
*take the<sub>SING,FEM</sub> garbage<sub>SING,TANTUM,FEM</sub> and load-PRON<sub>FEM,SING</sub> in the truck*

It was shown in (17) that some mass nouns can alternate in Number. A few others can also vary with regard to Gender assignment (ex. *el/la mar* ‘the<sub>masc/fem</sub> sea’).<sup>18</sup> In both cases, the anaphoric pronouns related to them must match the inflectional layer of the expressions denoting such entities. Consider examples (26 a,b) and (27 a,b), which show matching in variable Gender and Number respectively:

- (26) a. El estado de *la mar* es peligroso y se recomienda no entrar  
*the state of the<sub>FEM</sub> sea is dangerous and it is recommended not to enter*  
 en ella  
*in PRON<sub>FEM,SING</sub>*  
 b. Consultaron el estado del *mar* y no consideraron  
*(they) checked the state of the<sub>MASC</sub> sea and (they) not considered*  
 recomendable bañarse en él  
*advisable to bathe in PRON<sub>MASC,SING</sub>*

<sup>18</sup> The following, among some others, can alternate in Gender in Spanish. Their adscription to one or other noun class is subject to dialectal variation: *el/la maratón* ‘the<sub>masc/fem</sub> marathon’; *el/la linde* ‘the<sub>masc/fem</sub> boundary’; *el/la calor* ‘the<sub>masc/fem</sub> heat’; *el/la cobaya* ‘the<sub>masc/fem</sub> guinea pig’; *el/la armazón* ‘the<sub>masc/fem</sub> frame’, *el/la reuma* ‘the<sub>masc/fem</sub> reumathism’; *el/la tilde* ‘the<sub>masc/fem</sub> diacritical mark’.

- (27) a. Recogió la ceniza para reutilizarla como abono  
*(s/he) picked up the<sub>FEM,SING</sub> ash<sub>FEM,SING</sub> to reuse-PRON<sub>FEM,SING</sub> as fertilizer*  
 b. Recogió las cenizas para reutilizarlas como abono  
*(s/he) picked up the<sub>FEM,PLUR</sub> ashes<sub>FEM,PLUR</sub> to reuse-PRON<sub>FEM,PLUR</sub> as fertilizer*

A mismatch in the feature values of the pronouns and those of the inflectional content of their co-referring antecedents leads to ungrammaticality, if anaphora is intended, or to a free interpretation of the pronoun in the same contexts. The indices in the unmatching pronouns exemplify this state of affairs: (28 a) shows a mismatch in Gender in a nominal that can alternate for this feature (i.e., *el/la mar*) and (28 b) to a mismatch in Number in mass nouns that can also show alternation, such as *ceniza/cenizas* ‘ash/ashes’:

- (28) a. El estado del *mar*<sub>i</sub> es peligroso y se recomienda no  
*the state of the<sub>MASC</sub> sea is dangerous and it is recommended not*  
 entrar en *ella*<sub>\*i;j</sub>  
*to enter in PRON<sub>FEM</sub>*  
 b. Recogí *la ceniza*<sub>i</sub> cuando vi que ella no *las*<sub>\*i;j</sub>  
*(I) picked up the<sub>FEM,SING</sub> ash<sub>FEM,SING</sub> when (I) saw that she not PRON<sub>FEM,PLUR</sub>*  
 quería recoger  
*wanted to pick up*

Summarizing, anaphorically interpreted pronouns appear to only be sensitive to the inflectional or functional phase of their co-referring nominals.<sup>19</sup> Such a syntactic space includes Person, but also Gender and Number. If –by assumption– pronouns are purely inflectional elements, anaphoric pronouns should allow Gender mismatches in ellipsis contexts, because only inflectional categories allow it. This is indeed the case. Consider (29) where two anaphoric interpretations for the pronoun in the deleted fragment are allowed: the interpretation corresponding to the local (or sloppy) reading and the strict (or non-local) one, as shown in the reconstruction of the deleted fragments (i) and (ii).

- (29) a. El violinista quiere que *lo* contraten y la  
*the<sub>MASC</sub> violinist<sub>MASC</sub> wants that (they) him hire and the<sub>FEM</sub>*  
 trompetista también  
*trumpet player<sub>FEM</sub> too*  
 (i) <wants that they hire her<sub>(the-FEM trumpet player)</sub>> (SLOPPY INTERPRETATION)  
 (ii) <wants that they hire him<sub>(the-MASC violinist)</sub>> (STRICT INTERPRETATION)  
 b. El libro tiene un número que *lo* identifica pero  
*the<sub>MASC</sub> book<sub>MASC</sub> has a number that PRON<sub>MASC,SING</sub> identifies but*  
 la ficha no  
*the<sub>FEM</sub> card<sub>FEM</sub> not*

<sup>19</sup> The quirky Number behavior of *committee*-type nouns withstanding. See examples (20) and (21).

- (i) <has a number that identifies PRON<sub>FEM</sub>=the card > (SLOPPY INTERPRETATION)  
 (ii) <has a number that identifies PRON<sub>MASC</sub>=the book > (STRICT INTERPRETATION)

Regardless of whether it is the phonologically realized one or the one deleted with the VP, the anaphorically interpreted pronoun remits to two entities (animate or inanimate) that are salient in the linguistic environment, and the antecedence condition on ellipsis requires the pronoun to match the Gender content of its short- or long-distance intended co-referring expression. The interpretive ambiguity is possible if both formal Gender as well as formal Number are constitutive elements in the inflectional layers, which is what an anaphoric pronoun is sensitive to. Gender alternation under ellipsis also obtains in the much stricter condition of binding. Pronouns bound to quantified expressions can also display alternations under ellipsis, as we see in (30 a, b):

- (30) a. *Cualquier hombre quiere conocer a alguien que lo quiera y cualquier mujer también*  
 <quiere conocer a alguien que la quiera>  
 ‘Any man wants to know somebody who loves *him* and any woman too  
 <wants to know somebody who loves her>,  
 b. *Cada libro tiene un número que lo identifica y cada ficha también*  
 <tiene un número que la-identifica>  
 ‘Each book<sub>MASC</sub> has a number that identifies *it*<sub>MASC</sub> and each card<sub>FEM</sub> too  
 <has a number that identifies it-FEM>

Bound pronouns only allow the sloppy reading represented within the brackets because they are variables and can’t be bound outside their own sentence. The constituent values of a bound pronoun may be different from that of a co-referring one, although their form may morpho-phonologically be the same. Heim 2008 and Kratzer 2009 have suggested that bound pronouns (i.e., pronominal variables) reflect the inflectional content of the quantified expressions binding them, and such inflectional content is what determines the form the related pronouns take.

The ungrammaticalities in (6) and (19) can now be assessed under a different perspective. They are ungrammatical because they show Gender and Number alternations, but such alternations may overtly manifest different combinations of notions coded in the most embedded (lexical) area with which the functional elements Gender and Number relate. We have already shown that alternations under deletion are possible when they are purely inflectional. Alternations are not possible when they externalize lexical idiosyncrasies. Next section will consider some conjectures on the possible components of the so-called ‘little-n’ space alluded to in the representation (22).

## 6. On the lexical content of nominals

Following some insights in the proposal put forth in Ramchand (2001, 2008), I suggest that the lexical content of nominal constructions that I have been referring to as ‘little-n’, following DM terminology, should be built up with recursively embedded conceptual categories that express structured facets or nominal meaning. These could include categories related to sortality, meronymy, cohesion, boundedness, unity, identity, or others that may characterize nominal denotations. Such notions should be universal and possibly rooted in



more general cognitive processes related to the perception and conception of entities, as well as general reasoning about the physical world, which infants are known to perform at a very young age independently of whether or not they already recognize particular objects as entities of specific kinds (see Spelke 1990). The structure and the categorial/conceptual content of the lexical projections corresponding to nouns or verbs allude to either static entities or to dynamic states of affairs respectively. Note that being compositionally and conceptually different, the theory of grammar does not necessarily have to posit ‘nominalizer’ or ‘verbalizer’ elements (i.e. ‘litte-n’ or ‘little-v’), in particular if they are devoid of other content than categorial specification.

The notions that compose the lexical projection of nouns may overtly be ‘externalized’ in the form of correlate categories in the functional domain, which may encyclopedically surface in a variety of forms. The set of superordinate *inflectional* elements (or extended projections) that dominate the lexical (or ‘first phase’) space should not be necessarily universal, and languages may vary with respect to which functional projections they select and the overt forms they may take. Basque, for example, does not select a formal Gender/noun class inflectional category but Spanish does and can also recruit it to express mass/count distinctions, and non-linguistic perceptual properties of entities such as size, collective readings or sexual bi-morphism (see section 2).<sup>20</sup> The absence of realization of functional correlates in the inflectional space does not imply absence of the conceptual/interpretive categories on which nominal denotations are built because inflection and the abstract conceptual notions that it may make overt should be independent. Such independence is suggested by Li et al. 2009, who have shown that young infants are aware of the conceptual difference related to the singular/plural distinction, irrespectively of whether their native language morphologically expresses grammatical Number, or it does not. I suggest that the same independence may apply to Gender/noun class categories.

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## References

- Abney, S.P. (1987). *The English Noun Phrase in its Sentential Aspect*, Ph.D. Diss., Cambridge, Mass. MIT.
- Acquaviva, P. (2008). *Lexical Plurals. A Morphosemantic Approach*. Oxford. Oxford University Press.
- Acquaviva, P. (2009). Roots and lexicality in Distributed Morphology, in A. Galani et al. (eds). *York-Essex Morphology Meeting 2*.  
<http://www.york.ac.uk/language/ypl/ypl2issue10.html>

<sup>20</sup> Thus, natural gender should not be analyzed as a syntactic category or a syntactic feature, as already suggested in Sigurðsson 2015, among many others.

- Alexiadou, A. et al. (2007). *Noun Phrase in the Generative Perspective*, The Hague, Mouton. <https://doi.org/10.1515/9783110207491>
- Antón-Méndez, I. et al. (2002). The relation between gender and number agreement processing. *Syntax* 5: pp. 1-25. <https://doi.org/10.1111/1467-9612.00045>
- Bernstein, J. (1993). *Topics in the Syntax of Nominal Structure across Romance*. Ph.D. Diss. New York. C.U.N.Y.
- Bosque, I. (ed). (1996). *El sustantivo sin determinación. La ausencia de determinante en la lengua española*. Madrid. Visor.
- Brucart, J.M. (2004). Entre el borrado y la reconstrucción: nuevos enfoques al tratamiento de la elipsis, in T. Cabré (ed.) *Lingüística teòrica, anàlisi i perspectives*. Servei de publicacions de la UAB. Bellaterra. pp. 159-189.
- Campos, H. (1986). Indefinite Object Drop. *Linguistic Inquiry* 17: pp. 354-359.
- Cardinaletti, A. & M. Starke. (1999). The Typology of Structural Deficiency: A Case Study of the Three Classes of Pronouns, in H. Van Riemsdijk (ed.) *Clitics in the Languages of Europe*. Berlin. Mouton. pp. 145-233. <https://doi.org/10.1515/9783110804010.145>
- Carlson, G. (1977). *Reference to Kinds in English*, Ph Diss. University of Massachusetts at Amherst.
- Chomsky, N. (1995). *The Minimalist Program*. Cambridge, Mass. MIT Press.
- Chomsky, N. & H. Lasnik. (1977). Filters and Control. *Linguistic Inquiry* 8: pp. 425-504.
- Cinque, G. (2005). Deriving Greenberg's Universal 20 and Its Exceptions. *Linguistic Inquiry* 36: pp. 315-332. <https://doi.org/10.1162/0024389054396917>
- Corbett, G. (1991). *Gender*. Cambridge, Cambridge University Press. <https://doi.org/10.1017/cbo9781139166119>
- Corbett, G. (2006). Number. *Encyclopedia of Language and Linguistics*. K. Brown (ed.). Oxford. Elsevier. 2nd Edition, Volume 8, pp. 724-731. <https://doi.org/10.1016/b0-08-044854-2/00203-0>
- Corbett, G. (2011). Gender. *The World Atlas of Language Structures*. M. Dryer & M. Haspelmath (eds.). Chaps. 30, 31, 32. Munich.
- Corbett G. & N. Fraser (2000). Gender assignment, a typology and a model, in G. Senft (ed.), *Systems of nominal classification*. Cambridge, Cambridge University Press. pp. 293-325.
- Déchaine, R.M. & M. Wiltscho (2002). Decomposing Pronouns. *Linguistic Inquiry* 33: pp. 409-442. <https://doi.org/10.1162/002438902760168554>
- Déchaine, R. M. et al. (2014). The internal syntax of Shona class prefixes. *Language Sciences* 43: pp. 18-46. <https://doi.org/10.1016/j.langsci.2013.10.008>
- Depiante, M. & P. Masullo (2001). Género y número en la elipsis nominal: consecuencias para la hipótesis lexicalista. *Primer Encuentro de Gramática Generativa*. Universidad Nacional del Comahue.
- De Vicenzi, M. & E. Di Domenico (1999). A distinction among  $\phi$ -Features: The role of gender and number in the retrieval of pronoun antecedents. *Rivista di Linguistica* 11: pp. 41-74.
- den Dikken, M. (2001). "Plurilinguals", pronouns and quirky agreement. *The Linguistic Review* 18: pp. 19-41. <https://doi.org/10.1515/tlir.18.1.19>
- Eguren, L. (2010). Contrastive focus and nominal ellipsis in Spanish. *Lingua* 120: pp. 435-457. <https://doi.org/10.1016/j.lingua.2009.05.004>
- Elbourne, P. (1999). Some correlations between semantic plurality and quantifier scope. *Proceedings of NELS* 29: pp. 81-92.

- Espinal M.T. (2010). Bare nominals in Catalan and Spanish. Their structure and meaning. *Lingua* 120: pp. 984-1009. <https://doi.org/10.1016/j.lingua.2009.06.002>
- Fábregas, A. & I. Pérez-Jiménez. (2010). Prolegómenos a una teoría del género en español. *La gramática del sentido: léxico y sintaxis en la encrucijada*. Zaragoza. Univ. Zaragoza. pp. 225-249.
- Ferrari-Bridgers, F. (2005). *A syntactic analysis of the nominal systems of Italian and Luganda: how nouns can be formed in the syntax*. Ph. D. Diss. New York University.
- Ferrari-Bridgers, F. (2008). A unified syntactic analysis of Italian and Luganda nouns. *The Bantu-Romance Connection*. C. de Cat and K. Demuth (eds.). Amsterdam. John Benjamins. pp. 239-258. <https://doi.org/10.1075/la.131.13fer>
- Franceschina, F. (2005). *Fossilized Second Language Grammars: the Acquisition of Grammatical Gender*. Amsterdam. John Benjamins. <https://doi.org/10.1075/lald.38>
- Fuchs, Z., M. Polinsky & G. Scontras (2015). The differential representation of number and gender in Spanish. *The Linguistic Review* 32: pp. 703–737. <https://doi.org/10.1515/blr-2015-0008>
- Gallego, Á. (2011). *Sobre la elipsis*. Madrid. Arco Libros.
- Halle, M. & A. Marantz (1993). Distributed Morphology and the pieces of inflection, in S. J. Keyser & K. Hale (eds.). *The view from Building 20: Essays in honor of Sylvain Bromberger*. Cambridge, Mass. MIT Press. pp. 111–176.
- Harley, H. & E. Ritter (2002). A feature-geometric analysis of person and number. *Language* 78: pp. 482-526. <https://doi.org/10.1353/lan.2002.0158>
- Harris, J. (1991). The Exponence of Gender in Spanish. *Linguistic Inquiry* 22: pp. 27:62.
- Heim, I. (2008). Features on Bound Pronouns, in D. Adger et al. (eds.) *Phi Theory: Phi Features across Interfaces and Modules*. Oxford University Press.
- Hockett, C.F. (1958). *A Course in Modern Linguistics*. Macmillan, New York. <https://doi.org/10.1111/j.1467-1770.1958.tb00870.x>
- Igoa, J. M. et al. (1999). Gender-number dissociations in sentence production in Spanish. *Rivista di Linguistica* 11: pp. 163-196.
- Kramer, R. (2014). Gender in Amharic: a morphosyntactic approach to natural and grammatical gender. *Language Sciences* 43: pp. 102-115. <https://doi.org/10.1016/j.langsci.2013.10.004>
- Kratzer, A. (2009). Making a pronoun: fake indexicals as windows into the properties of pronouns. *Linguistic Inquiry* 40: pp. 187-237. <https://doi.org/10.1162/ling.2009.40.2.187>
- Lasnik, H. (1995). Verbal morphology: Syntactic Structures meets the Minimalist Program, in H. Campos & P. Kempchinsky (eds). *Evolution and Revolution in Linguistic Theory: Essays in Honor of Carlos Otero*. Washington DC. Georgetown University Press. pp. 251-275.
- Leonetti, M. (1999). El artículo, in I. Bosque & V. Demonte (eds.) *Gramática descriptiva de la lengua española*. Madrid. Espasa Calpe. Vol. 1. pp.787-890.
- Lew-Williams, C. & A. Fernald (2007). Young Children Learning Spanish Make Rapid Use of Grammatical Gender in Spanish Word Recognition. *Psychol Sci* 18.3: pp. 193-196. <https://doi.org/10.1111/j.1467-9280.2007.01871.x>
- Li, P. et al. (2009). Does the Conceptual Distinction Between Singular and Plural Sets Depend on Language? *Developmental Psychology* 45: pp. 1644-1653. <https://doi.org/10.1037/a0015553>
- Longobardi, G. (1994). Reference and Proper Names: a Theory of N-Movement in Syntax and in Logical Form. *Linguistic Inquiry* 25: pp. 609-665.

- Lowenstamm, J. (2008). On little n,  $\sqrt{\quad}$ , and types of nouns, in J. Hartmann et al. (eds). *Sounds of Silence: Empty Elements in Syntax and Phonology*. Amsterdam: Elsevier. pp. 105-144.
- Matushansky, O. (2013). Gender Confusion, in L. L. Cheng & N. Corver (eds.) *Diagnosing Syntax*. Oxford. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199602490.003.0013>
- Merchant, J. (2014). Gender mismatches under nominal ellipsis. *Lingua* 151: pp. 9–32. <https://doi.org/10.1016/j.lingua.2014.01.008>.
- Nunes, J. & C. Zocca (2010). Lack of morphological identity and ellipsis resolution in Brazilian Portuguese, in J. Nunes (ed.) *Minimalist essays on Brazilian Portuguese syntax*. Amsterdam. John Benjamins. pp. 215-236.
- Panagiotidis, P. (2015). *Categorial Features*. Cambridge. Cambridge University Press.
- Pérez-Pereira, M. (1991). The acquisition of gender: What Spanish children tell us. *Journal of Child Language* 18: pp. 571–590. <https://doi.org/10.1017/S0305000900011259>
- Picallo, M. C. (1991). Nominals and nominalizations in Catalan. *Probus* 3: pp. 279-316. <https://doi.org/10.1515/prbs.1991.3.3.279>
- Picallo, M. C. (2008). Gender and Number in Romance. *Lingue e Linguaggio* 7: pp. 47-66.
- Postal, P. (1969). On So-called “Pronouns” in English, in D. Reible & S. Schane (eds.) *Modern Studies in English*. Englewood Cliffs, N. J. Prentice Hall. pp. 201-224.
- Ritter, E. (1993). Where is gender?. *Linguistic Inquiry* 24: pp. 795-803.
- Roca, I. (1989). The organisation of grammatical gender. *Transactions of the Philological Society*, 87: pp. 1–32. <https://doi.org/10.1111/j.1467-968X.1989.tb00617.x>
- Saab, A. (2010). (Im)possible deletions in the Spanish DP, *Iberia* 2: pp. 45-83.
- Saab, A. (to appear). Nominal ellipses, in T. Temmerman & J. van Craenenbroeck (eds.) *The Oxford Handbook of Ellipsis*. Oxford. Oxford University Press. Available at <http://ling.auf.net/lingbuzz/002216>. March 2016.
- Sigurðsson, H. A. (2015). Gender: a PF reflection of an edge linker. Available at <http://ling.auf.net/lingbuzz/002467>. May 2015.
- Spelke, E. (1990). Principles of object perception. *Cognitive Science* 14: pp. 29-56. [https://doi.org/10.1207/s15516709cog1401\\_3](https://doi.org/10.1207/s15516709cog1401_3)
- Szabolcsi, A. (1994). The Noun Phrase, in F. Kiefer & K.Kiss (eds.) *Syntactic Structure of Hungarian*, Syntax and Semantics 27. New York. Academic Press. pp. 179-274
- Tancredi, C. D. (1992). *Deletion, Deaccenting and Presupposition*. PhD. MIT dissertation.
- Ticio, E. (2016). Nominal ellipsis as a collaborative effort. *Borealis* 5: pp. 221-252. <https://doi.org/10.7557/1.5.2.3130>
- Tsoulas, G. (2009). On the grammar of number and mass terms in Greek, in Halpert, J. Hartman & D. Hill, (eds.). *MIT Working Papers in Linguistics* 57.
- Vergnaud, J.R. & M.L. Zubizarreta (1992). The Definite Determiner and the Inalienable Constructions in French and in English. *Linguistic Inquiry* 23: pp. 595-652
- Viglocco, G. & J. Nicol (1998). Separating hierarchical relations and word order in language production: is proximity concord syntactic or linear?. *Cognition* 68, B13-B29. [https://doi.org/10.1016/S0010-0277\(98\)00041-9](https://doi.org/10.1016/S0010-0277(98)00041-9)
- Zabala Maldonado, R. (1990). Los sistemas clasificatorios en el Kanjobal de San Miguel de Acatan (Acateco). *Función* 9-10. Centro de Investigación de Lenguas Indígenas. Universidad de Guadalajara. México.