The syntax of φ-features: Agreement with plural DPs in Basque and Spanish

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Abstract

This paper proposes that the pattern of 1st and 2nd person agreement between plural DPs and inflection attested in some Null Subject Languages (NSLs) such as Spanish and Basque is to be attributed to a null pronoun linked to the plural DP (Torrego 2014). Pronouns within plural DPs/NPs are nothing new: Since Postal (1966), linguists have viewed pronouns as a subtype of Determiner, related to the definite article, a point highlighted by the morphological identity of, for instance, the Spanish definite determiner «el» («el libro») and the third person singular masculine pronoun «él» (written with an accent mark: «él leyó el libro»). Postal (1966) shows that pronouns within plural DPs behave like definite determiners, as witnessed by expressions such as [DP we women], [you girls], that have a Determiner pronoun («[DP we]» in [DP we women]). Our discussion makes two main points: One is that cross-linguistic variation in the domain of 1st and 2nd person agreement with plural DPs stems from the internal syntax of overt pronouns within DPs. The other is that NSLs resort to null pronouns when overt pronouns are not able to function as Determiner-pronouns within plural DPs for syntactic/structural reasons, with consequences for the pronominal agreement inflection of the clause.

0. Introduction*

Ibon Sarasola introduced generative linguistics in the study of Basque very early on. One of his pioneering works, Sarasola (1979), is a study of the relationship between agreement and the distribution of reflexive possessive

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pronominal forms in the written records of the language. We would like to pay homage to Sarasola’s contribution to linguistics by putting forth an account of a phenomenon also involving agreement and a specific type of pronominal form. As we will argue, the type of pronominal responsible for this phenomenon belongs in the same class as those studied in Sarasola (1979).

1. The Empirical issue

Let us consider the phenomenon at stake: φ-agreement. Nominal features can be expressed on DPs as well as on verbs and auxiliaries (V/A, henceforth) in both Basque and Spanish. We can tell from the form of the V/A that φ-agreement with a DP has taken place because the person and number values of the DP appear morphologically on V/A, even though person and number lack semantic interpretation on V/A. Person-agreement between V/A and NPs is expected to be in 3rd person (Baker 2008), as illustrated, for instance, by the Italian examples below:

   *The friends arrive early.*
   *The friends have arrived early.*

   The noticeable fact is that in some of the languages that allow a pronominal subject to be phonologically null, φ-agreement between a subject DP and V/A can be not only in 3rd person, but in 1st and in 2nd person as well. Crucially, the «extra» agreement options of 1st and 2nd person are restricted to plural DPs, as illustrated below for both Spanish and Basque. As shown, non-pronominal DPs in the singular disallow the 1st and 2nd person agreement possibilities allowed in plurals:

(2) Spanish
   Subject-Verb agreement with a singular DP
      *The friend arrives early.*

1 Much of the discussion of these issues centers on nominal agreement between Verbs/ Auxiliaries and subjects. For the purposes of illustration, we omit the NP/DP distinction in our presentation of agreement.

2 The 1st and 2nd agreement phenomenon of plural DPs is noted in Spanish descriptive grammars. Both Bosque & Moreno (1984) and Hurtado (1985) brought it to the attention of generative grammar (Hurtado 1985 gave it the unfortunate name of Unagreement).
Subject-Verb agreement with a plural DP
b. Las amigas llegan[3rd P.Pl]/llegamos[1st P.Pl]/llegais[2nd P.Pl]
   pronto.
   'The friends arrive early.'

(3) Basque
Subject-Verb agreement with a singular DP
   'The friend arrives early.'
Subject-Verb agreement with a plural DP
   'The friends arrive early.'
Subject-Auxiliary agreement with a plural DP
   'The friends have arrived early.'

The agreement pattern in (2b) and (3b-c), which we call First and Second Agreement (henceforth, FSA), is surprising insofar as the theme plural DP can agree with V/A in 1st and 2nd person, in addition to 3rd. Since agreement with non-pronominal DPs is in 3rd person cross-linguistically, deviation from the 3rd agreement pattern calls for an explanation.3

It is important that we highlight the connection between being a NSL and the FSA phenomenon. The distribution of FSA is restricted to syntactic contexts of pronominal or «rich» agreement morphology, the kind that traditionally «licenses» null pro in finite clauses in NSLs like Spanish (but see Duguine 2008). This is best illustrated with pronominal object clitics. For instance, in Spanish, 1st and 2nd person object pronominal clitics can «double» non-pronominal lexical DPs, although doubling in this syntactic context is not required. Consider (4):

(4) pro (nos/os) saludó a las ganadoras.
    pro (us/you)-greeted to the fem winnersfem
    'S/he greeted us/you/the winners.'

Both the option of ‘clitic+lexical DP’ and the option of the ‘lexical DP with no clitic’ are grammatical. However, the presence of the pronominal clitic carries along a difference in the interpretation of the lexical DP. With the 1st person clitic nos, the interpretation obtained in the object DP is ob-

3 A word of caution about Basque is necessary. Basque (mostly in western varieties) has a distinctive determiner -ok that is frequently associated with FSA (Artiagoitia 1998). However, there is no necessary connection between the determiner -ok and FSA for two main reasons: One is that both -aki/-ek and -ok can be used in FSA. In addition, -ok can be used for third person agreement as well. Here we put aside -ok since it deserves an exploration on its own, and so far it has not been explored in depth.
ligatorily inclusive; that is, there is the implication that the speaker is one of the (female) winners who were greeted (las ganadoras). This is just the interpretation that obtains in English DPs with a Determiner-pronoun plus a plural N as in us winners. For example, in S/he greeted us winners the DP complement us winners is understood as including the speaker. Similarly, in example (4), with the 2nd person object clitic os the DP las ganadoras is understood as including the addressee in the reference of the winners, as in English you winners. Therefore, in the clause S/he greeted [you winners], the reference of the DP in brackets includes the addressee. Importantly, in the absence of the «doubling» pronominal clitic, the interpretation of the complement DP in (4) is neutral with respect to whether the speaker and the addressee are among the winners; the speaker and the addressee can be among the winners but they do not have to be.

Similar facts obtain with object verb agreement in Basque, where a plural DP object can agree with Inflection in 1st and 2nd person in addition to 3rd:

(5) pro irabazleak agurtu gaituzte[1st P.Pl]/zaituzte[1st P.Pl]/dituzte[3rd P.Pl]
    pro winners-the greeted us-have-them/you-have-them/ them-have-them
    ‘They greeted us/you/the winners.’

The correlation we see in (4) and (5) between pronominal inflection and the interpretation of the DP complement also obtains in examples involving subjects. Agreement in 1st person plural between a subject and a Verb/Aux is interpreted inclusively for the speaker, and Subject-Verb/Aux agreement in 2nd person plural is interpreted inclusively for the addressee. Thus, the subject DP in (2b), when it agrees with the Verb/Aux in 1st person, is understood as including the speaker in the reference of the DP. The same interpretation obtains in the corresponding Basque examples involving 1st person agreement (3b-c).

In order to strengthen the correlation between pronominal inflection and FSA we give additional examples contrasting a dative complement (6b) with a prepositional complement (6c):

(6) a. pro nos habló.
    pro us spoke
    ‘S/he spoke to us.’

b. pro nos habló a los clientes.
    pro us spoke to the clients
    ‘S/he spoke to us the clients.’

c. pro (*nos) habló con los clientes.
    pro us spoke with the clients
    ‘S/he spoke with (*us) the clients.’

For the inclusive interpretation of pronouns in so-called infinitival control clauses, see Torrego (1996).
With the clitic, the dative complement *a los clientes* in (6b) has the characteristic inclusive interpretation of English plurals with a D-pronoun, as already noted. By contrast, the prepositional complement *con los clientes* in (6c), which cannot co-occur with pronominal clitics, lacks the inclusive interpretation of the dative complement in (6b).

Strikingly, some but not all NSLs display 1st and 2nd person agreement with plural DPs. When we turn to, for instance, Italian, we find that the 1st and 2nd agreement options of plural subject DPs are banned, as we can see in the example below:


*The friends arrive early.*

In summary, the 1st and 2nd person agreement possibilities obtained with plural DPs in languages like Spanish and Basque are puzzling. On the empirical side, some NSLs allow them (in the restricted contexts of person marking, the kind that is traditionally thought to «license» null pro), while others do not. On the theoretical side, this paper argues that plural DPs displaying FSA contain a null pronoun. In the spirit of Baker (2008), we assume that FSA reflects a syntactic relation with a DP that has a 1st or a 2nd person feature on its label/projection (Chomsky 2013), although we do not work out the labeling aspect of the analysis here. As it turns out, FSA is a by-product of plural DPs with a null pronoun, all other things equal (e.g. provided that the syntactic contexts in which they occur permit null pro).

2. **Internal versus External Syntax**

The consensus in the literature is that 1st and 2nd person pronouns are indexical pronouns (Fillmore 1971): 1st person indexes the speaker, and 2nd person indexes the addressee. A considerable body of work has focused on the indexical property of 1st and 2nd person pronouns, attempting to understand how the indexicality of pronouns should be captured in the grammar. Some literature has proposed that there is a Speech Act Phrase above the Comp-domain containing two DPs: one for the Speaker, and another for the Addressee (Siðgurson 2004; Baker 2008; Zanuttini 2008, among others). This approach builds on the old *Performative Hypothesis* proposed by Ross (1970) for root clauses. The gist of the *Performative Hypothesis* is that root

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5 Here we put aside the bound uses of 1st and 2nd pronouns, which are not indexical. For instance, the second occurrence of *‘I’* in its bound variable interpretation is not indexical in *Only I got a question that I understood* (credited in the literature to Irene Heim), with the meaning: ‘other than me nobody has the property of being an x such that x got a question that x understood’ (*Only I got a question that I understood, nobody else did*).
clauses contain an abstract performative verb above CP which indexes the utterance, something like *I claim/tell (you)/promise (you)* CP clause.

Although we do not take sides on the semantics of indexical pronouns, we do take sides with respect to the source of the agreement phenomenon under consideration: FSA. We argue that the Speech Act Phrase that in some approaches is above CP in both root and embedded contexts is not responsible for FSA. We put forward the proposal that cross-linguistic variation in the domain of 1st and 2nd person agreement with plural DPs stems from the internal syntax of overt pronouns within DPs, following Torrego (2014).

The distributional possibilities of overt pronouns in DPs provide the first hint that the internal structure of plural DPs/NPs with pronouns is involved in FSA. Observe that plural DPs with an overt Determiner-pronoun are attested in both English and Italian, but not in Basque and Spanish:

(8) English
   a. [us linguists]
   Italian
   b. [noi linguisti]

(9) Spanish
   a. *[nosotros lingüistas]
   Basque
   b. *[gu hizkuntzalari]

As shown, the pronoun in the DPs of Spanish and Basque in (9) only admits an appositive interpretation, an option commonly represented by a comma: Spanish *nosotros, lingüistas*; Basque *gu, hizkuntzalari*. In sum, 1st and 2nd person plural pronouns within DPs in English/Italian type of languages behave as Determiners, while 1st and 2nd person plural pronouns within DPs in Spanish/Basque type of languages do not. We will now consider what appears to be a difference in the «size» of 1st and 2nd person plural pronouns in the two types of languages (English/Italian versus Spanish/Basque), and then we will examine some syntactic consequences of this difference.

3. Some pronouns are bigger than others

It is well established in the linguistic literature that the size of pronouns varies within a single language and across languages. On the scale established by Cardinaletti & Starke (1999) (C&S, henceforth), pronouns are clas-

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6 Mancini et al. (2011) pursue a pioneering ERP study on the phenomenon and attribute the 1st and 2nd person agreement of Spanish plural DPs to «the application of a reverse Agree operation and a shift in the interpretation of the nominals» (Mancini et al. 2011: 1369). Our account does not require those two operations being available for Spanish but not for Italian, and places the source of this difference between Spanish and Italian in the internal structure of DPs.
sified as strong (e.g., Italian noi), weak (null pro), and the weakest pronouns of all, which are clitics (See also Cardinaletti 1997). Here we wish to contrast two strong pronouns within C&S’s classification which nonetheless differ in their morphological complexity: Italian noi and Spanish nosotros. In particular, we will examine their morphological make-up and sketch an approach to their contrastive behavior within plural DPs.

3.1. Spanish versus Italian

Morphologically, 1st and 2nd person plural pronouns in Spanish contain a morpheme expressing person and number, namely nos- (1st person, plural)/vos- (2nd person plural), and another element, expressing number and gender: otros Masc./otras Fem. (‘others’). Importantly, we assume that the person and the number features of nosotros/vosotros are introduced by separate heads, following: nos/vos bears interpretable person and otros is an indefinite expressing plurality (i.e., nosotros/vosotros = I/you(sg) + others (See Vassilieva and Larson 2005).7

Assuming that Number is associated with its own head (Ritter 1992 and subsequent literature), the structure that results from combining the pronoun nosotros/vosotros with a plural Noun in the DP will be as follows:

(10) {DP D(nos/vos) [NumbP Number [NP N(linguistas)]]}]

As illustrated in (10), both the Noun and the pronoun nosotros/vosotros have interpretable number. Therefore, the pronoun nosotros/vosotros can only combine with the plural Noun in an appositive relation, as shown in (9a) (*nosotros lingüistas/nosotros, lingüistas).

The bimorphemic nature of the Spanish 1st person plural pronoun nosotros (and of the second person plural vosotros/vosotras) is not found in the 1st person plural Italian pronoun noi (or its second person plural correlate voi).

As is clear from representation (10), Spanish nosotros/nosotras is a DP containing its own Number projection and Noun Phrase, as the presence of the indefinite D otros highlights. By comparison, the Italian pronoun noi, or for that matter English we/us, are monomorphic D-pronouns which can combine à la Abney (1987) with the Number Phrase of another Noun Phrase, as in the forms us linguisti/noi linguisti (see also Déchaine & Wiltschko in press).

(11) [DP D(noij) [NumbP Number [NP N(linguisti)]]]
The internal structure of Spanish 1st (and 2nd) person plural pronouns shown in (10) suggests that these pronouns are syntactically autonomous, and as such, they allow for the corresponding null pronominal option within plural DPs. When Inflection enters into 1st or 2nd person agreement with a plural DP, it agrees with a 1st or a 2nd person feature of the null pronoun inside the DP.

Let us now turn to Italian, starting with the pronoun *noi*. The fact that *noi* is a D-pronoun rather than a DP-pronoun has implications for the absence of its null option in plural DPs, and consequently for the absence of FSA in this language. The gist of the proposal is that within the plural DP, *noi* is a D-element that combines syntactically with the number-feature of the Noun, tying it to the Noun. This prevents its null option. Although numerous details of this proposal are not dealt with here, the need to invoke the internal syntax of plural DPs to explain FSA seems correct.

To recapitulate, first we have shown that Spanish and Italian differ in the size of their 1st and 2nd person (non-clitic) pronouns. Then we have established a link between the size of their person plural pronouns and FSA, arguing that FSA is a syntactic effect of a null pronoun linked to the DP.

### 3.2. Some syntactic effects

The range of plural DPs that give rise to FSA in Spanish and Basque is wider than the range of plural DPs that have D-pronouns in English and Italian (*us linguists/noi linguisti*). The former is not restricted to definite DPs, but the latter is. Observe that both definite and indefinite plurals display FSA in Spanish and Basque:

#### (12) Definites

**Spanish**

   ‘The organizers interview many candidates.’

**Basque**

   ‘The organizers interview many candidates.’

#### (13) Indefinites:

**Spanish**

   ‘Many/several friends attend the concert.’

**Basque**

   ‘Many/several friends attend the concert.’
From the point of view of the internal structure of plural DPs, D-pronouns in plural DPs in English are tied to the DP via the Number Head. This restricts the distribution of D-pronouns in English plural DPs to the Determiner position. This is clearly in contrast with the behavior of null pronouns in plural DPs in Spanish and Basque, whose positions within the DP do not depend on the Number Head of the Noun. As argued, the internal syntax of overt 1st and 2nd person plural pronouns in Spanish contains its own Number Phrase and NP. This makes the distribution of these pronouns, null or overt, within the plural DP more free.

The same point can be made with Wh-Movement. Both Spanish and Basque plural DPs can undergo Wh-movement when they agree in 1st and 2nd person with Inflection, as illustrated below:

   'How many/which ones attended the concert?'
   c. Me pregunto cuántas/cuáles asistimos[1st P.Pl]/asistís[2nd P.Pl]
al concierto.
   d. Jakin nahi nuke zenbat/zeintzuk joan ginen[1st P.Pl]/
   'I wonder how many which ones attended the concert.'

Regardless of details, the facts of (13) and (14), as well as their absence from Italian, also a NSL, can be made to follow from the internal structure of plural DPs with pronouns. However, it is hard to see how they could be captured by invoking a Speech Act Phrase in the Comp-domain. This concludes the description of the facts of pronouns inside plural DPs in Spanish and Italian. We now turn to Basque pronouns.

3.3. On the size of pronouns in Basque

Given the arguments provided above regarding the differences in the internal makeup of pronouns between Spanish and Italian, and given the fact that Basque aligns with Spanish in displaying the FSA phenomenon, it is to be expected that the internal structure of Basque pronouns will resemble that of Spanish in the relevant respects. That is, if FSA correlates with DP type pronouns and not with D type pronouns, then Basque should have DP type personal pronouns. Here we provide some evidence in support of this, which is rather speculative and awaits further scrutiny.

Artiagoitia (1998) discusses the Determiner category and the Determiner Phrase in Basque, and argues that personal pronouns are Determiners. He notes that Basque personal pronouns are an idiosyncratic type of Determiner, because unlike English personal pronouns, they do not allow further branch-
ing of the DP into an NP to generate expressions like the ones in (8a-b). Our proposal can provide an alternative account for the ‘obligatory intransitivity’ of personal pronouns in Basque: personal pronouns involve whole DPs, as shown in (10) for Spanish, and thus the D hosting the person features creates ‘transitive’ or branched DP structures. That is to say, personal pronouns in Basque are ‘transitive’ DPs and that is why they cannot generate structures like (8a-b), which English and Italian can, given their D-pronouns.

Can we provide evidence that there is further syntactic structure to Basque personal pronouns? The form of 1st and 2nd person plural pronouns generally provided in Basque grammars is gu ‘we’ and zuek ‘you pl.’ respectively. It is well known that the 2nd person plural is a relatively recent morphological evolution from the older plural form zu, attested as plural in older texts, which has come to correspond to 2nd singular in contemporary Basque. This morphological evolution involves the addition of a plural determiner -ek to the original plural pronoun zu, creating a bi-morphemic new pronominal form. The fact that this new form should include a plural marker suggests an internal structure of the type in (15), where the pronoun is a DP with branching internal structure that can host the plural morpheme:

\[
(15) \quad [\text{DP zu} [\text{NumP} [\text{NP} \text{ ek}]]]
\]

The most compelling evidence that Basque personal pronouns involve branching DP structures and not simple D elements comes from what are called «emphatic» pronominal forms. These forms involve «a combined sequence of the reflexive form of the corresponding possessive pronoun and the appropriate demonstrative pronoun» (de Rijk 2008:795). It is also de Rijk (2008) who notes that in the case of 1st and 2nd plural pronouns «the inclusive article -ok appears in place of the demonstrative pronouns.» Below we show the 1st and 2nd plural pronoun forms provided by de Rijk (2008) in neutral and emphatic form:

\[
(16) \quad \text{We emphatic you emphatic}\ \gu \text{ gerok zu zerok}
\]

As noted by de Rijk (2008), there are many variants of these emphatic pronouns, and in some varieties they combine with demonstratives, particularly in eastern varieties where the use of the inclusive determiner -ok is not attested. We show in (17) the eastern forms provided by Lafitte (1944):

\[
(17) \quad \text{We emphatic you emphatic}\ \gu \text{ guhaur zu zuhauk}
\]

\[\text{8 See for instance de Rijk (2008) Chapter 6, for discussion and further references on the history, uses and other details concerning the Basque pronominal system, not directly relevant here.}\]
These forms belong to the Navarro-Labourdian variety, and they do not appear to contain a genitive form of the pronominal, but rather a demonstrative following the pronominal form: gu+haur «we+this» zui+hauk «you+these». Despite the differences in detail between (16) and (17), both types of emphatic pronomininals point to a more developed internal structure for the pronoun, that is, to a DP type pronoun rather than to a mere D-pronoun.

Despite the fact that they are often referred to as «emphatic», and despite the fact that they can and are often used when pronouns are foci, it would be mistaken to assimilate these forms exclusively to foci environments. The descriptive grammar of the Basque Language Academy (Euskaltzaindia 1991) refers to these forms as «strengthened», and in spite of the many forms that can be found across varieties of the language it chooses the ones shown in (16) and (17) as representatives. Euskaltzaindia (1991) strongly warns against giving out simple rules regarding the use of strengthened forms and points to the difficulty in spelling out precisely when the two types of pronouns can be used. For one, western varieties use them far more frequently than eastern ones, though precise data are not available as to the differences in frequency and context. Strengthened forms can be used as foci, but need not be, so that both sentences in (18) are grammatical and pragmatically adequate answers to the question Nor etorri da? ‘Who arrived?’:

(18) a. Gerok/Guhauk etorri gara
    b. Gu etorri gara

    ‘We arrived.’

These forms can also (but need not) be used as topics, as discussed by de Rijk (2008:797):

(19) a. Gerok/guk ere egin dezakegu hori
    We+ok/we too do can-aux that
    ‘We too can do that.’
    b. Zerok/zuek behintzat etorri zarete
    You+ok/you at least arrived are
    ‘At least you have arrived.’

The variety of strengthened pronominal forms used in western varieties of the language is illustrated in (20):

(20) we emphatic you.pl emphatic
    gu  geu  zu  zeu

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It should be noted that the forms in (16), (17) and (20) are, to the best of our current knowledge, dialectal variations, though it must also be emphasized that there are no thorough studies on the preferences of use of strengthened forms across varieties of the language, with the exception of Sarasola (1979) regarding the classical use of strengthened genitives as reflexives in Basque. In the case of Basque, we have suggested that strengthened pronominal forms of the type shown in (16) to (20) reveal the internal structure of pronouns in Basque, crucially involving a rich internal structure. If our approach is correct, then it is more adequate to think of the neutral forms as «shortened» in relation to the strengthened ones.

4. Conclusion

This paper provides a characterization of plural NPs entering into 1st and 2nd person agreement in NSLs. It establishes the existence of two classes of pronouns within plural NPs, a Determiner size pronoun, and a DP size pronoun. It draws a distinction between plural NPs with a Determiner size pronoun, and plural NPs with a DP size pronoun. It argues that plural NPs with a DP size pronoun give rise to 1st and 2nd person agreement in contexts in which null pro is found because these DPs involves a null pronoun.

Sarasola (1979) studied the distribution of possessive pronominal forms in Basque classical literature, and revealed that it often did not respond to the so-called *Linschmann-Aresti Law*: use strengthened forms when the possessive is co-referent with one agreeing argument of the clause. This left the distribution of the two types of pronominal forms unexplained (see also Duguine 2003 for similar conclusions). Here, we have attempted to argue that the possibility of a plural DP agreeing in first and second person with the verb, generally not available except for pro-drop languages of the type of Spanish and Basque springs from the presence of a null pronominal associated with the plural DP, and that the possibility of having this null pronominal depends in turn on having DP-type pronouns of the type discussed, like the ones found in Spanish and Basque. Within this view, the main difference between neutral and strengthened pronominal forms would be whether there are phonologically shortened or not. It would not concern their internal make-up, which would always involve a branching DP structure.

References


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