Closest conjunct agreement in Spanish DPs: Syntax and beyond[1]

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This article analyses a phenomenon not frequently dealt with in the grammar of Romance languages, namely, closest conjunct (number) agreement (CCA) between determiners, adjectives and nouns in Spanish structures containing conjoined singular Ns: $[_{DP}$ D (A) $[N_1$ y $N_2]$ (A)]. Using new corpus data, we apply statistical tests to assess the theoretical and empirical claims of the analysis. We first offer a description of the plural semantics of these structures. Regarding syntax, we show that, despite the plural semantics of the DP, determiners and prenominal adjectives agree with the closest conjunct (N_1) (e.g. *Una*.F.SG *fuerte*.SG *lluvia*.F.SG *y viento*.M.SG *azotaron*.PL *la ciudad* 'A heavy rain and wind battered the city'). As for postnominal adjectives, CCA with N_2 alternates with full (plural) agreement (e.g. *Una*.F.SG *lluvia*.F.SG *y viento*.M.SG {*inoportuno*.M.SG/ *inoportunos*.M.PL} *azotaron*.PL *la ciudad* 'An inopportune rain and wind battered the city'). Within a generative framework, we analyse CCA in the prenominal field and full agreement of postnominal adjectives as syntactically derived from the interaction of the Agree operation and a reformulated theory of phi-features. CCA of postnominal adjectives is analysed to be the result of post-syntactic relations, that is, linear adjacency.

Keywords: closest conjunct agreement, partial agreement, adjectival agreement, coordination, phi-feature, Agree, number

1. Introduction

Closest conjunct agreement (hereafter CCA), sometimes called *partial agreement*, occurs in DPs with a conjunction of Ns when an agreeing element (a determiner or adjective) – the *target* – agrees in number and gender with the closest member of the coordination – the *controller*. (1) illustrates the phenomenon in English and (2) in Spanish;[2] in this case the determiner agrees with the first noun of the coordination (*first conjunct agreement*).

(1)   **This boy and girl** are eating a pizza. (King and Dalrymple 2004: 70, (3))

(2)   *En principio se entienden por hijos matrimoniales aquellos **cuya madre y padre** están casados entre sí.*[1][3]
'In principle we take as marital children those whose.F.SG mother.F.SG and father.M.SG are.PL married.M.PL to each other.'

CCA holds irrespectively of the plural reference of the coordination of nouns, which is shown, among other tests, by syntactic plural verbal agreement when the DP is a subject. In (1) and (2) the conjunction of Ns denotes

[2] CCA within the Noun/Determiner Phrase has been studied for English and Finnish (Dalrymple & Kaplan 2000, Wechsler & Zlatić 2000, 2003, King & Dalrymple 2004, Dalrymple & Nikolaeva 2006, Kuhn & Sadler 2007 and others), mainly in unification-based accounts; much less for Romance languages (with the exception of Camacho 2003, King & Dalrymple 2004, Heycock & Zamparelli 2005 and Villavicencio, Sadler & Arnold 2005). As a matter of fact, most generative studies on CCA, whether from the point of view of syntax, semantics or psycholinguistics, deal with instances of this phenomenon in S(ubject)–V(erb) structures, especially in VS sentences where the postverbal subject surfaces as a coordination of NPs (Aoun, Benmamoun & Sportiche 1994, 1999, Munn 1999, Becker 2005, Franck, Lassi, Frauenfelder & Rizzi 2005, Marten 2005, Marušič, Nevins & Saksida 2007, 2011, Bhatia & Benmamoun 2009, Bošković 2009, Steiner 2009, Benmamoun, Bhatia & Polinsky 2010 and others). With respect to Spanish, as far as we know, there is no formal syntactic analysis of examples like *Existía el favoritismo y la corrupción* (lit. existed.SG the favouritism and the corruption, 'There was favouritism and corruption') [Camacho 1999: 2650 (39)] in terms of CCA (see, however, the observations in Camacho 2003: sect. 1.4.3). In this article, we will not explore the connections between different CCA environments in Spanish.
    CCA between complementisers and coordinated subjects in certain dialects of Dutch have been thoroughly studied by van Koppen (2005) and van Koppen & Cremers (2008) within the framework of Distributed Morphology.
[3] Bibliographical references for all corpus examples are given at the end of the article.

a plurality or set of individuals, that is, these conjunctions have a *split reading* (we will come back to this notion in sect. 2.3). These conjunctions must be distinguished from the syntactically similar ones which receive a *joint reading*, as in example (3), where the conjoined Ns refer to a single individual, as indicated by the obligatory singular agreement triggered on the verb:

(3) *El   insigne   historiador   y   arqueólogo*
the.M.SG distinguished.SG historian.M.SG and archaeologist.M.SG
publicó . . .[2]
publish.PST.3SG
'The distinguished historian and archaeologist published . . .'

In this article we examine structures of the type in (2) in which CCA is held between determiners and nouns in Spanish DPs. In addition to cases like (2), we consider sentences like (4) for CCA of prenominal and postnominal adjectives. Prenominal adjectives, like *inoportuna* in (4a), show a pattern of agreement identical to determiners; the contrast between (4a) and (4a′) indicates that the output of CCA can be singular or plural depending on the number of the first N. For postnominal adjectives, (4a) shows agreement between A (*pertinaz*) and the second noun of the conjunction. Yet, as shown by (4b), CCA (*last* or *right conjunct agreement*) alternates with full plural agreement:[4]

(4) a. *. . . una   inoportuna llovizna   y   viento   pertinaz,*
an.F.SG untimely.F.SG drizzle.F.SG and wind.M.SG persistent.SG
nos mantuvieron atados   dos días en tierra   firme.[3]
us   keep.PST.3PL moored two days to ground solid
'An inopportune and persistent drizzle and wind kept us moored to land for two days.'

a′. *En el   curso de la Asamblea se aprobarán   los   nuevos*
in the course of the assembly SE approve.FUT.3PL the.M.PL new.M.PL
estatutos   y   reglamento   de la Confederación de
statutes.M.PL and regulations.M.SG of the Confederation of
Cajas.[4]
Savings.Banks
'In the course of the Assembly, the new statutes and regulations of the Confederation of Savings Banks were adopted.'

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[4] Adjectives in Spanish fall into two classes regarding gender agreement: (i) those that inflect for feminine and masculine – *alto* 'tall.M' vs. *alta* 'tall.F'– and (ii) those which are

b. *La   anorexia   y   bulimia   nerviosas,* (…), *generan…*[5]
    the.F.SG anorexia.F.SG and bulimia.F.SG nervous.F.PL   cause.PRS.3PL
    'Anorexia nervosa and bulimia nervosa, (. . .), cause . . .'

This complex set of data poses interesting empirical and theoretical questions that we will be dealing with in this article within a formal generative framework. One of our goals is to establish the empirical domain of the phenomenon of CCA inside DPs in Spanish. Asserting the existence of this phenomenon in Romance – it has been claimed to be characteristic of Germanic languages and not to exist in Romance due to parametric reasons (Bouchard 2002, Heycock & Zamparelli 2005, Dobrovie-Sorin 2009) – could help us to take a position as to the properties of the Romance determiners and determiner phrases, though this is a task that we will certainly not undertake in this article. Theoretically, a first question posed by this set of data is whether surface coordination of bare Ns is in fact deep coordination of Ns or NPs or if it is instead the result of an ellipsis process over two DP conjuncts (Camacho 2003). We will suggest that a non-ellipsis-based account can be developed for the paradigm presented above. Our proposal will be based on the existence of two types of phi-features and certain post-syntactic operations, which have been independently motivated in the literature to explain a larger set of data, such as agreement mismatches triggered by collective nouns or mixed Subject–Verb agreement cases.

Our analysis raises many questions as to the exact abstract representation of the DP with coordination of singular Ns. Within a generative framework, we will justify an analysis of coordination as an asymmetric structure (Munn 1993, 1999, Kayne 1994, Johannessen 1996, 1998, Progovac 1998, Camacho 2003 for Spanish and others). Regarding the internal position of pre- and postnominal adjectives in DPs, some of the questions that arise are the following: are they all derived in the same way, for instance as specifiers of higher functional projections, their linear order being the result of leftward movement of either N or NP (Cinque 1994, 2010)? Are they (right–left) adjoined to NP (Laenzlinger 2004, Schoorlemmer 2009)? Alternatively, are postnominal adjectives generated higher up in a reduced relative clause (Cinque 2010)? The facts of CCA in Spanish DPs argue in favour of a non-uniform derivation for pre and postnominal adjectives.

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invariable with respect to gender marking – *interesante*.M/F 'interesting', *actual*.M/F 'current' – (in the glosses, gender has not been indicated for these adjectives). In the cases under study, when full plural agreement is obtained, gender is determined by *resolution*: feminine when all conjuncts are feminine, masculine otherwise (see sect. 4.2.1).

Last but not least, an important question on which this phenomenon has a bearing is the content and nature of the agreement mechanism and the level at which it applies. In generative Minimalist approaches to agreement, an *Agree* operation is defined which matches/values features of *Probes* and *Goals* under a c-command relation (Chomsky 2001, 2004, Bhatt 2005). This abstract syntactic view combines with the assumption that later processes (such as morphological operations – van Koppen 2005 – or post-syntactic linearisation processes – Benmamoun et al. 2010) may condition the final spell-out of Agree. Theoretical as well as empirical reasons will lead us to the conclusion that in CCA, syntactic and post-syntactic mechanisms interact. Importantly, in order to correctly account for the CCA facts we will also claim that Agree is a syntactic mechanism involving two types of phi-features: *Index features* and *Concord features*. Ns and Ds carry these two sets of features which, we claim, behave syntactically as *bundles*.

The article is organised as follows. In section 2, we undertake two tasks. Fist, we present the corpus analysis on which our descriptive generalisations are based. Second, we describe and clarify the basic paradigm showing that CCA (i.e., singular agreement) is obligatory for D and A in [D (A) [$N_{1\ SG}$ *y* $N_{2\ SG}$]] structures, and optional for A, that is, alternating with *full* (plural) *agreement*, in [D [$N_{1\ SG}$ *y* $N_{2\ SG}$] A] structures, in other words in DPs with postnominal adjectives. New Romance data not previously studied in the literature will be introduced. In this same section we try to briefly and schematically test the plural semantics of *split reading* structures. We survey the various contexts that imply semantic plurality but still trigger singular agreement. In section 3 we deal with the underlying structure of surface coordination of singular Ns. First, we assume that coordinate constituents are structured in a CoP, following Munn (1999), van Koppen (2005), van Koppen & Cremers (2008) and others. Second, we present the various reasons why we prefer a non-ellipsis analysis for this type of structure. In section 4 we show that CCA of D and prenominal A with the first N within the DP can be explained in terms of Agree. In this section we also provide an explanation for the fact that the whole DP has plural reference despite the singular number agreement of D and make a distinction between index and concord phi-features, following previous proposals on feature theory, both within the minimalist tradition (D'Alessandro 2004a, 2004b, Costa & Pereira 2005, López 2007, Danon 2011), and within HPSG and LFG models (Pollard & Sag 1994, Kathol 1999, Wechsler & Zlatić 2000, 2003, King & Dalrymple 2004, Villavicencio, Sadler & Arnold 2005) (also

in semantic works such as Sauerland 2008). In section 5 we note that full plural agreement of postnominal adjectives is also a case of syntactic Agree if postnominal adjectives are merged as predicates of a reduced relative clause (Cinque 2010: sect. 3.1, 4.2, 6.1). We provisionally explain CCA of the adjective with N_2 (i.e. singular agreement) in terms of linear adjacency after spell-out.

2. Source of the data and basic paradigm

2.1. Corpus analysis

In this section we present the corpus analysis on which the empirical generalisations which sustain the theoretical proposals developed in the following sections of this article are based. The goal of this analysis is to determine the exact agreement patterns which determiners and adjectives give rise to in the structures in (5) (where the DP has a plural interpretation):

(5)   a. $[_{DP} \text{D A } [N_{1\,SG} \, y \, N_{2\,SG}]]$
       b. $[_{DP} \text{D } [N_{1\,SG} \, y \, N_{2\,SG}] \text{ A}]$

2.1.1. *Methodology*

The sample of Spanish sentences used in the present corpus analysis was extracted from the online *Corpus de Referencia del Español Actual* (CREA). In order to obtain a representative sample, 7,985 sentences containing the structures in (5) were randomly selected. Sentences containing superficially similar sequences (i.e D-A-N-*y*-N or D-N-*y*-N-A sequences), but with properties different from those analysed in this article, were not included in the sample. In particular, examples such as those in (3), where the DP refers to a single entity, were systematically excluded. Only sentences where the coordination of singular nouns can in principle receive a plural interpretation or *split reading* were considered (thus sentences where the DP is a subject triggering plural agreement on the verb were included; sentences where the DP is a DO, complement of a preposition, etc., that can receive a plural interpretation, were also included). In the same way, we excluded from the sample sentences where it is clear that a singular prenominal or postnominal adjective does not modify or have scope over the two conjoined nouns.

For each sentence included in the sample, we annotated (1) adjective number: *singular* or *plural*, (2) adjective position: *prenominal*, *postnominal*, (3) determiner number (*singular* or *plural*)[5] and (4) for the whole DP, whether this constituent was the subject of the sentence (triggering plural agreement on the verb) or not (*subject* vs. *non subject*). We obtained 330 tokens in which the DP is a subject, and 7,655 tokens in which the DP is a non-subject that can in principle receive a split reading.

2.1.2. *Results*

In order to determine whether, in the structures under study, adjective number agreement (i.e. singular agreement – CCA – vs. plural or full number agreement) is linked to its prenominal or postnominal position in a significant way, *adjective number* and *adjective position* were regarded as the dependent and independent variables, respectively, in the statistical analysis. The tables in this section show the results of the cross-tabulations and chi-square tests for those variables. Non specific tables are offered for determiner agreement. We analyse the results concerning determiners in the text, together with the results obtained for adjectives. First, we analyse the entire sample. Secondly, we analyse the subset of the sample where the relevant DPs are subjects that trigger plural number agreement on the verb.

The results of the analysis of the relationship between adjective number agreement and adjectival position in the entire sample are shown in Table 1. The table shows that in the structure in (5a), adjectives in prenominal position appear in singular in 98.5 per cent of the cases. Prenominal plural adjectives represent only 1.5 per cent of the total. These data show an almost categorical preference for prenominal singular adjectives in the structures under study. Only 54 examples with plural agreement were found. In these examples, the conjoined nouns are brand/type names and proper names (we will deal with these apparent exceptions in sect. 2.2.1). In the structure in (5b), however, postnominal adjectives show a high degree of variation with respect to number agreement (we will come back to postnominal adjectives in sect. 5). The differences observed between prenom-

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[5] In the structures studied, the gender and number features of determiners and adjectives behave as bundles with respect to agreement. See Marušič, Nevins & Saksida (2007, 2011) for the proposal that gender and number behave as *split-probes* in Participle-Subject agreement cases in Slovenian. For a recent discussion and analysis of the behaviour of number and gender features in sentence processing in Spanish see Acuña-Fariña (2009).

Table 1. All cases: adjective number by adjective position

			Adjective position		Total
			Prenominal	Postnominal	
Adjective number	Plural	Count	54	1,644	1,698
		Column%	1.5%	38%	21.3%
	Singular	Count	3,603	2,684	6,287
		Column%	98.5%	62.0%	78.7%
Total		Count	3,657	4,328	7,985
		Column%	100.0%	100.0%	100.0%

	Value	df	Asymp. sig. (2-sided)
Pearson chi-square	1577.961	1	.0001

inal and postnominal adjectives with respect to their singular or plural agreement are statistically significant (p < .05). With respect to determiners, in the structure in (5a), the determiner invariably shows up with the same number (and gender) feature as the following adjective. In the structure in (5b), for all the 4,328 examples with postnominal adjectives, the determiner agrees with N_1, that is, it bears singular agreement.

Second, we restricted the analysis of the link between adjective number agreement and adjective position to those cases where the relevant DP is a subject that triggers plural verbal agreement. In these cases, the plural marking on the verb clearly indicates that the DP has a plural interpretation. The results are shown in Table 2. As seen in the table, adjec-

Table 2. Subject DPs that trigger plural verbal agreement: adjective number by adjective position

			Adjective position		Total
			Prenominal	Postnominal	
Adjective number	Plural	Count	6	133	139
		Column%	6.2%	57.1%	42.1%
	Singular	Count	91	100	191
		Column%	93.8%	42.9%	57.9%
Total		Count	97	233	330
		Column%	100.0%	100.0%	100.0%

	Value	df	Asymp. sig. (2-sided)
Pearson chi-square	72.771	1	.0001

tives in prenominal position show singular agreement in 93.8 per cent of the cases. Prenominal plural adjectives represent only 6.2 per cent of the total. What these data show is an almost categorical preference for agreement with N_1 in the case of prenominal adjectives. The only six examples with plural adjectives also contain brand names or proper nouns (see sect. 2.2.1). Postnominal adjectives show variation in number agreement (see sect. 5). The chi-square test shows that there exists a significant relationship between adjective number agreement and adjective position (p < .05). As for determiners, in the structure [D A [N *y* N]], the determiner shows up with the same features as the adjective. In the structure [D [N *y* N] A], the determiner always exhibits CCA with N_1.

2.1.3. *Discussion*

The first important observation, which sustains the analysis to be developed in this article, is that CCA – that is, singular agreement – between D, prenominal adjectives and N_1 appears to be categorical in the structures described in (5). The examples where D and A show plural agreement are cases where the conjoined nouns are brand, type or proper names. As stated in section 2.2.1, these kinds of examples can receive an alternative analysis. With respect to postnominal adjectives, the statistical analysis shows that there exists variation in number agreement. If we consider the results in Table 2, where the DP is a subject triggering plural verbal agreement, postnominal adjectives show plural number agreement in 57.1 per cent of the cases and singular agreement in 42.9 per cent of the cases. As we will see in section 5, semantic factors (related to noun class or adjective class) do not determine the choice of agreement in those cases.

2.2. The basic paradigm

In this section we present the basic paradigm that emerges from the corpus analysis carried out in the previous section. With respect to the prenominal field, we would like to take as a point of departure the paradigm in (6) and (7).

(6)   [{*El/*Los*}   *abdomen   y   pecho*]   *aparecen*
          the.M.SG/M.PL abdomen.M.SG and chest.M.SG appear.PRS.3PL
          relativamente abultados.[6]
          relatively   swollen
          'The abdomen and chest look relatively swollen.'

(7) a. [{*La* (*fascinante*) / **Las* (*fascinantes*)} *flora*   *y*
the.F.SG fascinating.SG / the.F.PL fascinating.PL flora.F.SG and
relieve]   *que lo componen.*
rugged-landscape.M.SG that it constitute.PRS.3PL
'The fascinating flora and rugged landscape that constitute it.'

b. [{*Su* (*verdadero*)/ **Sus* (*verdaderos*)} *desarrollo*   *y*
its.SG true.M.SG/ its.PL true.M.SG development.M.SG and
expansión]   *han*   *venido ocurriendo a partir de la*
expansion.F.SG have.PRS.3PL been taking.place from   the
segunda mitad del   presente siglo.[7]
second half of.the current century
'Its true development and expansion have been taking place from
the second half of the current century onwards.'

c. [{*Su* (*admirable*) / **Sus* (*admirables*)} *empuje*   *y*
his.SG admirable.SG / his.PL admirable.PL drive.M.SG and
creatividad] (…) *lo han*   *llevado a conseguir…*
creativity.F.SG   him have.PRS.3PL taken   to obtain
'His admirable drive and creativity (…) lead him to obtain…'[8]

Sentences (6) and (7) are examples of CCA; in these cases D and A agree
in the singular and share the gender feature with the first N of a coor-
dinated phrase. Plural determiners and plural prenominal adjectives are
ungrammatical. In (7a), for instance, the first conjunct is feminine and the
second is masculine while the determiner is feminine and singular; in (7b)
and (7c) the determiner agrees in singular number with N₁. Moreover, the
ungrammaticality of plural determiners (*los*, *las*, *sus* in the examples in (6)
and (7)) shows that CCA is obligatory for Ds.[6] Prenominal adjectives in (7)
also obey CCA. In all the examples in (7) the adjective agrees in number
and gender with the first noun of the coordination. CCA of D and prenom-
inal A with N₁ also takes place when N₁ and N₂ have different number, as
can be seen in (8) (remember also example (4a′)):

(8) a. [*Sus pómulos*   *y   nariz*]   *aparecían*   *afilados.*[9]
his.PL cheeks.M.PL and nose.F.SG seem.PST.3PL sharp
'His cheeks and nose looked sharp.'

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[6] CCA is obligatory for any kind of determiner, even for demonstratives, as witness the
contrast between *Esta*.F.SG *morfología*.F.SG *y estructura*.F.SG *urbana*.F.SG *reflejan*.PL *una
organización*…[40] ('This urban morphology and structure reflect an organisation…') and
the ungrammatical **Estas*.F.PL *morfología*.F.SG *y estructura*.F.SG *urbana*.F.SG …

    b. *Los ataques de* [*la   aviación   y   helicópteros*
       the attacks of the.F.SG aeroplanes.F.SG and helicopters.M.PL
       rusos]   *fueron   constantes.*[10]
       Russian.M.PL be.PST.3PL constant.PL
       'The attacks of the Russian aeroplanes and helicopters were constant.'

This paradigm in (6) and (7) should be completed with the sentences in (9) and (10) with postnominal adjectives.

(9) a. [*El   trigo   y   sorgo   disponible*] *no*
       the.M.SG wheat.M.SG and sorghum.M.SG available.SG not
       presentaron   variantes . . .[11]
       show.PST.3PL changes
       'The wheat and sorghum available did not show any change (in their levels).'

    b. [*La   agricultura   y   ganadería* **europeas**]
       the.F.SG farming.F.SG and cattle.F.SG European.F.PL
       se han   ido   industrializando.[12]
       SE have.PRS.3PL become industrialising
       'The European farming and cattle sectors have become progressively industrialised.'

(10)   [*La   radio   y   televisión   pública   catalanas*]
       the.F.SG radio.F.SG and television.F.SG public.F.SG Catalan.F.PL
       negocian   hoy.[13]
       negotiate.PRS.3PL today
       'The Catalan public radio and television corporations are negotiating today.'

Alternation between (singular) agreement of the adjective with the closest conjunct (N_2), (9a), and full (plural) agreement, (9b), shows up in this configuration.[7] Note that the subject DP triggers plural agreement on the verb both in (9a) and (9b). The similar example in (10) is particularly interesting because here we find the first postnominal adjective agreeing in singular with N_2, while the second takes syntactic plural agreement; the verbal predicate shows also plural agreement. Example (10) indicates that conjoined Ns found in these structures are available for plural agreement both within the DP and with the verbal predicate. We will come back to cases

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[7] Cinque (2010: sect. 7.3) also notes that in Italian and French (following Noailly 1999), adjectives preceding a series of singular coordinated nouns must agree in (singular) number (also in gender) with the first noun of the conjunction. Postnominal adjectives, by contrast, can show plural agreement.

with two postnominal adjectives in section 5.2, where we explain (singular) agreement of postnominal adjectives with N_2 in terms of linear adjacency.

In all the previous examples with pre- and postnominal adjectives, the denotation of the whole DP is plural (i.e. the coordination has a group reading) and the adjective is interpreted by native speakers as a modifier of the two singular nouns. The example in (11) indicates that the postnominal adjective has in our structures scope over both conjuncts.

(11) [*La   destrucción   y   creación   **simultáneas**]   *de la*
       the.F.SG destruction.F.SG and creation.F.SG simultaneous.F.PL of the
       cultura del   Nuevo Mundo.[14]
       culture of.the New   World
       'The simultaneous destruction and creation of the culture of the New World.'

This example has a reading whereby the destruction and creation of the culture take place at the same time. *Collective* or *symmetric* adjectives like *simultáneo*, *coincidente*, *similar* and *parecido* (or, alternatively, a collective operator licensing the collective reading of the predicate) must scope over a plural argument. Since in this example each conjunct is singular, the collective predicate (or collective operator) must scope above the coordination phrase. The same reading would be obtained if the adjective were singular: *simultánea*.F.SG. Similar examples can be found for prenominal adjectives, which show that prenominal As also modify or scope over both NP conjuncts in our structures: *La simultánea destrucción y creación de la cultura del nuevo mundo* 'The simultaneous destruction and creation of the culture of the New World.'

Finally, regarding the cross-linguistic nature of the paradigm, it has been claimed (Bouchard 2002, Heycock & Zamparelli 2005,[8] Dobrovie-Sorin 2009 and others) that sentences like ***This boy and girl*** *are eating a pizza* (example (1), above) do not exist in Romance due to semantic or syntactic parametrised properties of the category Number. In fact, sentences such as (12) and (13) are ungrammatical in Italian and French.

(12) *****Un   uomo   e   bambino*** *mangiano.*
       a.M.SG man.M.SG and child.M.SG eat.PRS.3PL
       'A man and child are eating.' (Heycock & Zamparelli 2005: (21a))

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8 See King & Dalrymple (2004: sect. 4) for a discussion of this analysis.

(13)   **Ce   soldat   et marin   étaient   d'accord.*
this.M.SG soldier.M.SG and sailor.M.SG be.PST.3L in.agreement
'This soldier and sailor were in agreement.' (Heycock & Zamparelli 2005: (22b))

However, such sentences are frequently attested in Spanish, as can be inferred from our corpus analysis.[9] Observe in (14) that this kind of structures with CCA also occurs in Brazilian Portuguese (see Munn 1999 for more examples).

(14)   *O   presidente   e amigo   comeram juntos.*
the.M.SG president.M.SG and friendM.SG eat.PST.3PL together.M.PL
'The president and (his) friend ate together.' (Villavicencio et al. 2005: (28))

To summarise, the empirical generalisation which follows from the paradigm presented thus far is as follows:

(15)   a.   CCA (with N_1) is categorical in Spanish for determiners and adjectives in the structure $[D\ A\ [N_{1\,SG}\ y\ N_{2\,SG}]]$.
        b.   In the structure $[D\ [N_{1\,SG}\ y\ N_{2\,SG}]\ A]$ CCA (with N_1) is also categorical for D but the postnominal A may take singular (showing CCA with N_2) or plural form.

2.2.1.   *Some apparent counterexamples*

Sentences like the ones in (16), where determiners and prenominal adjectives agree in plural with the coordination, appear to be counterexamples to the empirical generalisation in (15):

(16)   a.   . . . *los modelos que* (. . .) *reemplazarán   a los   actuales*
            the models that   replace.FUT.3PL to the.M.PL current.PL
            Corsa y   Tigra. . .[15]
            Corsa and Tigra
            '. . .The models that will replace the current Corsa and Tigra.'

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[9] We would like to note in passing that the kind of coordination described is very productive with pairs of semantically related nouns. In this respect, Spanish seems to be similar to Dutch (Heycock & Zamparelli 2005: 206). Most but not all conjunctions of this type are typologically classifiable as instances of a *natural coordination* relation: "a semantic relation in which two entities are closely related in meaning and form a conceptual unit" (Dalrymple & Nikolaeva 2006: 830). However, these are not frozen or lexicalised constructions but very productive ones, often used in both written and oral language.

b.   . . . *a no ser que cerca anden*   *los*   *temibles*
        unless   near walk.PRS.SBJU.3PL the.M.PL fearsome.PL
     Capirucho y   Capirote. . .[16]
     Capirucho and Capirote
     '. . .unless the fearsome Capirucho and Capirote are around.'

Yet there are various reasons to take the preceding examples with a grain
of salt and not consider them problematic for our proposal. First, plural
agreement of D and A before the conjunction N-*y*-N is infrequent. In our
corpus we found 54 examples of this, against 3,603 showing CCA. More
importantly, these kinds of cases mostly fall in two patterns. On the one
hand, we have examples like (16a) above with DPs in which the presence
of a plural null N can be easily postulated because the surfacing name is a
brand or type name (in 16a we find names of car models). In these cases the
adjective can be missing (17a). Note that the null N (*model*) can be explicit,
as in (17b):

(17)   a.   *los*   *Corsa y   Astra*[17]
            the.M.PL Corsa and Astra
       b.   *los*   *modelos*   *Corsa y   Astra*[18]
            the.M.PL models.M.PL Corsa and Astra

On the other hand, we have examples with proper names that are either
explicit, as in (16b) – where the names of people are found – or implicit, as in
los actuales Presidente y Vicepresidente de EE.UU [19] 'the.M.PL current.M.PL
president.M.SG and vicepresident.M.SG of the USA', in the sense that these
terms refer to unique entities. A crucial observation is that these cases
require the co-occurrence of D and A, while they are ungrammatical if the
adjective is absent. There are various putative hypotheses as to why proper
names and names which refer to unique entities require plural agreement
on the preceding determiners and modifiers. One possibility is that proper
names have a different status within DPs since, first, when appearing alone
they move to D to acquire referential status (Longobardi 1994), and, sec-
ond, when they take a determiner this element requires the presence of an
adjective to be properly licensed (*los Capirucho y Capirote* 'the Capirucho
and Capirote' vs. *los temibles Capirucho y Capirote* 'the fearsome Capirucho
and Capirote'), which suggests that they behave as appositions to a specific
common noun. We leave this question open for further research.

2.3. The plural semantics of DP internal N-*y*-N coordination

Semantically, sentences like English (1) and all the Spanish cases we have seen so far are examples of *split-reading* and/or *group-forming and* in [$_{DP}$ D_{SG} [N_{SG} *and/y* N_{SG}]] structures. In other words, they are cases where a conjunction denoting a plurality or set of individuals takes a singular determiner and/or modifier. In this section, we will provide a brief account of the semantics of such conjunctions (remember that these structures must be differentiated from the syntactically similar ones which receive a *joint reading*, such as the one in (3) above).

Heycock & Zamparelli (2005: 206) claim that these kinds of coordinations with a plural or *split* reading refer to pairs of individuals or denote "the property of being a couple". This denotation applies straightforwardly to conjunctions of count or concrete nouns. However, the conjunction of count nouns is not the most widespread pattern of CCA compared to other possible combinations. In (18) we enumerate some, if not all, possible types of singular conjoined nouns that denote pluralities and therefore take plural agreement on the verb when they are (preverbal) subjects; recall that "plural agreement is required when the conjunction operation is interpreted as group formation" (Lasersohn 1995: 111, after Hoeksema 1983). Sentence (18a) illustrates the *split* interpretation with (concrete) count nouns. (18b) exhibits the conjunction of mass nouns. In (18c) we find a coordination of two collective nouns, in (18d) one of abstract nouns. In (18e) the conjunction of nominalisations shows up. In our structures, then, the conjunction denotes a set of atomic or non-atomic individuals.

(18)   a. [*Su   madre   y   hermana*] *hablaron   con él.*[20]
         his.SG mother.F.SG and sister.F.SG talk.PST.3PL to him
         'His mother and sister talked to him.'

     b. [*La   arena   y   tierra   afectadas*] *son*
         the.F.SG sand.F.SG and soil.F.SG affected.F.PL be.PRS.3PL
         cuidadosamente removidas. . .[21]
         carefully   turned over
         'The sand and soil affected are carefully turned over. . .'

     c. [*La   marinería y   tropa*] *deben   tener dos mudas de*
         the.F.SG crew.F.SG and troop.F.SG should.PL have two changes of
         franela.[22]
         flannel
         'The ship's crew and troops shoud have two changes of flannel clothing.'

d. [*La   confianza y   seguridad*]   *aumentan   y   aparece*
   the.F.SG trust.F.SG and confidence.F.SG increase.PRS.3PL and appears
   euforia. . .[23]
   euphoria
   'Trust and confidence increase and euphoria appears. . .'

e. [*La   maduración y   putrefacción*] *suceden   casi*
   the.F.SG ripening.F.SG and rotting.F.SG   occur.PRS.3PL almost
   paralelamente.[24]
   in.parallel
   'The ripening and rotting take place almost in parallel.'

A qualification regarding the data in (18a) is in order. Camacho (1999: 2655) claims that "when two concrete names coordinate [sharing the determiner] the result only refers to one object with the properties designated by the two nouns";[10] that is, according to this author cases like (18a) should have a *joint reading* (see also Camacho 2003: 130). Our claim is that even if it is true that the pattern in (18a) is less productive, not all cases of coordination of concrete/count nouns have a *joint* (versus a *split*) *reading*; recall (2), and observe examples in (19):

(19)   a. *Dio   el   teléfono   y   dirección   del*
          give.PST.3SG the.M.SG telephone.M.SG and address.F.SG of.the
          procesado.[25]
          defendant
          'He gave the defendant's telephone number and address.'

       b. *Algunas basas   de la   cabecera y   crucero*
          some   column.bases of the.F.SG front.F.SG and transept.M.SG
          van   recorridas por una cenefa.[26]
          go.PRS.3PL covered   by a   frieze
          'Some column bases of the front and transept are decorated with a frieze.'

       c. *Se quitó   el   abrigo   y   bufanda azules.*[27]
          SE take.off.PST.3SG the.M.SG coat.M.SG and scarf.F.SG blue.PL
          'He took off his blue coat and scarf.'

We will leave open here the question of whether the more reduced productivity of *split readings* with concrete count nouns (especially with animate ones) is simply a pragmatic effect or whether it must be attributed to other factors.

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[10] See also King & Dalrymple (2004).

2.3.1. *Group and distributed readings*

As is the case with other instances of plural denoting phrases, DP internal
N-*y*-N conjunctions give rise to distributive as well as to collective readings. Put in other words, conjoined Ns can denote individuals or can have
a group reading. Following Lasersohn (1995), we assume (although this is
not crucial) that collective and distributed readings depend entirely on the
predicate with which such noun phrases combine. With distributive predicates (*hablar francés* 'speak French', *aumentar por separado* 'increase separately') in examples like *Su madre y hermana hablan francés* 'His mother
and sister speak French', *La confianza y seguridad aumentan por separado*
'Trust and confidence increase separately' the event denoted is predicated individually of the elements forming the conjunction. On the other
hand, the collective reading is also available for the coordinations in (18).
Different syntactic contexts (set forth by Aoun, Benmamoun & Sportiche
1994) forcing the group reading of coordinate count nouns are illustrated
in (20): (20a) co-appearance with verbs requiring semantically plural subjects such as *reunirse, encontrarse* ('meet', 'gather'); (20b) acceptance of
similarity predicates or combination with the adjective *junto/a* ('together');
(20c) binding of reciprocals; and (20d) *respectively coordination*, namely,
cases where *respectivamente* ('respectively') sets-up a one-to-one mapping
between two sets (Munn 1993: 8). These examples indicate that the coordination of Ns has a cumulative reading and a logical form in which the
individuals must be seen as acting together or being a group:

(20)   [*Su   madre   y   hermana*]
          his.SG mother.F.SG and sister.F.SG

    a. *se* {***reunieron***   / ***encontraron***} *ayer.*
        SE {gather.PST.3PL / meet.PST.3PL} yesterday
        'met yesterday.'

    b. {*son*   ***parecidas***   / *vinieron*   ***juntas***}.
        be.PRS.3PL similar.F.PL / come.PST.3PL together.F.PL
        'resemble each other / came together.'

    c. *se   quieren   (**la   una   a la   otra**).*
        SE.RECP love.PRS.3PL the.F.SG one.F.SG to the.F.SG other.F.SG
        'love each other.'

    d. *se comieron   la   tarta y   los bollos,* ***respectivamente***.
        SE eat.PST.3PL the cake and the cookies respectively
        'ate the cake and the cookies, respectively.'

The series in (21) provides examples of contexts which show that coordinations of mass, collective and abstract nouns have properties similar to those of count terms: they have plural reference and show both distributed and collective interpretations. Example (21a) illustrates occurrence with predicates of distribution like *distribuirse*, *esparcirse* ('distribute', 'spread out'); (21b) and (21c) illustrate occurrence with the predicates *mismo* ('same') and *diferente* ('different'), which are usually licensed by semantic plurals, although *mismo* triggers a group reading and *diferente* a distributed reading. Example (22) shows that mass nouns also allow for reciprocals:

(21)   [*La   arena   y   tierra*] / [*La   marinería y   tropa*] /
       the.F.SG sand.F.SG and soil.F.SG / the.F.SG crew.F.SG and troops.F.SG /
       [*La   confianza y   seguridad*]
       the.F.SG trust.F.SG and confidence.F.SG

   a.   {*se **distribuyeron*** /   *se **esparcieron***}   ***conjuntamente***
         SE distribute.PST.3PL / SE spread out.PST.3PL together
         de forma adecuada.[11]
         appropriately

   b.   *vinieron   en el   **mismo** momento.*
        come.PST.3PL at the same   moment

   c.   *vinieron   en **diferentes** momentos.*
        come.PST.3PL at different   moments

(22)   *En este Mercado, el   pescado y   marisco   están*
       in this market   the.M.SG fish.M.SG and seafood.M.SG be.PRS.3PL
       separados   el   uno   del   otro   por las truchas.
       separated.M.PL the.M.SG one.M.SG of.the.M.SG other.M.SG by the trout
       'In this market, fish and seafood are separated from each other by the trout.'

The examples in (20) through (22) show that the coordinated structures in question are semantically plural even though the DP is headed by a singular determiner. An interesting syntactic corollary of (20), (21) and (22) is that DP-internal N-*y*-N conjuncts cannot be considered the result of clausal coordination, that is, the result of a conjunction of underlying sentences.

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[11] It is true that *La arena se esparció*, *La tropa se distribuyó* are also grammatical, differing in this sense from the previous example **La madre es parecida* (the discourse-linked reading of the adjective, where a null complement is understood, must be discarded). However, the occurrence of *conjuntamente* ('together') in (21a) coerces the plural reading of the conjunction even if the individual nouns each have a collective reading.

The coordination of sentences like *La madre se reunió* ('The mother met') and *La hermana se reunió* ('The sister met') or *La madre es parecida* ('The mother is similar') and *La hermana es parecida* ('The sister is similar') is either uninterpretable or ungrammatical. In other words, in Spanish, group predicates like *similar*, *meet* or *together* require both syntactic and semantic plurality, something that cannot be accounted for if we propose that sentences like the ones in (18) and (19) are an external manifestation of underlying clausal coordination. These facts suggest that the origin of the plural reading is located in the conjunction of Ns and not in the coordination of sentences that, through a mechanism of conjunction reduction (based on ATB movement and right node raising), produces the surface coordination of NPs, as proposed by Aoun, Benmamoun & Sportiche (1994, 1999) for the analysis of CCA in V–S structures with coordinated subjects in Arabic (see Munn 1999 for arguments against this analysis).

3. The underlying structure of conjoined Ns

Having described in the last section the patterns of agreement found inside DPs with a conjunction of Ns, we want now to propose a syntactic analysis for such a structure. Let us simply recall that in this structure any determiner and prenominal adjective agrees in singular number (also in gender) with its closest conjunct, the first noun of the coordination. Postnominal adjectives may agree in singular number (also in gender) with the N immediately to their left. Such an option alternates with full plural agreement (and gender resolution). To account for this generalisation in an explanatory fashion we will proceed in two steps. First in section 3.1 we will propose and justify that the structures we are considering are instances of DPs containing a Conjunction Phrase [CoP]. This position taken, we will then show that coordinated phrases are not superficial constituents resulting from an ellipsis process. This point will be argued in section 3.2.

3.1. A CoP analysis for coordinated NPs

The usual analyses of coordinated structures in the generative tradition assert that the head Co (*y* 'and') projects a Coordination Phrase [CoP] in which the two members of the conjunction stand in an asymmetric relation (Munn 1993, 1999, Kayne 1994, Johannessen 1996, 1998, Progovac

1998, Camacho 2003). In such a CoP the first conjunct occupies a higher c-commanding position with respect to the second, as in (23):[12]

(23)   [$_{CoP}$ N [$_{Co'}$ *and* N]]

An argument for asymmetry between Specifier and Complement in CoPs is provided precisely by the existence of unbalanced agreement in coordinate structures, that is, cases where an external head agrees with only one of the conjuncts. If one of the conjuncts is hierarchically higher than the rest of the CoP this will provide an explanation, for instance, for the fact that in certain languages the verb agrees only with the first conjunct when a coordinate subject appears postverbally (see also van Koppen 2005 for Comp-S agreement in Dutch dialects). In the set of data we are considering we also seem to have an instance of unbalanced agreement: D agrees in singular only with the first member of the coordination. In parallel, TP agrees in plural with DP when it is a subject, that is, the DP triggers plural agreement in verbs and also in other types of predicate. To account for this complex pattern, we consider it necessary to assume an asymmetric analysis for the Spanish coordinated structures giving rise to CCA. To explain these facts, a modification of the theory of features will also be necessary (see sect. 4).

Two different structures have been suggested in the literature to represent an asymmetrical relation between conjuncts. These two structures are shown in (24a) and (24b) (from Munn 1999: sect. 4):[13]
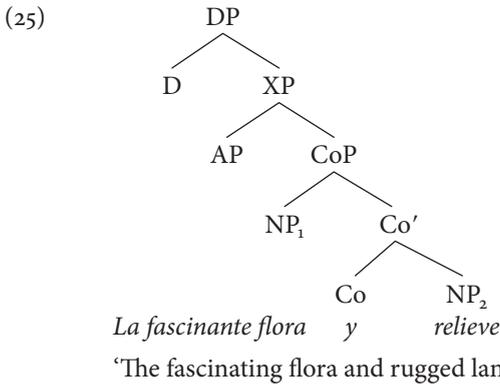
(24)   a.
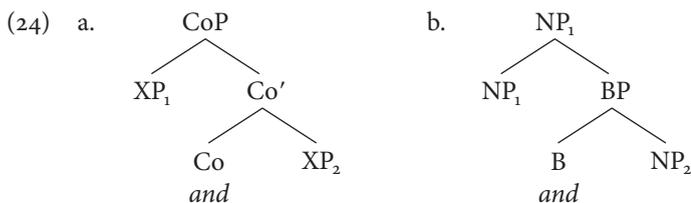
In the first structure, (24a), the head of the phrase is the conjunction, and the first and second conjuncts occupy the specifier and complement position of CoP, respectively. In (24b) the head of the conjoined noun phrase is the first conjunct and the second one is part of a Boolean phrase, BP,

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[12] This approach faces a number of problems, as has been noted by Borsley (2005). These problems relate to various aspects of conjoined phrases, for instance, the not always homogeneous content of the feature shared by both conjuncts that should percolate up to CoP or the non-maximality of the conjuncts. The facts we are considering in this article present a problem, though, for a symmetric analysis.

[13] (24b) is taken from Munn (1999: 663). See Lorimor (2007) for a revision of these proposals.

adjoined to it. In both cases the first conjunct is accessible to c-command.[14] We will assume (24a) as the best possible structure to explain CCA within DPs, since (24b) would run into difficulties to explain how the phi-features of both conjuncts percolate up to the CoP level (i.e. how number and gender resolution is triggered), a derivational step that will be crucial in our proposal to explain the agreement patterns described above. We thus take (25) as a point of departure for our analysis of CCA.

(25)

DP
├─ D
└─ XP
   ├─ AP
   └─ CoP
      ├─ NP$_1$
      └─ Co'
         ├─ Co
         └─ NP$_2$

La fascinante flora   y   relieve

'The fascinating flora and rugged landscape.'

The reasons for this choice will become clearer in the following section where we work out all the aspects of Agree and c-command in CCA processes.

We assume a DP structure without additional functional projections (such as NumberP, GenderP or ClassifierP), that is, we claim that agreement inside the DP can be explained without appealing to dedicated functional nodes for number (and gender) (see Alexiadou, Haegeman & Stravou 2007 for a review of the main proposals regarding functional projections inside DP).

It is important to note that, in (25), prenominal adjectives are projected not inside the nominal projection (Bernstein 1993) but in a functional projection above CoP. We take no particular side in the debate about whether adjectives merge successively in an ordered set of specific functional projections (Cinque 1994) or are instead attached to independently motivated functional projections (Demonte 2008, Svenonius 2008). We also do not take any side as to the specifier or adjunct status of the APs in prenominal

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[14] There is a third possibility, posed by Kayne (1994), which is: the Specifier is left-adjoined to the CoP.

position.[15] As for postnominal adjectives, we assume that they are gener-
ated inside a reduced relative clause, as we will describe in section 5.1.1.

The last issue to be addressed in order to justify the representation in
(25) is that of the level of projection of the conjuncts. In fact, if they are
Specifiers and Complements as we have argued, they must be maximal
projections (see Borsley 2005 on this theoretical point). In the examples
we have presented thus far, we have shown simple coordination of nouns,
in other words, apparent non-maximal projections. Yet, we would like to
claim that CoP is a coordination of NPs; in the next section, when arguing
against the ellipsis analysis, we will go deeper into this issue. For the time
being, let us simply observe that sentences such as the ones in (26) where
each of the conjoined nouns takes its own complement provide straight-
forward evidence for the NP condition of the conjuncts:

(26) a. *La   reciente* [***venta   de armas   y   compra   de***
          the.F.SG recent.SG   sale.F.SG of weapons and purchase.F.SG of
          uranio] *están dañando   su imagen.*
          uranium   are   damaging his image
          'The recent arms sale and purchase of uranium are damaging his
          image.'
      b. *El   [**teléfono   de Luisa y   dirección   de Pedro**]*
          the.M.SG   telephone.M.SG of Luisa and address.F.SG of Pedro
          están en mi agenda.
          are   in my diary
          'Luisa's phone number and Pedro's address are in my diary.'

Problematic for this view are the sentences in which a single PP comple-
ment following N_2 refers to both of the conjuncts, as in (19a) above. We
claim that these kinds of examples could be treated as cases of some ver-
sion of *right node raising* applying within the DP (we use this term merely

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[15] Nevertheless, it is worth wondering whether an adjunction analysis of attributive pre-
nominal adjectives might not help to better explain the data we are considering. In fact,
in a recent interesting proposal, Schoorlemmer (2009) argues for the adjunct condition of
attributive adjectives. If adjectives are adjuncts, it should be possible to establish *domin-
ance* and not *c-command* as the structural condition for the Agree operation. Actually, the
dominance requirement makes it possible to correctly derive the structures with strong and
weak agreement in Germanic. However, as Schoorlemmer notes (2009: 243), there is no
empirical motivation in Romance for a choice between the c-command or the dominance
requirement, even if one accepts that this latter approach could be theoretically simpler. In
consequence, we will stand by the standard view of Agree as c-command and not make a
specific case for the adjunct or specifier condition of prenominal adjectives.

descriptively; we will not attempt to spell out a syntactic analysis of these examples in terms of rightward movement, deletion or multidominance). Borsley (2005) leaves open the possibility of analysing parallel examples like *The King and Queen of France* as right node raising structures; Sabbagh (2007) treats examples like *Jamie read [a short review_, and two longer reviews_] for the same journal, of my recent book* as instances of ATB rightward movement of the PP complement of the conjoined nouns.[16]

3.2. Arguments against an ellipsis analysis

In this section we will review the ellipsis-based account developed by Camacho (2003: sect. 2.5.3) for the types of DP under study.[17] Camacho (2003: 131) claims that the structure of examples like (27a) and (28a) involves full DP conjunction and licensing of null structure in the second DP under identity with parallel elements in the first DP, as illustrated in (27b) and (28b) (Chaves 2008: 270 suggests a parallel analysis of examples like *That boy and girl are really no different from each other*; Cinque 2010: sect. 7.3 also suggests this kind of analysis for examples parallel to (28a)).

(27) a. **La flora y relieve** (*me sorprendieron mucho*).
          'The flora and rugged landscape (astonished me).'
      b. [$_{DP_1}$ D N] y [$_{DP_2}$ $\emptyset_D$ N]

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[16] Note that a postnominal adjective, either singular or plural, may also be present between N$_2$ and the PP, (i). In this case, the PP obligatorily follows the adjective. The opposite order results in agrammaticality (unless the adjective is built as an appositive or incidental constituent). Although the ordering between postnominal adjectives and PPs in Spanish non-coordinated NPs depends on a complex set of factors (see Demonte 1999a: sect. 3.3.1.1, 3.5.1.2), it is possible to find pairs like (ii). However, in the case of coordinated NPs, only the order A-PP is possible. If postnominal adjectives are base-generated above the position where nouns and their PP complements are generated, this would be an indication that the PP appears in a derived position in these examples.

(i)   *La   venta   y   compra   {rápida/rápidas} de uranio.*
      the.F.SG sale.F.SG and purchase.F.SG rapid.F.SG/F.PL of uranium
      'The rapid sale and purchase of uranium.'

(ii) *La   compra   de uranio rápida – La   compra   rápida   de*
      the.F.SG purchase.F.SG of uranium rapid.F.SG – the.F.SG purchase.F.SG rapid.F.SG of
      uranio
      uranium

[17] See sect. 5.1.2 for discussion of ellipsis-based analyses of postnominal adjectives in the structures in question.

(28) a. *La fascinante flora y relieve* (*me sorprendieron mucho*).
          'The fascinating flora and rugged landscape (astonished me).'
      b. $[_{DP_1} D A N]$ y $[_{DP_2} \varnothing_D \varnothing_A N]$

The ellipsis analysis can explain the following facts: (a) the plural denota-
tion of these sequences and the agreement triggered on the verb, since two
full DPs are being conjoined; (b) the scope of the adjective *fascinante* in
(28a), since there would be two instances of A in the structure; and (c) the
fact that D compulsorily agrees with the first noun of the coordination.
However, there are various questions that cannot be easily addressed and
answered under the ellipsis analysis.

First, ellipsis analyses cannot explain the fact that a hypothetically ellip-
tical sentence has a quantificational reading that its non-elliptical counter-
part lacks. Consider the examples in (29) and (30). If we set up a context in
which there are two boys and two girls, in (29), a total of four balloons are
being carried (each of the two boys carries a balloon and each of the two
girls carries a balloon). The example in (30) can have the same meaning
but additionally permits the interpretation that a total of only two balloons
is being carried (each of them carried by a pair consisting of one boy and
one girl). If it is assumed, as generally claimed in the literature, that ellipsis
processes do not *add* readings to non-elliptical structures, this set of facts
suggests that the pair interpretation of the sentence in (30) derives from a
non-elliptical structure.

(29) *Cada   niño   y   cada   niña   llevan   un globo.*
      each.SG boy.SG and each.SG girl.SG carry.PRS.3PL a   balloon

(30) *Cada   niño   y   niña   llevan   un globo.*
      each.SG boy.SG and girl.SG carry.PRS.3PL a   balloon

Second, Camacho's analysis would need some stipulation to explain why,
in DP$_2$, the noun must be obligatorily a remnant of the ellipsis process. If,
according to the ellipsis approach, D and A in DP$_2$ can be elided under
identity with D and A in DP$_1$, why can N in DP$_2$ not be elided under iden-
tity with the N in DP$_1$? Observe that in an example like (31a) the conjunc-
tion cannot refer to two different women – the split reading – but can only
refer to a single woman who is married both to Pedro and Juan – the joint
reading. Yet, the split reading would be the expected interpretation if the
structure of this example involved an ellipsis process of D, A and N in the
second conjunct under identity with D, A and N in the first conjunct, as
in (31b):

(31) a. *La   hermosa   mujer   de Pedro y   de Juan* (**vendrán*
          the.F.SG beautiful.F.SG wife.F.SG of Pedro and of Juan (arrive.FUT.3PL
          el   lunes).
          the Monday)
          (intended: 'The beautiful wife of Pedro and the beautiful wife of Juan
          will arrive on Monday.')

     b. *[$_{DP_1}$ D A N PP] y [$_{DP_2}$ $\varnothing_D$ $\varnothing_A$ $\varnothing_N$ PP]

It is also important to note that in our structures, contrary to what happens
generally in coordinate structures where ellipsis has been applied, N_2, the
remnant of the ellipsis process, does not receive a special interpretation
from the point of view of information structure (for example, a contrastive
interpretation).[18]

These empirical issues aside, a theoretical question remains with respect
to the status of (27b) and (28b) as cases of phrasal or head ellipsis. If this
process is to be understood as a case of phrasal ellipsis, then the fact that
it affects non-constituents must be explained; note that in (28b), D and A
in the second conjunct do not form a syntactic constituent. As is generally
claimed in the generative literature, phrasal ellipsis only affects segments
which are syntactic constituents (Lobeck 1995, Merchant 2001, Johnson
2004 and others).[19] The second possibility is to understand the ellipsis pro-

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[18] The fact that, as shown in (i), two adjectives can appear in these structures, each of them
modifying N_1 and N_2, respectively, does not lead to the DP-coordination analysis either. It
is important to note that this possibility is extremely frequent in DPs with a joint reading,
as in (ii). These data seem to indicate that the nominal projections conjoined are not DPs
but the projections hosting the adjectives in these cases.

(i)   a. This old man and young woman fell in love.
       b. *Su mala puntería y peor fortuna habían dejado el resultado en un preocupante
           0–0.* [41]
           'His bad aim and worse fortune had left the score a worrying 0–0.'
(ii)   . . . *Manuel Cortés, un experimentado observador y excelente fotógrafo.* [42]
           'Manuel Cortés, an.M.SG experienced.M.SG observer.M.SG and excellent.SG
           photographer.M.SG.'

[19] In order to maintain a phrasal ellipsis approach to the phenomenon we are studying and,
at the same time, overcome this problem, the analysis in (27b) and (28b) could be recast as
follows (see for example the analysis of Nthelitheos 2004 on nominal ellipsis). Assuming
a structural approach to ellipsis (for example, of the kind adopted in Merchant's works) it
could be claimed that the ellipsis process that underlies an example like (28a) takes place in
two steps, (i): (a) movement of N_2 out of the second DP (N_2 would then be the remnant of
the ellipsis process), and (b) deletion/non-pronunciation of the phonological features of the
whole DP_2 (containing D, A and the trace of N).

(i)   [$_{CoP}$ [$_{DP_1}$ *la fascinante flora*] [$_{Co'}$ *y* [$_{XP}$ *relieve*$_i$ [$_{DP_2}$ ~~el fascinante t$_i$~~]]]]

cess in (27b) and (28b) as head ellipsis. This kind of approach would again face serious problems. On the one hand, head ellipsis – once its existence is admitted and whichever way it is implemented – is constrained by severe conditions; one of these conditions is adjacency between the elided head and its antecedent head (see Saab 2009). However, in our structures, there is no adjacency between D_2 and D_1. On the other hand, in the case of adjectives, note that the adjectival projection can be a phrase, (32), and thus cannot be affected by head ellipsis.

(32)   *Este hecho merece*   **mi**   **más enérgica** *reprobación y*
       this fact   deserve.PRS.3SG my.SG most firm.F.SG censureF.SG and
       repulsa.[28]
       condemnation.F.SG
       'This fact deserves my firmest censure and condemnation.'

Although the ellipsis approach could be amended or reformulated to explain the aforementioned facts, in the light of the facts and arguments set out in the preceding discussion, we conclude that it is worth exploring an account of the agreement pattern under study in terms of Closest Conjunct Agreement. Moreover, the basic assumptions of our analysis have been independently motivated in the literature and can account for a larger set of data.

4. The analysis of CCA: Agree and feature checking within DP

4.1. Basic assumptions: Agree, Probes and Goals

In this section we will present a Minimalist view of CCA within a theory of feature matching/valuation based on the syntactic mechanism Agree (Chomsky 2000, 2001, 2004, 2008). We take as our point of departure the definition of Agree in (33) (from Bhatt 2005: 758):

(33)   Agree is the process by means of which a head X° with unvalued
       uninterpretable features (the Probe) identifies the closest Y°/YP in
       its c-command domain with the relevant set of visible matching (i.e.

However, this analysis would have to motivate what the target position of the displaced constituent is. Nor can it easily account for the facts described in (31) in the text. The reasons for ruling out a structure like (ii) are also unclear under this kind of approach.

(ii)   [[DP₁ *la hermosa mujer de Pedro*] [C°′ *y* [XP *de Juan*ᵢ [DP₂ ~~la hermosa mujer tᵢ~~]]]]

non-distinct) interpretable features (the Goal) and uses the interpretable features of Y°/YP to value its uninterpretable features.

The operation Agree is constrained (apart from locality and intervention conditions) by the *maximisation principle* (Chomsky 2001), which states that if the Probe and the Goal match, their unvalued features must be eliminated at once, as fully as possible. This condition on Agree will have crucial consequences for our proposal.

We will adopt this basic framework with the two important modifications introduced by Frampton & Gutmann's (2000, 2006) theory of *Feature Sharing*: (i) the features of the Goal need not be valued in order for a Probe to agree with them and (ii) an element containing only valued features can act as a Goal in the derivation (thus doing away with Chomsky's *Activation Condition*). Let us briefly present this model, according to which, Agree is best seen as a feature-sharing rather than a feature-copying operation.

In line with Chomsky (2001) and many other approaches to the syntactic nature of agreement, Frampton & Gutmann (2000, 2006) assume that lexical items can enter the derivation with their features either 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. The Probe conducts a top-down search within its c-command domain seeking a feature, be it valued or unvalued, that matches its own unvalued feature (matching is independent of valuation). When this is accomplished, the top-down search stops and the unvalued feature on the Probe and the feature on the Goal are coalesced, resulting in a shared feature, even if agreement does not succeed in valuing at that point the unvalued feature of the Probe. In that case, the Probe and the Goal will share an instance of an unvalued feature, which will be valued at once, in a later step of the derivation. In this model, unvalued features are not deleted following Agree. They remain present in all nodes in which the features are shared. Interface conditions determine where each feature is interpreted.

In this context, we would now like to describe the facts presented above in terms of Probes and Goals. We observed, in the first place, that the first noun in the DP internal coordination determines agreement on prenominal adjectives and determiners (CCA). We observed, on the other hand, that both CoP and N_2 seem to be able to determine agreement on the

adjective when this element appears postnominally, and there seems to be no semantic or morphological motivation for such optionality (we will postpone until section 5.2 the discussion of this second pattern). Thus, N_1, CoP and apparently N_2 are Goals for agreement relations, and D and A are Probes that seek to be determined. Moreover, CoP seems to determine the agreement relation with a TP Probe and triggers plural subject-verb agreement independently of the CCA facts inside DP.

Various important questions arise at this point that we would like to deal with in the remaining part of this section: (a) what valued and unvalued features are at stake in the phenomenon under scrutiny? (b) what is the feature specification of the heads D, N and Co(P)? (c) how does c-command work in these cases and why do, in the CCA pattern, D and (prenominal) A agree only with N_1, not with N_2? (d) Finally, how can we explain the paradoxical fact that in all the sentences we are considering D and prenominal A have singular form, as the result of CCA, but the DP receives a plural interpretation, as shown by the fact that, when it is a subject, it is able to match the unvalued number features of T and value them as plural (see (2), (4), (7), (18))?

4.2. Two types of features

In the PP/Minimalist tradition it has always been assumed that syntactic agreement operates with phi-features. However, the notion of the phi-feature set, as generally understood, is insufficient to explain the facts described here, particularly the paradox we have just noted. Our proposal is that the theory of phi-features must be enriched, and we would like to propose a hypothesis that is able to capture the transmodular relevance of phi-features. Specifically, we claim that two different sets of phi-features must be introduced in the Minimalist syntactic model. Borrowing terminology from the HPSG tradition, we will call them *concord phi-features* and *index phi-features*. Concord phi-features are formal features related to the morphosyntactic/declensional properties of lexical items and codify instructions to the PF interface. Index phi-features are formal features related to semantic properties of lexical items and codify instructions to the LF interface. The proposal that two distinct sets of features are involved in agreement processes has been developed in the OT framework (Badecker 2007, specifically with regard to CCA), and also in the LFG and HPSG models (Pollard & Sag 1994, Kathol 1999, Wechsler & Zlatić 2000, 2003, King

& Dalrymple 2004, Villavicencio, Sadler & Arnold 2005 – the latter two with specific regard to CCA – and others) (also in semantic approaches to phi-features, Sauerland 2008). Data supporting the hypothesis that nouns carry two sets of agreement features come from the *mixed agreement* patterns triggered by collective nouns in some languages. Collective nouns in English (e.g. *band*) and Spanish (*gente* 'people', *pareja* 'couple', etc.) give rise to mixed agreement patterns (*This$_{SG}$ band$_{SG}$ are$_{PL}$ absolutely amazing*; Wechsler & Zlatić 2003: 76; *Esta$_{F.SG}$ gente$_{F.SG}$ nos están$_{PL}$ masacrando*[29] 'These people are slaughtering us'). The idea that two distinct sets of agreement features co-exist in the same node is also present in a few works within the PP/Minimalist tradition. D'Alessandro (2004a, 2004b) claims that *sigma features* must be added to the set of phi-features to account for agreement in impersonal *si* constructions. Similarly, in Costa & Pereira (2005) an additional set of *referential* (phi) *features* is proposed to explain the agreement patterns which the Portuguese pronoun *a gente* ('we', lit. 'the people') gives rise to. López (2007) also posits within the minimalist framework that lexical items (specifically, nouns) contain a semantic feature matrix and a morphosyntactic feature matrix to explain, among other empirical facts, agreement in indefinite *se* constructions or quirky subject structures in Spanish. Recently, Danon (2011) claims that the Minimalist feature theory, as it is generally used, is too restrictive, and proposes that nouns and quantifiers have *concord* and *index features* in order to account for the agreement patterns triggered by partitive DPs in Hebrew (also Heycock & Zamparelli 2005 make use of syntactic and semantic plural features to account for data parallel to what we are describing).

4.2.1. *Featural content of N, D and CoP*

In this section, we will examine the featural content of the different categories involved in the derivation of the structures under study.[20] We will use example (7a) (*la fascinante flora y relieve*) as an illustration. Following Wechsler & Zlatić (2000, 2003), we assume that nouns have *c*(oncord) and *i*(ndex) phi-features. *C*-features reflect morphological properties of nouns, namely gender, number and Case. According to these authors, nouns are also associated with indices that reflect semantic properties of nouns and

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[20] See Demonte, Fernández-Alcalde & Pérez-Jiménez (2011) for a full exposition of this hypothesis.

are conceived as feature structures (*i*-features: gender, number and person). Gender is associated with sex or other semantic categorisation of the entities denoted by the noun, number with cardinality and person with the identification of participants. We claim that nouns enter the derivation with a double set of phi-features. The first part of this double set consists of a bundle of *c*-features, including gender, number and Case. With regard to Case, we assert that all nouns have an abstract Case feature, though it is not phonologically visible in Spanish nouns – as opposed, for example, to Serbo-Croatian, Greek and Russian. Person is absent from this set, since it is not a declensional category of Ns. The second part of the double set consists of a bundle of *i*-features, including gender, number and person. We thus claim that 'person' is considered a semantic property of nouns. This idea is supported by the fact that person specification (first, second person) seems to be contingent on or to interact with the property of being animate/human, which is undoubtedly a semantic property of nouns (see the contrast in (34)), which suggests that animate/human nouns may trigger various forms of person agreement (34a), while inanimate nouns do not (34b). *C*- and *i*-features are valued in N, except for the Case feature in the *c*-set.

(34) a. ***Los   lingüistas***   {*estamos/estáis/están*} *en esta habitación*.
          the.PL linguists.3PL   be.PRS.1PL/2PL/3PL   in this room
          'We/You/The linguists are in this room.'
      b. ***Las   sillas***   {**estamos/*estáis/están*} *en esta habitación*.
          the.PL chairs.3PL   be.PRS.1PL/2PL/3PL   in this room.
          'The chairs are in this room.'

According to our proposal, the feature bundles of the nouns *flora* and *relieve* (from example in (7a)) are made explicit in (35). Note that the gender and number features have equivalent values in the *c*- and *i*-bundles.[21]

(35) a. *flora i*[G(f) N(sg) P(3)]   b. *relieve i*[G(m) N(sg) P(3)]
              c[G(f) N(sg) C( )]   *c*[G(m) N(sg) C( )]

Let us now consider determiners and adjectives. We follow Wechsler & Zlatić's proposal that determiners and adjectives carry gender, number and
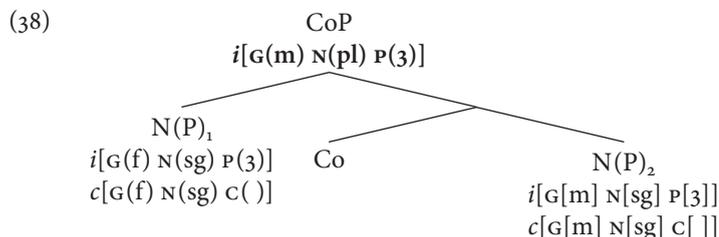
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[21] The gender index feature is semantically interpreted as sex in the case of nouns like *esposa*, *hijo* ('wife', 'son'). For the relation between concord gender features, index gender features and semantic interpretation in the case of inanimate nouns or animate non-sexed nouns (that is, nouns grammatically unmarked for sex), like *persona*, see Wechsler & Zlatić (2003: sect. 4.1, 4.2) and López (2007: sect. 2.6). We will not concern ourselves with this issue further in this article.

Case *c*-features, linked to the morphology of these categories. These features are all visible in D; however, the Case feature remains phonologically non-visible in Spanish adjectives differing in this regard from languages such as German or Greek, in which adjectives carry explicit Case markers. Our claim is that D also carries gender, number and person *i*-features. Adjectives do not have *i*-features. Both sets of features are unvalued in D since it is a functional category. The featural make-up of D is thus (36), while the featural make-up of A is (37). The intuition behind the proposal that D carries *i*-features is that D 'collects' the valued *i*-features of the noun via agreement. 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 item in the semantic model (for example, in the case of referential DPs, the *i*-features of the noun constrain the range of possible referents of the DP). Agreement between D and N(P) also makes it possible for the DP as a whole (via its head D) to carry all the phi-features with which external heads agree.
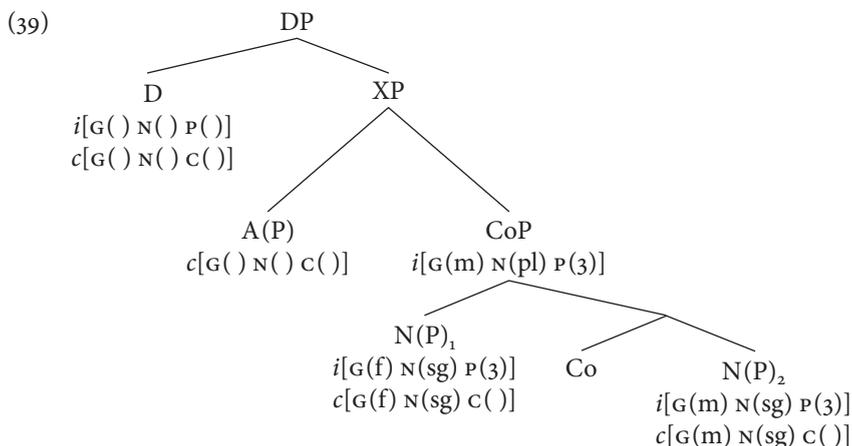
(36)   D   *i*[G( ) N( ) P( )]
        c[G( ) N( ) C( )]

(37)   A   *c*[G( ) N( ) C( )]

The question we must now answer is the following: what is the feature structure of a coordination of nouns? In coordinate structures like (7a) (*la fascinante flora y relieve*), see (38), both N(P) conjuncts have *c*- and *i*-features. The coordinate phrase, nevertheless, lacks *c*-features. Remember that *c*-features are related to the declensional properties of lexical items and, in this case, the head of the phrase, the conjunction *y*, is not morphosyntactically marked as plural or singular, masculine or feminine. The coordinate phrase, however, bears *i*-features (on this idea, see also Dalrymple & Kaplan 2000, Wechsler & Zlatić 2003, King & Dalrymple 2004, Badecker 2007 and others). The proposal that CoP bears *i*-features receives its motiv-

(38)

CoP
i[G(m) N(pl) P(3)]

N(P)$_1$
i[G(f) N(sg) P(3)]
c[G(f) N(sg) C( )]   Co

N(P)$_2$
i[G[m] N[sg] P[3]]
c[G[m] N[sg] C[ ]]

ation from the semantics of *and* in group-forming coordinations: the conjunction semantically operates on the indices of its conjuncts, joining them (Zoerner 1995 and references therein). Since indices are understood as feature structures, the conjunction joins the *i*-feature bundles of $N(P)_1$ and $N(P)_2$. As a consequence, the coordinate phrase as a whole has a plural *i*-feature and gender and person *i*-features determined via resolution.[22]

To summarise: before DP internal Agreement takes place, the structure and feature content of the DP *la fascinante flora y relieve* in example (7a) is that illustrated in (39).

(39)

```
                          DP
            ┌──────────────┴──────────────┐
            D                             XP
    i[G( ) N( ) P( )]              ┌───────┴────────┐
    c[G( ) N( ) C( )]          A(P)                CoP
                         c[G( ) N( ) C( )]   i[G(m) N(pl) P(3)]
                                          ┌──────┴───────┐
                                      N(P)₁              │
                               i[G(f) N(sg) P(3)]   Co        N(P)₂
                               c[G(f) N(sg) C( )]        i[G(m) N(sg) P(3)]
                                                        c[G(m) N(sg) C( )]
```

4.2.2. *Agreement in the prenominal field and Subject–Verb agreement*

In this section, we will propose a unified analysis of the DP-internal facts illustrated in the preceding sections. We will make brief comments on Subject–Verb agreement, but we will leave some questions open since this is not the main issue of this article. We will use example (7a) to illustrate our analysis.

To understand how the derivation proceeds at the stage captured in (39) it is important to remember that the operation Agree is constrained by the *maximisation principle* (initially proposed by Chomsky 2001). According to this principle, if a Probe matches with a Goal, its unvalued features must be valued at once, as fully as possible; partial valuation of the features of a Probe under Match, followed by valuation of the residue under remoter

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[22] On this process, see Corbett (1991, 2006), and others.

Match, is not an option. This condition on Agree, which we incorporate into the framework of Feature Sharing, has crucial consequences for our proposal.
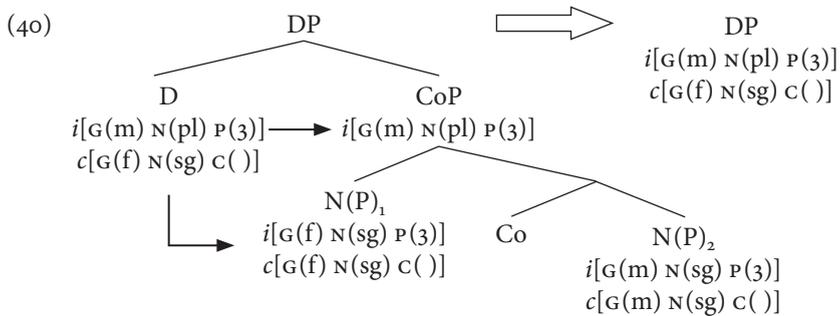
Let us first consider agreement of D, setting aside agreement of the adjective for the moment. In (39), D, with unvalued phi-features, probes for a Goal with their matching counterparts. Crucially for our analysis, *i*- and *c*-features are treated by syntax as bundles, as expected from the application of the *maximisation principle* stated above: 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.[23] The *c*-features of D, on the other hand, find their closest Goal in the *c*-features of $N(P)_1$, establishing with them an Agree relation. The *i*-feature bundle of 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, as noted above, Agree is blind to feature values: it just pairs up matching features. These DP internal agreement processes, usually referred to as *Concord*, are derived in our approach from the application of Agree. As a result of these agreement operations, D is morphologically singular, which constitutes the phenomenon of Closest Conjunct Agreement, but 'indexically' plural. 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, as illustrated in (40).[24]

Let us briefly address at this point agreement between T and the subject DP. Our claim is that T bears only a *c*-bundle which contains at least person and number features. These are *c*-features on T, because they correspond to the morphological/inflectional properties of the verb and are visible at PF (we remain neutral as to whether T has *i*-features related to the event denoted; see Wechsler & Zlatić 2003: sect. 7.5.1 on this topic). Once T

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[23] Although CoP and N_1 are equally local to the Probe D, according to van Koppen's (2005: 14) notion of *equally local*, (i), (cf. also Chomsky's (2000) definition of *equidistance*), we claim that CoP is the closest Goal for Probe D since *merge* takes place between D and CoP, and not between D and the specifier of CoP.

(i) Y and Z are equally local to X iff (i) X c-commands both Y and Z, and (ii) the set of nodes that c-command Y is identical to the set of nodes that c-command Z.

[24] We do not address here the question of whether the goal of agreement is the head of the phrase or the maximal projection (via feature 'percolation'), although we adhere to the latter option consistently. This must be kept separate from the *resolution* process by means of which the Co head takes the indices of its conjuncts and creates a new one at the CoP level.

(40)

DP
├─ D
│ i[G(m) N(pl) P(3)] ⟶
│ c[G(f) N(sg) C( )]
│
└─ CoP
    i[G(m) N(pl) P(3)]
    ├─ N(P)$_1$
    │ i[G(f) N(sg) P(3)]
    │ c[G(f) N(sg) C( )]
    │
    └─ Co
        │
        └─ N(P)$_2$
            i[G(m) N(sg) P(3)]
            c[G(m) N(sg) C( )]

⟹ DP
i[G(m) N(pl) P(3)]
c[G(f) N(sg) C( )]

is merged in the derivation, the unvalued c-features of T (person, number) probe for a matching set of features, 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 from the point of view of the interfaces they give instructions to, but are treated equally by syntax. Therefore, a c-bundle can agree with an i-bundle as long as they both contain the same featural content, as is the case 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.[25]

Let us now consider agreement of prenominal adjectives in (39). As noted above before, A carries c-features. These features find their closest Goal in the c-features of N(P)$_1$, establishing with them an Agree relation. The i-features of CoP are overlooked, as expected given the *maximisation principle*.

4.2.3. *C-command and the features in D and A*

Apart from the hypothesis of two types of features and the articulation of Agree under such a view, a question still remains relative to the specific properties of adjective agreement: Do both Probes, D and A, enter simultaneously into an agreement relation with the corresponding Goal in (39)?

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[25] Since the study of Subject–Verb agreement in the structures under study is not the primary goal of this article, we will not address here the question of Case assignment to the coordinate nouns. See Demonte, Fernández-Alcalde & Pérez Jiménez (2011) for the proposal that the Case feature of the coordinate nouns is valued not by means of copying the value of another Case feature already valued in a different head, but rather as an argument-marking strategy dependent upon Agree. In other words, Case is valued in the coordinate nouns (as nominative in our structures) as a by-product of the Agree relation established between DP and T.

There are two possibilities in our view. First, we could propose that N serves as a Goal to the various Agree relations that constitute Concord (Carstens 2000, 2001: 154). In fact, a common assumption is that these agreement operations take place simultaneously and there are two instances of Agree occurring at the same time; there is *multiple agreement*. The alternative possibility is to postulate that in the cases where A is a Probe for its closest Goal, $N(P)$, once A has valued its *c*-features, it could become a Goal to be probed by D. This second option is more akin to Chomsky's (2001) idea that Agree is a single one-to-one Agree operation.[26] Finally, we need to explain why neither D nor A probe N_2 even though this N is also in their c-command domain. The answer is that, given (39), N_2 is not an available Goal for D and A since N_1 is closer to both of them than is N_2.

5. Postnominal adjectives. Agree and linear adjacency

By showing that there is something more than Agree behind the facts of adjective agreement, this section seeks to explain the agreement pattern found with postnominal adjectives: postnominal adjectives, in the structures under study, show either full agreement (that is, agreement with the coordination phrase) or agreement with the rightmost conjunct (N_2). This pattern is observed across different semantic/morphological classes of adjectives. In our corpus of 4,328 examples of postnominal adjectives modifying a conjunction of Ns we have found 1,787 cases of adnominal predicative adjectives (Bolinger 1967) – *indirect modification adjectives* in Cinque's (2010) terms, *intersective/restrictive adjectives* in other explanations – and 2,541 cases of *relational adjectives* – classificatory and thematic or nationality adjectives in Cinque's terms. From the statistical point of view, the differences observed between different classes of adjectives with respect

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[26] A third possibility, proposed by Schoorlemmer (2009: sect. 3.1), is to think that adjective agreement is licensed indirectly as the by-product of the Agree-relations established by a higher Probe, instead of being the result of a direct Agree relation between A and the noun. This idea works together with the hypothesis that adjectives are merged as adjuncts and that only dominance and not c-command is relevant for agreement. Actually, in languages where adjectives do not agree with N, the hypotheses of Agree through dominance and adjective adjunction to NP appear to work. In such an explanatory approach adjective agreement needs to be stipulated as *indirect agreement*. Romance languages, where agreement holds across the board, do not make a case in favour of such a view and the c-command requirement seems to be enough.

Table 3. Adjective number by adjective class

			Adjective class		Total
			Predicative	Relational	
Adjective number	Plural	Count	51	82	133
		Column%	62.2%	54.3%	57.1%
	Singular	Count	31	69	100
		Column%	37.8%	45.7%	42.9%
Total		Count	82	151	233
		Column%	100.0%	100.0%	100.0%

	Value	df	Asymp. sig. (2-sided)
Pearson chi-square	1.351[a]	1	.245

to their singular (CCA with N_2) or plural agreement (agreement with the coordinate phrase) in postnominal position are not significant. The results of the distribution of singular/plural agreement across the classes of adjectives mentioned above are shown in Table 3. We have restricted the sample, as we did in section 2.1, to those cases where the relevant DP containing the conjunction of Ns and the adjective is a subject that triggers plural number agreement on the verb, since, in these cases, the interpretation of the coordination of NPs is undoubtedly plural. The chi-square test shows that there is no significant correlation between adjective number in postnominal position and the class to which the adjective belongs ($p > .05$). Accordingly, we will offer a unified account for different semantic/morphological classes of adjectives to explain the agreement pattern described.

In (41)–(45), minimal pairs from our corpus are provided to illustrate the alternation between singular and plural agreement for both kinds of adjectives. In the pool of postnominal predicative adjectives we find all the adnominal adjectives which can also appear as predicates of copular sentences: participles, qualifying (*perfecto*), temporal (*actual*), locational (e*xterior*), frequency (*constante*) and even focus and degree adjectives like *absoluto* (since in most cases both subclasses accept predicative uses). In the pool of relational adjectives we find ethnic or nationality adjectives (*catalán*) and classifying adjectives (*acuático*), which can also be used in certain cases as predicates of copular sentences:

(41) a. *el   timbre   y   ritmo   perfecto*[30]
          the.M.SG tone.M.SG and rhythm.M.SG perfect.M.SG
          'the perfect tone and rhythm'

b. *una   textura   y   brillo   perfectos*[31]
a.F.SG texture.F.SG and shine.M.SG perfect.M.PL
'a perfect texture and shine'

(42) a. *el   modelo   y   sistema   actual*[32]
the.M.SG model.M.SG and system.M.SG current.SG
'the current model and system'

b. *la   estructura   y   dinámica   actuales*[33]
the.F.SG structure.F.SG and dynamics.F.SG current.PL
'the current structure and dynamics'

(43) a. *la   dedicación   y   entrega   absoluta*[34]
the.F.SG dedication.F.SG and devotion.F.SG absolute.F.SG
'the absolute dedication and devotion'

b. *una obediencia   y   disciplina   absolutas*[35]
an   obedience.F.SG and discipline.F.SG absolute.F.PL
'an absolute obedience and discipline'

(44) a. *su   escasa   flora   y   fauna   acuática*[36]
its.SG scanty.F.SG flora.F.SG and fauna.F.SG aquatic.F.SG
'its scanty aquatic flora and fauna'

b. *la   flora   y   fauna   acuáticas*[37]
the.F.SG flora.F.SG and fauna.F.SG aquatic.F.PL
'the aquatic flora and fauna'

(45) a. *la   lengua   y   cultura   catalana*[38]
the.F.SG language.F.SG and culture.F.SG Catalan.F.SG
'the Catalan language and culture'

b. *la   lengua   y   cultura   catalanas*[39]
the.F.SG language.F.SG and culture.F.SG Catalan.F.PL
'the Catalan language and culture'

5.1. Postnominal adjectives: Agree

5.1.1. *Our analysis*

Cases of individual (intra-dialectal) variation in agreement, such as the alternation we are showing between singular and plural in postnominal adjectives modifying plural conjunctions in Spanish, are not easy to handle in formal approaches to natural languages. In this article we do not aim to provide an explanation for the type of variation involved in such a pattern (see Adger & Smith 2010 in this regard) but simply try to place such an alternation within the general theoretical frame we are taking as

a point of departure. In brief, we explain plural agreement assuming, as in Cinque (2010), that there are two sources for adnominal adjectives in DPs. Prenominal attributive adjectives are APs generated as specifiers of the functional heads of the extended projection of NP (recall (25)), whereas postnominal predicative adjectives are generated inside a reduced relative clause merged in a high position inside the DP structure (Cinque 2010).[27] We claim that plural agreement is the output of syntactic Agree while agreement of the adjective with the second noun of the coordination is determined by factors which fall outside narrow syntax.

Let us look at the derivation of postnominal adjectives with a plural marking. The partial structure in (46) is the underlying representation for constructions similar to the ones in (41)–(45) with a plural adjective. Consider the example *La lengua y cultura catalanas* (the.F.SG language.F.SG and culture.F.SG Catalan.F.PL). The index bundle of the CoP contains a plural number feature and a gender feature determined by resolution: $i[\text{G}(f)\ \text{N}(pl)\ \text{P}(3)]$. The postnominal adjective is generated within a reduced relative clause. The surface order of postnominal adjectives, as represented in (46), is derived via movement of the lower section of the DP which contains the CoP to a position above the node hosting the relative clause.

(46)

DP
D
XP
$[_{(Red)RC}\ \text{PRO}_i\ A]$
...
CoP$_i$
$i[\text{G}(f)\ \text{N}(pl)\ \text{P}(3)]$
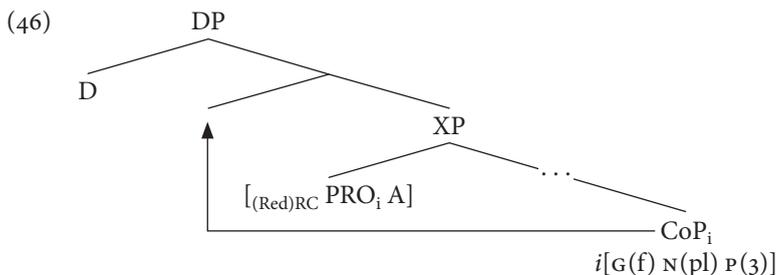
As to agreement, the relation between A and CoP is mediated by PRO. The pronoun in the reduced relative clause and CoP are coindexed, that is, they are coreferential (PRO behaves as an *obligatory control PRO* that must be c-commanded by its antecedent; note that in (46) only CoP c-commands PRO – not N_1 or N_2). Since pronouns are nominal categories, they have index and concord phi-features. As to coindexed pronouns, their *i*-features (which determine anchoring conditions) must be semantically compatible

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[27] Alternatively, it could be assumed that postnominal 'attributive-predicative' adjectives are generated in a small-clause structure (Demonte 1999b, 2008, Gutiérrez Rexach & Mallén 2001, 2002, Truswell 2004) or in a PredP (Bowers 1993, 2001).

with that of their antecedents; in other words, coindexing consists of sharing *i*-features (Wechsler & Zlatić 2003). Accordingly, PRO in (46) has the same index bundle as CoP: $i[\text{G}(f)\ \text{N}(pl)\ \text{P}(3)]$. With respect to the concord bundle of the pronoun, we will follow Wechsler & Zlatić's proposal that there are linguistic constraints holding between concord values and index values, encoded grammatically in the form of a default feature structure for nouns and pronouns, according to which the gender and number values are identical in the concord and index bundles (though this constraint may be overridden by lexical exceptions; remember the cases of collective nouns such as Eng. *band* and Sp. *gente* 'people'). Accordingly, in (46), the number and gender values of the concord bundle of PRO correlate with those of the index bundle (that is, feminine gender and plural number). Finally, as for the Case feature of the pronoun, let us assume that it is nominative (Cinque 2010: sect. 4.2) or null Case (Martin 2001 and others); nothing crucial hinges upon this. The Agree relation established in the reduced relative clause between the adjective and the pronoun results in the adjective showing up with plural number, and masculine gender. This is the outcome of syntactic agreement.

5.1.2. *Is an ellipsis-based analysis an alternative?*

Before turning to our proposal to explain agreement between postnominal adjectives and N_2, let us briefly consider and reject an alternative analysis of examples with (plural and singular) postnominal adjectives as cases of DP internal *Right Node Raising* [RNR] of the postnominal adjective. This kind of analysis would imply taking as a point of departure, contrary to what we have claimed in the text, the proposal that postnominal adjectives are generated in a low position inside each NP conjunct. Extending currently available analyses of Right Node Raising in verbal/sentential structures to our empirical domain, the following implementations of this alternative analysis would be possible. First, in an *ellipsis/backward deletion account* of RNR, (47a), the postnominal adjective would appear twice in the base structure, once under each NP conjunct. The first instance of the adjective is affected by ellipsis. Second, in an *ATB rightward movement account*, (47b), the adjective surfacing in postnominal position is rightwards ATB moved from each NP conjunct. Third, in a *multidominance account*, (47c), both NP_1 and NP_2 multidominate AP (we set aside the question of linearisation in such structures).

(47) a. $[_{DP}$ D $[_{CoP}$ $[_{NP_1}$ N AP] $[_{Co'}$ Co$[_{NP_2}$ N AP]]]]
      b. $[_{DP}$ D $[_{CoP}$ $[_{NP_1}$ N t] $[_{Co'}$ Co$[_{NP_2}$ N t]]] AP]
      c. $[_{DP}$ D $[_{CoP}$ $[_{NP_1}$ N] $[_{Co'}$ Co$[_{NP_2}$ N AP]]]]

The pros and cons of these analyses have been extensively discussed in the literature with respect to RNR in sentential contexts. With respect to our structures, and assuming that singular and plural adjectives are derived from the same structure, the *ellipsis account* will encounter difficulties in explaining how the plural number (and resolved gender) of the postnominal adjective is derived, unless a stipulative constraint is posited according to which agreement in the second conjunct can be sensitive to deletion in the first conjunct. Moreover, the grammaticality of examples like (11) above (with collective/symmetric adjectives) cannot be explained in this analysis unless a covert semantic operation is proposed which allows the adjective inside NP$_2$ to scope over the coordination (see Abels 2004 for RNR in sentential contexts). Under the *rightward ATB movement approach*, the plural agreement of the adjective (and the gender mark determined by resolution) could be explained if it is assumed that agreement takes place in the final position occupied by the predicate in the derivation, a proposal with theoretical implications that we cannot explore here. Similarly, the presence of collective adjectives in postnominal position would be explained if scope is determined once the adjective has ATB moved. Finally, the *multidominance approach*, similarly to the ellipsis approach, would also have to resort to additional semantic operations to explain the presence of collective predicates in our structures. The plural number and resolved gender of the postnominal adjective could however be explained as a process of *cumulative agreement*, as proposed in Grosz (2009) for sentential RNR structures like (48) where, under a multidominance analysis, a shared agreement target (the T head) exhibits *plural* phi-agreement with two unshared *agreement controllers* (e.g., two subject DPs), even if the latter are singular. This *cumulative agreement* is a type of agreement resolution that arises whenever a shared functional head agrees in phi-features with two singular unshared agreement triggers.

(48) [Sue's proud that *Bill*.SG _] and [Mary's glad that *John*.SG _] have.PL/?*has.SG traveled $t_{Bill/John}$ to Cameroon.

The proposal presented in section 5.1.1 can explain without resorting to additional operations the scope of collective adjectives in the structures

under study, as well as the plural number (and resolved gender) of postnominal adjectives, and can also be extended to explain plural agreement on the verb and other predicative elements in the sentence. However, even if it were proven that (at least some kinds of) postnominal adjectives (for example, relational adjectives) were generated inside the projection of each NP conjunct, and an analysis within the lines of ATB rightward movement or multidominance were to be assumed, the crucial observation is that agreement of postnominal As with N_2 in our structures cannot be derived in the syntax, that is, as the result of an Agree relation between A and N_2.

5.2. Postnominal adjectives. Linear adjacency

To explain agreement between postnominal adjectives and N_2 in the structures under study, we take as our point of departure the idea that in the mapping between syntax and phonology, there is an interface post-syntactic component – PF – where syntactic terminals are linearised and the feature bundles on which the syntactic component operates are replaced by vocabulary items and/or by agreement affixes (that is, by phonological strings). Assuming this approach, the fact that sometimes syntactic agreement does not surface with the *expected* morphological realisation can be explained.

   Recall that in the case of singular adjective agreement in our structures, agreement holds between the postnominal adjective and the rightmost conjunct in the CoP, although the adjective has scope over the two conjuncts. It is evident that singular agreement with the rightmost conjunct NP_2 is not anticipated by either of the two basic configurations proposed for adnominal adjectives. First, if the postnominal adjective is generated in the Spec of a functional phrase above CoP and postposition is the outcome of NP movement (Cinque 1994), CCA with the first conjunct N_1 and not with the second would obtain. Second, we have just seen that the reduced relative clause analysis of the postnominal adjective only gives rise to plural agreement (recall (46)).

   Camacho (2003: 98–99) refers to cases of partial agreement of postnominal adjectives in coordinated DPs as *PF agreement structures* since, in these cases, "partial or full agreement does not necessarily correlate with differences in interpretation". His intuition – correct, from our point of view – is that partial agreement could obey non-syntactic factors. To be more explicit, we reject an explanation of singular agreement between postnominal adjectives and N_2 in terms of Agree between the concord features of

the postnominal adjectives and the concord features of N_2, because in the case of postnominal adjectives, agreement with N2 (singular agreement) is not obligatory and, moreover, N2 cannot be a Goal in any case. Our claim, thus, is that agreement of the postnominal adjective with the second conjunct is not a matter of syntax, since syntax deals with local hierarchical relations, but rather a matter of other locality conditions, namely, linear adjacency in a post-syntactic component. We assume that, at PF, precedence relations between syntactic constituents are established, that is, *linearisation* applies. When a DP structure of the kind we are studying is sent to PF, its internal elements are linearised in such a way that the rightmost N of the coordination (N_2) precedes and is adjacent to the postnominal AP. This adjacency relation makes agreement between the adjective and N_2 possible.

Our proposal follows the spirit of Marušič, Nevins & Saksida (2007, 2011) and specifically Benmamoun et al.'s (2010) explanation of CCA in Subject–Verb structures with coordinated subjects in head-final languages. In these languages, CCA is established between V/T and the rightmost conjunct of the coordinated subject. Sentence (49) shows partial number agreement between V/T and an absolutive coordinated subject in Tsez; the verb agrees in singular with N_2 – singular agreement shows up with no explicit number marking on the verb.[28]

(49)   *Kid-no   uži-n   ∅-ik'is.*
        girl.ABS.II-and boy.ABS.I-and I-go.PST
        'A girl and a boy left.' (Benmamoun et al. 2010: 71 (12a))

As the authors note, a purely syntactic account based on the asymmetric structure of the coordination (recall 24a) cannot account for CCA in these cases, since N_2 is structurally lower than N_1 and CoP, and thus cannot enter in an Agree relation with T. According to their *compositional approach to agreement*, T agrees with CoP in the syntax, but this relationship can be satisfied at PF by spelling out the features of either CoP or the linearly closest conjunct, N_2, depending on many factors that remain to be studied. The consequence is that the way agreement features are spelled-

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[28] In this language, full plural agreement is also possible between V/T and the absolutive coordinate subject.

(i)   *Kid-no   uži-n   b-ik'is.*
        girl.ABS.II-and boy.ABS.I-and IPL-go.PST
        'A girl and a boy left.' [Benmamoun et al. 2010: 71 (11a)]

out "may not be faithful to the syntactic component". In the same spirit, Borsley (2009) claims that adjacency based on linear order determines agreement in Welsh, and partially determines agreement relations in other languages. In Polish, for example, when a coordinate subject follows the verb, the verb may agree with either the whole subject or merely the first conjunct (CCA). According to Borsley, agreement involves a superficial level of structure which is a syntactic level closely related to phonology.[29]

Following these ideas, we claim that in our cases the postnominal adjective showing agreement with N_2, hence singular agreement, establishes a syntactic relation which would in principle determine plural agreement, but, once linearisation provides an ordered string of elements, agreement with the second conjunct is possible. To be more explicit, our proposal to explain singular agreement in an example like *La lengua y cultura catalana* (the.F.SG language.F.SG and culture.F.SG Catalan.F.SG) is in line with Ackema & Neeleman (2004), who argue for the existence of rules that affect the featural content of terminals once linearisation has taken place at PF. As shown in (50), when a structure like (46) (for *la lengua y cultura catalanas* 'the.F.SG language.F.SG and culture.F.SG Catalan.F.PL') is linearised, N_2, with a singular number feature, precedes and is adjacent to the postnominal A, with a plural number feature. This linear relation enables a post-syntactic process of weakening/deletion of the values of the phi-features (*c*-features) of the adjective, followed by a process of feature-copying of the *c*-features of the immediately preceding noun N_2. Only concord-features are involved in these post-syntactic processes since these are the only features interpreted by the PF interface. As a result, the adjective is spelled out with singular marking: *catalana*.

(50)   **Syntax:** La [$_{CoP.NUMBER:PL}$ [$_{N1}$ lengua] y [$_{N2}$ cultura$_{NUMBER:SG}$]] A $_{NUMBER:PL}$
       PF (interface level between syntax and phonology)
         Linearisation:
         La lengua y cultura$_{NUMBER:SG}$ A$_{NUMBER:PL}$
         –*Weakening/deletion*: [$_A$ F_2] [$_B$ F_3] $\rightarrow$ [$_A$ F_2] [$_B$ F]
         La lengua y cultura$_{NUMBER:SG}$ A$_{NUMBER.}$
         –*Feature identification under linear adjacency*: [$_A$ F_2] [$_B$ F_2]
         La lengua y cultura$_{NUMBER:SG}$ A$_{NUMBER:SG}$
         Spell out of terminals: La lengua y cultura catalana
       Phonology

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[29] This is the level of order domains proposed in linearisation-based HPSG.

In other words, agreement of the postnominal adjective with N_2 could then be treated as a case of *context-sensitive spell-out* and *PF feature identification* process of the kind proposed by Ackema & Neeleman (2004: chs 6, 7). According to these authors, processes affecting the featural content of terminals are sensitive to local prosodic domains established at the level of initial prosodic phrasing after linearisation. Benmamoun et al. (2010) also find some initial indications that the choice of CCA in the structures they study is sensitive to prosodic constraints. Though it is possible that other relations among syntactic units, for example, relations relevant to the determination of phonological phrasing, are established at PF (Ackema & Neeleman 2004, Fox & Pesetsky 2005 and others), and even if it is possible that those initial prosodic relations may condition agreement as Ackema & Neeleman (2004) claim, they do not seem to interact with CCA in our structures. Indeed, Demonte & Pérez-Jiménez (in press) show the results of an experimental study that shows that agreement of postnominal adjectives with N_2 in the structures under study in this article is independent of the grouping of N_2 and A in a local prosodic domain (*phonological phrase*). In other words, agreement between the postnominal adjective and the second noun of the coordination is independent of the prosodic relation of these two terminals; it seems to be sensitive only to linear adjacency.

The proposal that linear adjacency plays a crucial role in CCA with postnominal adjectives in our structures receives empirical support from contrasts like the following:

(51) a. *la   radio   y   television   pública   catalanas* (cf. (10))
          the.F.SG radio.F.SG and television.F.SG public.F.SG Catalan.F.PL
          'the Catalan public radio and television'
      b. **la   radio   y   television   públicas   catalana*
          the.F.SG radio.F.SG and television.F.SG public.F.PL Catalan.F.SG

In (51a), the adjective adjacent to N_2 (*pública*) shows singular agreement, while the second adjective takes syntactic plural agreement (*catalanas*). However, the sequence A_{PL}–A_{SG} is ungrammatical (51b). In this case, the second adjective cannot show singular agreement with N_2, since these two elements are not adjacent (the sequence A_{SG}–A_{SG} is also possible, since the second singular adjective is adjacent to the first one; the sequence A_{PL}–A_{PL} is also grammatical).

Moreover, in an example like (52), the singular adjective *viejo* ('old') can only be interpreted as modifying the second noun, not the whole coor-

dinate phrase (a plural adjective, *viejos*, would be the only possibility). This is because in (52) there is no adjacency between the adjective and N₂. Therefore, the singular number feature of the adjective cannot be a result of partial agreement between the adjective and N₂. Similarly, examples like (53) show that adjacency is required between the adjective and N₂ in partial agreement.

(52) *La   maleta   y   bolso   de rayas viejo.*
      the.F.SG suitcase.F.SG and bag.M.SG of stripes old.M.SG
      'The suitcase and the old striped bag.'

(53) a. **La   radio   y   televisión   recientemente **pública***
          the.F.SG radio.F.SG and television.F.SG recently   public.F.SG
          han   renovado su   programación.
          have.PRS.3PL renewed their programming
      b. *La   radio   y   televisión   recientemente **públicas***
          the.F.SG radio.F.SG and television.F.SG recently   public.F.PL
          han   renovado su   programación.
          have.PRS.3PL renewed their programming

6. Conclusions

This article illustrates the multifaceted nature of closest conjunct agreement. Its main points are the following. First, contrary to what has been claimed (Camacho 2003 and Heycock & Zamparelli 2005), in Romance languages a process of CCA inside DPs with coordinated Ns does exist. We have assessed the existence of CCA in Spanish exhaustively by examining a wide sample of corpus data, in which conjunctions of different individuals (singular count and group nouns) as well as of other entities (mass, abstract and deverbal nouns) were considered. We have also demonstrated that the [D [NP *y* NP]] structures are not the result of ellipsis.

Second, singular (CCA) agreement between determiners, prenominal adjectives and the first noun of the coordination – in languages where DP coordinated subjects agree in plural with the VP – can be explained assuming that agreement relations are established derivationally due to the interaction of two different types of nominal features, namely, *c*-features and *i*-features, both being syntactically active inside the DP domain. Specifically, we have argued that number is a syntactic feature that emerges with a double face within the nominal feature geometry: as a mere formal

(morphological/declensional) feature (concord) and as a referential feature (index). In our proposal, concord and index features are both syntactic/formal features that differ only with respect to the interface they give instructions to (concord features are interpreted at PF; index-features are interpreted at LF). Therefore, concord and index features are not designed to enter into two specific grammatical operations; there is no necessary link between concord-features and agreement inside the DP and index-features and agreement outside the DP – in the VP domain. In our approach, there are not different agreement operations such as concord-agreement and index-agreement. Agree is a single syntactic operation that applies across all syntactic domains matching features irrespective of their type.

Third, we have explained the variation between singular and plural marking in adjectives following a coordination of NPs as a consequence of the assumption that in the mapping between syntax and phonology there is an interface post-syntactic component – PF – where syntactic terminals are linearised and where specific PF operations affecting the featural content of these terminals apply. Nonetheless, the deep reasons why sometimes syntactic agreement does not surface with the *expected* features remains open to further research.

Sources of the examples

[**a**] Real Academia Española. Banco de datos en línea *Corpus de referencia del español actual* (CREA). <http://www.rae.es>

[**b**] Davies, Mark. 2002. *Corpus del español* (100 million words, 1200s–1900s). Available online at http://www.corpusdelespanol.org.

[1] Pérez, O. & M. Trallero. *La mujer ante la ley*. Martínez Roca (Barcelona), 1983. [a]

[2] *El Mundo* (Madrid), 9 Dec. 2004. [a]

[3] Bojorge, R. *La aventura submarina.* Albatros (Buenos Aires), 1992. [a]

[4] *ABC* (Madrid), 3 June 1986. [a]

[5] *Informe de Evaluación de Tecnologías Sanitarias*, nº 27, 12/2000: 7. Ministerio de Sanidad y Consumo. Instituto Carlos III. A. E. T. S. (Madrid), 2000. [a]

[6] Examen escrito 92205010, España, 1992. [a]

[7] Torre Padilla, Ó. de la. *El turismo. Fenómeno social.* Fondo de Cultura Económica (México D. F.), 1990. [a]

[8] Castillo Hernández, L. Entrevista (Chiapas): ENTRE14; [b]. http://larepublica.chiapas.com/entrevistas/entre.htm

[9] Benítez, J. J. *Caballo de Troya 1.* Planeta (Barcelona), 1994 [1984]. [a]

[10] *La Vanguardia* (Barcelona), 2 Jan. 1995. [a]

[11] *Clarín* (Buenos Aires), 22 Mar. 1979. [a]

[12] Labrador, J. et al. *Aproximación a las bases técnicas de la agricultura ecológica.* Sociedad Española de Agricultura Ecológica (Madrid), 2002. [a]

[13] *La Vanguardia* (Barcelona), 25 Jan. 1994. [a]

[14] Fuentes, C. *El espejo enterrado.* Fondo de Cultura Económica (México), 1992. [a]

[15] *El Mundo* (Madrid), 20 June 1996. [a]

[16] Subcomandante Marcos. *Los del color de la tierra. Textos insurgentes desde Chiapas.* Txalaparta (Tafalla (Navarra)), 2001. [a]

[17] *El Mundo* (Madrid), 3 Dec. 1996. [a]

[18] *El Mundo* (Madrid), 28 July 1995. [a]

[19] *El Tiempo* (Colombia), 11 Nov. 1996. [a]

[20] *Vistazo* (Quito), 8 May 1997. [a]

[21] *Tercer Milenio* (Suplemento de El Heraldo de Aragón, nº 214, 25 Jan. 2000). [a]

[22] Arenal, Concepción. *Las colonias penales de Australia y la pena de deportación.* Alicante, Biblioteca Virtual Miguel de Cervantes, 1999 [1856]. [a]

[23] Valbuena Briones, A. *Toxicomanías y Alcoholismo. Problemas médicos y psiquiátricos.* Masson/Salvat (Barcelona), 1993. [b]

[24] Pozuelo J. & M. A. Pérez. *Técnicas culinarias.* Paraninfo (Madrid), 2001. [a]

[25] Puig, M. *El beso de la mujer araña.* Seix Barral (Barcelona), 1993 [1976]. [a]

[26] Villanueva Lázaro, J. M. *La Cantabria del Esla.* Lancia (León), 2000. [a]

[27] Leguina, J. *Tu nombre envenena mis sueños.* Plaza&Janés (Barcelona), 1992. [a]

[28] Jiménez Losantos, F. *Lo que queda de España.* Temas de Hoy (Madrid), 1995. [a]

[29] Rodríguez Juliá, E. *Peloteros.* Universidad de Puerto Rico (San Juan), 1997. [a]

[30] *Quinto Sol* (Nicaragua), nº 19, 2000. [a]

[31] Lastra, Mª T. de la. *Cómo restaurar muebles antiguos.* Alianza (Madrid), 1999. [a]

[32] *Los Tiempos* (Cochabamba), 17 Mar. 1997. [a]

[33] Castilla del Pino, C. *Introducción a la psiquiatría I.* Alizanza (Madrid), 1993. [a]

[34] *Tiempo* (Madrid), 8 Jan. 1990. [a]

[35] Gracia Monterde, C. *Tras la caza menor.* Hispano-Europea (Barcelona), 1996. [a]

[36] *Clarín* (Buenos Aires), 2 Apr. 1997. [a]

[37] Butteler H. *Ecología y civilización.* Magisterial (Lima), 1996. [a]

[38] *El País* (Madrid), 1 Feb. 1985. [a]

[39] = [32]

[40] J. Estébanez. *Las ciudades.* Síntesis (Madrid), 1991. [a]

[41] *El País* (Madrid), 1 Oct. 1987. [a]

[42] Oliver, J. Mª. *Manual práctico del astrónomo aficionado.* De Vecchi (Barcelona), 1992. [a]

References

Abels, Klaus. 2004. Right node raising: Ellipsis or across the board movement? In Keir Moulton & Matthew Wolf, eds. *Proceedings of NELS 34.* Amherst: GSLA, 45–59.

Ackema, Peter & Ad Neeleman. 2004. *Beyond morphology: Interface conditions on word formation.* New York: Oxford University Press.

Acuña-Fariña, Juan Carlos. 2009. The linguistics and psycholinguistics of agreement: A tutorial overview. *Lingua* 119: 389–424.

Adger, David & Jennifer Smith. 2010. Variation in agreement: A lexical feature-based approach. *Lingua* 120: 1109–1134.

Alexiadou, Artemis, Liliane Haegeman & Melita Stavrou. 2007. *Noun phrase in the generative perspective.* Berlin & New York: Mouton de Gruyter.

Aoun, Joseph, Elabbas Benmamoun & Dominique Sportiche. 1994. Agreement, word order and conjunction in some varieties of Arabic. *Linguistic Inquiry* 25: 195–220.

Aoun, Joseph, Elabbas Benmamoun & Dominique Sportiche. 1999. Further remarks on first conjunct agreement. *Linguistic Inquiry* 30: 669–682.

Badecker, William. 2007. A feature principle for partial agreement. *Lingua* 117: 1541–1565.

Becker, Christopher. 2005. *Clausal and nominal agreement in Russian.* University of Michigan PhD dissertation.

Benmamoun, Elabbas, Archna Bhatia & Maria Polinsky. 2010. Closest conjunct agreement in head-final languages. In Jeroen van Craenenbroeck, ed. *Linguistic Variation Yearbook, 2009.* Amsterdam: John Benjamins, 67–88.

Bernstein, Judy. 1993. *Topics in the syntax of nominal structure across Romance.* New York: City University of New York PhD Dissertation.

Bhatia, Archna & Elabbas Benmamoun. 2009. Close conjunct agreement: Role of Linear Adjacency. Paper presented at the LSA Linguistics Meeting. San Francisco, 25–27 Feb. 2009.

Bhatt, Rajesh. 2005. Long distance agreement in Hindi-Urdu. *Natural Language and Linguistic Theory* 23: 757–807.

Bolinger, Dwight. 1967. Adjectives in English: Attribution and predication. *Lingua* 18: 1–34.

Borsley, Robert D. 2005. Against ConjP. *Lingua* 115: 461–482.

Borsley, Robert D. 2009. On the superficiality of Welsh agreement. *Natural Language and Linguistic Theory* 27: 225–265.

Bošković, Željko. 2009. Unifying first and last conjunct agreement. *Natural Language and Linguistic Theory* 27: 455–496.

Bosque, Ignacio & Violeta Demonte, eds. 1999. *Gramática descriptiva de la lengua española.* Madrid: RAE-Espasa Calpe.

Bouchard, Denis. 2002. *Adjectives, number and interfaces: Why languages vary*. Amsterdam & Boston: North Holland.

Bowers, John. 1993. The syntax of predication. *Linguistic Inquiry* 24: 591–656.

Bowers, John. 2001. Predication. In Mark Baltin & Chris Collins, eds. *The handbook of contemporary syntactic theory*. Oxford: Blackwell, 299–333.

Camacho, José. 1999. La coordinación. In Bosque & Demonte, eds. 2635–2694.

Camacho, José. 2003. *The structure of coordination. Conjunction and agreement phenomena in Spanish and other languages*. Dordrecht: Kluwer.

Carstens, Vicky. 2000. Concord in Minimalist Theory. *Linguistic Inquiry* 31: 319–355.

Carstens, Vicky. 2001. Multiple agreement and case deletion. Against Phi-(in)completeness. *Syntax* 4: 147–163.

Chaves, Rui P. 2008. Linearization-based word-part ellipsis. *Linguistics and Philosophy* 31: 261–307.

Chomsky, Noam. 2000. Minimalist inquiries: The framework. In Roger Martin, David Michels & Juan Uriagereka, eds. *Step by step: Essays on minimalist syntax in honour of Howard Lasnik*. Cambridge, MA: MIT Press, 89–115.

Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz, ed., *Ken Hale: A life in language*. Cambridge, MA: MIT Press, 1–52.

Chomsky, Noam. 2004. Beyond explanatory adequacy. In Adriana Belleti, ed. *Structures and beyond: The cartography of syntactic structures*. Vol. 3. New York: Oxford University Press, 104–131.

Chomsky, Noam. 2008. On phases. In Robert Freidin, Carlos P. Otero & María Luisa Zubizarreta, eds. *Foundational issues in linguistic theory*. Cambridge, Mass.: MIT Press, 133–166.

Cinque, Guglielmo. 1994. On evidence for partial N-movement in the Romance DP. In Guglielmo Cinque, Jan Koster, Jean-Yves Pollock & Raffaella Zanuttini, eds. *Paths towards Universal Grammar*. Georgetown: Georgetown University Press, 85–110.

Cinque, Guglielmo. 2010. *The syntax of adjectives: A comparative study*. Cambridge, MA: MIT Press.

Corbett, Greville. 1991. *Gender*. Cambridge: Cambridge University Press.

Corbett, Greville. 2006. *Agreement*. Cambridge: Cambridge University Press.

Costa, João & Sandra Pereira. 2005. Phases and autonomous features: A case of mixed agreement in European Portuguese. In Martha McGinnis & Norvin Richards, eds. *Perspectives on phases*. Cambridge, MA: MIT Press.

D'Alessandro, Roberta. 2004a. Syntactic and pragmatic features: A case study. *Leitura: Estudos em Syntaxe Comparativa* 33: 185–202.

D'Alessandro, Roberta. 2004b. *Impersonal* si *constructions. Agreement and interpretation*. Stuttgart: University of Stuttgart PhD Dissertation (publ. 2007, *Impersonal* si *constructions*. Berlin: Mouton de Gruyter).

Dalrymple, Mary & Irina Nikolaeva. 2006. Syntax of natural and accidental coordination: Evidence from agreement. *Language* 82: 824–849.

Dalrymple, Mary & Ronald M. Kaplan. 2000. Feature indeterminacy and feature resolution. *Language* 76: 759–798.

Danon, Gabi. 2011. Agreement with quantified nominals: Implications for feature theory. In Oliver Bonami & Patricia Cabredo, eds. *Emprical issues in formal syntax and semantics* 8: 75–96. http://www.cssp.cnrs.fr/eiss8

Demonte, Violeta. 1999a. El adjetivo. Clases y usos. La posición del adjetivo en el sintagma nominal. In Bosque & Demonte, eds. 129–215.

Demonte, Violeta. 1999b. A minimal account of Spanish adjective position and interpretation. In Jon Franco, Alazne Landa & Juan Martín, eds. *Grammatical analyses in Basque and Romance Linguistics*. Amsterdam: John Benjamins, 45–75.

Demonte, Violeta. 2008. Meaning-form correlations and the order of adjectives in Spanish. In Louise McNally & Chris Kennedy, eds. 71–100.

Demonte, Violeta, Héctor Fernández-Alcalde & Isabel Pérez Jiménez. 2011. On the nature of nominal features: Agreement mismatches and CCA in Spanish. In Julia Herschensohn, ed. *Romance Linguistics 2010. Selected papers from the 40th Linguistic Symposium on Romance Languages (LSRL)*. Amsterdam: John Benjamins, 177–190.

Demonte, Violeta & Isabel Pérez-Jiménez. In press. Concordancia parcial de adjetivos pospuestos. Sintaxis y prosodia. In José Camacho, Marta Luján & Liliana Sánchez, eds. *Cuadernos de la ALFAL,* 3.

Dobrovie-Sorin, Carmen. 2009. Number as a feature. To appear in Laura Brugè, Anna Cardinaletti, Giulana Giusti, Nicola Munaro & Cecilia Poletto, eds. *Functional heads.* Oxford & New York: Oxford University Press.

Elordieta, Gorka, Sónia Frota & Marina Vigário. 2005. Subject, objects and intonational phrasing in Spanish and Portuguese. *Studia Linguistica* 59: 110–143.

Fox, Danny & David Pesetsky. 2005. Cyclic linearization of syntactic structure. *Theoretical Linguistics* 31: 1–46.

Frampton, John & Sam Gutmann. 2000. Agreement is feature sharing. Ms., Boston: Northeastern University.

Frampton, John & Sam Gutmann. 2006. How sentences grow in the mind. In Cedric Boeckx, ed. *Agreement systems*. Amsterdam: John Benjamins, 121–157

Franck, Julie, Glenda Lassi, Ulrich H. Frauenfelder & Luigi Rizzi. 2005. Agreement and movement: A syntactic analysis of attraction. *Cognition* 101: 173–216.

Grosz, Patrick. 2009. Movement and agreement in right-node raising constructions. Cambridge, MA: MIT General Papers in Syntax.

Gutiérrez-Rexach, Javier & Enrique Mallén. 2001. NP movement and adjective position in the DP phases. In Julia Herschensohn, Enrique Mallén & Karen Zagona, eds. *Features and interfaces in Romance*. Amsterdam: John Benjamins, 107–132.

Gutiérrez-Rexach, Javier & Enrique Mallén. 2002. Toward a unified minimalist analysis of prenominal adjectives. In James F. Lee, Kimberly L. Geeslin & Clancy Clements, eds. *Structure, meaning and acquisition in Spanish. Papers from the 4th Hispanic Linguistic Symposium.* Sommerville, MA: Cascadilla Press, 178–192.

Heycock, Caroline & Roberto Zamparelli. 2005. Friends and colleagues. Plurality, coordination and the structure of DP. *Natural Language Semantics* 13: 201–270.

Hoeksema, Jack. 1983. Plurality and conjunction. In Alice ter Meulen, ed. *Studies in model-theoretic semantics*, vol. 1 of *Groningen-Amsterdam Studies in Semantics (GRASS)*. Dordrecht: Foris, 63–83.

Johannessen, Janne Bondi. 1996. Partial agreement and coordination. *Linguistic Inquiry* 27: 661–676.

Johannessen, Janne Bondi. 1998. *Coordination*. Oxford: Oxford University Press.

Johnson, Kyle. 2004. How to be quiet. In Nikki Adams, Adam Cooper, Fey Parril & Thomas Wier, eds. *Proceedings from the 40th Annual Meeting of the Chicago Linguistics Society,* 1–20.

Kathol, Andreas. 1999. Agreement and the syntax-morphology interface in HPSG. In Robert D. Levine & Georgia M. Green, eds. *Studies in contemporary phrase structure grammar*. New York: Cambridge University Press.

Kayne, Richard. 1994. *The antisymmetry of syntax*. (Linguistic Inquiry Monograph 25), Cambridge, MA: MIT Press.

King, Tracy & Mary Dalrymple. 2004. Determiner agreement and noun conjunction. *Journal of Linguistics* 40: 69–104.

Koppen, Mario van & Crit Cremers. 2008. Boolean agreement in Tegelen Dutch. *Lingua* 118: 1064–79.

Koppen, Marjo van 2005. *One probe – two goals. Aspects of agreement in Dutch dialects.* Leiden: Leiden University PhD Dissertation, LOT Publications, 105.

Kuhn, Jonas & Louise Sadler. 2007. Single conjunct agreement and the formal treatment of coordination in LFG. In Miriam Butt & Tracy H. King, eds. *Proceedings of LFG07 Conference*, CSLI Publications, http://csli-publications.stanford.edu

Lasersohn, Peter. 1995. *Plurality, conjunction and events*. Dordrecht: Kluwer.

Lasersohn, Peter. 1999. Generalized distributive operators. *Linguistics and Philosophy*. 21: 83–93.

Laezlinger, Christopher. 2004. French adjective ordering: Perspectives on DP internal Movement Types. *Lingua* 115: 645–689.

Lobeck, Anne. 1995. *Ellipsis: Functional heads, licensing and identification*. New York: Oxford University Press.

Longobardi, Giuseppe. 1994. Reference and proper names. *Linguistic Inquiry*. 25: 609–666.

López, Luis. 2007. *Locality and the architecture of syntactic dependencies*. New York: Palgrave.

Lorimor, Heidi. 2007. *Conjunctions and grammatical agreement*. University of Illinois at Urbana-Champaign PhD Dissertation.

Marten, Lutz. 2005. The dynamics of agreement and conjunction. *Lingua* 115: 527–547.

Martin, Roger. 2001. Null Case and the Distribution of PRO. *Linguistic Inquiry* 32: 141–166.

Marušič, Franc, Andrew Nevins & Amanda Saksida. 2007. Last-conjunct agreement in Slovenian. In Richard Compton, Magdalena Goledzinowska & Ulyana Savchenko, eds. *Formal approaches to slavic linguistics* 15. Ann Harbor, MI: Michigan Slavic Publications: 210–227.

Marušič, Franc, Andrew Nevins & Amanda Saksida. 2011. The grammars of conjunction agreement in Slovenian. Ms. University of Nova Gorica, University College London, University of Arizona.

McNally, Louise & Chris Kennedy, eds. 2008. *Adjectives and adverbs: Syntax, semantics and discourse.* Oxford: Oxford University Press.

Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands, and the theory of ellipsis.* Oxford: Oxford University Press.

Munn, Alan. 1993. *Topics in the syntax and semantics of coordinate structures*. University of Maryland Doctoral Dissertation.

Munn, Alan. 1999. First conjunct agreement: Against a clausal analysis. *Linguistic Inquiry* 30: 643–668.

Noailly, Michélle. 1999. *L'adjectif en français*. Paris: Ophrys.

Ntelitheos, Dimitros. 2004. *Syntax of ellipsis and discontinous nominals.* Los Angeles: UCLA MA Thesis.

Pesetsky, David & Esther Torrego. 2007. The syntax of valuation and the interpretability of features. In Simin Karimi, Vida Samiian & Wendy K. Wilkins, eds. *Phrasal and clausal architecture: Syntactic derivation and interpretation*. Amsterdam: John Benjamins, 262–294.

Pollard, Carl & Ivan Sag. 1994. *Head-driven phrase structure grammar*. Stanford & Chicago: CSLI Publications and University of Chicago Press.

Prieto, Pilar. 2006. Phonological phrasing in Spanish. In Sonia Colina & Fernando Martínez-Gil, eds. *Optimality-theoretic advances in Spanish phonology*. Amsterdam: John Benjamins, 39–60.

Progovac, Ljiljana. 1998. Structure for coordination. *Glot International* 3–7: 3–6, 3–8: 3–9.

Saab, Andrés L. 2009. *Hacia una teoría de la identidad en la elipsis.* Buenos Aires: Universidad de Buenos Aires PhD Dissertation.

Sabbagh, Joseph. 2007. Ordering and linearizing rightward movement. *Natural Language and Linguistic Theory* 25: 349–401.

Sauerland, Uli. 2008. On the semantic markedness of phi-features. In Daniel Harbour, David Adger & Susana Béjar, eds. *Phi theory: Phi features across interfaces and modules.* Oxford: Oxford University Press.

Schoorlemmer, Erik. 2009. *Agreement, dominance and doubling. The morphosyntax of DP.* Universiteit Leiden PhD. Dissertation.

Steiner, Ilona. 2009. Partial agreement in German: A processing issue? In Sam Featherston & Susan Wrinkler, eds. *The fruits of empirical linguistics*. Berlin: Walter de Gruyter, 239–260.

Svenonius, Peter. 2008. The position of adjectives and other phrasal modifiers in the decomposition of DP. In Louise McNally & Chris Kennedy, eds. 16–42.

Truswell, Roberts. 2004. *Attributive adjectives and the nominals they modify.* Oxford: University of Oxford MA Thesis.

Villavicencio, Aline, Louise Sadler & Doug Arnold. 2005. An HPSG account of Closest Conjunct Agreement in NP coordination in Portuguese. In Stefan Müller, ed. *Proceedings of the 12 international conference on Head-Driven Phrase Structure Grammar*, CSLI Publications, 427–447.

Wechsler, Stephen & Larisa Zlatić. 2000. A theory of agreement and its application to Serbo-Croatian. *Language* 76: 799–832.

Wechsler, Stephen & Larisa Zlatić. 2003. *The many faces of agreement*. Stanford: CSLI Publications.

Zoerner, Cyril Edward. 1995. *Coordination: The syntax of &P.* Irvine: University of California PhD Dissertation.

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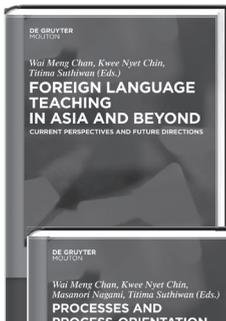
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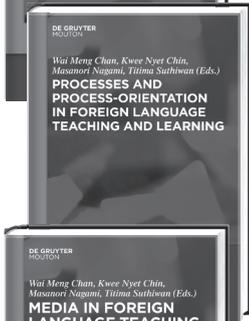*Ed. by Wai Meng Chan, Kwee Nyet Chin, Titima Suthiwan*

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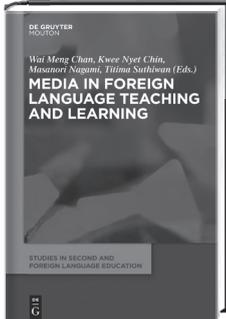
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