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On Gender and Number

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Abstract

This study proposes a hypothesis on the syntactic function of formal gender and grammatical number and assesses the relation between these two syntactic features by showing that grammatical number can only be expressed in categories that are assigned a formal gender in the Romance languages. It is claimed that gender and number are the uninterpretable correlates of corresponding interpretable abstract features in functional projections of nominal structures. The relation between the interpretable functional features and their non interpretable counterparts in the lexical category is that of (abstract) Agreement and does not involve head movement. The argumentation is framed under the conditions imposed by economy, full interpretation and strict cyclicity. A strong version of the Uniformity hypothesis is adopted by suggesting that nominal constructions should not only conform to a universal hierarchical structure but the locus where their grammatical features are interpreted should be invariant.

Keywords: gender, number, noun classifiers.

1. Introduction

This essay explores the syntactic function of grammatical gender in common nouns, and its relation with grammatical number, with data mainly drawn from Catalan and Spanish. I propose that gender inflection in a noun constitutes the formal correlate of an interpretable feature that linguistically encodes categorization processes. This feature is hosted in a functional projection in nominal structures. The conjecture that these cognitive processes may have grammatical expression has already been formulated by some scholars in different theoretical frameworks.[1] The idea is formally recast here under a Principles and Parameters perspective and it is suggested that the linguistic mechanisms used to access such processes by means of a grammatical entity appear to surface in different ways across languages: noun classifiers, noun classes and formal gender inflection, among some other possible ones. I also assess the relation of

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[1] See Allan (1977), Craig (1986 a), Corbett (1991) and Croft (1994), among many others.

gender (or class) with number and claim that the expression of grammatical number crucially depends on the assignment of a formal class to a linguistic category. That is, there can be no number without classification. In the course of the discussion, a few data from languages of families other than Romance are brought up to support the view that some aspects of the functional nominal structure should be invariant but their particular morpho-phonological realization may cross-linguistically vary. This proposal is consistent with the assumption that languages are uniform (see Cinque 1999, Chomsky 2001 and Sigurðsson 2004, among others), and advocates a rather abstract conception of the syntactic objects that constitute the functional layers of nominal structures.

The paper is organized as follows: the next section offers some considerations on the characterization of the gender feature within the Principles and Parameters framework. Some generalities on grammatical gender in Catalan and Spanish are first described in section 3, to pursue the claim that formal gender is the manifestation of merging and agreement procedures between a functional category with interpretable content and its N complement, which manifests its non-interpretable correlate. Section 4 explores the relation between gender and the expression of grammatical number. It is shown that grammatical number is only possible in Romance if there is grammatical gender, a fact that I relate to the interpretive content encoded in the respective functional projections. In that section, it is also shown that classification by means of formal gender feeds grammatical number, the latter not being possible without the former. In section 5, the properties of genderless arguments are examined in support of the hypothesis proposed. Section 6 focuses on the constituent structure of some pronominal categories in light of the proposals suggested in the previous sections. A brief conclusion follows.

2. The gender feature in the Principles and Parameters framework

Grammatical gender has been considered one of the features that form the referential feature set of a nominal category (i.e. the so-called *Phi* set), which includes also person and number. At the syntactic component, gender is generally assumed to participate in the operation of abstract Agreement in a bunch with the interpretable person and number. Gender has generally been conceived as an unvalued and non interpretable item in a functional probe (say, T or *v*) and as a valued but also non

interpretable feature in the *Phi*-set of the nominal category that constitutes its potential goal.

Formal gender appears to be a syntactic artifact in this system since, besides its assumed non interpretability in either probe or goal, gender has not been assumed to intervene in the computation in a specific way.[2] It differs from other non interpretable items, such as the so-called EPP feature or structural case, which have been attributed the syntactic functions of triggering phrasal movement or rendering arguments active or "visible" for abstract Agreement respectively (see Chomsky 1995 *et seq.*). From a minimalist point of view, the assumption that gender is not interpretable in either probe or goal --together with its apparent lack of a specific computational function-- can be puzzling, in particular if one considers that general and strict principles of economy lead us to the conclusion that the computation should be maximally efficient and that each formal feature intervening in the system should be either interpretable or should be associated with a specific syntactic effect.

One can consider the possibility that gender inflection is not, in fact, a syntactic object but a dissociated morpheme in the sense defined in Embick & Noyer (2001, 558); that is, a pure morpho-phonological entity that is post-syntactically inserted at Spell Out, a word marker in the sense discussed in Harris (1991). Dissociated morphemes, however, should not intervene in LF processes, but grammatical gender has effects at the interpretive component. It can determine, for example, whether or not a variable-like reading obtains for pronominal elemens in the classical "donkey" sentences. Consider in this respect the following Catalan examples that involve clitic pronouns:

(1) a. Quan un venedor   té una calaixera$_i$ la$_i$ /el$_{*i/j}$ /ho$_{*i/h}$ ven
      when a seller-MASC has a drawer chest-FEM   it-FEM,SG /it-MASC,SG /it-NEUT sells
      When a seller has a drawer chest, he sells it

    b. Quan una venedora té un armari$_i$ la$_{*i/j}$ /el$_i$ /ho$_{*i/h}$ ven
      when a seller-FEM has a   closet-MASC it-FEM,SG /it-MASC,SG /it-NEUT sells
      When a seller has a closet, she sells it

The pronouns in the above sentences are all singular. The examples show that they must agree in gender with their respective antecedents in order to be bound by them. If agreement does not obtain, the constructions (1 a, b) are grammatical, but the

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[2] See, however, Ferrari (2005) who attributes to it a nominalizer function.

pronouns should be interpreted as free. Another indication of the syntactic presence of gender is provided by the association of overt gender inflection with specific movement operations. *Wh*-constructions with past participle agreement in French, as in (2), or a parallel type of concord with Catalan accusative clitic constructions, as in the examples (3 a, b), are two examples of it:

(2) a. Quelle   chaise   as-tu   *t* répeinte   *t*
     which-FEM chair-FEM have you   repainted-FEM

    b. Les   chaises   que Paul a   *t*   repaintes *t*
      the-FEM-PLUR chairs-FEM-PLUR that Paul has   repainted-FEM-PLUR

(3) a. (Aquesta pel·lícula) ja   l'has   vista?
     (this movie-FEM)   already it-FEM have (you) seen-FEM, SING?

    b. (Aquestes pel·lícules) ja   les   has   vistes?
     (these movies-FEM)   already them-FEM have (you) seen-FEM,PLUR?

As is known, nominals in their thematic position do not trigger such agreement effects, neither in French nor in Catalan.[3] The assumption that the above agreement is directly or indirectly related to the application of movement indicates that gender is encoded in one of the predicate projections, becoming phonologically overt if some types of operations apply. The facts observed in the examples (1)-(3) above allow us to disregard the possibility of assuming the post-syntactic status of grammatical gender. In this paper, it is also shown that the expression of grammatical gender is associated with grammatical number. Genderless categories are also numberless and can not participate in any phenomena related to grammatical number (see section 5). The fact that gender appears to feed number can not be accounted for under the dissociated morpheme hypothesis, which predicts that no relation should exist between the two features.[4] In the following section, I suggest that the gender morphemes are the formal exponent of an interpretable head in a functional projection in nominal constructions.

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[3] See, for French, Kayne (1985), (1989), (2000, 25). The same facts obtain in Catalan:
  (i) Ja   has   vist (*-a)   aquesta pel·lícula?
     already have (you) seen (*FEM)   this movie-FEM ?

[4] The relation is captured in Greenberg (1963) Universal 36, which states that if a language has the category of gender it always has the category of number.

3. Grammatical gender in Romance

As is well known, all Catalan and Spanish common nouns must morphologically belong to one of two possible types: the masculine or the feminine, henceforth [±fem].[5] Determiners, demonstratives, pronouns or adjectives syntactically related to nouns or to nominal expressions by concord, syntactic Agreement or anaphora, also show [±fem] inflection. Consider, in this respect, the glosses in the following Catalan sentences:

(4) La   ploma negra,   encara no la   puc   fer servir
    the-FEM pen-FEM black-FEM, still   not it-FEM can.PRES-1.SING make use
    The black pen, I still can not use it

(5) No el   tanquis,   el   calaix   groc
    not it-MASC close-2.SING, the-MASC drawer-MASC yellow-MASC
    Don't close it, the yellow drawer

Neither Catalan nor Spanish have neuter nouns. The label 'neuter' has been traditionally applied to some pronominal forms,[6] but it is not a third grammatical gender complementary to masculine and feminine in these languages. 'Neuter' is a term borrowed from the three gendered Latin system and stands for the absence of a formal gender in Catalan or Spanish. All nouns, irrespective of their denotation, can only be of one of two possible formal genders, [±fem]. Nominal expressions can not serve as linguistic antecedents of neuter pronominal forms, as already seen in (1 a, b) above where the indefinite noun phrase can not be the linguistic antecedent of neuter *ho* 'it'. I will return to discussing neuter pronouns in section 5.

Leaving aside the morphological expression of natural (sexual) gender distinctions, one can say that the interpretation of common nouns, either mass or count,

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[5] For the purposes of the present discussion, we can very generally say that [+fem] prototypically surfaces as the suffix /a/ in both Catalan and Spanish. The value [-fem], the unmarked grammatical gender in both languages, mostly surfaces as the suffix /o/ in Spanish, and is phonologically null in Catalan. This is a coarse generalization with well known irregularities. For example, the Spanish noun *mano* 'hand' apparently has an /o/ inflection but it is a feminine noun, whereas *mapa* 'map' and *poeta* 'poet' appear to show /a/ inflection both in Catalan and Spanish, but are masculine. Harris (1991) has analyzed these suffixes as word markers. Be as it may, the inherent gender of such nouns establishes regular concord in the masculine or in the feminine with determiners and adjectives (cf. Sp. *La mano blanca* 'the-FEM hand white-FEM' (the white hand) / *El mapa amarillo* 'the-MASC map yellow-MASC' (the yellow map) / *Un poeta estúpido* 'a-MASC poet stupid-MASC' ('a stupid poet'). Derivational suffixes follow inflectional regularities as well in these cases: *manaza/*manazo* (big hand-FEM), *mapazo/*mapaza* (big map-MASC), *poetastro/*poetastra* 'poetaster-MASC'. In the present context, I will put aside any morpho-phonological irregularities to consider only the syntactic import of the gender feature.

[6] They are, among others, the Catalan clitic *ho* 'it', its Spanish counterpart *lo* 'it' or the Spanish tonic form *ello* 'it', which are discussed in section 6. Some demonstratives like *això/allò-esto/eso/aquello* 'this/that' and certain quantifiers like the Spanish *algo* 'some' are also neuter.

is not affected by belonging to a particular gender type.[7] Although grammatical gender may not be interpretable in the lexical N category, I propose that it is the formal exponent of an interpretable functional feature, which I will label [CLASS] for convenience, that licenses the formal type the noun belongs to. This feature is hosted in a functional projection $\underline{c}$ (for *class*) immediately dominating N, as shown in (6):

(6) $[_{\underline{c}}$ [CLASS] $[_N$ N]

      The interpretable content of $\underline{c}$ is a function that applies to nouns. Let us entertain the conjecture that [CLASS] translates to the grammatical system processes of entity categorization. In many Indoeuropean languages, the presence of [CLASS] is manifested as formal gender on the noun but in other language families, this grammatical entity may surface with other linguistic tools. One of them is that of resorting to the use of noun classifiers or noun classes. In these cases, [CLASS] is rendered as overt semi-lexical items or as morphemes that appear to catalog the entities denoted by nouns in various different ways: perceptual distinctions (physical or functional), (in)animacy hierarchies, natural divisions, or ranking of objects within scales determined by several non-linguistic factors. The distribution and the interpretation of noun classifiers in Yidini and Jacaltec is exemplified in (7) and (8) respectively. The distribution of noun classes (or 'genders') is exemplified in the Seshoto example (9):[8]

(7) *mayi*   jimirr *bama*-al   yaburu-ŋgu julaal   YIDINI (Central Australia)[9]
     NCL:*vegetable* yam   NCL:*person*   girl   dig.PAST
     The girl dug up the yam

(8) swatx' *ix*   ix *ixim*   b'itx   JACALTEC (Mayan)[10]
     made   NCL:*woman* girl NCL:*corn* tamal

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[7] For example, *diente*-MASC/*dent*-FEM 'tooth' in Spanish and Catalan respectively have a different gender, a fact that only affects concord with their syntactically related categories. Mascaró (1985, 101) provides a list of a very few cases where gender has some semantic import as in the Catalan pair *cistell/cistella* 'basket-MASC/big basket-FEM', where a change in gender is related to the object size. The feminine inflection is probably a disguised derivational morpheme. The same occurs with the Spanish pair *saco/saca* 'sack- MASC/big sack-FEM'.

[8] I will not attempt to discuss in any depth the properties of languages with classifiers or noun classes. The cursory look at some of them and the cross-linguistic data brought up to the fore all along the discussion in this paper is intended to support the proposed hypothesis on the syntactic role of formal gender.

[9] From Dixon (1982, 185) cited in Wilkins (2000, 158)

[10] From Craig (1986 a, 264)

The girl made the tamales

(9) *ba*-shányana *bá*-ne *bá*-fúmáné *di*-perekisi SESHOTO (Bantu)[11]
NCL:*2*-boys NCL:*2*-those NCL:*2*-found NCL:*10*-peaches

tsé-monáte
NCL:*10*-good
Those boys found peaches that are tasty

In the cases (7) and (8), the noun classifiers surface as independent lexemes immediately preceding the noun. These types of classifiers usually have a nominal origin, deriving in some cases from nouns that have been morpho-phonologically reduced to varying degrees (see Craig (1986 b, 255)). In the Bantu case exemplified in (9), the noun classes or 'genders' combine with number and are prefixed on the noun with concord spreading to the categories related to it.[12]

Whatever form or denotation noun classifiers or noun classes may have, they are linguistic objects that, like formal gender, grammatically classify nouns; whether or not they also classify in some other non-linguistic dimension (material composition, social hierarchy or physical analogy) the entities the nouns denote. The noun class/noun classifier paradigms may cross-linguistically vary, but irrespective of dialectal or language idiosyncrasies, noun classifiers and noun classes have the following properties (see Rijkhoff (2004, 74)):

(10) a. They occupy a fixed position in nominal constituents.

b. They form a closed system within the language.

c. They are not subject to variation.[13]

These properties are typical of the functional elements that constitute extended projections of the noun and characterize formal gender of the Romance type as well. As we will see in section 6, these elements can also have the function of "reference trackers" because they are used as pronouns or enter in the constituency of pronouns.

Many scholars, following different theoretical or methodological traditions, have suggested that the inflection for gender typical of many Indoeuropean languages is akin

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[11] From Demuth (2000, 273)

[12] With respect to example (9), the noun class NCL:2 selects nouns denoting a plurality of humans (NCL:1 would correspond to its singular counterpart). *Perekisi* 'peach' is assigned to classes 9 and 10 (for singular and plural respectively). The relative prefix *tsé-* corresponds to class 10 (plural) as well.

[13] Unless they are creatively used for verbal play or metaphor (see Allan 1977, 307).

to some extent to these syntactic objects known as noun classes or noun classifiers.[14] I adopt this insight while considering the hypothesis that grammatical gender, noun classifiers (of the Mayan type) or noun classes (of the Bantu type) is the same kind of functional element.[15] It should be pointed out, before proceeding, that the analogy is not extended here to other types of classificatory devices such as the so-called numeral, genitive or verbal classifiers.[16] The coexistence in some languages of a number of different types of them occupying a hierarchically fixed and different position within a nominal structure, suggests that the label 'classifier' may be a too coarse and general cover term for a number of different functional elements within DP.[17] Thus, the suggested parallelism of classifiers and gender is kept here to the grammatical objects known as noun classifiers, such as the ones exemplified in (7) and (8), and noun classes, like the ones exemplified in (9).[18] I therefore do not consider in this context numeral, genitive or verbal classifiers.

3.1. The functional category c

I have proposed that [CLASS] is an interpretable feature that heads a functional projection. The latter merges with a lexical N complement that enters the numeration fully inflected. At the syntactic component, the feature [CLASS] selects and probes N. The representation (11) below shows that the category hosting [CLASS], the selector, projects after Merge:

(11) c

          c N
        [CLASS]

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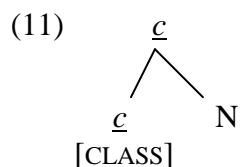
[14] See, among others, Corbett (1991, 312), Zavala (1990), Grinevald (1999, 2000, 2002) and Ferrari (2005).

[15] For the later, see Ferrari (2005).

[16] See Allan (1977) for an overview of classification systems.

[17] For general discussion on this issue, see Croft (1994). See also Zavala (1990, 1992) and Grinevald (2000, 70) who discuss the existence of four concurrent types of classifiers within nominal constructions in the Kanjobalan languages (Mayan family). See, in this respect, note 29.

[18] On the parallelism between the Romance gender and the Bantu noun class system see Ferrari (2005), who analyzes gender as a noun formation device at the syntactic component with data drawn from Italian and Luganda.

In languages like those exemplified in (7) and (8), noun classifiers realize the feature content of c with an overt and independent lexeme chosen from a closed inventory of forms. In the Bantu example (9), noun classes appear as prefixes. In both cases, the realization of [CLASS] precedes N, either as a free or as a bound morpheme but, in the Romance case, gender follows the noun surfacing as a suffix when overt. The post-nominal position of the Romance gender suggests that a syntactic operation applies in this case. Previous accounts of nominal constituency such as Picallo (1991) and Bernstein (1993 a, 1993b) have claimed that the post-nominal (suffix) position of gender inflection in the Romance NP obtains from a head raising and adjunction operation of the uninflected N stem to the head of a functional category.[19] Such "stem hopping" or head raising operations have been put to question in recent research because they are counter-cyclic. In what follows, I disregard head raising as a possible syntactic mechanism in order to satisfy the strict cyclicity imposed by the Extension Condition (see Chomsky 2001). I disregard as well the hypothesis that head movement is a post-syntactic phonological operation,[20] to consider instead the syntactic alternative that the pre- or post-nominal position of the exponent of the [CLASS] feature, in (11) above, follows from a parametric difference: the locus of its valuation. Suppose that [CLASS] in c is always interpreted in the functional projection, but is selected as unvalued in Romance. The [±fem] inflection forms that appear suffixed to Catalan and Spanish nouns are the overt manifestation of a syntactic agreement operation between [CLASS] in c and its formal feature correlate in N, which is inherent in the lexical entry of the noun but is not interpretable in N. That is, the feature [CLASS] in Romance has to relate with a fully inflected N, the lexical category in its local c-command domain, in order to be valued. The binary feature [±fem] in N encodes the two possible options in which [CLASS] can formally be valued by the agreement operation in Catalan and Spanish:

(12) $[_c$ [CLASS] $[_N N_{[\pm fem]}$]]

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[19] Picallo (1991) argues that grammatical gender projects into a functional category Ge(nder)Phrase. Bernstein (1993 a, 1993 b) claims that grammatical gender is a Word Marker (using Harris 1991 terminology) that projects into a functional category WMPhrase. See, however, Ritter (1993) and Di Domenico (1997, 136) who argue against the existence of an autonomous functional projection hosting either gender or a WM in the Romance languages.

[20] See Matushansky (2006) and references cited there for discussion against the assumption that head movement is a phonological operation.

The proposal just sketched preserves the Extension Condition without appealing to post-syntactic reordering. The above claim on the relation between gender inflection in N and the [CLASS] feature in c adopts the hypothesis that Agreement is a syntactic relation that obtains between the unvalued features of a probe and the valued features of its goal (Chomsky 2001). In this case, the probe-goal relation is established between CLASS and gender features in N. Note, however, that the present proposal departs from the hypothesis that unvalued features are invariably non interpretable. Here, the locus of interpretation has been suggested to be in the unvalued probe [CLASS] in the functional c. Its matching correlate in the goal N is valued (i.e. [±fem]) in Catalan and Spanish, but not interpretable.

The possibility of having one and the same feature in more than one syntactic position, i.e. that agreement is feature sharing, has already been proposed in Frampton and Gutmann (2000). Note that the feature sharing mechanism that is being suggested here does not appear to constitute an isolated case within grammatical constructions. The Agreement procedure between a feature realized in two (or more than two) syntactic locations, functional and lexical, also obtains between the [Tense] feature in T and its correlate in V, realized as overt morphemes for tense in the V goal.[21] Pesetsky and Torrego (2004) point out that the [Tense] feature in T is interpretable. It agrees with, and it is valued by, a correlated feature instance surfacing as overt inflection on the verb [±past], which is not interpretable. In their study, Pesetsky and Torrego assess Chomsky's (2001) proposal on the biconditional relation between valuation and interpretability and suggest that these should be independent properties. If so, for a feature occurrence to have the property of being unvalued but interpretable or valued but non interpretable is possible. Separating valuation from interpretability allows these authors to claim that elements of the lexicon can contain four types of instances of features according to these properties:

(13) a. [valued, uninterpretable]
      b. [unvalued, uninterpretable]
      c. [valued, interpretable]
      d. [unvalued, interpretable]

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[21] The same relation can be said to apply between the interpretable features for Mood in the Comp domain and their non valued counterparts in V, which can be morpho-phonologically overt in Catalan and Spanish.

Recall that we have kept the hypothesis that probes are always unvalued. Hence, only instances of features conforming to the types (13 b) and (13 d) are possible probes. Those of the types (13 a) can be the goal of Agreement operations because they are valued. In addition to being valued, items conforming to (13 a) are not interpretable at LF and the operation Agree with matching feature correlates must apply, with the effect of deleting these instances at Spell Out. Elements conforming to (13 c) do not necessarily have to participate in syntactic Agreement operations. They are valued (hence, they can not be probes) and are LF interpretable (hence, they do not delete). If they participate in syntactic agreement, they can only be goals. With these assumptions in mind, let us return to the issues under consideration.

In the case of Catalan and Spanish nominals, the binary [±fem] feature realized as inflection in N belongs to the types (13 a). This non interpretable (and valued) goal Agrees with the unvalued and interpretable [CLASS] feature (its probe) hosted in the abstract c selecting N. Such probe belongs to the types (13 d) in Romance. In a configuration such as (14 a) below, the Agreement operation formally values [CLASS] in one of only two possible ways in Catalan and Spanish. The procedure triggers syntactic LF deletion of its [±fem] instance in N when the phase is completed. The morphological [±fem] correlate of [CLASS] remains overt at the PF component, as in the example (14 b) that exemplifies the value [+fem]:

(14) a. $[_D$ D ... $[_{\underline{c}}$ [CLASS$_{+fem}$] $[_N$ N $_{[+fem]}$]] ...]   LF

　　b.　(la/una)　　　　　corbat*a*　　　　　PF
　　　　(the/a-FEM)　　　tie-FEM

The combination characterized as (13 c) is arguably exemplified in languages with noun classifiers, like those in (7) and (8) above. They realize with an independent functional lexeme the [CLASS] feature in $\underline{c}$. The functional category takes a complement N devoid of a non interpretable correlate.[22] An interpretable and valued feature of these types is possibly also hosted in $\underline{c}$ in languages of the Bantu familiy. In this case, the noun class morpheme is prefixed to the noun, fused with number. I turn to discussing the remaining combination of properties (13 b) (i.e. non interpretable and unvalued) in section 6 where I suggest that it obtains in pronominal forms.

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[22] A similar situation occurs in the clausal domain by the lexeme *will* in T, in the English future tense.

3.2. Bare nouns

Bare nouns that conform to the (bare) structure [$_c$ CLASS N] in (12) above name kinds, or types, of entities. They can not name instantiations of such types. To do so, the syntactic object c must merge with number, hosted in a superordinate functional projection (see section 4) and, subsequently, with a phonologically null or an overt Determiner (see Longobardi 1994, Szabolcsi 1994), among other possible functional elements (see Cinque 2005). Evidence for the assumption that the bare sub-structure c names kinds can be found in a few constructions where it is syntactically licensed. In Catalan and in Spanish, its distribution is severely restricted to the complement positions of some lexical environments: the object of a few prepositions, light verbs or intensional predicates, among a handful of others.[23] The following examples illustrate them. The examples (15) are in Catalan and (16) in Spanish:

(15) a. El president   necessita escorta
          the president needs   bodyguard-MASC

    b. La Maria té   bolígraf
       Mary   has   ball pen-MASC

    c. En Pere sempre porta jaqueta
       Pere   always dons   jacket-FEM

    d. La Joana   busca   pis
       Joana   looks for   appartment-MASC

 (16) a. Ella lo escribió todo con lápiz
          she it-wrote   all   with pencil-MASC

    b. Estos pepinos se han conservado   en barrica
       these cucumbers have been preserved in cask-FEM

    c. Hay   silla   para todos
       there is chair-FEM for everybody

    d. Las palabras esdrújulas   llevan acento
       the words proparoxitonous bear accent-MASC

The only possible reading of the bare nouns in these constructions is that of types of entities, like entries in a dictionary, not tokens. The nouns that apparently

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[23] See Bosque (1996) for a general discussion on the distribution of bare nouns in Spanish

surface in the unmarked singular in these constructions lack number content, being not interpreted as singular or plural. They can not intervene in processes of backwards anaphora, which are only possible with grammatically referential expressions.[24] Witness the examples (17) and (18 a, b), in Spanish and Catalan respectively, showing that co-reference between the bare noun and a pronoun (be it a _pro_, a clitic or a strong pronoun) is impossible:

(17) *Como ya   la$_i$ he arreglado, podemos conservar el whisky en barrica$_i$
       as already (I) it-FEM have fixed, (we) can preserve the whisky in cask-FEM

(18) a. *Com que   el$_i$ van contractar, el president porta escorta$_i$
         as that (they) him-CL   hired   , the president has escort-MASC

    b. *Si _pro$_i$_ ha estat repintada,   hi haurà   cadira$_i$ per a tothom
        if (it)   has been repainted-FEM, there will be chair-FEM for everybody

The bare nouns exemplified in (15) and (16) appear to syntactically function as arguments despite of the fact that they lack a determiner. An analysis of these bare nominals as disguised indefinites with a null determiner does not seem adequate since they have the lowest scope and 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 (19); over negation, as shown in (20); and over some time adverbs or adverbial phrases, as shown in (21). The three sets of examples offered below are in Catalan, but the same effect obtains with their Spanish counterparts. The English translations that appear below the glosses are intended to provide an approximate interpretation of the expressions containing these bare nouns:

(19) _pro_ vol portar maleta
     s/he wants to carry suitcase-FEM
     S/he wants to be a suitcase carrier

(20) _pro_ no té cotxe
     s/he not has car-MASC
     S/he is not a car owner

(21) _pro_ fa servir ploma repetidament/moltes vegades
     s/he makes use pen-FEM repeatedly/many times
     S/he is a recurrent pen user

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[24] See Vergnaud & Zubizarreta (1992, 601) and references cited there.

Even considering the limited distribution of these types of bare nominals, the examples question the assumed general non availability of bare singular count nouns in Romance.[25] The grammaticality of (15) and (16), as well as (19)-(21) shows that the claim that nominal expressions can function as syntactic arguments only if they are introduced by the category D, overt or null (see Longobardi 1994) should be qualified. Note that if these bare nouns had a null determiner, they could be expected to share some characteristics of indefinites and be able to take scope over some operators but, as we have shown, this is not the case.

Summarizing, I have suggested that the structure of singular bare nouns contains a functional category c, headed by the interpretable feature [CLASS] selecting an N complement. The conjecture being entertained is that this abstract feature serves to relate grammar with non linguistic processes of entity categorization. It has been claimed that this functional feature can parametrically be selected as valued or as unvalued in order to account for its pre- or post-nominal overt distribution and preserve strict cyclicity. Some languages select it as valued, being overtly realized as an independent lexeme or as a prefix to the noun. In the Romance case, [CLASS] has been suggested to be unvalued and non overt in c. As an unvalued feature, it is a probe. It agrees with, and gets a value from, its valued but non interpretable correlate [±fem] in the N complement of c. The present proposal is fully consistent with the Uniformity hypothesis. Although the number of noun classifiers, noun classes or genders (three or twenty) that a given language resorts to in order to provide a lexical or a formal content to the abstract syntactic feature [CLASS] may vary, the computational component is blind to its specific morpho-phonological realization or its actual denotation, if any.

A possible problem for the present account is posed by the languages that do not appear to have a system of noun classification in nominal constructions. The hypothesis that the interpretable [CLASS] feature in c and its correlate in N (if a language selects the latter) may both be phonologically null can not be disregarded in view of the fact that many languages that apparently lack grammatical gender or a noun classifying device often show a human/non human or an animate/inanimate distinction in their pronominal paradigms. These distinctions should be sensitive to the presence of an abstract feature in the possible linguistic antecedents of the pronouns, given that such variants in a

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[25] See Chierchia (1998). Exceptions to this generalization are Brazilian Portuguese and Haitian Creole. See Munn and Schmitt (1999) and Déprez (2005) respectively.

pronominal system allow us to determine whether or not an anaphoric link between a pronoun and a nominal expression is possible.

It has been suggested that classifiers in general appear to feed the expression of counting or measuring devices in the nominal systems.[26] Greenberg's Universal 36 (see note 4 above) also states the relation between grammatical gender and number.[27] In the following section, I explore how the observed relation can be formulated in the present context.

4. Gender and Number

This section assesses the distribution of grammatical number, its relation to grammatical gender and to its overt expression on the noun. Recall that the preceding discussion has assumed a strong version of Uniformity by assuming not only that the hierarchical order of the functional projections is universally fixed, but that the locus of interpretation of the grammatical features contained in these projections should be invariant and located in the functional layers. I claim that the functional projection containing the number feature [NU] cross-linguistically selects and merges with the one hosting [CLASS].

4.1. The distribution of grammatical number

The overt manifestations of grammatical number are known to surface cross-linguistically in a variety of forms and distribution. Let us consider a few examples of this variation. In Romance, number features surface as suffixes on the noun, following gender, as shown in the Spanish example (22).[28] In the Mayan languages, exemplified in (23), number surfaces as an independent lexeme. It precedes noun class, which is also a free item. In this case, both elements are at the left of the N head and the noun is

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[26] See Croft (1994) who offers evidence from a variety of languages. Doetjes (1996) and Cheng and Syebesma (1999, 2005) make the same claim analyzing data from several varieties of Chinese. For Japanese, see Muromatsu (1995, 1998) and for several other languages of Southeast Asia see Simpson (2005).

[27] There are languages with number and no overt gender (or noun classes). Greenberg's universal would be satisfied if we assume that the computational operations are the same, but there is only one possible value for the gender/class feature.

[28] Grammatical singular is phonologically null both in Spanish and in Catalan. The plural is realized with the morpheme /-s/.

morphologically invariant.[29] As said, number appears morphologically fused with noun class in the Bantu languages, and surfaces as a prefix as exemplified in (24). Grammatical number has also been reported to surface prosodically. In the Ngiti example (25), the last two syllables are assigned high tones for plural marking:

(22) a. libr-*o*   SPANISH
      book-MASC,SING

    b. libr-*os*
     book-MASC,PLUR

(23) a. *heb'*   *nax*   winax   JACALTEC (Mayan)[30]
     PL.*human* NCL.*man* man
     (The) men

    b. *hex*   *no7*   tšitam
     PL.*animal* NCL.*animal* pig
     (The) pigs

(24) a. *ji*-no   KISWAHILI (Bantu)[31]
     NCL:*5*-tooth

    b. *me*-no
     NCL:*6*-teeth

(25) a. màlimò   NGITI (Central Sudanic)[32]
     teacher

---

[29] In addition to noun class and plural, cardinal numerals in Jacaltec appear also with a classifier-like element. They precede the plural lexeme which, in turn, precedes the noun classifier. The plural lexeme is optional for animal referents in these cases but is obligatorily overt for humans. The examples (i a, b) are from Zavala (1990, 164):

(i) a. ka-*waŋ*   *heb'*   *nax*   winax   JACALTEC (Mayan)
     two-*human* PL.*human* NCL.*human* man
     Two men
    b. ka-*k'oŋ*   (*hex*)   *no7*   tšitam
     two-*animal* PL.*animal* NCL.*animal* pig
     Two pigs

[30] Examples from Zavala (1990, 164) who reports that nominals without a number lexeme can ambiguously be interpreted as singular or plural, as in the following example:

(i) te7   sila
    NCL.*wood* chair
    the chair(s)

[31] Examples from Carstens (1991).

[32] From Kutsch Lojenga (1994, 135), cited in Rijkhoff (2004, 151).

b. màlímó
     teachers

Let us assume that the abstract structure shown in (26) below is cross-linguistically fixed. The functional category Nu(mber) hosting the number feature [NU] selects and merges with the (sub-)structure [$_c$ CLASS N]. The features [CLASS] and [NU] are always interpreted in their respective functional projection:

(26)

```
                  Nu
               /      \
          Nu            c
         [NU]         /    \
                    c'        N
                 [CLASS]
```
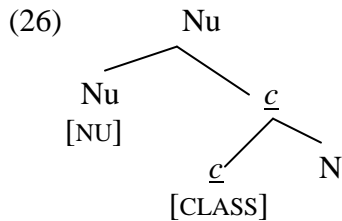
The overt expression of number and noun class in the Jacaltec example (23) and in the Kiswahili (24) strictly follows the basic order (26). In the Mayan case, number and noun class (in that order) are independent lexemes. In Bantu, they are bound and prefixed on the noun. Cyclicity requirements (i.e. the Extension Condition) do not allow us to presuppose that the post-nominal overt position of number in the Romance types of languages obtains from an N head raising operation through the functional heads. The interpretability of this feature also bans any post-syntactic operation to explain its distribution, even in languages where grammatical number surfaces prosodically, as in the Ngiti example (25).

The distribution of number can be accounted for if we adopt the parametric account proposed in section 3.1. for gender and noun class. The observed variation with respect to the morpho-phonological distribution of this functional feature may simply follow from a difference with respect to the syntactic location in which it is valued, not where it is interpreted. The feature [NU], like [CLASS], is always interpretable in the functional projection, but its value may be expressed in the lexical category. Following Pesetsky and Torrego (2004), I have considered that valuation and interpretability are two independent properties of feature instances (see section 3 above). Let us then suppose that, in the Mayan and the Bantu languages, interpretation and valuation obtain in the same syntactic position (i.e. the functional head). In the Romance languages and Ngiti, the two properties of the feature (interpretability and valuation) are distributed in two heads, the functional and the lexical respectively, as abstractly represented in (27)

below. In Romance, the value of [NU] is overtly expressed on the noun as a bound morpheme (the suffix corresponding to [±plur]); in Ngiti, the value for the feature surfaces prosodically, being assigned to the N category when entering the numeration:

(27) [$_{NuP}$ [NU] [$_c$ [CLASS] [$_{NP}$ [N $_{[±fem, ±plur]}$]]]]

      If [NU] is unvalued in the functional projection dominating N in Romance, it can be a probe because only unvalued features can have that property. The abstract syntactic operation Agree between [NU] in the functional projection and its related instance in the lexical N category values the first as [±plur]. As a result of the operation, its non interpretable correlate in N is deleted for LF interpretation at Spell-Out. The valued but non interpretable instance of the feature surfaces in N at the morpho-phonological component.

      The feature [NU] gets the formal values of [±plur] but the interpretive contribution of this feature in syntactic objects like (27), which are bare NuPs, does not appear to be associated with cardinality (i.e. one *versus* more than one entity) but with the notion of token of the kind named by the sub-structure *c* that Nu selects. Indirect evidence for this is provided by the interpretation of plural nouns in some contexts. Benincà (1980, 53) points out that the expression of number in bare plurals may be purely formal. Morphological plurality is not necessarily interpreted as multiplicity but as the instantiation of a given object type, be it one or more than one. In the absence of a partitive preposition, bare plurals in Italian, as well as their Catalan or Spanish counterparts, are perfectly compatible with singular referents, as shown in the below examples in Italian (from Benincà 1980), Catalan and Spanish respectively:

(28) a. Ho Sandra, quindi ho amiche
      have Sandra, therefore have friends-FEM
      I have Sandra, therefore I have friends

   b. Es pot adduir que, a la reunió, hi haurà fonòlegs. Vindrà l'Eulàlia
      SE can adduce that, at the meeting, will be phonologists. Will come Eulàlia
      One can adduce that there will be phonologists at the meeting. Eulàlia will come

   c. No digas que aquí no hay sillas. Hay una
      not say that here not are chairs-FEM. Is one-FEM
      Don't you say that there are no chairs. There is one

A similar phenomenon has been observed with the reading of null plural pronouns in Romance which, as is known, can be interpreted as denoting one or more than one individual (see Jaeggli 1986).[33] The following examples are in Catalan and Spanish respectively:

(29) a. _pro_ truquen   a la porta,   deu ser la teva tia
         knock-3,PLUR at the door, must be your aunt
      (They) knock at the door, it must be your aunt

   b. Espero que _pro_ arreglen   pronto el grifo.   Llamé al fontanero hace días
      hope that   fix-3,PLUR soon   the faucet. called the plumber ago days
      I hope that (they) fix the faucet soon. I called the plumber days ago

The possible pluralization of some mass nouns can also offer some evidence for the tokenizing role of grammatical number. A number of mass nouns, which have generally been assumed to be inherently singular, can also be pluralized in Spanish and Catalan. The grammatical plural in the Spanish examples (30 a, b, c) can not be interpreted as denoting measuring units or different types of the named entity, but only instances of it. The use of a plural mass noun in the Spanish examples has a certain literary flavour but the sentences do not differ in interpretation in any way with their singular (30 a', b', c') counterparts:

(30) a. Las   aguas   de la bahía están agitadas   hoy
        the-FEM,PLUR waters-FEM of the bay are   rough- FEM,PLUR today

   a'. El   agua   de la bahía está agitada   hoy
       the- FEM,SING water-FEM of the bay is   rough- FEM,SING today

   b. Aquel día, estuvieron disfrutando de los   vientos de la sierra
      that day, (they) were enjoying of the-MASC,PLUR winds-MASC of the mountain
      range

   b'. Aquel día, estuvieron disfrutando del   viento de la sierra
       that day, (they) were enjoying of the- MASC,SING wind-MASC of the mountain
       range

   c. Harry contemplaba las   nieves   del Kilimanjaro
      Harry gazed at the-FEM,PLUR snows-FEM of Kilimanjaro

   c'. Harry contemplaba la   nieve   del Kilimanjaro
       Harry gazed at the- FEM,SING snow-FEM of Kilimanjaro

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[33] As is known, these so-called "arbitrary pronouns" have a limited distribution and interpretation. They can not be internal arguments or derived subjects and can only refer to humans.

Similar facts can be observed in Catalan and exemplified with the following sentence pairs. Recall again that the intended reading of the mass plurals in (31 a, b, c) below is not that of different portions or several types of car smoke in (31 a), of soup in (31 b) or of dirt in (31 c). Their interpretation does not differ from their corresponding singular (31 a', b' and c'):[34]

(31) a. Em molesten,   aquests   fums   (de cotxe)
          to me bother-PLUR, these-MASC smokes-MASC (of car)

    a'. Em molesta, aquest   fum   (de cotxe)
        to me bothers, this-MASC smoke-MASC (of car)
        This/these car smoke(s) bother me

    b. Fes-me el favor d'acabar-te   les   sopes   del plat
        Do-me the favour of finish-you up the-FEM,PLUR soups-FEM of the dish

    b'. Fes-me el favor d'acabar-te   la   sopa   del plat
        Do-me the favour of finish-you up the-FEM,SING soup-FEM of the dish
        Do me the favour of finishing up the soup(s) in this dish

    c. Neteja-li   les   caques   al nen
        (you) clean-him the-FEM,PLUR dirts-FEM to the child

    c'. Neteja-li   la   caca al nen
        (you) clean-him the- FEM,SING dirt-FEM to the child
        Clean the child's dirt(s)

Recapitulating, I have claimed that the functional hierarchy in a nominal construction is Number (Nu) and Class (*c*), the first one selecting the second. That is, there is no number without classification. The locus of interpretation of the [NU] and [CLASS] features has been proposed to be cross-linguistically invariant in the functional projections. The pre- or post-nominal distribution of their morpho-phonological exponents reflects a parametric variation with respect to the syntactic location where the

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[34] Pluralization of mass nouns has been reported to be widespread in Modern Greek when a list or enumeration of mass denoting nouns occurs (Tsoulas 2006). In my dialect of Spanish, mass pluralization is limited to nouns like water, wind, sand, snow or rain, with a few others. J. Mascaró (p.c.) observes that quite a number of mass nouns tend to be *pluralia tantum* in Catalan. Their singular counterpart does not always have a transparent relation with the plural in many dialects (cf. *febre/febres* 'fever(s), *sobra/sobres* 'left-over(s)', *moc/mocs* 'mucus-SING/PLUR' or *farineta/farinetes* 'flour-DIMIN/porridge' among many others). This is not the case in the pairs of examples (31) above where singular and plural are perfectly interchangeable without alteration.

features are valued: either at the functional projection or, as their correlates, on the lexical head.

It has also been suggested that the [CLASS] feature in the functional category c selecting N is related to kind denotations and some evidence has been provided suggesting that the [NU] feature selecting the former appears to furnish the nominal with token readings. In any case, mass and count nouns are known to behave differently with respect to a number of properties,[35] the discussion in the literature partially focuses on the issue of whether the different behaviour of mass and count nouns follows from their lexical denotation or it is induced by the functional projections that immediately dominate N. The next section briefly addresses this issue in the context of the present discussion.

4.2. A note on the mass/count distinction

Borer (2005) claims that the generation of mass *versus* count structures is purely formal. According to this author, all nouns are mass nouns, the count reading being triggered by the properties of the functional projections that dominate N in nominal constructions (mainly, by a Classifier Phrase in Borer's terminology). In this section, I offer some evidence showing that Borer's hypothesis may not be adequate and that the mass/count distinction should be a lexical property of N.[36] Such a conclusion is based on the behavior of denominal verbs.

Let us first assume the hypothesis suggested in Hale and Keyser (1993 *et seq*.) that the abstract lexical structure of denominal verbs contains an intransitive grammatical entity, a nominal root, that enters into processes of conflation with a light predicate. Adopting that hypothesis, Harley (2004) has claimed that the inherent semantic features of the conflated nominal should include the mass/count distinction, which accounts for the telic or atelic properties of the verbal entry obtained by conflation. A small representation of two types of verbs of the unergative class shows

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[35] Independently of the interpretive role of grammatical number that is being considered here, a series of factors intervene in determining the specific value of this feature, the selective properties of predicates among them. I. Bosque (p.c.) points out that bare mass singulars and count plurals share distributional properties with some types of predicates. Consider, for example, group selecting verbs:
(i) Luis acumula   oro/libros/*libro
     Luis accumulates gold/books /*book).

[36] See, also Harley (2004) with data from English and Cheng and Sybesma (1999), who make the same claim on the basis of data from Chinese.

that the mass/count property must be inherent in such nominal roots. Denominal verbs of birthing such as the Catalan *infantar* (lit. 'to child'), *vedellar* (lit. 'to calve') or *pollinar* 'to foal' lexically formed with a count nominal are telic, as shown by the temporal adverbial tests in (32):

(32) a. La dona va infantar
the woman childed

en tres hores / #per (durant) tres hores
in three hours / #for (during) three hours

b. La gossa ha cadellat
the she-dog has puppied

On the contrary, unergative denominal verbs of body fluid emission have a mass-denoting base and they are atelic. Hence, the opposite behavior obtains with respect to the adverbial adjuncts examined above. Verbs that lexically contain a mass (noun) base include *llagrimejar* (lit. 'to tear'), *sagnar* 'to bleed', *babejar* 'to drool' or *suar* 'to sweat', among others. The following examples are in Catalan:[37]

(33) a. He suat
(I) have sweated

#en tres hores / per (durant) tres hores
#in three hours/ for (during) three hours

b. La ferida va sagnar
the wound bleeded

Similar contrasts obtain with transitive *location/locatum* verbs where the telicity of predicates like *to saddle* versus the atelicity of those like *to paint* can be predicted on the basis of the count/mass properties of the incorporated nominal root (see Harley 2004 for extensive discussion).

Verbal modification by certain quantifiers also supports Harley's contention. Licensing these quantifiers appears to be contingent on the inherent mass/count distinction of the nominal base of the predicate. Bosque and Masullo (1998) show that adverbs or adverbial phrases of the Spanish (or Catalan) types *un poco* (*una mica*) 'a bit', *mucho*(*molt*)/*demasiado* (*massa*) '(too) much' or *bastant*(*e*) 'enough/sufficiently', among some others, are sensitive to the mass/count properties of the nominal base.

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[37] The adverbial adjunct shown in (33) above can co-appear with constructions of the types (i), inducing the aspectual reading of iteration of the denoted event:

(i) Va rotar / badallar / esternudar per (durant) tres hores
(s/he) burped /yawned / sneezed for (during) tree hours

These quantifiers can not appear with predicates of birthing, lexically formed with a count noun, whereas verbs of fluid emission, with a base mass noun, allow them. Consider the following contrasts in Catalan:

(34) a. La dona va infantar *massa/*bastant/*una mica
   the woman childed *too much /*enough/*a bit

  b. L'infant va bavejar massa/ bastant/ una mica
   the child drooled too much/ enough/a bit

  Bosque and Masullo (1998) also show that *location/locatum* predicates formed with mass-N roots admit the types of quantifiers that are impossible in (34) above. These items can be interpreted as quantifying over the amount of substance named in the base noun conflated with an abstract relational preposition in the lexical structure of these verbs (see Hale and Keyser (1993 *et seq*.). The nominal base of verbs like *to saddle* is not compatible with such quantifiers, whereas that of verbs like *to paint* are compatible with them. Consider the contrasts in the following Spanish examples under the intended 'amount of N' interpretation:[38]

(35) a. Juan ensilló el caballo (*poco/*demasiado/*excesivamente)
   Juan saddled the horse (a bit/too much/excessively)

  b. Juan pintó la puerta (poco/demasiado/excesivamente)
   Juan painted the door (a bit/too much/excessively)

  Spanish verbs like *archivar* 'to archive', *almacenar* 'to store' (lit: 'to warehouse') o *ensobrar* 'to envelope', as well as their Catalan counterparts, behave like *ensillar* 'to saddle' in (35 a). Verbs like *encerar* 'to wax', *enharina*r 'to flour' or *barnizar* 'to varnish' behave like *pintar* 'to paint', since they contain mass noun bases, like (35 b). Given that lexical structures lack functional projections, the selectional properties of denominal verbs with respect to some types of adverbial adjuncts and quantifiers allow us to reach the conclusion that the non relational N element must be lexically endowed with the features accounting for the mass/count distinction. That is,

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[38] In the example (35 a), the adverb can be interpreted as quantifiyng over the amount of time that the horse has remained saldled. It is impossible if understood as the "amount of saddle" in contact with the horse. Examples like (35 b) are ambiguous in this respect because both "amount of paint" or "amount of time" can be understood. Only the former interpretation is relevant in this context.

this property can not be syntactically induced by the functional projections dominating N, be it c, Nu, or any other.[39]

The preceding discussion has focused on NPs, which are always categories that have gender and number. Other types of categories can also have the function of arguments of predication, but can not be attributed a grammatical class or a formal gender. They also lack number. We turn to examine them in the next section.

5. Genderless arguments

This section shows that grammatical number can only be assigned to gendered arguments. There are elements in a syntactic structure that have a thematic role but do not have inflection for gender. They are traditionally called "neuters" in Catalan and Spanish. Absence of gender is related to their lacking also grammatical number and, hence, to the impossibility for them to participate in any phenomena related to the expression of this feature. The following data shows that, when neuters are subjects of predication, the predicate appears in the default singular, even under coordination, as in (36 a). Coordinated neuters can only link singular (and neuter) pronouns as well, as in (36 b). The following Spanish examples are from Quer (2001):

(36) a. Eso   y lo   de Mario nos preocupa/*?preocupan   mucho
       that-NEUT and the-NEUT of Mario us worry-PRES-3-SING/*?PLUR a lot
       That and the (thing) about Mario worry us a lot

   b. Esto   y aquello   lo/*los   considero   un error /*errores

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[39] The lexical entry of nouns appears to offer some possibilities of cross-linguistic variation with respect to the mass/count distinction, which suggests that the distinction must be a lexical property of the noun. As an example of this variation, Bosque (1999) observes that nouns such as *advice* and *information* behave like a mass noun in English, but their corresponding items in Spanish or Catalan *consejo/consell* and *información/informació* respectively are count nouns (cf. the Spanish examples *Me dió tres consejos* 'S/he gave me three advices-MASC' or *Me llegaron varias informaciones* 'Several informations-FEM arrived to me'). Mass-count readings can also be manipulated with some morphological operations. The mass reading of a count noun root can be triggered by derivational suffixes like the Catalan /-*am*/ or the Spanish /-*ar*/ or /-*aje*/ as in the following examples:
(i) Hem traslladat tot el cadiram a la sala gran
   have-1-PLUR all the chair-*AM*-MASC-SING to the big room
   They have moved the (mass of) chair(s) to the big room
(ii) Examinaron el costillar de las vacas
    examined-3-PLUR the rib-*AR*-MASC-SING of the cows
    They have examined the (mass of) rib(s) of the cows
    Very idiosyncratic and affective mass-like interpretations can also be obtained by using mass quantifiers with count nouns, as in (iii a, b) in Catalan and Spanish respectively:
(iii) a. Estic tipa de sentir tant ploraner
    b. Estoy harta de oir a tanto llorón
      am tired of listening to so much "weeper"

this-NEUT and that-NEUT. it/*them consider-PRES-1-SING a mistake/*mistakes
I consider this and that a mistake

The neuter subjects exemplified above are like argument CPs. Clauses are 'neuter' arguments in the sense that they do not have grammatical gender and lack grammatical number as well. The following Catalan examples show that independently of whether coordinated CPs may denote different propositions, as in (37), or different events, as in (38), they do not trigger plurality in the predicate:[40]

(37) [[Que x sigui un nombre senar] i [que x sigui (també) divisible per dos]] és/*són contradictori/*-s
that x is an odd number   and that x is (also) divisible by two   is/*are contradictory.SING/*PLUR
That x is an odd number and that x is (also) divisible by two is contradictory

(38) [[Que detinguessin en Lluís]   i   [que escorcollessin la casa d'en Pere]] va/*van tenir lloc simultàniament/amb poques hores de diferència

that arrest-PAST-3.PL Lluís   and   that search-PAST-3.PL Pere's house
took-3-SING/*PLUR place simultaneously/within a few hours of difference

That Lluís had been arrested and that Pere's house had been searched took place simultaneously/within a few hours of difference

As opposed to series of coordinated nominals, summation procedures (which apply to grammatical singulars) can not apply to a series of coordinated argument CPs, which are unable to antecede a co-referring pronoun in the plural. CPs can only antecede neuter pronouns, which are always numberless. In the Catalan example (39) the intended anaphoric pronoun is a neuter clitic, whereas in the Spanish (40 a) is a

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[40] Complex NPs or nominalizations corresponding to (37) and (38) obligatorily require their predicate in the plural, but we have already seen that all NPs show declension for gender (masculine or feminine), and grammatical gender co-appears with grammatical number:
(i) [[La proposició segons la qual x és un nombre senar] i [la proposició segons la qual x és també divisible per dos]] *és/són contradictories
   the proposition-FEM according to which x is an odd number and the proposition according to which x is also divisible by two *is/are contradictory.PLUR
(ii) [[La detenció d'en Lluís] i [el registre de la casa d'en Pere]] *va/van tenir lloc simultàniament/amb poques hores de diferència
   the arrest.FEM of Lluís and the search.MASC of Pere's house took.*SING/PLUR place simultaneously/within a few hours of difference
Note that plural agreement on the verb is required with all coordinated nouns regardless of whether they are mass or count, or the morpho-phonological expression of the determiner. Consider the following examples in Spanish:
(iii) a. Aparecieron   (un/el)   libro   y (una/la)   libreta   en el cajón de la mesa
      appeared-PLUR (a/the-MASC) book-MASC and (a/the-FEM) notebook-FEM in the drawer of the table
   b. Agua   y   aceite no se mezclan con facilidad
      water-FEM and oil-MASC don't mix-PLUR easily

neuter strong pronoun.[41] Note that a neuter pronoun is also required if, instead of "bare" CPs, coordination takes place with nominalized clauses as shown in the Spanish example (40 b):[42]

(39) Sabem [que van bombardejar la ciutat] i [que van saquejar els magatzems] perquè
ho/*els portava el diari d'ahir

know-1,SING that the city was bombarded and that the warehouses were looted because yesterday's newspaper it/*them told

(40) a. Dicen   [[que Pedro está en París] y [que Ana no terminó aún el artículo]],
pero no quiero preocuparme por *ello/*ellos* ahora

say-PRES-3PLUR   that Pedro is in Paris and that Ana not finished yet the paper but not want-PRES-1SING to worry about it-NEUT/*them now

They say that Pedro is in Paris and that Ana didn't finish the paper yet, but I do not want to worry about it/*them now

b. Lamento mucho [[el que Pedro esté en Paris] y [el que Ana no haya terminado
aún el artículo]] pero no quiero preocuparme por *ello/*ellos* ahora

regret-PRES-1SING the that P. be-SUBJ in Paris and the that A. not have-SUBJ finished yet the paper but not want-PRES-1SING to worry about it-NEUT/*them now

I regret a lot that Pedro is in Paris and that Ana has not finished the paper yet, but I do not want to worry about it/*them now

Floating quantification is also impossible with coordinated CPs because a grammatical plural able to license the floating quantifier can not obtain. The following example is in Catalan:[43]

(41) [[Que dimiteixi el primer ministre] i [que se substitueixi el cap de la policia]]
ha/*han estat proposat/*-s (*ambdós/*cadascun) com a solució a la crisi

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[41] The pronoun *ellos* 'they-MASC,PLUR' is grammatical in (40 a, b) only if interpreted as the summation of the referents *Pedro* and *Ana*, but not if its antecedent is the set of coordinated CPs or nominalized clauses.

[42] See Picallo (2002) for discussion on the properties of nominalized clauses in Spanish.

[43] As expected (see also note 40), floating quantification is licensed in the corresponding nominalizations:
(i) [[La dimissió del primer ministre]   i   [la substitució del cap de la policia]] han estat
proposades (ambdues/cadascuna) com a solució a la crisi
the resignation-FEM of the prime minister and the replacement-FEM of the head of the police have
been proposed-FEM.PLUR (both/each one) as a solution to the crisis

that the prime minister resign   and that SE.imper. substitute the head of the police
has/*have been proposed.sing/*plur (*both/*each one) as a solution to the crisis

The examples above show that grammatical number can only be assigned to gendered arguments. That is, gender feeds number and merge takes place between these two projections, the later selecting the first. Apparently, number can only be grammatically expressed in argument categories that can be assigned a formal class. Lacking grammatical number, argument CPs appear to behave as linguistic expressions that denote undifferentiated "stuff", in a fashion similar to some extent to the series of coordinated nominals exemplified in the Spanish example (42):

(42) Isabel compró un cepillo, la maleta, aquella camisa y el libro. No gastó mucho dinero en *ello*

Isabel bought a brush, the suitcase, that shirt and the book. (She) didn't spend much money on *it*

In the above case, an anaphoric neuter pronoun has been used in order to trigger an intended mass or bulk reading for its coordinated nominal antecedents. The Spanish sentence (42) minimally differs from its (43) counterpart where a summation procedure has applied and the coordinated nominals antecede a plural pronoun:

(43) Isabel compró un cepillo, la maleta, aquella camisa y el libro. No gastó mucho dinero en *ellos*

Isabel bought a brush, three suitcases, that shirt and the book. (She) didn't spend much money on them

Summation can not obtain with coordinated CPs because they lack the formal condition that allows it, grammatical number. Only a pronoun unspecified for gender and number can agree with CP antecedents and be anaphorically linked to them, thereby triggering the apparent unindividuated mass properties of clausal arguments. Such a behavior can only be the effect of a *grammatical* or syntactic property of clausal arguments or nominalized clauses, since the propositions or states of affairs that CPs may denote are not conceived or understood as homogeneous mass. Witness the events described by the CPs in the example (38) above, which can be compared or contrasted by the inclusion of adverbs or adverbial phrases. Similarly, the compatibility of predicative nouns and symmetric predicates with subject CPs also shows that the

different states of affairs that coordinated clauses may denote are not understood as a "massified bulk". The nominal predicate, as well as the copulative verb with which it agrees is in the plural in the Catalan (44 a) whereas the symmetric adjectival predicate must be in the singular in (44 b), in Spanish:

(44) a. [[Que la Terra sigui rodona] i [que la Terra giri al voltant del Sol]] són dos fets diferents

   that the Earth is round and that the Earth moves around the Sun are two different facts

  b. Es incompatible [[que un objeto sea esférico] y [que sea también cúbico]]
   (it) is incompatible that an object is spherical and that it is also cubic

To sum up, the absence of a grammatical categorization mechanism has the effect of blocking the expression of grammatical number, if the later selects the former as has been claimed. Gender, or formal class attribution, feeds number, which is the grammatical tool with which tokens of a class appear to be named. One can speculate on the hypothesis that the Phase Impenetrability Condition (Chomsky 2001) may offer an account for why argument CPs can not linguistically be assigned a formal class or number content. CPs are assumed to close, or shield, a phase. If so, agreement, or feature sharing, with a superordinate functional projection can not obtain. After the completion of a phase, the resulting structure is sent to the interface components and the features internal to the phase, other than the ones in its specifier, may no longer operate in narrow syntax. Note, however, that such an account could arguably be acceptable for argument CPs but it is not for other genderless categories, like neuter pronouns. In fact, the discussion in the preceding sections raises some questions on the feature composition and the structure of pronominal categories. The last section of the paper briefly addresses these issues.

6. *L*-pronouns[44]

  Pronominal categories known as *l*-pronouns have generally been assumed to be Determiner Phrases (DPs)[45] and to conform to the functional architecture of NPs. In this

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[44] *L*-pronouns are the strong forms and clitics of the nominative, accusative and dative series derived from the Latin demonstrative *ille-illa-illud*. For expository purposes, I include in the discussion the Catalan neuter clitic *ho*, derived from the Latin demonstrative *hoc*.

[45] See Postal (1969), Abney (1987) and Cardinaletti and Starke (1999), among many others.

section, I assess their configuration and some of their syntactic properties in light of the hypotheses proposed in sections 3. and 4. I limit the discussion to pronouns of the nominative and the accusative series.

6.1. Nominative and Accusative *l*-pronouns

Various proposals on pronominal systems in a variety of languages have claimed that pronouns are syntactic objects that may have different internal structure and morpho-syntactic properties.[46] Déchaine and Wiltschko (2002) have argued that pronouns can not uniformly be conceived as DPs dominating a more or less complex internal structure. Following their insight, but slightly altering their terminology to suit the preceding discussion, I suggest that Catalan and Spanish *l*-pronouns instantiate two of the three morpho-syntactic types proposed by Déchaine and Wiltschko. The two types are abstractly represented in (45) and (46):[47]

(45) $[_{Nu} \; [NU] \; [_{\underline{c}} \; [\text{CLASS}] \; [_{N} \; N \;]]]$

(46) $[_{D} \; D \; [_{Nu} \; [NU] \; [_{\underline{c}} \; [\text{CLASS}] \; [_{N} \; N \;]]]]$

The structure (45) corresponds to the clitic *l*-series and, possibly, to <u>pro</u> as well. The strong forms, showing a Determiner merging with Nu, conform to the structure in (46). The interpretable constituents of both clitics and strong forms are the functional categories $\underline{c}$ and Nu. The N constituent shown in the above representations follows Déchaine and Wiltschko's (2002) proposal, who suggest that pronominal structures contain an N category devoid of a lexical root. Their suggestion is adopted here with the addition that the rootless N category represented in (45) and (46) should also be the locus of the non interpretable correlates of the *Phi*-features of the pronouns (number and gender respectively). Recall from section 3 that I have proposed that the interpretable [NU] and [CLASS] features are selected as unvalued in the Romance languages.

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[46] See, among others, Cardinaletti (1993), Cardinaletti & Starke (1999), Ritter (1995), Noguchi (1997), Koopman (1999) and Wiltschko (2002).

[47] Déchaine and Wiltscho claim that pronominal elements can cross-linguistically belong to three possible different syntactic categories, which they characterize as *pro*-DPs, *pro*-φPs, and *pro*-NPs. Instances of these elements in the languages they consider are shown to differ with respect to their internal constituency and their binding possibilities. I mainly focus on the issue of pronominal constituency in this section. The categories $\underline{c}$ and Nu in the stuctures (45) and (46) correspond to Déchaine and Wiltschko's φ projection.

With these provisos in mind, consider now the paradigm of *l*-pronouns of the Nominative and Accusative series in Catalan and Spanish:[48]

(47)

	masc.sing	fem.sing	masc.plur	fem.plur	'neuter'
STRONG PRONOUNS					
CATALAN	**ell**	**ella**	**ells**	**elles**	
SPANISH	**él**	**ella**	**ellos**	**ellas**	**ello**
CLITIC PRONOUNS					
CATALAN	**el**	**la**	**els**	**les**	**ho**
SPANISH	**lo**	**la**	**los**	**las**	**lo**

The list in (47) shows that number features can only co-appear with gender ([±fem]). Neuter pronouns, which have no value for gender, lack grammatical number. This list also shows that the morphological composition of clitics appears to be a subset of that of strong pronouns. The morphemes that correspond to the syntactic categories Det and [Nu [*c*]] are represented in (48 a, b). The representation (48 a) below corresponds to the morpheme composition of pronouns with value for gender and number, whereas (48 b) is that of neuter forms:

(48) a. [$_D$ D   [$_{Nu}$ [NU]   [$_c$ [CLASS]   [$_N$ [±fem]   [±plur]]]]   ]
     el   (*l*)   **Ø/-a**   **Ø/-s**

     CLITIC PRONOUNS

     STRONG PRONOUNS

  b. [$_D$ D   [$_{Nu}$ [NU]   [$_c$ [CLASS]   [$_N$ [*fem*]   [*plur*]]]]   ]
     el   (*l*)   **-o**

                  ho

     CLITIC PRONOUNS

     STRONG PRONOUN

I suggest that the segment (*l*) that appears with the sequences corresponding to the gender and number morphemes in the figures (48 a, b) does not correspond to a

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[48] For the purposes of this section, I am not considering allomorphs or the phonological representation of the pronominal forms. Any alternation some of them present is irrelevant in the present context.

Determiner. Clitics are not DPs but NuPs, as represented in (45). The (*l*) segment preceding the morpho-phonological realization of gender and number is only a morphological rescue strategy, a dissociated (post-syntactic) morpheme inserted after Spell-Out. That is, an operation aimed solely at resolving the dependency of otherwise stranded bound morphemes. The segment is possibly a vestige of the Latin forms, from which *l*-pronouns derive and appears to have a function akin to what has been generally claimed for English *do* support.[49]

The suggestion that the (*l*) segment is a dissociated morpheme in clitic pronouns, and not the realization of the syntactic category Determiner selected from the numeration, is able to structurally express some interpretive distinctions among pronominal elements. As is known, strong pronominal forms may be linked to a linguistic antecedent but can not be interpreted as bound variables if a clitic or *pro* is available.[50] There are also a series of constructions where pronominal dependence (i.e. an anaphoric interpretation) can only be obtained if a clitic or a *pro* is used. These constructions include indefinites within opaque contexts as in (49 a), generic expressions as in (50 a) and donkey sentences as in (51 a), among other expressions where specificity or presupposition of existence for the relevant linguistic antecedent are absent. The strong (i.e. DP) pronominal counterparts of *l*-clitics or *pro* in (49 b), (50 b) and (51 b) respectively, can only be interpreted as deictic or co-referent, at best:[51]

(49) a. La fada Pepa vol conèixer [un príncep que tingui castell]$_i$ per convertir-*lo*$_i$
en granota
the fairy Pepa wants to meet [a prince that have-SUBJ castle] to turn-*him*
into a frog

   b. La fada Pepa vol conèixer [un príncep que tingui castell]$_i$ per convertir-*lo a ell* $_{\#i/j}$

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[49] See, however, Embick and Noyer (2001, 586) who disagree with the "dummy stem" treatment of *do* support.

[50] Relevant examples are the Catalan (i) (*apud* Montalbetti 1984) and (ii). The diacritic # indicates the absence of variable bound interpretation. Following the proposed analysis, I gloss the Catalan and Spanish strong forms as "the-*pronoun*" in the examples that follow:
   (i)   Molts lingüistes diuen que   *pro* / #ells   són intel·ligents
            many linguists   say   that (they) / the-they   are intelligent
  (ii) a.   Tots els lingüistes creuen que en Joan els admira   (#a ells)
            all   the linguists believe that Joan   them-admires (to the-them-MASC)
       b.   Algunes noies van contestar la pregunta que l'Anna els va fer   (#a elles)
            some girls   answered the question that Anna them-posed   (to the-them-FEM)
Déchaine & Wiltschko (2002) also argue that D-pronouns (i.e. strong forms) can not have a variable function in the languages they discuss.

[51] Direct and indirect object strong pronouns must be doubled by a clitic in Catalan and Spanish, as reflected in the English glosses below the corresponding examples.

en granota

the fairy Pepa wants to meet a prince that have-SUBJ castle   to turn-him *the-him*

into a frog

(50) a. [Un/el ciutadà de Barcelona]$_i$ ha de comprar una plaça de parking si *pro*$_i$ té

cotxe

a/the citizen-MASC of Barcelona has to buy   a parking space   if   has-3,SING

car

b. [Un/el ciutadà de Barcelona]$_i$ ha de comprar una plaça de parking si *ell* $_{\#i/j}$ té

cotxe

a/the citizen of Barcelona   has to buy a parking space   if   *the-he*   has

car

(51) a. Si una professora$_i$ té un becari$_j$,   *pro*$_i$ l$_j$'aconsella

if   a professor-FEM has a fellow-MASC   *him*-advises

b. Si una professora$_i$ té un becari$_j$,   *ella*$_{\#i/h}$ l'aconsella *a ell*$_{\#j/k}$

if   a professor-FEM has a fellow-MASC *the-she*   him-advises   *the-him*

The observed contrasts between clitics/*pro* and strong forms can be syntactically reflected by assuming that they are categorically distinct. Strong forms are DPs but clitics and *pro* are not. Romance *l*-clitics have traditionally been known as *definite pronouns*, but they do not appear to convey "definiteness" if it is broadly understood as expressing a unique property of an object. The only content clitics and *pro* have is their formal gender (or CLASS) and grammatical number, which replicate the corresponding formal feature content of a linguistic antecedent or of a contextually salient nominal expression. The general properties of clitics and *pro* that we have cursorily examined here by comparing them with the strong forms can thus be structurally characterized with the determinerless structure that is being proposed.

6.2. The operation Agree in the pronominal system

Let us now turn to discussing operations at the computational component and separately consider the operation Agree in the syntactic structures (48 a) and (48 b) above, which result in the forms listed in (47). As said, the structure (48 a) corresponds to the gendered and numbered pronouns, either strong forms or clitics. Successively cyclic merging and Agreement-valuation operations apply between the interpretable and unvalued [$_c$ CLASS] probe and its non interpretable correlate realized as [±fem] gender in the rootless N. The same procedure applies between the unvalued interpretable probe [$_{Nu}$ NU] and its non interpretable [±plur] in the N goal. The gender and number suffixes

of the pronoun are the morpho-phonological exponent of such successive Agreement operations. They reflect the cycle of feature valuation and subsequent deletion of non interpretable feature instances shown in (52 a-c). The resulting abstract structure (52 c) corresponds to clitics showing gender and number. The representation (53), where D merges with Nu, corresponds to the strong forms for gendered and numbered pronouns:

(52) a. N $_{[[\pm fem],\ [\pm plur]]}$

b. [$_c$ CLASS $_{[\pm fem]}$ [$_N$ N $_{[\ [\pm \text{fem}],\ [\pm plur]]}$]]

c. [$_{Nu}$ NU $_{[\pm plur]}$ [$_c$ CLASS $_{[\pm fem]}$ [$_N$ N $_{[\ [\pm \text{fem}],\ [\pm \text{plur}]]}$]]]

(53) [$_D$ D [$_{Nu}$ NU $_{[\pm plur]}$ [$_c$ CLASS $_{[\pm fem]}$ [$_N$ N $_{[\ [\pm \text{fem}],\ [\pm \text{plur}]]}$]]]

Within the present proposal, two hypotheses can be considered to account for the neuter pronominal forms listed in (47) above: *ello, ho* and *lo* (it). A first hypothesis would be to assume that the same procedure just discussed for the gendered forms applies to the neuter forms listed in (47) and represented in (48 b). In this case, the features in both probe and goal share the property of being unvalued. The probes correspond, as in all the Romance cases discussed in this paper, to feature instances that have the properties specified in (13 d) (i.e. interpretable, unvalued) whereas their goal correlates are instances of the characterization (13 b) (i.e. uninterpretable and unvalued). The neuter pronouns result from an Agree operation applied between the interpretable and unvalued probes [CLASS] [NU] and their corresponding unvalued and uninterpretable [*fem*] [*num*] instances in the N represented in (48 b). The operation allows deletion of the later at Spell-Out whereas the interpretable correlates in the functional projection remain unvalued after the Agreement operation:

(54) a. N $_{[\ [fem]\ [num]\ ]}$

b. [$_c$ CLASS [$_N$ N $_{[\ [fem]\ [num]]}$]]

c. [$_{Nu}$ NU [$_c$ CLASS [$_N$ N $_{[\ [fem]\ [\text{num}]\ ]}$]]] $\rightarrow$ *lo / ho*

(55) [$_D$ D [$_{Nu}$ NU [$_c$ CLASS [$_N$ N $_{[\ [fem]\ [\text{num}]\ ]}$]]]] $\rightarrow$ *ello*

A second hypothesis to consider would be that no rootless N category is selected in these cases, the genderless and numberless forms consisting of a $\underline{c}$ projection hosting

an interpretable but unvalued [CLASS] feature and a Nu projection with a [NU] feature with the same characteristics (i.e. instances of (13 d) above):

(56) a. [$_c$ CLASS]

     b. [$_{Nu}$ NU [$_c$ CLASS]]   → *lo / ho*

(57)   [$_D$ D [$_{Nu}$ NU [$_c$ CLASS]]]   → *ello*

       Any of the two hypotheses result in the same outcome since under both accounts the interpretable gender and number features remain unvalued. This is precisely the only possible reading for the so-called "neuter" pronouns since they are interpreted as items with no value for gender and number in Catalan or Spanish. These pronominal forms can have as antecedents linguistic expressions that lack grammatical gender or number, such as CP arguments or neuter demonstratives (see section 5 above).

       I am assuming that *l*-pronouns have no person features, as extensively argued in Kayne (2000). In fact, person and gender are practically in complementary distribution in the Catalan and Spanish mono-morphemic pronominal domains. This is also the case in many other languages where first and second person pronouns do not have grammatical gender. Person may not be a feature of DPs in general, which amounts to saying with Benveniste (1966) that the so-called third person does not exist. CLASS, or gender declension, is the relevant feature that characterizes entities distinct from the speaker or the addressee. Person characterizes the individual participants (speaker/hearer) in a given discourse exchange, either as individuals (*j/yo-me* 'I-me' or *tu-te* 'you.sing') or as the individual participants with their respective understood associates (*nos-ens* 'we-us' or (*v*)*os-us* 'you.plur'). The first and second person morphemes for the singular and the plural simple forms *j/y-n* and *t-v* respectively (see Kayne 2000) are genderless.[52]   We may further speculate on the possibility that the person feature is simply a categorization variant of the abstract category *c* in pronouns. In this case, categorization would cut across participant types (speaker or addressee). I do not pursue this issue here.

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[52] First and second pronominals like the Spanish *nosotros/nosotras – vosotros/vosotras* (lit. 'we-other-MASC/FEM', and 'you-other-MASC/FEM') can arguably be analyzed as plurimorphemic elements. They appear to be first and second person plurals *nos/vos* combined with the Latin form *alteri* (see Par (1923, 22)). These forms may correspond to a structure like (45) above, where N is phonologically realized.

6.3. *L*-Pronouns meet classifiers

       The idea that grammatical gender is a classifier-like element, together with the hypothesis just considered on pronominal structures can account for the characteristics of pronominal elements in some linguistic families other than Romance. Noun classifiers and noun classes have been shown to have pronominal functions in many languages. The example (58 b) in Seshoto (Bantu) is the pronominalized counterpart of (58 a), which repeats the example (9) above. In this case, the noun classes are typically fused with number, appear prefixed onto the verb and are interpreted as pronouns:[53]

(58) a. *ba*-shányana *bá*-ne   *bá*-fúmáné *di*-perekisi   SESHOTO (Bantu)[54]
      NCL:*2*-boys   NCL:*2*-those NCL:*2*-found NCL:*10*-peaches

      tsé-monáte
      NCL:*10*-good
      Those boys found peaches that are tasty

   b. *bá*-*di*-fúmáne
      they-them-found

       The same phenomenon occurs in the Mayan languages, which lack third person pronouns and use noun classifiers as anaphors.[55] Consider the following example in Kanjobalan:[56]

(59) [*nax* šunkaš]ᵢ š-Ø-s-lo7eytox *nax*ᵢ   [*7išim* paat]ⱼ   7ey-Ø y-ib'an meša
    NCL:*man* John   ate   NCL(he) NCL:*corn* tortilla exist   on   table

    katu7 š-Ø-s-lo7eytox *nax*ᵢ   *7išim*ⱼ   y-ul   saam
    then   ate   NCL(he) NCL(it/them) in   pan

    John, he ate the tortilla(s) on the table and afterwards he ate the one(s) on the pan(s)

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[53] See also Kihm (2005, 472) with data from Mankaju. Bresnan and Mchombo (1987) have also shown the pronominal status of these types of affixes in Chichewa, on the basis of their syntactic distribution and phonological properties.

[54] From Demuth (2000, 273)

[55] See Craig (1986 b, 1994), Zavala (1990) and Grinevald (2002)

[56] From Zavala (1992, 172).

Unless interpreted by context, the glosses show that an antecedent like *7išim paat* 'NCL:*corn*-tortilla(s)' and its anaphor, the classifier *7išim* in this case, are ambiguous with respect to number. The following example, also from Kanjobalan,[57] shows the classifier lexeme independent of the number lexeme. Both forms act as pronominal anaphors in the subsequent sentences:

(60) [*eb'   nax   tsonwon*]$_i$ wul 7ewi   sastoo   *eb' nax*$_i$
    PL:*human* NCL:*man* seller   came yesterday already   PL.   NCL (they)

    tsinab'ul   palta *eb' nax*$_i$ skan   titi7   xa7   *eb' nax*$_i$
    Huehuetenango but   PL. NCL (they)   remain   here act.absol.3   PL. NCL (they)

    tit   trosanto   7osi
    came   Todos Santos   three days ago

    The sellers who came yesterday, already left for Huehuetenango, but the ones that
    remained here are the ones that came from Todos Santos three days ago

The pronominal items we have considered, the Seshoto prefixes in (58 b) or the Kanjobalan lexemes in (59) and (60), do not appear to substantially differ from the Romance pronouns at the relevant level of abstraction. Their linguistic antecedents can be tracked and identified by the expression of the abstract features [CLASS] and [NU], whether they surface as noun classifiers and number lexemes, noun classes fused with number, or the Romance pronouns with grammatical gender and number. The idea that the anaphoric properties of *l*-pronouns result from the fact that they are, basically, classifiers, seems at this point a logical conclusion to reach at, given the proposals developed here under the Uniformity hypothesis. The observed variation and apparent multiformity of the data examined is confined to the morphological idiosyncrasies of the lexicon as well as to differences in the valuation property of the interpretable features in functional projections.

7. Conclusion

This paper has assessed the possible syntactic function of grammatical gender and its relation with the expression of grammatical number within a Minimalist perspective. Gender inflection has been claimed to be the overt manifestation of an Agreement relation between an interpretable feature in a functional projection and its

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[57] From Zavala (1990, 186)

non interpretable correlate in the lexical N category. This interpretable feature, labeled [CLASS] to facilitate the discussion, possibly relates grammar with non linguistic systems and has been conjectured to encode cognitive processes of entity categorization. I have brought up data from language families other than Romance in order to test, even in the limited domain of inquiry considered here, a strong version of the Uniformity hypothesis, namely, not only DPs should conform to a universal hierarchical structure but also the locus where grammatical features are interpreted can be assumed to be invariant.

The Extension Condition, that I have also adopted, imposes severe restrictions on any account for the distribution of the morpho-phonological expression of [CLASS] and grammatical number in a number of languages (i.e. a pre- or a post-nominal position). Strict cyclicity bans, in particular, former accounts of gender and number suffixation in Romance as resulting from head movement. The distribution has been accounted for by assuming that the operation of Agreement is feature sharing (Frampton & Gutmann 2000) and that the valuation and interpretation of feature instances are dissociated properties (Pesetsky & Torrego 2004). Interpretation is fixed but the locus of feature valuation is subject to parametric variation. These assumptions and the hypotheses derived from them have shown to have some consequences for pronominal constituency. A proposal concerning the structure of pronominal categories in Romance has also been discussed in light of all the preceding discussion.

Aknowledgements

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