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***Singular DPs with plural denotation and the features of D*¹**

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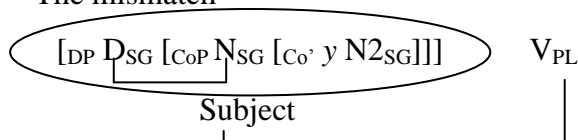
(Consejo Superior de Investigaciones Científicas, CSIC-CCHS, Madrid, Spain)

1. Introduction.

- (1) a. [DP [D El] [[N1 presidente] y [N2 secretario]]] han sido destituidos.
 the_{M.SG} president_{M.SG} and secretary_{M.SG} have been dismissed
- b. [DP [D El] [[N1 embalaje] y [N2 distribución]]] se realizan en España.
 the_{M.SG} packing_{M.SG} and distribution_{F.SG} take place in Spain

- D agrees in number and gender with the first noun of the coordination (Closest Conjoint Agreement).
- The DP has a plural interpretation or *split reading* → plural Subject -Verb agreement.

- (2) The mismatch



- (3) a. [D (A) [N₁ y N₂]]
 b. [D [N₁ y N₂] A]

2. The data.

- Nouns belonging to different semantic classes can appear in this structure: count nouns, mass nouns, collective nouns, abstract nouns, nominalizations (data from CREA):

- (4) a. **Su marido e hijo vivían** en Río.
 her husband and son lived in Rio
 ‘Her husband and son lived in Rio’.

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- a'. En las noches **su bar y discoteca** abrirán sus puertas.
 in the nights his bar and disco will.open their doors
 'His bar and disco will be open at night'.
- b. **El propano y butano** juegan un papel complementario del gas natural.
 the propane and butane play a role complementary to.the gas natural
 'Propane and butane play a complementary role to that of the natural gas'.
- c. **La gendarmería y policía** mantenían cuerpo a tierra a los detenidos.
 the gendarmerie and police kept body to ground to the people.under.arrest
 'Gendarmes and policemen kept the people under arrest face down'.
- d. **La oscuridad y claridad** están asociadas directamente a la luz existente.
 the darkness and brightness are associated directly to the light existing
 'Darkness and brightness are directly associated to the existing light'.
- e. **Su producción y envasado** tienen un control de higiene y calidad muy estricto.
 its production and packing have a control of hygiene and quality very strict
 'Its production and packing are under very strict quality and hygiene controls'.

• CCA is obligatory:

- (5) a. ***Sus marido e hijo** vivían en Río.
 a'. *En las noches **sus bar y discoteca** abrirán sus puertas.
 b. ***Los propano y butano** juegan en muchos casos un papel complementario del gas natural.
 c. ***Las gendarmería y policía** mantenían cuerpo a tierra a los detenidos.
 d. ***Las oscuridad y claridad** están asociadas directamente a la luz existente.

• Brand/type names: Ellipsis

- (6) a. los Corsa y Astra
 the_{M.PL} Corsa and Astra
 b. las cabernet sauvignon y tempranillo (CREA)
 the_{F.PL} cabernet sauvignon and tempranillo
- (7) a. los modelos Corsa y Astra
 the_{M.PL} models_{M.PL} Corsa and Astra
 b. las uvas palomino y Pedro Ximenez (CREA)
 the_{F.PL} grapes_{F.PL} palomino and Pedro Ximenez

- (8) a. Los Corsa.
 the_{M,PL} Corsa
 b. Las tempranillo.
 the_{F,PL} tempranillo

• Other Romance languages:

- (9) a. *[Un uomo e bambino] mangiano. [Heycock and Zamparelli 2005: (21a)]
 a_{M,SG} man_{M,SG} and child_{M,SG} eat_{PL}
 ‘A man and child are eating’.
 b. *[Questo uomo e ragazzo] sono buoni amici. [H&Z 2005: (21b)]
 this_{M,SG} man_{M,SG} and boy_{M,SG} are_{PL} good friends
 ‘This man and boy are good friends.’
- (10) *[Ce soldat et marin] étaient d’accord. [H&Z 2005: (22b)]
 this_{M,SG} soldier_{M,SG} and sailor_{M,SG} were_{PL} in-agreement
 ‘This soldier and sailor agreed with each other’.

3. The plural semantics of singular DPs

- “Split-reading” or “group-forming *and*” structures: The conjunction of nouns denotes a plurality or set of individuals (a ‘plural individual’ [Lasersohn 1995]).
- DP internal coordinations give rise to distributive as well as to collective readings.

• Distributive reading:

- (11) a. **Su marido e hijo** {hablan francés / son altos}.
 ‘His husband and son {speak French / are tall}’.
 b. {**Su marido e hijo** / **La policía y gendarmería** / **El propano y butano** / **La oscuridad y claridad**} llegaron en diferentes momentos.
 ‘{His husband and son / The police and gendarmerie / The propane and butane / The darkness and brightness} arrived at different moments’.

- Collective or group reading: Combination with verbs selecting a semantically plural argument, with similarity predicates, with the adjective *junto/a* (‘together’), with the predicate *mismo* (‘same’), binding of reciprocals, ‘*respectively* coordination’:

- (12) a. **{Su marido e hijo / La policía y gendarmería}**
 her_{SG} husband_{M.SG} and son_{M.SG} / the_{F.SG} police_{F.SG} and gendarmerie_{F.SG}
 {se reunieron / se encontraron} ayer
 {SE gathered_{PL} / SE met_{PL}} yesterday
- b. **{El propano y butano / La claridad y oscuridad}**
 the propane and butane / the brightness and darkness
 {se distribuyeron / se esparcieron} conjuntamente de forma adecuada.
 {SE spread out_{PL} / SE distributed_{PL}} together adequately
- (13) a. **[Su marido e hijo] son parecidos.**
 her_{SG} husband_{M.SG} and son_{M.SG} are_{PL} similar_{M.SG}
- b. **{Su marido e hijo / La policía y gendarmería / La claridad y oscuridad}**
 Her husband and son / The police and gendarmerie / The brightness and darkness
 vinieron juntas.
 came_{PL} together_{F.PL}
- c. **{Su marido e hijo / La policía y gendarmería / La claridad y oscuridad}**
 Her husband and son / The police and gendarmerie / The brightness and darkness
 llegaron en el mismo momento.
 came_{PL} at the same moment
- d. **Su marido e hijo se quieren (el uno al otro).**
 her husband and son SE_{reciprocal} love_{PL} the_{M.SG} one_{M.SG} to the_{M.SG} other_{M.SG}
 ‘Her husband and son love each other’.
- e. **Su marido e hijo se comieron la tarta y los bollos, respectivamente.**
 her husband and son SE ate_{PL} the cake and the cookies respectively
 ‘Her husband and son ate the cake and the cookies, respectively’.

- Empirical generalization: Coordination of mass nouns is more acceptable in the context of collective predicates.

- (14) a. **El pescado y marisco se distribuyeron / se separaron adecuadamente.**
 the fish and shellfish were distributed / were separated adequately
- b. **El vino y sidra asturianos son parecidos.**
 the wine and cider Asturian are similar
 ‘Asturian wine and cider are similar’.

(15)a. * **El vino y sidra** son saludables.

the wine and cider are healthy

‘Wine and cider are healthy’.

b. ?? **La leche y agua** son buenas para la salud.

the milk and water are good for the health

‘Milk and water are good for one’s health’.

(16) a) a plurality is a set of atomic individuals (entities that cannot be further subdivided),
or

b) a plurality is a set of non-atomic individuals, a set of entities or elements which can be further subdivided.

In both cases the ‘cumulative reference’ condition is satisfied.

• DPs with singular denotation → singular Subject-Verb agreement:

(17)a. **El académico y novelista** pronunció su conferencia en castellano. (*joint reading*)

‘The academician and novelist delivered_{SG} his conference in Spanish’.

b. **Su desarrollo e interpretación** dió origen a lo que se conoce como Brahmanismo

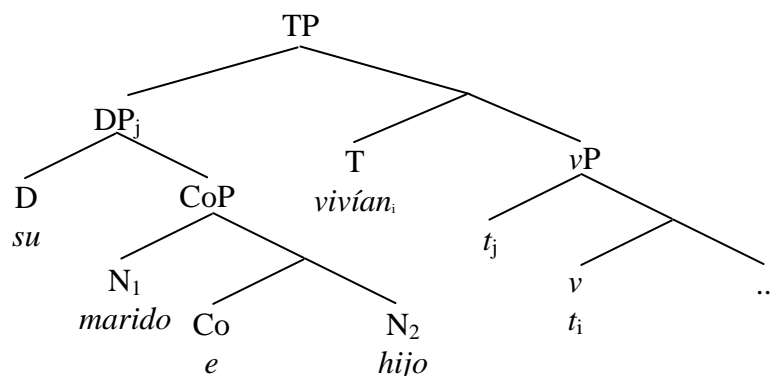
‘Its development and interpretation gave_{SG} rise to what is known as Brahmanism’.

4. Analysis.

4.1. Nominal features inside the DP. The AGREE relation.

• Point of departure: asymmetric structure for coordinations.

(18) Su marido e hijo vivían (en Río) ‘Her husband and son lived (in Río)’.



- Against an ellipsis analysis (Camacho 2003):

(19) $[_{DP} D N] y [_{DP} \emptyset_D N]$

(20) a. La fascinante flora y relieve (me sorprendieron mucho)

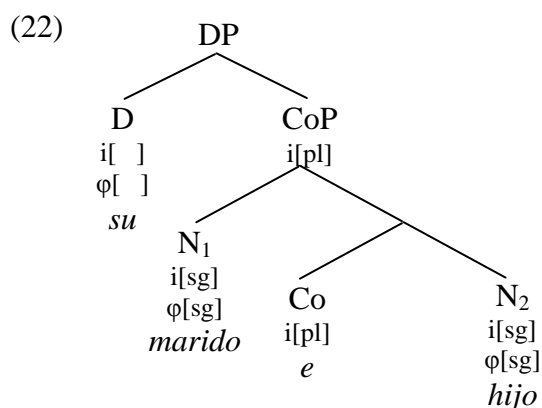
‘The fascinating flora and relief’

b. $[_{DP} D A N] y [_{DP} \emptyset_D \emptyset_A N]$

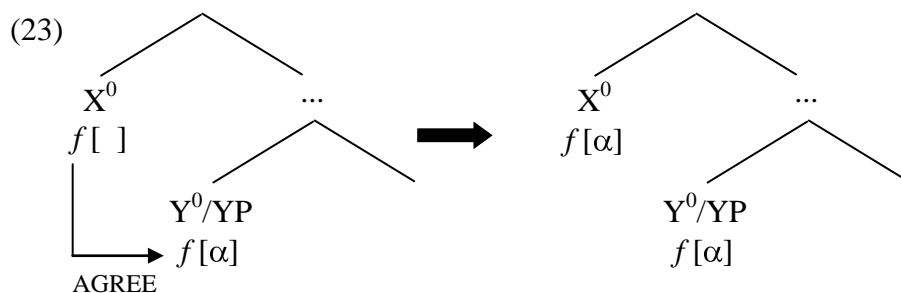
(21) a. La fascinante flora y el relieve (me sorprendieron mucho)

b. $[_{DP} D A N] y [_{DP} D \emptyset_A N]$ cannot mean ‘The fascinating flora and the fascinating relief’.

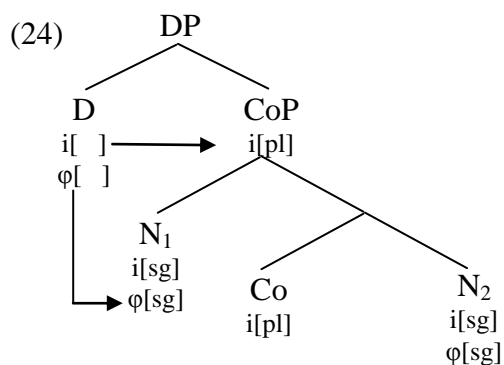
- Two kinds of nominal agreement features (King and Dalrymple 2004, a.o.: concord and index features).

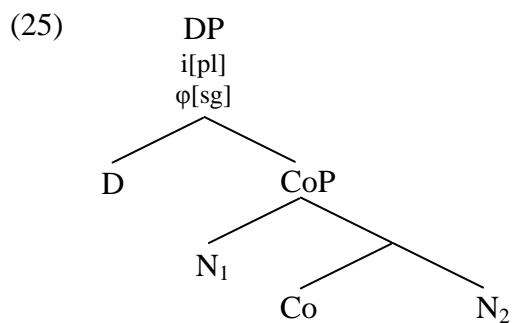


- AGREE: feature-valuation operation (Chomsky 2001, 2004, 2008) triggered by “unvalued” features on a head X^0 (“probe”) which seeks in its c-command domain for a “goal” Y^0/YP with the relevant set of matching “valued” features



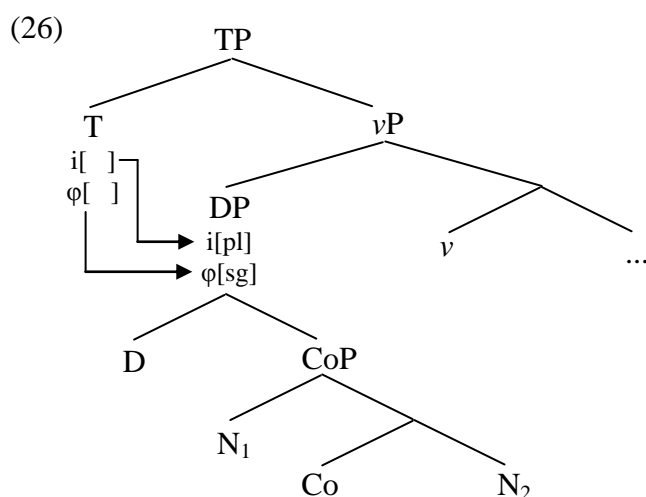
- The mismatch: phi features and index features of D





- The mismatch: Subject-Verb agreement (T contains phi features and also referential index features, see Pollard and Sag 1994 and Wechsler and Zlatić 2000).

- The agreement relation which results in more specific agreement morphology is spelled out.



4.2. Certain implications of our proposal

- *Pluralia-tantum* nouns: plural morphology / singular denotation → phi feature valued as [plural] / index feature valued as [singular]

(27) **Las tijeras** {sirven/*sirve} para cortar
 the scissors {serve_{PL}/*serve_{SG}} to cut
 ‘Scissors are used for cutting’.

- Collective nouns:

(28) a. **La pareja** de la que hablas al final no se han casado.
 the couple_{SG} you are talking about finally did_{PL} not get married

b. **Esa gente** nos están masacrando.
 that people_{SG} are_{PL} slaughtering us

• Possible extensions of our proposal:

(29) a. **Los españoles** creemos en los derechos humanos.

the Spaniards_{3PL} believe_{1PL} in the rights human

‘We Spaniards believe in human rights’.

b. **Su Majestad** está cansado.

his majesty_{FEM} is tired_{MASC}

‘His Majesty is tired’.

(30) ... existe la estructura y personal adecuados ...

exists_{SG} the_{F.SG} structure_{F.SG} and staff_{M.SG} adequate_{M.PL}

‘There is an adequate structure and staff’. (CREA)

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