

## On the nature of nominal features

### Agreement mismatches in Spanish conjoined structures\*

Violeta Demonte, Héctor Fernández-Alcalde & Isabel Pérez-Jiménez

Consejo Superior de Investigaciones Científicas, CCHS, Madrid, Spain

Agreement mismatches pose a challenge for standard conceptions of Agree as a Probe-Goal feature valuation process of a single set of  $\phi$ -features. In this paper we focus on sentences with a subject DP formed by two singular conjoined Ns, such as *La madre e hija vinieron juntas*, in which agreement inside DP gives rise to Closest Conjunct Agreement – D agrees in singular with the first N – while Subject-Tense agreement is plural. To solve this puzzle we argue for the necessity of incorporating into the minimalist framework the distinction between concord and index features, as proposed in other theoretical frameworks. Ns and Ds carry these two sets of features which, we claim, are introduced in independently motivated bundles. Building on Frampton & Gutmann's (2000, 2006) Feature Sharing theory and Chomsky's (2001) Maximization Principle, we articulate a single agreement process which derives the two ways in which agreement proceeds in conjoined structures.

#### 1. Introduction

This paper discusses some issues that arise in the feature theory of the minimalist framework. The empirical basis of the article is the agreement mismatches illustrated in (1). Unless otherwise noted, the Spanish examples in this article are from the *Corpus de Referencia del Español Actual*.

- (1) a.  $[_{DP} [_D \textit{El}] \quad [_{N1} \textit{hornero}] \quad y \quad [_{N2} \textit{hornera}]]] \textit{cobran}$   
the.M.SG      baker.M.SG      and      baker.F.SG were.paid.PL  
*en panes.*  
in bread.loaves

\* This work has been mainly supported by the Spanish MICINN through a grant to the Projects HUM2007-30541-C, FFI2009-07114/FILO and EDU2008-01268/EDUC. We thank Cedric Boeckx, Olga Fernández-Soriano, Ángel Gallego and specially Dongsik Lim for useful suggestions. Usual disclaimers apply.

- b. [<sub>DP</sub> [<sub>D</sub> *cuya*] [[<sub>N<sub>1</sub></sub> *detención*] e [<sub>N<sub>2</sub></sub> *interrogatorio*]]]  *fueron*   
 whose.F.SG arrest.F.SG and interrogation.M.SG were.PL  
*llevados a cabo por inspectores.*  
 carried.out.M.PL by inspectors

Here the subject consists of two singular conjoined nouns preceded by a single determiner, which obligatorily agrees in number and gender with the first conjunct, N<sub>1</sub>. This phenomenon is usually referred to as Closest Conjunct Agreement (CCA). However, despite the singular agreement marker on the head D, the DP has a plural interpretation, which correlates with plural agreement on the verb with that DP subject.

This paper argues that the notion of  $\phi$ -feature set generally assumed in the P&P/Minimalist framework must be enriched to explain this pattern of agreement, which can be done if Agree is understood not as an operation of feature copying and deletion but of feature sharing (Frampton & Gutmann 2000, 2006). We will argue that Agree is a single syntactic operation that applies both DP internally (what has been referred to as Concord) and externally (in Subject-Verb agreement, generally associated with Case assignment), in line with Carstens (2000, 2001).

The paper is organized as follows. Section 2 illustrates the data. Section 3 motivates a new typology of  $\phi$ -features and presents the mechanism of agreement that triggers the pattern illustrated in (1). Section 4 discusses some prospects and concludes the paper.

## 2. The data

### 2.1 Basic examples

The construction in (1) is widely attested and productive in Spanish. It is not conditioned by pragmatic/contextual factors, nor restricted to specific kinds of nouns or determiners. Concrete (in)animate nouns, (1a), (2a), mass/abstract nouns, (2b), (2c), and event nominalizations, (1b), show CCA. As for determiners, definite articles, (1a), possessives (1b), indefinite articles, (3a), demonstratives, (3b), and quantifiers, (3c) are allowed.

- (2) a. *En las noches [su bar y discoteca] abrirán*  
 in the nights its.SG bar.M.SG and disco.F.SG will.open.PL  
*sus puertas.*  
 their doors  
 "Its bar and disco will be open at night."

- b. [*El propano y butano*] *juegan un papel*  
 the.M.SG propane.M.SG and butane.M.SG play.PL a role  
*complementario.*  
 complementary  
 "Propane and butane play a complementary role."
- c. [*La oscuridad y claridad*] *están asociadas a*  
 the.F.SG darkness.F.SG and brightness.F.SG are.PL associated to  
*la luz.*  
 the light  
 "Darkness and brightness are associated to the light."
- (3) a. [*Un banquete y baile*] *habían sido anunciados.*  
 a.M.SG banquet.M.SG and ball.M.SG had.PL been announced  
 "A banquet and ball had been announced."
- b. [*Esta implicación y apoyo*] *han*  
 this.F.SG implication.F.SG and support.M.SG have.PL  
*quedado reflejados...*  
 been reflected.M.PL  
 "This implication and support are reflected..."
- c. [*Toda persona y pueblo*] *tienen derecho a saber.*  
 every.F.SG person.F.SG and people.M.SG have.PL right to know  
 "Every person and people has the right to know."

Next we describe the major syntactic and semantic properties of these structures.

### 2.2 Obligatory Closest Conjunct Agreement

As noted above, agreement between D and the first noun of the coordination (i.e. CCA) is compulsory in the structure under study. Compare (1a), where the determiner agrees with N<sub>1</sub> in masculine gender and singular number, with (4), where the determiner agrees in feminine gender with N<sub>2</sub> or appears in the plural. CCA between D and N<sub>1</sub> is obligatory even when N<sub>1</sub> and N<sub>2</sub> have different number specification, (5).

- (4) {*\*La/\*Los/\*Las*}<sub>D</sub> *hornero*<sub>N<sub>1</sub></sub> y *hornera*<sub>N<sub>2</sub></sub> *cobran...*  
 the.F.SG/M.PL/F.PL baker.M.SG and baker.F.SG were.paid.PL
- (5) ... *cuya corrupción y disparates han causado*  
 whose.F.SG corruption.F.SG and foolish.acts.M.PL have.PL caused  
*la actual paralización.*  
 the present stoppage  
 "...whose corruption and foolish acts have caused the present stoppage."

### 2.3 Plural semantics

In the examples above, the conjunction of nouns, although headed by a singular D, denotes the same as a plural noun phrase ("more than one", Lasersohn 1995). Note that this kind of DP may co-refer with a plural pronoun in the discourse, (6).

- (6) *Se les atribuirán [un nuevo padrino y  
SE CL will.assign.PL a.M.SG new.M.SG godfather.M.SG and  
madrina], quienes deben darle la instrucción necesaria...*  
godmother.F.SG who.PL must give.CL.DAT the instruction necessary  
"They will be assigned a new godfather and godmother, who must  
instruct them..."

Similarly to regular plural DPs such as *los hombres*, the DPs under study give rise to distributive as well as to collective readings (Lasersohn 1995). The distributed or individual level reading, semantically equivalent to sentential conjunction, is illustrated in (2a), where two places are mentioned – a bar and a disco – and each of them will open at night. The collective or set reading arises when the verb selects a semantically plural argument, as in (7a), where the mother and the daughter are exchanging glances with each other, and (7b), where the width and the height are identical to each other.

- (7) a. *[La madre e hija] cruzaron una serie  
the.F.SG mother.F.SG and daughter.F.SG crossed.PL a series  
de miradas.  
of glances  
"The mother and daughter exchanged a series of glances."*
- b. *Su cúpula, [cuya anchura y altura]  
its dome whose.F.SG width.F.SG and height.F.SG  
son idénticas, 43.30m.  
are.PL identical  
"Its dome, whose width and height are identical: 43.30 m."  
[From <http://viajeroscallejeros.com>]*

However, a coordination of Ns can have a singular denotation, correlated with singular verbal agreement when the DP is a subject:

- (8) *[El académico y novelista] pronunció  
the.M.SG academician.M.SG and novelist.M.SG delivered.SG  
su conferencia.  
his conference  
"The academician and novelist delivered his conference."*

Following King & Dalrymple (2004:75–76), we tentatively assume that the distinction between the examples introduced so far and those like (8) is tied to the semantics of the conjunction. Specifically, a coordinate phrase like *la madre e hija* in (7) involves a group forming interpretation of *and*, requiring a group composed of *madre+hija*. In contrast, coordinate phrases like (8) involve "a Boolean interpretation of *and*, requiring that the individual or individuals have each relevant property". In this case, the individual that is referred to must be both an academician and a novelist.

## 3. Proposal

### 3.1 Asymmetric Coordination Phrase

We assume an asymmetric structure for Coordination Phrases (CoPs, Kayne 1994; Johannessen 1996, 1998; Camacho 2003), where the structure of a DP like *La madre e hija* is (9). The determiner combines with a CoP where  $N_1$  c-commands  $N_2$  (it is not crucial for this paper whether the level of projection of  $N_1$  is  $N^\bullet$  or NP).<sup>1</sup>

- (9) *La madre e hija (cruzaron una serie de miradas). [= (7)]*  
[<sub>DP</sub> [<sub>D</sub> la] [<sub>CoP</sub> [<sub>N(P)1</sub> madre] [<sub>Co</sub> [<sub>Co</sub> e] [<sub>N(P)2</sub> hija]]]]

We also assume that formal features are properties of lexical items, listed in lexical entries: Specifically, with respect to nouns, we assume that Ns enter the derivation with a full set of  $\phi$ -features.<sup>2</sup>

### 3.2 An enriched theory of $\phi$ -features

In P&P/Minimalist tradition, syntactic agreement is usually assumed to operate with  $\phi$ -features. However, the standard notion of a  $\phi$ -feature set is insufficient to explain CCA. Note that the assumption that the head of the DP subject in (9), i.e. [<sub>D</sub> la], has only one set of  $\phi$ -features does not explain why the D shows singular morphology but the DP triggers plural agreement on the verb. That is why we claim that the theory of  $\phi$ -features must be enriched. Specifically, we introduce two different sets of  $\phi$ -features. Borrowing terminology from the HPSG tradition,

1. Ultimately, this work springs from Munn (1993), where phenomena parallel to those explored in this article are discussed.
2. This is not uncontroversial, though: see Dobrovie-Sorin (2011) for recent discussion on the status of 'number'.

we call them *c[oncord]*  $\varphi$ -features and *i[ndex]*  $\varphi$ -features. Concord  $\varphi$ -features are formal features related to the morphosyntactic or declensional properties of lexical items and codify instructions to the PF interface. Index  $\varphi$ -features are formal features related to semantic properties of lexical items and codify instructions to the LF interface. This hypothesis captures the transmodular relevance of  $\varphi$ -features.

The proposal that two distinct sets of features are involved in agreement has already been argued for in different frameworks, such as OT (Badecker 2007), LFG and HPSG (Pollard & Sag 1994; Kathol 1999; Wechsler & Zlatić [W&Z] 2000, 2003; King & Dalrymple 2004; Villavicencio et al. 2005), and even within Minimalism (D'Alessandro 2004a, 2004b; Costa & Pereira 2005; López 2007; Danon 2011a, 2011b; see also Heycock & Zamparelli 2005, and Sauerland 2008). Data motivating this idea come from the *mixed agreement* patterns of collective nouns in some languages. Consider the Serbo-Croatian example in (10).

- (10) *Ta dobra deca dolaze.* [W&Z 2003:51, (8)]  
 that.F.SG good.F.SG children came.3-PL  
 "Those good children came."

The collective noun *deca* triggers feminine-singular agreement on the pronominal adjective and the determiner, but triggers plural agreement on the verb. In the next section we will extend W&Z's (2000, 2003) proposal on the puzzle in (10) to explain CCA.

### 3.3 Featural content of N, D and CoP

Here we examine the featural content of the different categories involved in the derivation of CCA in (9). Following W&Z (2003), we claim that nouns enter the derivation with a double set of  $\varphi$ -features. First, nouns have a bundle of *c*-features, including gender, number and Case. For Case, we propose that all nouns have an abstract Case feature, though phonologically invisible in Spanish nouns (as opposed, for example, to Serbo-Croatian, Greek or Russian). Person is absent from this set, since it is not a declensional category of Ns. Second, they have a bundle of *i*-features, including gender, number and person.<sup>3</sup> We claim that *person* is a semantic property of nouns and not of determiners, based on the interaction of the person specification (1st/2nd person) with a semantic property of nouns such as animate/human (see (11), suggesting that animate/human nouns

3. See Zoerner (1995) and references therein, where indexical features on nouns are also assumed. The gender *i*-feature is generally interpreted as sex in animate nouns. For the relation between *c*-features, *i*-features and semantic interpretation in inanimate nouns, see W&Z (2003:4.2) and López (2007:§2.6).

may show various forms of person agreement (11a), while inanimate nouns do not (11b)). *C*- and *i*-features are valued in N, except for the Case feature in the *c*-set.

- (11) a. *Los españoles* {*estamos/estáis/están*} *en el rincón.*  
 the Spaniards.3-PL are.1-PL/2-PL/3-PL in the corner  
 "We/You/The Spaniards are in the corner."  
 b. *Las mesas* {*\*estamos/\*estáis/están*} *en el rincón.*  
 the tables.3-PL are.\*1-PL/\*2-PL/3-PL in the corner  
 "The tables are in the corner."

In our proposal, the feature bundles of the nouns *madre* and *hija* from the example in (9) are (12). Note that the gender and number features have equivalent values in the *c*- and the *i*-bundle.

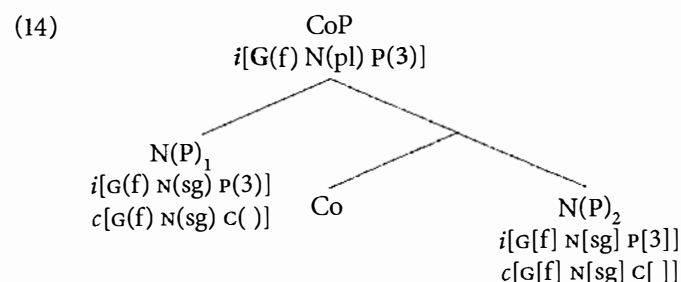
- (12) a. *madre*  $i[G(f) N(sg) P(3)]$   
 $c[G(f) N(sg) C( )]$   
 b. *hija*  $i[G(f) N(sg) P(3)]$   
 $c[G(f) N(sg) C( )]$

Let us now consider determiners. We follow W&Z's proposal that determiners carry gender, number and Case *c*-features, linked to the determiner's morphology. We claim that D also carries gender, number and person *i*-features. Both sets of features are unvalued, since D is a functional category. The featural make-up of D is thus (13). The intuition is that D collects the valued *i*-features of the noun via agreement (see Section 3.4). This relation can be taken as the basis for the semantics of the determiner: D operates on the noun's index and maps it to some denotations in the context. Agreement between D and N(P) also makes it possible that the DP as a whole (via its head D) carries all the  $\varphi$ -features with which external heads agree. We will return to this idea in Section 3.4.

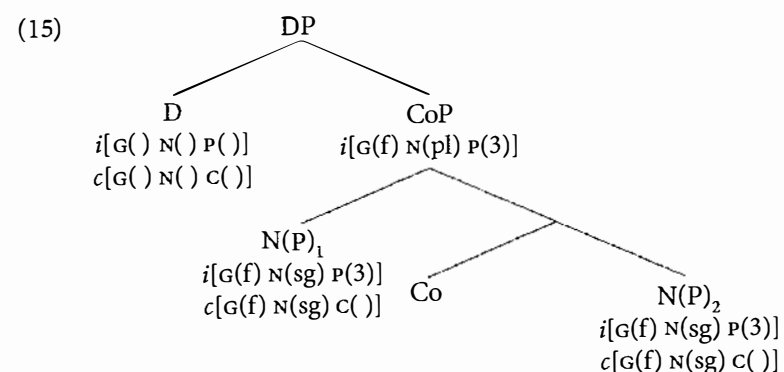
- (13) D  $i[G( ) N( ) P( )]$   
 $c[G( ) N( ) C( )]$

Let us now turn to the feature structure of the coordination of nouns. In coordinate structures like (9) (*la madre e hija*), both N(P) conjuncts have *c*- and *i*-features. The CoP, nevertheless, lacks *c*-features, because the head of the phrase, the conjunction, is not morphosyntactically plural or singular, masculine or feminine. However, the CoP bears *i*-features (see also Dalrymple & Kaplan 2000; W&Z 2003; King & Dalrymple 2004; Badecker 2007). This proposal is motivated from the semantics of *and* in group forming coordinations: the conjunction semantically operates on the indices of its conjuncts, joining them (Zoerner 1995). Since indices are understood as feature structures, the conjunction joins the *i*-feature bundles of N(P)<sub>1</sub> and N(P)<sub>2</sub>. As a consequence, the whole CoP has a plural *i*-feature (14).

Regarding the person and gender *i*-features of the coordination, we assume that they are determined via *resolution*, on the basis of the features of  $N(P)_1$  and  $N(P)_2$ . In (14) gender is resolved as feminine and person as 3rd.<sup>4</sup>



Let us recapitulate. Before DP internal Agreement takes place, the structure and feature content of the DP *la madre e hija* in (9) is (15).



### 3.4 Agree as feature sharing

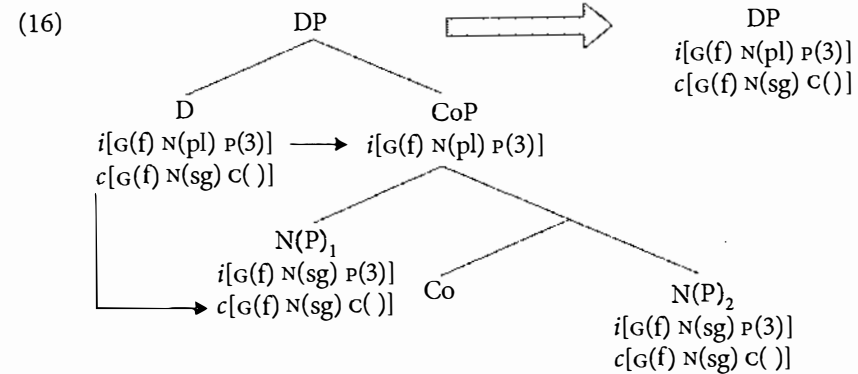
In the remainder of this section, we develop our unified analysis of the DP-internal and Subject-Verb agreement facts illustrated in the preceding sections. The analysis crucially relies on Frampton & Gutmann's (2000, 2006) theory of Feature Sharing, which modifies Chomsky's (2000, 2001) Agree theory in two respects: (i) the features of the Goal need not be valued for a Probe to agree with them; and (ii) an element containing only valued features can act as a Goal in the derivation (contra Chomsky's Activation Condition).

4. For the details of 'resolution', see Corbett (1991, 2006), Dalrymple & Kaplan (2000), W&Z (2000, 2003), King & Dalrymple (2004), Villavicencio et al. (2005), Badecker (2007).

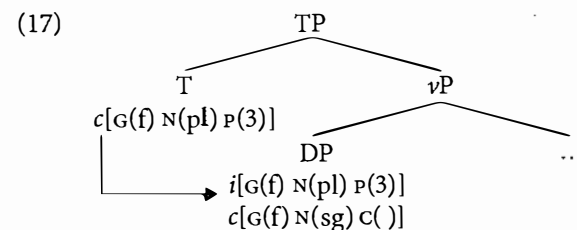
Frampton & Gutmann (2000, 2006) assume that lexical items can enter the derivation with their features valued or unvalued. Unvalued features must be valued before the derivation is transferred to the interfaces, otherwise it would crash. Agree is the syntactic operation established between a Probe containing unvalued features that need to be assigned a value and a Goal with matching counterparts. Within its *c*-commanding domain, the Probe conducts a top-down search of a feature, be it valued or unvalued, that matches its own unvalued feature. When this is accomplished, the search stops and the unvalued feature on the Probe and the feature on the Goal are coalesced, resulting in a shared feature, no matter whether agreement succeeds or not in valuing at that point the unvalued feature of the Probe. When unvalued, the Probe and the Goal will share an instance of an unvalued feature, which will be valued at once later in the derivation. This is what happens with the Case feature in our structure, as we will see immediately. We further assume that the operation Agree is constrained (apart from being subject to locality and intervention conditions) by the Maximization Principle (Chomsky 2001): if a Probe matches with a Goal, its unvalued features must be valued at once, as fully as possible. Successive operations of partial valuation of features are not allowed.

In (15) D, with unvalued  $\phi$ -features, probes for a Goal with their matching counterparts. *I*- and *c*-features are treated as bundles, as expected from the Maximization Principle. D's *i*-features agree with the closest goal containing another instance of this set of features, namely CoP; since the *i*-features of CoP are valued, the features of D receive their value. But the *c*-features of D find their closest goal in the *c*-features of  $N(P)_1$ , establishing with them an Agree relation (the feature bundle on CoP is overlooked since it does not "maximally" match the one on the Probe). In this case, however, one of the features of N (structural Case) is unvalued; this is not a problem for the theory of feature sharing since Agree is blind to feature values: it just pairs up matching features. These DP internal agreement processes, usually referred to as Concord, are derived here from the application of Agree. As a result of these agreement operations, D is morphologically singular, which constitutes the phenomenon of CCA, but indexically plural, (16).<sup>5</sup> The Case feature of D also remains unvalued. We assume that the features of D are visible at the DP level and can be accessed for DP external syntactic operations.

5. The *i*-features of the DP (plural number and resolved gender coming from the *i*-bundle of CoP) are visible in predicative contexts. In (1b) and (3b), a conjunction of a masculine and a feminine noun determines masculine gender and plural number on the predicate. This is expected if predication is seen as a coindexing relation between a predicate and a *c*-commanding subject (Williams 1980).



As the derivation proceeds, the functional category T(ense), standardly assumed to be the locus of Subject-Verb agreement features, merges with the verbal phrase containing the subject DP, as in (17). T bears a *c*-bundle which contains at least person and number features (for simplicity we assume that it also has a gender feature, invisible in Spanish). These features are expected, since verbal agreement systems evolve historically from pronoun incorporation (a proposal which goes back as early as Givón 1976). However, these are *c*-features on T, because they correspond to the inflectional properties of the verb and are visible at PF. The unvalued *c*-features of T probe for a matching set of features, and find the *i*-features of DP and agree with them. This agreement relation is possible given that *c*- and *i*-features are different kinds of features in the interfaces they give instructions to, but are equally treated by syntax. Therefore, a *c*-bundle can agree with an *i*-bundle as long as they contain the same featural content, as in Subject-Verb (T) agreement.



As a result of Agree between T and DP, the number feature of T is valued as plural, since its value comes from the *i*-feature of D. Following Chomsky (2001) and Frampton & Gutmann (2000, 2006), we assume that Case is a reflex of agreement processes. Thus, the Case feature of DP (remember that Case is a feature shared by D and N) is valued as nominative as a by-product of the Agree that it establishes with T. How exactly the Case *c*-feature is valued after T agrees with

the *i*-features of D is still not clear to us, but what is important to keep in mind is that the Case feature is not valued by Agree, i.e. by means of copying the value of another Case-feature already valued in a different head, but as an argument-marking strategy dependent upon Agree. This is only possible if, as proposed above, D comes with (unvalued) *i*-features, since Case assignment to the whole DP would not be possible if T targeted some other, more embedded element with the relevant featural make-up.<sup>6</sup>

#### 4. Prospects and conclusions

Before concluding, we need to consider the cross-linguistic distribution of the structures analyzed in this paper. Many scholars claim that the existence of such structures (where a single D precedes a coordination of N(P)s with plural denotation) and the possibility of CCA in them are related to parametric differences between Romance and Germanic languages. Heycock & Zamparelli (2005), Bouchard (2002), Dobrovie-Sorin (2011), claim that sentences like (18)–(20) do not exist in Italian, French and Romanian, due to semantically or syntactically parameterized properties of the category Number (cf. English *This man and woman are in love*).

- (18) \**[Un uomo e bambino] mangiano.* [H&Z 2005:(21a)]  
 a.M.SG man.M.SG and child.M.SG eat.PL  
 ‘‘A man and child are eating.’’

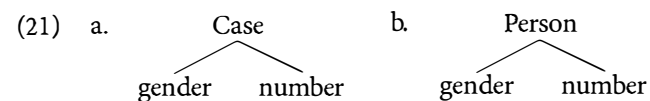
- (19) \**[Ce soldat et marin] étaient d'accord.* [H&Z 2005:(22b)]  
 this.M.SG soldier.M.SG and sailor.M.SG  
 were.PL of agreement  
 ‘‘This soldier and sailor agreed with each other.’’

- (20) \**[Acest bărbat și femeie] sunt îndrăgostiti.* [Dobrovie-Sorin 2011:(11)]  
 this.M.SG man.M.SG and woman.F.SG  
 are.PL in.love  
 ‘‘This man and woman are in love.’’

6. We will not discuss the details of Case assignment to N<sub>2</sub>, and simply assume that N<sub>1</sub> and N<sub>2</sub> share their Case-feature, which gets its value when Agree with a Case-assigner probe is established.

The data presented in this paper suggest that Spanish (also see Villavicencio et al. 2005 for Portuguese) should be grouped together with Germanic rather than Romance languages in this respect, a fairly unexpected typological conclusion. Finding the exact locus of this putative parametric variation is beyond the scope of this article, but we think that a research line worth exploring could be the further investigation of the role of the conjunction, which seems to license bare N(P)s as arguments (\**Madre llegó* ‘mother came’ vs. *Madre e hija llegaron* ‘mother and daughter came’), in combination with the properties of the determiner in Spanish, whose selectional requirements may differ from the other languages.

Another line of research that our analysis gives rise to is treating bundles as structured sets (C. Boeckx, p.c.) where gender and number features depend on Case (21a) and person (21b).



Evidence for this bundling is found in the agreement patterns observed in languages with quirky subjects. For example, in Icelandic gender/number agreement between a quirky subject and a Goal with person marking (e.g. the inflected verb: T) is different from gender/number agreement with a Goal with Case marking (e.g. a secondary predicate). This could indicate that gender and number features are dependent on the Case and person features in each bundle. With the feature hierarchies in (21) we may be able to dispense with the labels *i/c* and to explain why the number/gender features in the case bundle are not interpreted at LF while the number/gender features in the person bundle are. We may further argue that dependent features in a hierarchy must share some properties with the superordinate node, so that if Case is not interpreted at LF their dependent features will not be interpreted either.

To conclude, in this paper we have proposed an analysis for the number agreement mismatch in Spanish DPs with internal N-*y*-N coordinations. We have claimed that the mismatch between morphological and semantic number can be captured in a model in which agreement relations are established derivationally due to the interaction of two types of nominal features (*c*-features and *i*-features), both being syntactically active inside DP. Specifically, we have argued that number is a syntactic feature that emerges with a double face within the nominal feature geometry: as a formal feature (concord) and as a referential feature (index). The idea that there are two types of number features is favored by almost all approaches to agreement mismatches. Yet the ideas that each type of number feature is part of a bundle, that certain heads bear only one of the two bundles, and that Agree is a single syntactic operation (independent of Case assignment) that applies in all

syntactic domains linking matching features irrespective of their type, are unique to our approach and allow us to explain the complex agreement paradigm we have unveiled.

## References

- Badecker, William. 2007. ‘A feature principle for partial agreement’. *Lingua* 117.1541–1565.
- Bouchard, Denis. 2002. *Adjectives, Number and Interfaces: Why Languages Vary*. Amsterdam & Boston: North Holland.
- Camacho, José. 2003. *The Structure of Coordination. Conjunction and Agreement Phenomena in Spanish and Other Languages*. Dordrecht: Kluwer.
- Carstens, Vicki. 2000. ‘Concord in Minimalist Theory’. *Linguistic Inquiry* 31.319–355.
- Carstens, Vicki. 2001. ‘Multiple Agreement and Case Deletion. Against phi-(in)completeness’. *Syntax* 4.147–163.
- Chomsky, Noam. 2000. ‘Minimalist Inquiries’. *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik* ed. by Roger Martin, David Michaels & Juan Uriagereka, 89–155. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 2001. ‘Derivation by Phase’. *Ken Hale. A Life in Language* ed. by Michael Kenstowicz, 1–52. Cambridge, Mass.: MIT Press.
- Corbett, Greville. 1991. *Gender*. Cambridge: Cambridge University Press.
- Corbett, Greville. 2006. *Agreement*. Cambridge: Cambridge University Press.
- Corpus de Referencia del Español Actual* (CREA). Real Academia Española. Banco de datos en línea. (<http://www.rae.es>).
- Costa, João & Sandra Pereira. 2005. ‘Phases and autonomous features: a case of mixed agreement in European Portuguese’. *Perspectives on Phases* ed. by Martha McGinnis & Norbert Richards, 115–124. Cambridge, Mass.: MIT Press.
- D’Alessandro, Roberta. 2004a. ‘Syntactic and Pragmatic Features: A case study’. *Leitura: Estudos em sintaxe comparativa* 33.185–202.
- D’Alessandro, Roberta. 2004b. *Impersonal si Constructions. Agreement and Interpretation*. Ph.D. Dissertation, University of Stuttgart. (Published as *Impersonal si Constructions*. Berlin: Mouton de Gruyter, 2007.)
- Dalrymple, Mary & Ronald M. Kaplan. 2000. ‘Feature Indeterminacy and Feature Resolution’. *Language* 76.759–798.
- Danon, Gabi. 2011a. ‘Agreement with Quantified Nominals: Implications for feature theory’. *Empirical Issues in Syntax and Semantics* 8.75–96.
- Danon, Gabi. 2011b. ‘Agreement and DP-internal Feature Distribution’. To appear in *Syntax*.
- Dobrovie-Sorin, Carmen. 2011. ‘Number as a Feature’. To appear in *Functional Heads: a Festschrift for Guglielmo Cinque* ed. by Laura Brugè, Anna Cardinaletti, Giuliana Giusti, Nicola Munaro & Cecilia Poletto. Oxford: Oxford University Press.
- Frampton, John & Sam Gutmann. 2000. ‘Agreement is Feature Sharing’. Unpublished Manuscript, Northeastern University.
- Frampton, John & Sam Gutmann. 2006. ‘How Sentences Grow in the Mind’. *Agreement Systems* ed. by Cedric Boeckx, 121–157. Amsterdam: John Benjamins.
- Givón, Talmy. 1976. ‘Topic, Pronoun, and Grammatical Agreement’. *Subject and Topic* ed. by Charles N. Li, 151–188. New York: Academic Press.

- Heycock, Caroline & Roberto Zamparelli. 2005. "Friends and Colleagues: Coordination, plurality, and the structure of DP". *Natural Language Semantics* 13.201–270.
- Johannessen, Janne B. 1996. "Partial Agreement and Coordination". *Linguistic Inquiry* 27.661–676.
- Johannessen, Janne B. 1998. *Coordination*. Oxford: Oxford University Press.
- Kathol, Andreas. 1999. "Agreement and the Syntax-morphology Interface in HPSG". *Studies in Contemporary Phrase Structure Grammar* ed. by Robert Levine & Georgia M. Green, 223–274. Cambridge: Cambridge University Press.
- Kayne, Richard. 1994. *The Antisymmetry of Syntax*. Cambridge, Mass.: MIT Press.
- King, Tracy H. & Mary Dalrymple. 2004. "Determiner Agreement and Noun Conjunction". *Journal of Linguistics* 40.69–104.
- Lasersohn, Peter. 1995. *Plurality, Conjunction and Events*. Dordrecht: Kluwer.
- López, Luis. 2007. *Locality and the Architecture of Syntactic Dependencies*. New York: Palgrave.
- Munn, Alan. 1993. *Topics in the Syntax and Semantics of Coordination*. Ph.D. Dissertation, University of Maryland.
- Pollard, Carl & Ivan A. Sag. 1994. *Head-Driven Phrase Structure Grammar*. Chicago: University of Chicago Press.
- Sauerland, Uli. 2008. "On the Semantic Markedness of Phi-features". *Phi Theory: Phi Features across Interfaces and Modules* ed. by Daniel Harbour, David Adger & Susana Béjar, 57–82. Oxford: Oxford University Press.
- Villavicencio, Aline, Louisa Sadler & Doug Arnold. 2005. "An HPSG account of Closest Conjunct Agreement in NP coordination in Portuguese". *Proceedings of the HPSG Conference* ed. by Stefan Müller. Stanford: CSLI.
- Wechsler, Steven & Larisa Zlatić. 2000. "A Theory of Agreement and its Application to Serbo-Croatian". *Language* 76.799–832.
- Wechsler, Steven & Larisa Zlatić. 2003. *The Many Faces of Agreement*. Stanford: CSLI.
- Williams, Edwin. 1980. "Predication". *Linguistic Inquiry* 11.203–238.
- Zoerner, Cyril Edward. 1995. *Coordination: The Syntax of &P*. Ph.D. Dissertation, University of California.

## On the nature of bare nouns in Afro-Bolivian Spanish

Javier Gutiérrez-Rexach & Sandro Sessarego

The Ohio State University / University of Wisconsin, Madison

This paper provides an analysis of bare nouns in Afro-Bolivian Spanish. Their behavior does not fit the typology emerging from the Nominal Mapping Parameter. We consider several properties related to mass/count, kind, and indefinite/definite readings, and we conclude with an explanation based on the generalized availability of type-shifters.

### 1. Introduction

It is commonly accepted that NPs are predicates while DPs are arguments, at least in the Romance languages (Longobardi 1994; McNally 2004). A great deal of research has been carried out recently to refine the proposal of a Nominal Mapping Parameter (Chierchia 1998), which would account for the distribution of bare plurals and full DPs cross-linguistically, especially the distribution of bare nouns in languages where arguments can occur without projecting a D category in canonical subject and object positions. According to Chierchia (1998), languages lacking an overt definite article would be endowed with a non-overt *iota* operator, a semantic type-shifter equivalent to a definite article. On the other hand, if a language has an overt determiner capable of performing such operation, *iota* will be blocked since it is a last-resort operator. Such a proposal has been empirically challenged by Schmitt & Munn (2003) for Brazilian Portuguese (BP), among others (e.g. Déprez 2001; Kester & Schmitt 2006). In fact, BP has definite articles but bare NPs can still act as DPs.

Another language with certain characteristics that are partly similar to BP is Afro-Bolivian Spanish (ABS) – See Sessarego (2010) for an overview of its origins and structural characteristics. In this Afro-Hispanic vernacular, bare nouns can appear both in subject and object positions whereas in standard Spanish (stSp) they can only occur in complement positions (Contreras 1986; Bosque 1996). Independently of their syntactic distribution, bare nouns in ABS have a variety of interpretations. This paper provides an account for these phenomena



CURRENT ISSUES IN LINGUISTIC THEORY  
AMSTERDAM STUDIES IN THE THEORY AND HISTORY  
OF LINGUISTIC SCIENCE - Series IV

General Editor  
E.F.K. KOERNER  
Zentrum für Allgemeine Sprachwissenschaft, Typologie  
und Universalienforschung, Berlin  
efk.koerner@rz.hu-berlin.de

*Current Issues in Linguistic Theory* (CILT) is a theory-oriented series which welcomes contributions from scholars who have significant proposals to make towards the advancement of our understanding of language, its structure, functioning and development. CILT has been established in order to provide a forum for the presentation and discussion of linguistic opinions of scholars who do not necessarily accept the prevailing mode of thought in linguistic science. It offers an outlet for meaningful contributions to the current linguistic debate, and furnishes the diversity of opinion which a healthy discipline must have.

A complete list of titles in this series can be found on <http://benjamins.com/catalog/cilt>

*Advisory Editorial Board*

Lyle Campbell (Manoa, Hawaii)  
Sheila Embleton (Toronto)  
Elly van Gelderen (Tempe, Ariz.)  
John E. Joseph (Edinburgh)  
Manfred Krifka (Berlin)  
Martin Maiden (Oxford)  
Martha Ratliff (Detroit, Mich.)  
E. Wyn Roberts (Vancouver, B.C.)  
Joseph C. Salmons (Madison, Wis.)

Volume 318

Julia Herschensohn (ed.)

*Romance Linguistics 2010. Selected papers from the 40th Linguistic Symposium  
on Romance Languages (LSRL), Seattle, Washington, March 2010*

NS. 1499260  
CB. 970767

81  
AMS CUR  
318

ROMANCE LINGUISTICS 2010

SELECTED PAPERS FROM  
THE 40TH LINGUISTIC SYMPOSIUM  
ON ROMANCE LANGUAGES (LSRL),  
SEATTLE, WASHINGTON, MARCH 2010

Edited by

JULIA HERSCHENSOHN  
*University of Washington*



JOHN BENJAMINS PUBLISHING COMPANY  
AMSTERDAM/PHILADELPHIA



The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences – Permanence of Paper for Printed Library Materials, ANSI Z39.48-1984.

*To Laura Adjémian and to the memory of  
Christian Adjémian, my dear friend and  
fellow Romance linguist.*

**Library of Congress Cataloging-in-Publication Data**

Linguistic Symposium on Romance Languages (40th : 2010 : Seattle, Washington)  
Romance linguistics 2010 : selected papers from the 40th Linguistic Symposium on  
Romance Languages, Seattle, Washington, March 2010 /  
edited by Julia Herschensohn.

p. cm. (Amsterdam studies in the theory and history of linguistic science. Series IV,  
Current Issues in Linguistic Theory, ISSN 0304-0763 ; v. 318)

Selected papers from the 40th Linguistic Symposium on Romance Languages.  
Includes bibliographical references and index.

1. Romance languages--Congresses. I. Herschensohn, Julia Rogers, 1945-

PC11.L53 2010

440--dc23

2011034776

ISBN 978 90 272 4836 7 (Hb ; alk. paper)

ISBN 978 90 272 8341 2 (Eb)

© 2011 – John Benjamins B.V.

No part of this book may be reproduced in any form, by print, photoprint, microfilm, or any other means, without written permission from the publisher.

John Benjamins Publishing Co. · P.O. Box 36224 · 1020 ME Amsterdam · The Netherlands  
John Benjamins North America · P.O. Box 27519 · Philadelphia PA 19118-0519 · USA