

Agreement mismatches in Spanish and the nature of nominal features

Violeta Demonte

violeta.demonte@cchs.csic.es

Héctor Fernández-Alcalde

hector.fernandez@cchs.csic.es

Isabel Pérez-Jiménez

isabel.perez@cchs.csic.es

(Consejo Superior de Investigaciones Científicas – CCHS, Spain)

The goal of this talk is to provide a principled account for the mismatch between ‘morphological’ and ‘semantic’ number in Spanish DPs with an internal N+N coordination of the type illustrated in (1):

- (1) a. [DP [D La] [[N₁ madre] e [N₂ hija]]] **cruzaron** toda una serie de miradas.
the_{FEM.SG} mother_{MASC.SG} and daughter_{MASC.SG} exchanged a series of glances
- b. [DP [D El] [[N₁ embalaje] y [N₂ distribución]]] se **realizan** en España.
the_{MASC.SG} packing_{MASC.SG} and distribution_{FEM.SG} take place in Spain

In these structures, two singular conjoined Ns are preceded by a single D, which compulsorily agrees in (singular) number and gender with the first member of the coordination, N₁ (Closest Conjoint Agreement). Despite the singular agreement marks on the head D, the DP has a plural interpretation, which triggers plural agreement on the verb when the DP is a subject.¹ First, we will present the data as well as some evidence for the plural denotation of these DPs. Second, we will offer an Agree-based analysis for the mismatch just described based on the existence of two different types of phi features, and show some shortcomings of alternative analysis. Third, we will suggest some extensions of the proposal.

1. The data

In the structures under study, widely attested in contemporary corpora (CREA, DAVIES, etc.) contrary to common assumptions in the literature, different kinds of N can appear. In (1) count (concrete) Ns and event nominalizations are found. In (2), mass and abstract Ns appear:

- (2) a. El pescado y marisco **han** bajado de precio.
the fish and shellfish have_{PL} lowered their price
- b. La alegría y tranquilidad **disminuyen** con la crisis.
the happiness and calmness decrease_{PL} with the crisis

¹ This kind of structures can also have a singular denotation, correlated with singular verbal agreement. Compare, in this respect: *El presidente y tesorero han sido destituidos* ‘The president and treasurer have been dismissed’ (split reading) - *El presidente y tesorero ha sido destituido* ‘The president and treasurer has been dismissed’ (joint reading).

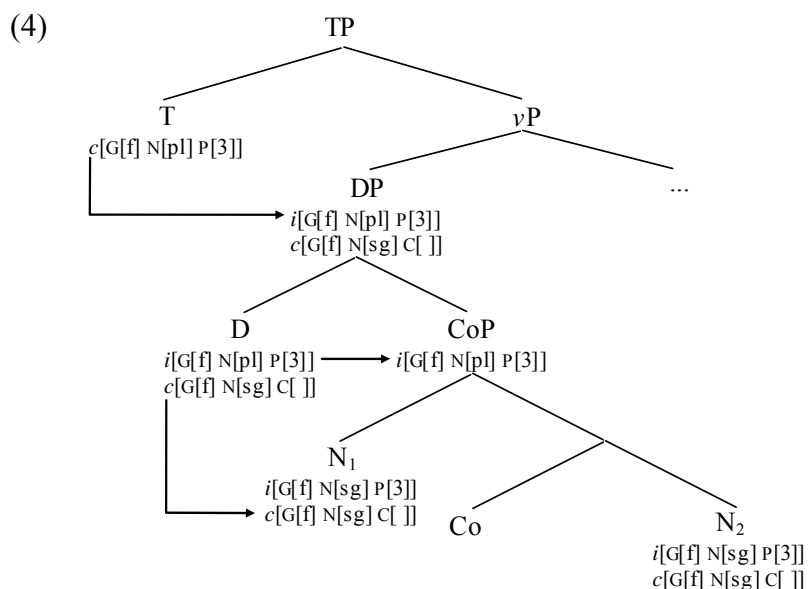
In all these cases, the DP has a plural denotation (the coordination of Ns denotes a “plural individual”, Lasersohn 1995). As it is the case with plural denoting phrases, this kind of DP gives rise to distributive readings (as in *La madre e hija viajaron por separado* ‘The mother and daughter travelled separately’) and to collective readings. Syntactic contexts forcing the collective reading of these DPs are illustrated in (3): appearance with predicates requiring semantically plural subjects, collective adjectives, and similarity predicates.

- (3) La madre e hija se reunieron / vinieron **juntas** / son **parecidas**
 the_{FEM.SG} mother and daughter gathered_{PL} / came_{PL} together / are_{PL} similar

2. Analysis

2.1. A typology of phi features

To explain the mismatch between the plural denotation of the DP and the singular morphology of D in examples like (1), we assume the structure in (4) (irrelevant details omitted). Our claim is that two kinds of phi features must be introduced in the Minimalist model (we follow ideas by Wechsler & Zlatić 2003, in an HPSG framework, and the P&P/minimalist proposals by D’Alessandro 2004 and Costa & Pereira 2005): *concord phi-features* [*c-features*], related to the declensional properties of lexical items and visible at PF; and *index phi-features* [*i-features*], related to the semantic properties of lexical items and visible at LF. Each of these sets forms a bundle, whose featural content for the Ns, D and CoP present in the structure of (1a) is made explicit in (4).



Nouns have gender, number (valued) and case (unvalued) *c-features*, related to their morphological properties; and gender, number and person (valued) *i-features*, which refer to the semantic

properties/potential anchoring conditions of N. Determiners have unvalued *c*-features (gender, number, case) due to their declensional properties, and unvalued *i*-features (gender, number, person) due to their semantics (they operate on the noun's index). The head Co has no *c*-features (the conjunction is not morphosyntactically plural or singular, masculine or feminine). However, CoP has index features, since the conjunction, as assumed in the literature (see e.g. Zoerner 1995), operates on its conjuncts' indices, joining them (*resolution* is operative in this joining process).

2.2. Agree (feature sharing)

We assume (a) Chomsky's (2001) theory of Agree, according to which agreement is a result of a Probe-Goal relation triggered by an unvalued feature that seeks for a matching feature, and (b) the modifications introduced by Frampton & Gutmann's (2000) Feature Sharing approach. These authors propose that feature matching and valuation are independent processes, that is, Agree can be established between two unvalued features. As a consequence of the Maximization Principle (Chomsky 2001), the concord and index features that participate in the agreement relations described in (4) for these structures are treated by syntax as bundles. The *c*- and *i*-bundles of D agree with the closest goals with matching features: N1 and CoP respectively. With respect to T-DP agreement, we claim that T has unvalued concord (i.e. inflectional) number and person (perhaps also gender) features. They agree with the *i*-features of DP, their closest matching goal.

Before concluding, we would like to note that alternative analyses for this kind of structures face some drawbacks. Camacho (2003), for example, claims that the structure of the DPs under study derives from DP coordination followed by deletion of D in the second conjunct under identity with D in the first conjunct: $[_{DP} D N] y [_{DP} \emptyset_D N]$. The structure of an example like (5a), with a prenominal adjective taking scope over the two conjoined Ns, would be (5b):

- (5) a. La fascinante flora y relieve 'The fascinating flora and relief'
 b. $[_{DP} D A N] y [_{DP} \emptyset_D \emptyset_A N]$

This analysis predicts, contrary to fact, that in examples like (6), where the second DP conjunct lacks an adjective, it should be possible to obtain the meaning 'The fascinating flora and the fascinating relief', since an A in the second DP could have been deleted under identity with the adjective *fascinante* in the first DP of the conjunction.

- (6) a. La fascinante flora y el relieve 'The fascinating flora and the relief'
 b. $[_{DP} D A N] y [_{DP} D \emptyset_A N]$

Our proposal might be extended to other cases of featural mismatch, such as those displayed by “concordantia ad sensum” facts. As a final point, we will offer some prospects on parametric differences between Spanish and other Romance languages concerning the structure in question.

References

- CAMACHO, J. 2003. *The structure of coordination. Conjunction and agreement phenomena in Spanish and other languages*. Dordrecht: Kluwer
- CHOMSKY, N. 2001. Derivation by phase. In M. Kenstowicz, ed. *Ken Hale. A life in language*. Cambridge: MIT Press, 1-52.
- COSTA, J. & S. PEREIRA. 2005. Phases and autonomous features: a case of mixed agreement in European Portuguese. In M. McGinnis and N. Richards, eds. *Perspectives on Phases. MITWPL #49*.
- D’ALESSANDRO, R. 2004. *Impersonal si constructions. Agreement and interpretation*, diss. U. Stuttgart.
- FRAMPTON, J. & S. GUTMANN. 2000. Agreement is Feature Sharing. Ms, Northeastern University.
- KING, T. & M. DALRYMPLE. 2004. Determiner agreement and noun conjunction. *Journal of Linguistics* 40.1: 69-104.
- LASERSOHN, P. 1995. *Plurality, conjunction and events*. Dordrecht: Kluwer.
- WECHSLER, S. & L. ZLATIC. 2003. *The Many Faces of Agreement*. Stanford: CSLI Publications.
- ZOERNER, C. E. 1995. *Coordination: The Syntax of &P*, diss., University of California, Irvine.