

Nominalized clauses, clausal arguments and agreement*

M. Carme Picallo

Universitat Autònoma de Barcelona. Departament de Filologia Catalana
08103 Bellaterra (Barcelona), Spain

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Abstract

Strict minimalist assumptions require adopting the hypothesis that argument clauses and nominalized clauses are assigned *Phi* features. The data examined suggest that the interpretable *Phi* content of these arguments is specified as [-P, -N, -G]. We conclude that all arguments (of the clausal or of the nominal types) are subject to the operation *Agree* with a functional category. All arguments behave alike as far as abstract computational operations is concerned. The computational component is blind to the concrete values of the features of the arguments related to functional categories.

Key words: *Phi* features, clauses, nominalized clauses, agreement.

Resum. Oracions nominalitzades, arguments oracionals i concordança

Supòsits estrictament minimalistes requereixen que s'adopti la hipòtesi que les oracions en funció d'argument i les oracions nominalitzades tinguin assignats trets *Phi*. Les dades que s'examinen suggereixen que el contingut *Phi* interpretable d'aquests tipus d'arguments s'especifica amb els valors [-P, -N, -G]. Es conclou que tots els arguments (tant de tipus oracional com nominal) se sotmeten a l'operació *Concorda* amb una categoria funcional. Tots els arguments es comporten de la mateixa manera respecte a les operacions computacionals abstractes. El component computacional no té en compte els valors concrets dels trets dels arguments que es relacionen amb categories funcionals.

Paraules clau: Trets *Phi*, oracions, oracions nominalitzades, concordança.

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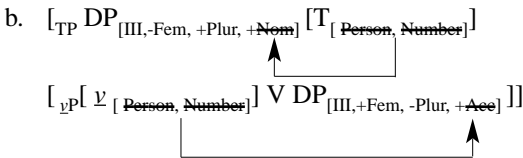
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1. Introduction

In Chomsky (1998, 1999), the operation *Agree* is conceived as a relation of feature matching between two syntactic objects, each with a specification for a complete set of *Phi* features: a functional category (TP or ν P) and an argument available in a given structural space (subject or object respectively). Functional TP/ ν P categories are headed by a complete and non interpretable *Phi* set of features of the types Person, Number and possibly Gender (henceforth PNG features). The specification of the interpretable *Phi* set of a nominal argument is expressed with a concrete value for each of the PNG feature types. In Spanish, the feature [+Person] is expressed as I, II or III; [+Number] as \pm plural] and [+Gender] as \pm feminine.

Under the operation *Agree*, the non interpretable features of each of the related elements are deleted: the complete PNG *Phi* set in the functional projection and the structural Case in the nominal [DP-NP] argument.¹ In Spanish, the morphophonological effect of the operation is overt subject-verb agreement. The object is assumed to undergo covert agreement. The configuration (1b), where irrelevant details are omitted, abstractly represents the agreement mechanisms taking place in a sentence like the Spanish (1a):

- (1) a. Los actores escuchaban la música.
 the actors-MASC-PLUR listened-III-PLUR the music-FEM-SING
 ‘The actors were listening to the music.’



Clausal arguments (henceforth argument CPs) have been argued to lack any specification for PNG features (see, more recently, Iatridou and Embick (1997)). We have observed that Spanish nominalized clauses (henceforth DP-CPs)² behave like

1. It is assumed that only elements that can satisfy the operation *Agree* have Case. One way to look at the relative dependency between Case and *Phi* features is to consider that sets of features are hierarchically organized: a lexical category has Case only if it has a positive specification for *Phi* features (i.e. +P, +N (+G))
2. Nominalized clauses (DP-CPs) are structures selected by factive predicates. In Spanish, they conform to sequences of the types *El que* IP (lit.: ‘the that IP’) or to sequences consisting of the determiner followed by an infinitive clause, as in the following examples:
 - (i) a. [El [PRO tener que adoptar estos métodos]] es escandaloso.
 the PRO to-have to adopt these methods is scandalous
 ‘Having to adopt these methods is scandalous.’
 - b. Carece de lógica [el [que creas que hay fantasmas en la azotea]]
 lacks of logic the that believe-II-SING that there-is ghosts in the attic
 ‘It is illogical that you believe that there are ghosts in the attic.’

argument CPs as far as agreement mechanisms are concerned. The hypothesis that argument CPs and DP-CPs may lack any specification for PNG features appears to be supported by the fact that a predicate with these types of subjects is in the default III person singular, irrespectively of their position (pre- or post-verbal) and irrespectively of whether such a subject is a simple or a coordinated structure:

- (2) a. Es/*son posible/*-s) [que ayer lloviera] (y [que
is/*are possible-SING/*PLUR that yesterday rained (and that
anteayer nevara))
the-day-before-yesterday snowed)
- b. [El PRO estar en Vitoria] (y [el PRO poder
the PRO to-be in Vitoria (and the PRO to-can
dar un paseo contigo)] me alegra/*-n mucho.
to-give a walk with-you) me pleases/*please lot
'To be in Vitoria (and to be able to take a walk with you) pleases me
a lot.'

Similarly, anaphoric pronouns taking simple or coordinated CPs or DP-CPs as antecedents are also in the default III person singular. These pronouns are considered neuter forms in traditional grammars of Spanish, and they appear as masculine by default:

- (3) a. [[El que estuvieras en Vitoria] y [el que hablaras con
the that were-II-SING in Vitoria and the that spoke-II-SING with
Maddi]]_i es sorprendente aunque yo no me lo_i/*los_i creo.
Maddi is surprising although I not me it /*them believe
'That you were in Vitoria and that you spoke with Maddi is surprising
although I don't believe it.'
- b. Dices [que estabas en Vitoria]_i pero yo no me lo_i
say-II-SING that were-II-SING in Vitoria but I not me it
creo.
believe
'You say that you were in Vitoria but I don't believe it.'

-
- c. Lamento mucho [el [PRO haberme visto obligado a explicar todo
regret-I-SING a-lot the PRO to have-me seen forced to explain all
esto]]
this
'I regret a lot to have been forced to explain all this.'

There are several reasons to believe that these constructions do not conform to a [DP-NP-CP] structure with a null N head standing for the lexical entry *hecho* 'fact' (see, however, Demonte (1977: 123), Plann (1981), and Iatridou & Embick (1997), among many others). On the contrary, nominalized clauses are best analyzed as [DP-CP] constituents, as in (ii), where the Determiner takes a CP as its immediate complement (see Leonetti 1999: 824):

- (ii) [_{DP} Det [_{CP} C [_{IP} T]]]

The purpose of this paper is to claim that computational operations involving agreement should take place at the syntactic component in cases where CPs or DP-CPs are subjects or objects. Note that the hypothesis that these types of arguments do not have any *Phi*-feature specification (like adverbs, for example) leads us to the subsequent assumption that they are unable to relate by agreement with a functional category. In section 2, it is argued that such a proposal is inconsistent with minimalist guidelines. It is claimed that particular requirements have then to be imposed on the operation *Select* for syntactic objects to enter the numeration.

In section 3, we examine some agreement phenomena involving DP-CPs and argument CPs. It is suggested that the data is compatible with the alternative hypothesis that these types of arguments have a PNG feature specification and that their interpretable *Phi* content is [-P, -N, -G]. This alternative view, discussed in section 4, allows us to assume that the computational component can formally identify subject and object CPs or DP-CPs through abstract agreement. Hence, all arguments in general are able to undergo the operation *Agree*. All along the discussion, a distinction is made between the formal feature content of a syntactic object and the morphological expression of that content.

A consequence of our hypothesis, which we will not develop here, is that pronouns anaphorically linked to CP arguments or to DP-CPs also agree with the complete set (or a subset) of the formal features of their antecedents.

2. *Phi* featureless arguments

Based on the preliminary data in (2a,b) and (3a,b), suppose that we would assume that DP-CPs and argument CPs do not have any specification for *Phi* features. This means that no value for Person, Number or Gender is assigned to these types of subjects or objects. Consider now cases like (4):

- (4) [El que hayas llegado tarde] demuestra [que eres un
the that have-II-SING arrived late shows that are-II-SING an
irresponsable]
irresponsible
'That you have arrived late shows that you are irresponsible.'

The *Phi* featureless hypothesis implies that the derivation should crash if T and \bar{v} enter the numeration as *Phi* complete functional categories in structures like (4) conforming to the abstract representation provided in (5):

- (5) * $[_{TP} DP-CP [T_{[Person, Number, (Gender)]}] [_{\bar{v}P} \bar{v}_{[Person, Number, (Gender)]} V CP]]$

For LF well formedness to obtain under the hypothesis we are now entertaining, the feature composition of T and \bar{v} in (5) must have to differ from that of T/ \bar{v} related to nominals (see (1b) above). In cases like (5), the functional elements would have to be selected and enter the numeration as *Phi* featureless syntactic

objects in order to avoid having non interpretable features at LF. The verb cannot be selected from the lexicon as a unitary collection of lexical and formal features, but as a root devoid of Agr inflectional morphemes. Halle and Marantz (1993) Distributed Morphology hypothesis can be adopted by assuming that default III person singular morphemes are added to the verbal root at *Spell-out*.

This proposal implies the necessity of having to impose a *look ahead* requirement to grammatical operations, since the functional categories T/\bar{v} have to be selected without *Phi* features when the subject or the object (or both arguments) are a CP or a DP-CP. On the contrary, T/\bar{v} are *Phi* complete if the arguments are nominal. The feature composition of a functional element is determined by the type of argument with which it is related at the computational component. In short, the morphological integrity of a syntactic object can depend on the formal features of another syntactic object as it is chosen to enter the numeration.

There is another alternative hypothesis we can consider, namely, that DP-CPs and argument CPs have, in fact, a *Phi* feature specification. In this case, no condition on *Select* for the functional projections has to be adopted when non nominal structures are arguments of predication. In the next section, we examine agreement phenomena related with each of the *Phi* features in isolation. We suggest that the alternative hypothesis we have sketched is compatible with the data. The consequences of adopting this view are discussed in section 4.

3. The *Phi* features of nominalized clauses and argument CPs

3.1. Person

A suitable test to check the specification for Person of a given argument can be provided by the distribution of possessive pronouns. In Spanish, possessives show morphemes for Person and Number.³ The Number morpheme of a Spanish possessive is in concord with the corresponding feature of its selecting noun. The only *Phi* feature that a possessive shares with its antecedent is [Person].⁴ Thus, Possessive anaphora allows us to assess the activity of this feature in isolation from other *Phi* features. We adopt Kayne's (1998) proposal that the morphemes *m-/n-*, *t-/v-* and *s-* of the Romance possessives are the morphological realization of specific features for I, II and III person respectively.⁵

Consider first the example (6), where a possessive has a complex nominal [DP-NP-CP] antecedent headed by *hecho* 'fact' and compare it with (7). The latter shows that a DP-CP (a nominalized clause) is unable to antecede a possessive in the same context:

3. Pre-nominal possessives are not inflected for Gender in Spanish. They only show Gender inflection if in post-nominal position. Other Romance languages, such as Catalan, Italian, French or Portuguese show Gender inflection for the possessive in pre-nominal position
4. As an example, the Spanish expression *su catáda* can correspond to 'his/her/its/their_{masc}/their_{fem} fall' in English.
5. The *m-/n-*, *t-/v-* and *s-* forms correspond to the Spanish *mi/nuestr-* 'my/our_[±fem, ±plur]', *tu/vuestr-* 'your_[±fem, ±plur]' and *su* 'his/her/its/their_[±fem]'.

- (6) a. [*El hecho de que hubieran desaparecido*]_i; no parecía importante...
 the fact of that had-III-PLUR disappeared not seemed important...
 'The fact that they had disappeared didn't seem important...'
- b. ...pero *su_i* relevancia no escapó a la atención del inspector.
 ...but its relevance not escaped to the attention of-the inspector
 ...but its relevance didn't escape the inspector's attention.'
- (7) a. [*El que hubieran desaparecido*]_i; no parecía importante...
 the that had-III-PLUR disappeared not seemed important...
- b. *...pero *su_i* relevancia no escapó a la atención del inspector.
 ...but its relevance not escaped to the attention of-the inspector

The same phenomenon can be observed in examples involving argument CPs. In (8), it is shown that it is possible to pronominalize a complex nominal with the function of object of an event/process NP (a 'passive' nominal in Romance).⁶ In (9), however, the object of N is a CP and pronominalization of the clausal object is impossible.⁷ A parallel ungrammaticality is shown in (10 b), where the possessive is intended to take as antecedent the CP complement of the N *observación* 'observation':

- (8) a. La demostración de [el procedimiento de asignación de Caso
 the proof of the procedure of assignment of Case
 a las oraciones] tuvo lugar en el aula 8.
 to the sentences took place in the room 8
- b. *Su* demostración tuvo lugar en el aula 8 (*Su* = del procedimiento)
 its proof took place in the room 8 (*su* (its) = the procedure)
- (9) a. La demostración de [que las oraciones tienen Caso] tuvo lugar
 the proof of that the sentences have Case took place
 en el aula 8.
 in the room 8
- b. **Su* demostración tuvo lugar en el aula 8
 its proof took place in the room 8
 (**Su* = que las oraciones tienen Caso)
 (**su* (its) = that sentences have Case)

6. See Cinque (1980), Picallo (1991) and references cited there.

7. The example (9b) is grammatical, but only in the irrelevant reading where *su* corresponds to the English his/her/their.

- (10) a. La observación de [que la Tierra gira alrededor del Sol]
 the observation of that the Earth rotates around of-the Sun
 era inaceptable para la iglesia católica.
 was unacceptable to the Church Catholic
- b. **Su* observación tuvo lugar en el s. XVI y la
 its observation took place in the XVI cent. and it
 atribuimos a Copérnico.
 attribute-I-PLUR to Copernicus

Argument CPs and DP-CPs behave in this respect like some arbitrarily interpreted elements like PRO in (11a), null objects like (11b) and impersonal SE in (11c), which have been argued to lack Person features (see Burzio (1986: 59)):⁸

- (11) a. *Es necesario [PRO_i sacar a *su*_i perro de paseo]
 is necessary PRO to take POSS dog for (a) walk
- b. *La buena música reconcilia [*e*]_i con *su*_i espíritu.
 the good music reconciles with POSS spirit
- c. **Se*_i ama siempre a *sus*_i hijos.
 SE loves always to POSS children

We suggest that the source of the ungrammaticalities exemplified in (7b), (9b) and (10b), as well as those of (11a-c), could be a mismatch in Person feature specification between the anaphoric possessives and their respective linguistic antecedents. If these types of arguments would lack any specification for this feature, ungrammaticality would not necessarily arise because there is no mismatch.⁹

8. Nominal categories with a formal [+Person] feature and with an arbitrary interpretation are able to link a possessive anaphor, witness the grammaticality of the following examples where a second person singular *pro* and a third person plural *pro*, with an intended arbitrary reading, antecede possessive pronouns:
- (i) a. Si *pro*_i puedes confiar en *tus*_i amigos, *pro* eres afortunado.
 if *pro* can_{2nd sing} trust in POSS_{2nd sing} friends, *pro* are_{2nd sing} fortunate
 'If you can trust your friends, you are fortunate.'
- b. En este pueblo, *pro*_i pueden llegar a amargar a cualquiera con
 in this town, *pro* can_{3rd plur} arrive to embitter to anyone with
*sus*_i chismes.
 POSS_{3rd plur} gossip
 'In this town, they can embitter anyone with their gossip.'
9. Recall that Spanish possessives inherently lack a lexical specification for Number (or Gender). The inflectional morphemes for these features that they exhibit are in concord with those of the head Noun (see note 1 above). Thus, a given III Person form can anaphorically be related to singular or plural and feminine or masculine antecedents indistinctively. No Number or Gender mismatch occurs in this case.

On the contrary, if these types of arguments have a [-Person] value, ungrammaticality under anaphora immediately follows by mismatch since they cannot antecede a possessive, which has the [+Person] feature inherently. CPs and DP-CPs can, however, be the antecedents of pronouns other than possessives, such as *lo*, *ello* or the null subject *pro*:

- (13) a. Goldbach conjeturó [que todo número perfecto ha de ser par]_i
Goldbach conjectured [that every number perfect has of be even]
- b. ...pero ningún matemático ha podido demostrarlo_i
...but no mathematician has been-able to prove-it
- (14) a. [El que la preparación hubiera cambiado de color]_i parecía
the that the preparation had changed of color seemed
irrelevante
irrelevant
'That the preparation had changed its color seemed irrelevant'
- b. ... pero ello_i llamó profundamente la atención del investigador.
... but it called deeply the attention of-the researcher
'but it deeply called the researcher's attention.'
- (15) [[Que leas en voz alta] y [que te pasees continuamente]]_i;
that read-II-SING in voice high and that walk-II-SING continuously
divierte a María pero pro_i distrae mucho a Juana
amuses to María but pro_i distracts a-lot to Juana
'Your reading aloud and your walking continuously amuses María but it distracts Juana a lot.'

The grammaticality of the anaphoric interpretation of *lo* and *ello* in (13b) and (14b) can be accounted for under Kayne's (1998) claim that the so-called III Person *l*- pronouns do not lexically express the feature [Person] but they are best thought of as 'determiner pronouns' (see Bello 1847, § 273) and Postal (1966)).¹⁰ As opposed to the cases of possessive anaphora, there is no mismatch in Person specification.¹¹ The possibility of obtaining an anaphoric read-

10. In Spanish, these include the masculine and the feminine accusatives *lo(s)/ la(s)*, the genderless dative *le(s)* and the so-called neuter strong pronoun *ello*.

11. This would be, at most, a case of feature unmatch. Note that the examples (11a-c) become grammatical if the *s*- possessive is substituted by the so-called 'possessive determiner':

- (i) a. Es necesario PRO cuidar la salud.
is necessary PRO to take-care-of the health
'It is necessary to take care of one's health.'
- b. La buena música reconcilia [e] con el espíritu.
the good music reconciles with the spirit
'Good music reconciles (one) with one's spirit.'

ing for *pro* in (15) suggests that the null subject has the lexical characteristics of an *I*-pronoun.¹²

3.2. Gender

As is well known, all nominals are assigned formal grammatical Gender in the Romance languages. Although grammatical Gender is assumed to be a non interpretable feature, it allows us to assess which anaphoric relations are possible and which are not in a given construction. In this section, the possible Gender specification of DP-CPs and argument CPs is briefly considered. It must be pointed out that a clear-cut test to examine the activity of this feature in isolation from Number and Person is difficult to evaluate. Nevertheless, VP ellipsis appears to offer some evidence for the [-Gender] value of these arguments.

Kitagawa (1991: 521) and Fiengo and May (1994: 218; note 21)) point out that sloppy readings tend to be somewhat marginal or ungrammatical in English VP ellipsis contexts if a variation in Gender between the members of the first pair showing an anaphoric relation and those of the second occurs. Ungrammaticalities of these types can marginally be observed in Spanish, where grammatical Gender is very robust. VP ellipsis and the sloppy interpretation is possible in cases like (16), where the anaphorically related elements in the first pair have the same specific value for the Gender feature that the related members of the second pair:¹³

- (16) a. Si Juan anunciara [su dimisión], el presidente
 if John would-announce [his resignation-FEM] the president
 debería aceptarla...
 would-have accept-*it*-FEM...
- b. ...pero si Pedro anunciara [la suya], el presidente
 but if Peter would-announce [the his-FEM] the presidente
 no podría.
 not could
 'If John would announce his resignation, the president would have to accept it, but if Peter would announce his, the president would not be able to.'

c. Se ama siempre a los hijos.
 SE loves always to the children
 'One loves always one's children.'

12. Iatridou and Embick (1997) have claimed that the null subject *pro* cannot have a clause as antecedent. The grammaticality of these types of examples contradicts their claim.

13. Anaphora in ellipsis has a very limited distribution in Spanish. VP deletion is only possible in the context of a modal verb.

VP deletion is not possible in (17), where the nominal antecedents (17a) and (17b) differ in grammatical Gender:¹⁴

- (17) a. Si Juan anunciara [su *procesamiento*], el presidente debería admitirlo...
 if Juan would-announce [his impeachment-MASC] the president would-have-to acknowledge-it-MASC...
- b. (*)??...pero si Pedro anunciara [su *dimisión*], el presidente no podría admitirla.
 but if Pedro would-announce [his resignation-FEM] the president not could

Marginal constructions parallel to (17b) are replicated in cases like (18b) and (18c). In the examples (18), the first member of the pair is a complex nominal, as shown in (18a). The second member of the pair has been constructed with a DP-CP, as in (18b) or with an argument CP as in (18c). We can see that VP ellipsis is disallowed in both cases:

- (18) a. [*El hecho de que Juan no me salude*] debo lamentarlo
 [the fact-MASC of that Juan not me greet-III-SING] must-I-SING regret-it-MASC
- b. (*)??...pero [*el que María no me haya hablado*] no puedo.
 but [the that Maria not me has spoken] not can-I-SING
- c. (*)??...pero [*que María no me haya hablado*] no puedo.
 but [that Maria not me has spoken] not can-I-SING

If ellipsis does not apply, the structure is grammatical with the intended interpretation, as shown in (19b) and (19c) respectively. Note that the anaphoric pronoun in each (19a), (19b) and (19c) is phonologically realized as *lo*:

- (19) a. [*El hecho de que Juan no me salude*] debo lamentarlo
 [the fact-MASC of that Juan not me greets] must-I-SING regret-it

14. The Gender change is shown overtly in the grammatical (ib), where VP deletion has not applied:

- (i) a. Si Juan anunciara [su *procesamiento*], el presidente debería admitirlo...
 if J. would-announce [his impeachment-MASC] the president would-have acknowledge-it-MASC...
- b. ...pero si Pedro anunciara [su *dimisión*], el presidente no podría admitirla.
 but if Peter would-announce [his resignation-FEM] the president not could acknowledge-it-FEM

- b. ...pero [*el que María no me haya hablado*] no puedo lamentarlo
 but [the that Maria not me has spoken] not can-I-SING
 lamentarlo
 regret-it
- c. ...pero [*que María no me haya hablado*] no puedo lamentarlo
 but [that Maria not me has spoken] not can-I-SING regret-it

The marginality of (18b) and (18c) suggests that a mismatch in Gender specification may occur. It is similar to the mismatch observed in the pair exemplified in (17). Both the pronoun *lo* and its antecedent in (18a) and (19a) have a [+Gender] specification (realized as –fem), in agreement with its nominal antecedent *hecho* ‘fact-MASC’. The DP-CP and the argument CP in (18b) and (18c) respectively are [-Gender]. The phonologically realized *lo* in (19b) and (19c) is also a [-Gender] (neuter) element that takes a masculine form by default.

3.3. Number

Consider the coordinated complex nominals in the examples (20), (21) and (22a,b). The head noun in the second member of the conjunct has been deleted under identity and is represented as crossed out. In (20), it is shown that coordination of nominal structures triggers plurality on the verb. In (21), the coordinated nominals are the antecedents of a pronoun, which must also be in the plural. Finally, (22a,b) show that coordinated nominals are able to link a floating quantifier:¹⁵

- (20) [El hecho de que hubiera desaparecido] junto con [el ~~hecho~~
 the fact of that had-III-SING disappeared together with the ~~fact~~
 de que no tuviera una coartada lo hicieron sospechoso
 of that not had-III-SING an alibi him made-III-PLUR suspect
 ante la policía.
 to the police
 ‘The fact that he had disappeared together with the (fact) that he didn’t
 have an alibi made him a suspect to the police.’

15. All types of nominals with subordinated clauses (arguments or adjuncts) behave alike in this respect:

- (i) [El deseo de que vinieras] y [el ~~deseo~~ de que te encontraras bien]
 the desire of that came-II-SING and the ~~desire~~ of that feel-II-SING well
 me parecieron ambos sinceros.
 to-me seemed-PLUR both sincere-PLUR

- (21) Pedro sugirió [la hipótesis de que las oraciones tienen Caso];
 Peter suggested the hypothesis of that the sentences have Case
 y [la hipótesis de que no tienen rasgos Phi]_j, pero nosotros
 and the hypothesis of that not have features Phi, but we
 no *las*_{i+j} asumiremos.
 not them-FEM assume
 ‘Peter suggested the hypothesis that sentences have Case and the (hypothesis) that they do not have Phi features, but we will not assume them.’
- (22) a. [La hipótesis de que las oraciones tienen Caso] y [la
 the hypothesis of that the sentences have Case and the
 hipótesis de que no tienen rasgos Phi] eran
 hypothesis of that not have features Phi were-III-PLUR
 consideradas, *las dos*, incompatibles.
 considered, the two-FEM, incompatible-PLUR
 ‘The hypothesis that sentences have Case and the (hypothesis) that they do not have Phi features were, the two of them, considered incompatible.’
- b. [El hecho de que sea ministra] junto con [el ~~hecho~~
 the fact of that is (a)minister together with the ~~fact~~
 de que presida una ONG] nos parecen, *ambos*,
 of that chairs an NGO us seem-III-PLUR both-MASC,
 asombrosos.
 amazing-MASC-PLUR
 ‘The fact that she is a minister together with the (fact) that she chairs an NGO seem both amazing to us.’

The verbal inflection, the ability to link a floating quantifier and the plural features of the anaphoric pronoun show that complex nominals are assigned a [+Number] feature specification. Coordination of these categories allows them to be assigned grammatical plural. If we now compare the preceding examples with the following ones with coordinated DP-CPs or coordinated argument CPs, we can see that they always require the verb in the singular, as in (23a,b).¹⁶ They are also unable to link a floating quantifier, as shown in (24a,b), or to antecede an anaphoric pronoun in the plural, as shown in (25a,b):

16. Example (23b) is the Spanish counterpart of the coordinated clausal subject constructions discussed in McCloskey (1991). The examples in (23), (24) and (25) show that singular inflection on the verb is required in Spanish, independently of whether the coordinated construction is propositional or factive.

- (23) a. [El que hubiera desaparecido] junto con [el que no
the that had-III-SING disappeared together with the that not
tuviera una coartada lo hizo/*hicieron sospechoso
had-III-SING an alibi him made-III-SING/*PLUR suspect
ante la policía. cf. (20)
to the police
'That he had disappeared together with that he did not have an alibi
made him a suspect to the police.'
- b. [Que el presidente sea reelegido] y [que sea procesado]
that the president is reelected and that is_{III,SING} impeached
es/*son igualmente probable/*probables en este momento.
is/*are equally probable-SING/*PLUR at this moment
'That the president will be reelected and that he will be impeached are
equally probable at this moment.'
- (24) a. [El que el presidente enfermara] y [el que el primer ministro
the that the president sickened and the that the prime minister
dimitiera] provocó/*-aron (*ambos) la caída de la bolsa.
resigned triggered-SING/*PLUR (*both) the fall of the stock-market
- b. [Que el ejército intervenga inmediatamente] y [que
that the army should-intervene immediately and that
se resuelva la crisis por vía diplomática] ha/*n
should-be-resolved the crisis by means diplomatic has/*have
sido propuesto/*s, (*cada uno), como una solución posible
been proposed-SING/*PLUR, (*each one) as a solution possible
al conflicto (por las mismas personas en momentos diferentes)
to-the conflict (by the same people in times different)
- (25) Juan lamenta [el que estuvieras en América]_i y [el que nunca
Juan regrets the that were-II-SING in America and the that never
conocieras a Luisa]_j pero yo no lo_{i+j}/*los_{i+j} lamento en absoluto.
met-II-SING Luisa but I not it/*them regret at all

Coordinated DP-CPs and coordinated argument CPs can be interpreted as a plurality of facts or of states of affairs. The question is why the interpreted plurality cannot formally be expressed. We suggest that these arguments are formally specified as [-Number]. Only the positive specification for this feature allows its realization as \pm plural. Therefore, DP-CPs and argument CPs are unable to trigger phenomena such like \pm plural agreement with a verb or an adjective,¹⁷ they cannot license a floating quantifier or antecede plural anaphora.

17. An exception to the observed facts is pointed out in Bello (1847, § 829) who notes that coordinated infinitives with the grammatical function of subject of a symmetric predicate trigger plurality on the verb:

To conclude, we have proposed the hypothesis that DP-CPs and argument CPs are [-P, -N, -G] constituents. In other words, these elements are not *Phi* featureless syntactic objects but, instead, they have a *Phi* feature specification expressed with the negative value for each of the feature types.

This proposal leads us to reconsider the implementation of the operation *Agree* in structures where one of the arguments, or both, are CPs or DP-CPs.

4. Feature checking

Let us adopt the null hypothesis that the operation *Agree* applies at the computational component between arguments and functional categories, without exception. Let us also strictly follow the basic assumption that *Agree* consists of feature matching between two syntactic objects endowed with a complete set of *Phi* features. The property of *Phi* completeness for a given syntactic object is satisfied in any category entering the numeration with specification for PNG features.

In cases like (4), repeated below as (26a), the arguments are *Phi* complete. The interpretable *Phi* features of subject and object match the (uninterpretable) *Phi* feature set of T and $\bar{\nu}$ respectively. The operation *Agree* abstractly represented in (26b) is parallel to the operation represented in (1b) above for nominal arguments:¹⁸

- (26) a. [El que hayas llegado tarde] demuestra [que eres un
The that have-II-SING arrived late proves that are-II-SING an
irresponsable]
irresponsible

-
- (i) Holgazanear y aprender son incompatibles.
to laze-around and to learn are incompatible
'Lazing around and learning are incompatible.'

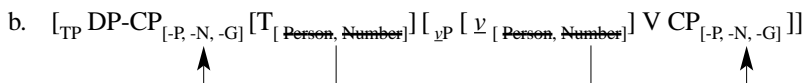
Coordinated tensed clauses appear however to be unacceptable with the verb in the plural in the same contexts:

- (ii) a. Que holganees y que aprendas es/??son incompatible/??-s
that laze-around-II-SING and that learn-II-SING is/??are incompatible_{sing/*plur}
b. Que digas esto y que actues de esta forma es/*son
that say-II-SING this and that act-II-SING of that way is/*are
contradictorio/*-s
contradictory_{sing/*plur}

The grammaticality of (i) could be attributed to the quasi-nominal characteristics of Spanish infinitives, which are in this respect somewhat similar to English gerund forms (see Hernanz (1999)). Note also that coordination of a clause with a complex nominal also requires agreement in the singular:

- (iii) Nos asombra [el hecho de que sea ministra] y [que se comporte así]
Us amazes the fact of that (she) is (a) ministe and that SE behaves like-this

18. In note 1 we have suggested the possibility that only [+P, +N, +G] arguments (i.e. nominals) are endowed with Case.



In these cases, the verb can be assumed to enter the numeration as a unitary collection of lexical and formal features. The *elsewhere* inflection of III singular (i.e. the so-called default inflection) is chosen as this lexical entry is being selected. It is the less marked inflection of the verbal paradigm (that is, $[_{P} -I, -II]$ and $[_{Num} -plural]$) as corresponds to the negative value of the *Phi* features of its arguments.

The hypothesis that argument CPs and DP-CPs are complex syntactic objects that undergo the operation *Agree* appears to be conceptually more attractive than the *Phi* featureless hypothesis we have considered in section 2. Besides the memory load or 'look ahead' requirement that *Phi* featureless arguments would impose in the grammar, some other questions concerning expletives would arise under such a view. Take a structure with a postverbal clausal subject, as in (27), with an expletive *it* (or its equivalent in other languages) in Spec, TP:

(27) *It* T seems/is assumed $[_{CP}$ that IP]

If the CP argument related to *it* has no *Phi* feature specification, the expletive and the functional category T must then be *Phi* complete (or *Phi* incomplete) for the same types of non interpretable features in (27). This assumption would be necessary because the formal content of both T and expletive *it* must be deleted prior to LF. We must assume, in fact, that *it* should agree with T (by feature matching). From this assumption it would arguably follow that expletive *it* -unlike expletive *there*- may have Case, because Case is a reflex of agreement.

Our claim that argument CPs and DP-CPs have *Phi* features and undergo the operation *Agree* with a functional category does not lead us to adopt any special assumptions for their associated expletives. A checking and erasing procedure parallel to the one suggested in Chomsky (1999) for structures with expletive *there* related to nominals could be envisaged for this case. Expletive *it* (or its equivalent in other languages) can be conceived, like expletive *there*, as a *Phi* incomplete item.¹⁹ Partial agreement of *it* and T can delete the non interpretable feature (or features) of the expletive, and the PNG-*Phi* complete set in T remains. The probe T agrees with the interpretable $[-P, -N, -G]$ *Phi* set of the clausal argument, the features of the probe being subsequently deleted:

(28) $It_{[N]} \dots T_{[-P, -N(-G)]} \dots CP_{[-P, -N(-G)]}$

Summarizing, functional categories, as well as their related arguments are endowed with a complete set of *Phi* features, without exception. All elements

19. Perhaps with $[-Number]$ or $[-Gender]$ specification only.

assigned a thematic role are subject to the operation *Agree* with a functional projection. All types of arguments (nominals, CPs and DP-CPs) are undifferentiated as far as abstract computational operations are concerned. In other words, the computational component is blind to the concrete value of the features that distinguish nominal arguments from nominalized clauses or CP arguments: positive specification for PNG features in the first case and negative specification in the later cases.

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