Abstract

Plural pronouns display a surprising Binding asymmetry. While a 1P.SG subject pronoun can bind the 1P.SG element within a 1P.PL pronoun (Le nous ai acheté des billets ‘1, bought us_{pi} tickets’), a 2P.SG pronoun cannot bind the 2P.SG element in a 2P.PL pronoun (*Tu vous as acheté des billets ‘You bought you_{pi} tickets’). This contrast is most striking with clitic pronouns, as contrastive Focus on one of the pronouns improves the relevant sentences in other languages. The reverse situation, with SG pronouns bound by PL subject pronouns, always yields ungrammaticality: (*Nous m’avons acheté des billets ‘We bought me_{pi} tickets’; *Vous t’avez acheté des billets ‘You_{pi} bought you_{pi} tickets’).

Such asymmetries of disjoint reference can be accounted for if the internal structure of plural pronouns is syntactically accessible. 1P.PL pronouns will be shown to be internally more complex than 2P.PL pronouns, a difference that is also typologically justified. The interaction between Binding theory and the different internal structure of 1P.PL and 2P.PL plural pronouns then derives the observed generalizations.

Keywords: disjoint reference, Binding, pronouns (internal structure of), person, PRO, inclusive/ exclusive, comitative agreement.

I. Two asymmetries in disjoint reference

Disjoint reference involves a pattern of Binding where binder and bindee are overlapping rather than identical in reference. Classical cases of disjoint reference are represented in (1). In (1a), we / and j are overlapping in reference, while in (1b) this coreferential relation is excluded (Postal 1966, Chomsky 1973, Lasnik 1981, Chomsky & Lasnik 1992).

(1) a. We think that I will win b. * We like me c. They_{i+j} think that he_{pi} will win d. * They_{i+j} like him_{i}

The examples of disjoint reference in (1) display a plural antecedent and a referentially dependent singular pronoun overlapping with it. This situation can be abbreviated as Pronoun_{i-j} > Pronoun_{i}. However, the definition of disjoint reference given above allows also a reverse situation: a singular pronoun antecedent may overlap in reference with a plural pronoun that is in part referentially dependent on this antecedent, i.e. Pronoun_{i} > Pronoun_{i-j}.

Examples are provided in (2).

1) Sentence (3), discussed by Chomsky (1973) illustrates both types of disjoint reference:

(2) a. I think that we will win
b. * I watched us leaving (in the mirror) (Chomsky 1973:241(42b))

(3) * We expect me to visit them; I expect me (me) to visit them

Chomsky (1973:241(45b))

The judgments reported for local cases of disjoint reference of the type Pronoun_{i} > Pronoun_{i-j} in (2b) and the second sentence of (3) are however not as constant as those offered for the reverse case, Pronoun_{i} > Pronoun_{i+j} exemplified in (1) and the first sentence of (3). Compare the following:

(4) a. (?) I discovered us / * We discovered on an old photograph
b. (?) I saved us / * We saved me from certain death
c. I got us/ * We got me some tickets for the opera

Similar contrasts apply in French: there is a clear difference between the (a) and (b) sentences of (5) and (6).2

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1 It should be noted that the ungrammaticality of the example in (2b) is not systematic. The example in (i) is minimally different from (2b), but seems to be quite felicitous:

i. I saw us leave (in the mirror; on the video)

It seems that there is a correlation between the data in (2b) and (3) and the availability of a reflexive in object position:

ii. *I watched saw myself leaving (in the mirror)

iii. *I expect myself to visit them

Moreover, when a reflexive reading is possible, the corresponding ‘disjoint reference’ pronoun is available as well:

iv. I have been watching us for some time (and I have come to the conclusion that we have turned into our parents, dear)

v. I have been watching myself for some time (and I have come to the conclusion that I have turned into my father)

I will not investigate here why the reflexive readings are unavailable in (ii-iii). It is clear, however, that disjoint reference automatically involves a partially reflexive interpretation. If for whatever reason a reflexive interpretation is not available, the disjoint interpretation cannot be either.

2 It might be objected that these data are not crystal clear in the light of sentences such as the following:

i. ? Nous m’avons vu à la télévision hier soir

ii. Je nous ai vu à la télévision hier soir

‘We saw us on television yesterday evening’

In (8a), disjoint reference between a plural subject and a singular object is possible, contrary to the (a) sentences of (5-6). Sentence (8b) patterns with the (b) sentences of (5-6). I would like to suggest that an additional factor interferes in such cases. It is well known that coreferentiality is influenced by spatio-temporal dissociation of the coreferential elements, the so-called Mon Tussaud effect. A case in point is the contrast between *I resemblé myself and I ressemble myself in that photograph, where the latter sentence involves a spatio-temporal dissociation between both instantiations of ‘myself’. Similarly, verbs of perception allow for spatio-temporal dissociation between subject and object: I saw myself *saw ‘saw’ (in the mirror). I attribute the acceptability of (8a) to the effects of spatio-temporal dissociation. Note that verbs such as sauver ‘save’ and acheter ‘buy’ in (5-6) do not allow for such spatio-temporal dissociation between subject and object: the subject and the object of these verbs are necessarily ‘associated’ throughout the even. For further effects of spatio-temporal dissociation, see Rueter (1984) (Johny hopes that he_{i+j} will go to Russia; Johny hopes that he_{i+j} will be able to go to Russia).
(5) a. * Nous m’avez sauvé d’une mort certaine
   ‘We saved me from certain death’
   b. Je nous ai sauvés d’une mort certaine
   ‘I saved us from certain death’

(6) a. * Nous m’avez acheté des billets
   ‘We bought me tickets’
   b. Je nous ai acheté des billets
   ‘I bought us tickets’

Disjoint reference between a singular subject and a plural object is also possible if the person features of the subject and those of the object differ:

(7) a. Il nous a acheté des billets
   ‘He bought us tickets’
   b. Il nous les a acheté
   ‘He bought them for us’

(8) a. Tu nous avons sauvé d’une mort certaine
   ‘You saved us from certain death’
   b. Tu nous les a acheté
   ‘You bought them for us’

However, the reverse is not true: plural subject pronouns cannot overlap in reference with a singular object pronoun:

(9) a. * Vous les avez acheté
   ‘You bought them for me’
   b. * Vous les avez acheté
   ‘You bought them for us’

(10) a. * Nous avons acheté des billets
    ‘We bought tickets’
    b. * Nous avons acheté des billets
    ‘We bought tickets’

The same contrasts seem to apply to all other languages as well. I would like to call this the syntactic asymmetry in disjoint reference (SADR): local disjoint reference between pronouns is only possible if the dependent pronoun is plural and the antecedent singular.

Lasnik (1981) argues that the cases excluded by SADR, i.e. a plural antecedent pronoun with a bound singular pronoun as in (1b) *we like me, are ungrammatical due to the interaction of two conflicting requirements. On the one hand, Principle B of the Binding theory requires me, a pronoun, to be free in its domain. On the other hand, the lexical properties of we and I require that there be a relation of overlapping reference between we and I, thus violating Principle B (Lasnik 1981). In (1a), disjoint reference is permitted since I is free in its domain, the embedded clause. However, this solution also rules out the cases permitted by SADR involving a plural dependent pronoun and a singular antecedent. Following Lasnik’s (1981) logic, nous ‘we/us’ in (5b-6b) should be free in its domain, a requirement that is violated by the overlapping lexical properties of nous ‘we/us’ and je ‘I’. It might be objected that nous ‘we/us’ in (5b-6b) in fact corresponds to anaphoric nous ‘we/us’. However, that would still leave the English data in (4) unaccounted for, since there is no anaphoric element involved. Similar considerations apply to cases where plural and singular pronouns with overlapping reference have different person features. Although Lasnik’s (1981) solution neatly applies to (1b) and (9-10), it is not clear why it should not apply in the same way to (7-8). In these cases, Condition B should prevent the plural object pronoun from being coreferential with the singular subject pronoun.

In addition to this syntactic asymmetry, there is another asymmetry that I would like to call a paradigmatic asymmetry in disjoint reference between pronouns with identical person features. While disjoint reference is possible between a 1P.SG antecedent pronoun and a 1P.SG element in the 1P.PL dependent pronoun as in (5b-6b), this observation does not extend to second and 3P features, keeping person features of subject and object identical.3

(11) a. * Tu vous avez sauve d’une mort certaine
    ‘You saved you from certain death’
   b. * Tu vous avez acheté des billets
    ‘You bought you tickets’

(12) a. * Elle les a acheté
    ‘She bought them for us’
   b. * Il les a acheté
    ‘He bought them for us’

Again, such data can be repeated for other languages where SG and PL pronouns are morphologically distinct,4 with or without clitic pronouns. These data now raise two questions:

(13) a. Syntactic asymmetry:
    Why is local disjoint reference between pronouns only possible if the dependent pronoun is plural and the antecedent singular? In other words, why is there a contrast between Pronouni > Pronouni+1 and * Pronouni+1 > Pronouni?
    b. Paradigmatic asymmetry:
    Why is disjoint reference between pronouns with identical person features limited to 1P? cf (5b-6b) (je > nous) vs. (12-13) (*tu =vous / elle/il > les)?

3 These sentences can be improved by focusing the (nonclitic) object pronoun, either syntactically as in French (i), or by either contructive or prosodic Focus as in Dutch (ii).
   i. Tu n’as sauvé que vous d’une mort certaine
      ‘You only saved you from certain death’
   ii. Ik heb ons op van een gewisse dood gered, waarom heb JIJ JULIE niet gered?
      ‘I saved us from certain death, why didn’t YOU save US?’

In the remainder of this article, I will constrain my attention to nonfocused cases of disjoint reference. My claims will apply to languages where singular and plural pronouns are not morphologically identical. Therefore, I will mainly refer to French examples, since clitics are not focussable by definition. I will not go into the relation between Focus and Binding. See Tancredi (1992) for an insightful analysis of the relation between Binding and Focus.

4 Jonathan Bobaljik (p.c.) has pointed out to me that SWG > 2PL cases are fine in English without Focus as in (iii):
   i. Why didn’t you save you? / y’all/ you guys some money by taking the bus?
   Some Dutch speakers report similar judgments for the nonfocused variant of (ii) in fit 3. Note that the counterpart of (iii) is still sharply ungrammatical in French:
   iv. * Penseu tu ne vous as pas épuisé un peu d’argent en prenant le bus?

I will come back to these cases in section 2.2 in fine.
The remainder of this paper will be devoted to a possible answer to these questions. I will also investigate the consequences of the analysis proposed for the representation and interpretation of plural pronouns.

2 The internal structure of plural pronouns.

2.1 Lexical structure vs. Binding domains

It should be clear from the outset that the advantages of Lasnik’s (1981) analysis of disjoint reference in terms of the interaction of Principle B and the lexical properties of the overlapping pronouns should be preserved. This analysis offers an immediate explanation for the facts in (12), the Principle B requirement that les ‘them’ be free in its domain is violated by the interpretive requirement that one of the elements contained in les ‘them’ be coreferential with the subject pronoun il ‘he’ or elle ‘she’. However, if Lasnik’s (1981) solution is maintained in full, an additional story is needed for the paradigmatic and syntagmatic asymmetries noted above.5

The facts relating to the syntactic asymmetry suggest that the pronominal ‘subparts’ contained in plural pronouns (Lasnik’s lexical properties of plural pronouns) are ‘shielded’ from Condition B effects in a way that singular pronoun me is not. Moreover, the paradigmatic asymmetry, contrasting felicitous 1P disjoint reference (Sa-6a) on the one hand, with ungrammatical 2P disjoint reference (11) on the other, suggests that the pronominal me part in as is likewise shielded from Condition B effects in a way that the you part in plural you is not. The dependent 1P.PL pronoun is opaque to Condition B effects in a way that dependent 2P.PL pronouns are not. 3P disjoint reference into 2P and 3P plural pronouns, as in (7), shows that the 3P pronoun present in as and plural you is always shielded from Condition B effects. In short then, a system should be devised in which, with the exception of 2P, all the pronominal ‘subparts’ encased within 1P and 2P plural pronouns are shielded from Condition B effects so as to afford disjoint reference with singular pronouns locally commanding them.

This ‘shielding’ can be obtained if the notion of Binding domain is extended to the internal structure of 1P and 2P pronouns. If 1P and 2P plural pronouns are taken to be full-fledged Binding domains containing singular pronouns, singular pronouns present within 1P and 2P plural pronouns can be claimed to be free in their domain, with the exception of 2P.SG. As a result, disjoint reference with pronouns outside the domain becomes possible. Note that such an internal Binding domain need not be assumed for 3P.PL pronouns: usually, such pronouns are morphologically transparent in the sense that they involve singular pronouns with a plural ending. Since such pronouns are morphologically transparent, I take it that they are also syntactically transparent for Binding purposes.

For the purposes of this paper, I will assume the Binding conditions of Chomsky (1995:96(186)):

(14) A. An anaphor must be bound in a local domain
B. A pronoun must be free in a local domain
C. An R-expression must be free

The ‘local domains’ relevant for the analysis proposed here are (i) CP and (ii) the internal structure of 1PL and 2PL pronouns.

Now it is in fact quite common to assume that 1P.PL and 2P.PL pronouns are a combination of singular pronouns: in Indo-European languages, 1P.PL is ambiguous between an inclusive {1P+2P} and an exclusive {1P+3P} reading, while e.g. many American Indian languages feature different morphemes for exclusive and inclusive 1P.PL. Such analyses are however rarely given theoretically relevant representations: the combination of persons within plural pronouns is usually viewed as a matter of standard feature composition.

Extending the syntactic notion of Binding domain to the internal make-up of 1P and 2P.PL pronouns requires that their lexical representation be itself syntactic in nature. The idea that pronouns are internally complex has gained ground in recent years (Cardinali & Sturke 1994; den Dikken, Lipták & Úvolszky 2001; Dechaine & Wijschko 2002; Harley & Ritter 2005, Van Koppen 2005, Vassilieva & Larson (to appear)). I will follow the spirit though not the exact form of such proposals in assuming a syntactic decomposition of plural personal pronouns, whether clitic or not. Before addressing the questions raised in (13), I will therefore develop a proposal for the lexical decomposition of pronouns.

2.2 Second person plural

Let us first analyze 2P.PL pronouns. Their syntactic decomposition might be represented as a conjunction of two pronouns, one involving a singular you.

(15) Lexical representation for youpl: (1P version)
[you [& she/he/they]]

The three elements making up this representation, the conjunction and both pronouns, need more justification. Typological considerations argue in favor of a structure as in (15). According to McGregor (1989) and Greenberg (1989), there are no languages with forms representing a second person inclusive and exclusive opposing {2P+2P} (two different hearers) to {2P+3P} (hearer + third party). McGregor (1989) also notes that the lack of {2P+2P} forms to the idea that the hearer, hence 2P, is by necessity singular, in the same way as 1P is necessarily singular. Greenberg (1989) strongly objects to the suggestion that 2P is inherently singular, arguing that it is an empirical possibility to address several hearers simultaneously.

It seems that this discussion confuses extralinguistic and strictly linguistic arguments. The possibility to address several hearers at once is an extralinguistic argument for the existence of a plurality of hearers/second persons. By contrast, the possibility to freely coordinate personal pronouns is a strictly linguistic argument. It will be clear that only the latter can have a bearing on the configuration of person features in the make-up of pronouns. Therefore, I will first try to develop in some detail a linguistic argument in favor of McGregor’s position that 2P is inherently singular. The argument will be based on the idea that a single syntactic domain can contain no more than a single 2P pronoun.

Greenberg’s extralinguistic argument in favor of multiple 2Ps can be made linguistically testable. At first sight, it seems to be corroborated by facts from coordination: 2P.SG pronouns, unlike 1P, can be coordinated:

(16) She was talking to you and YOU/ *you and you/ *me and me.)

5 Lasnik’s (1981) analysis of disjoint reference has also been called into question for a different set of facts by Seely (1993) and Berman & Hestvik (1997).

6 Greenberg (1989) attributes this idea to Benveniste (1966). Greenberg (1989) takes exception to this, arguing that he was not able to find it anywhere in Benveniste’s writings. Although Greenberg (1989) is certainly right in that there is no passage in Benveniste’s work stating explicitly the inherent singularity of second person, there are a number of statements in his articles on the strong interdependence of 1st and 2P that might easily be interpreted in this way.
It seems however that the coordination you and you requires special intonation, with some sort of stress on at least one of the occurrences of you. Although judgments vary, it is clear that the intonation of felicitous instances of you and you is noticeably different from that in a sequence such as you and me in a sentence such as in She was talking to you and me. I want to argue that this stress is what makes the coordination possible at all. Recall that certain types of disjoint reference are also better if the dependent pronoun is stressed (cf. supra). Observing the Binding behavior of comitatives, very similar observations apply. While (17a) is always ungrammatical with 1P, (17b) is ungrammatical with a 2P comitative if the intonation is identical to the one that is used with the other persons. Note that the stress needed to make a you ... with you sequence grammatical is absent with the 3P pronouns in (17c).

(17) a. I went to the movies with *me/ her/ you
b. You went to the movies with me/ her/ you

c. She went to the movies with her\(i,j\)

Obviously, this special stress appears as a linguistic means of introducing two second persons in a comitative or a coordinated structure. At first sight, the function of prosodic stress is to indicate that two different second persons are present in the sentence. However, the question arises why this should be so. Since you is defined as a pronoun with respect to Binding Theory, there is no reason why it should be differentiated from another instance of you in any other way than 3P pronouns. In other words, the prosodic difference between (17b) and (17c) cannot be due to a mere Principle B effect. It might be objected that the prosodic difference is due to the fact that both instances of you are homophonous in (17b), unlike (17c) where nominative and oblique forms of the 3P pronoun differ. However, in languages featuring different nominative and oblique forms for 2P pronouns, the stress requirement holds as well, as shown in the following sentences.

(18) a. *(TOI) tu iras au cinéma avec toi (French)
   ‘(You,) you will go to the movies with you’
   b. JIJ bent met jou naar de film geweest (Dutch)
   ‘YOU went with you to the movies’
   c. Je bent met hem\(i,j\) jou naar de film geweest(Dutch)
   ‘You went with him\(i,j\) you to the movies’

The sentences in (18) illustrate the importance of stress for multiple 2Ps in still another way. In (18a), the unstressable elicitic pronoun tu ‘you’ in French needs to be ‘reinforced’ by the (left-dislocated) stressed toi ‘you’. In Dutch, the stressable 2P p. sg pronoun jij ‘you’ in Dutch (18b) allows for a comitative structure involving two 2P pronouns, whereas the nonstressable pronoun je ‘you’ is excluded from such a structure (cf. 18c). I therefore conclude that prosodic stress is a necessary condition for introducing two second person pronouns in a comitative structure such as (17b), or in a coordination as (16).

The question remains as to why prosodic stress is required for two 2P pronouns occurring in a single syntactic structure. Recall the purpose of the argument was to demonstrate that a syntactic domain can only contain a single 2P pronoun. If this idea is correct, either structures like (17b) must be excluded, or one of the 2P pronouns should be prevented from functioning as a pronoun. In fact, both situations obtain. If both 2P pronouns in a comitative structure are prosodically treated as any other combination of pronouns, the structure (17b) is excluded. I would like to argue that prosodic stress prevents one of the two 2P pronouns in (17b) from functioning as a pronoun. It can be shown that stressed pronouns in these cases behave as referential expressions, excluding a pronominal interpretation. The sentence (19) has a reading on which the stressed you in the comitative cannot be coreferential with the you in the superordinate clause. For this reading to obtain, the stress on comitative you should not be interpreted as involving restrictive focus on the comitative (i.e. focus implying negation of the complement set, as in with you, and with nobody else). Admittedly, restrictive focus on the comitative does trigger a coreferential reading. Note however that the stress pattern for you ... with you in (17b) does not involve restrictive focus either. The intended nonrestrictive reading of (19) shows that the comitative you in this case is subject to Principle C of the Binding theory.

(19) You thought that Mary would go to the movies with YOU\(i,j\). (nonrestrictive)

Stress thus arguably functions as a way to turn a pronoun into a referential expression. As such, stress is similar to locatives and demonstratives. In a language such as Dutch, the locative daar ‘there’ can modify pronouns in object position. Pronouns that are thus modified become referential expressions: (20) shows that pronouns modified by daar ‘there’ are subject to Principle C.

(20) a. Hij dacht dat hij\(i,j\) naar de film was gegaan met [hem daar]\(i,j,k\) ‘He thought that he had gone to the movies with him there’
   b. Jij dacht dat hij, naar de film was gegaan met [jou daar]\(i,j,k\)
   ‘You thought that he had gone to the movies with you there’

In a sentence you and you ... with you, we may conclude that stress plays a role that is similar to that of the locative in (20). In other words, felicitous cases of you ... with you involve a structure akin to ‘this you right here ... with that you over there’.

The fact that stress is necessary to distinguish both second persons in a comitative structure shows that in the unmarked situation, a syntactic domain can only involve a single second person. Importantl, 3P pronouns as in (17c) do not require similar prosodic stress: this means that there can be more than one 3P pronoun within a single syntactic domain. I would therefore like to view the ban on multiple 2Ps in a single syntactic domain as an argument in favor of McGregor’s original proposal that 2P is inherently singular. If plural 2P pronouns are to be decomposed syntactically, the presence of more than one 2P in their internal structure (Greenberg’s (2P+2P)) can be excluded on purely syntactic grounds. The internal syntactic structure of plural 2P pronouns then should be along the lines of (15).

The sentence (17a) can be explained along the lines of Lasnik’s (1981, 1989) solution outlined above: the pronoun me must be free in its domain, but the lexical requirement of the pronoun I require that me be coreferential with I, thus excluding two different indices for I/me. In (17c), the pronoun her must be free in its domain, and as a result both pronouns carry different indices. Now, if it were true that there can be two you’s with different indices, the sentence (17b) should be felicitous without further prosodic ado, since the second you should be able to pick up a different index from the first one, in the same way as her in (17c). If, however, (17b) is to be explained along the lines of (17a), it must be the case that the lexical requirements of you include the impossibility of two different indices, in the same way as I/me in (17a). As a result, McGregor’s ontological argument about the inherent singularity of 2P can be linguistically vindicated. Admittedly, the opposition between *me and me vs you and you remains mysterious under this account. I would like to suggest that the difference between the comitative *you ... with you and the coordination you and you must be attributed to the distributive nature of the conjunction and, which introduces the possibility of assigning two different indices to both you’s.
As a result of this discussion, it now becomes possible to account for McGregor’s (1989) and Greenberg’s (1989) observation that there are no forms representing a second person inclusive and exclusive opposing [2P+2P] to [2P+3P]. I would like to argue that the syntactic behavior of comitative *you ... with you is mirrored in the lexical representation of the plural pronoun you in (14). In other words, the conjunction in (15) should be represented as a comitative, avoiding the distributive effects of the conjunction and.

(21) Lexical representation for you3P: (2nd version)
[you [WITH she/he/they/*you]]

In this way, the representation of plural you encodes the impossibility of an interpretation as [2P + 2P].

The idea that the representation of plural pronouns lexically includes a comitative receives support from languages such as Hungarian, Navajo, Yapese, Tzotzil and Turkish in which overtly realized comitatives determine agreement jointly with the subject (Aissen 1989).

(22) a. Hasan-la gittik (Turkish, from Aissen 1989:519(1d))
    Hasan-with we went
    ‘I went with Hasan’ (also: ‘We went with Hasan’)

b. Libatotikotik xchi?uk li Xune (Tzotzil, from Aissen 1989:519(1c))
   we went with DEF Xun
   ‘I went with Xun.’ (Also: ‘We went with Xun.’)

c. Mi cha-a-bat-ik ta Jobel xchi?uk vo/on?
   Q ASP-A2-go-pl to San Cristobal with me
   ‘Are you going to San Cristobal with me?’ (Tzotzil, from Aissen 1989:530(21a))

Schwartz (1985, 1988ab) has shown that comitatives in Hungarian, Yapese and Turkish constitute a single syntactic constituent with a plural personal pronoun;

(23) [3P Mi a batyammal] men mentünk (Schwartz 1985:6(6c))
   we the my.brother with.nom not we went
   ‘My brother and I didn’t go’

Aissen (1989) offers arguments to extend such an analysis to Tzotzil.

For the purpose of the argument developed here, it is important to observe that such languages seem to syntactically realize a structure that in other languages is not overtly visible, but covertly present as a lexical representation. Admittedly, this analysis does not explain why e.g. English comitatives do not have the possibility of Tzotzil to constitute a complex determining agreement, nor does the lexical structure in (21) offer any insight in how the agreement features of the pronouns contained in it percolate upwards to determine the feature composition of the pronoun.

The nature of the pronouns in the lexical representation (21) stills needs to be determined. An ideal lexical representation for you in (21) would contain pronouns which can accommodate more than one interpretation. In the complement of WITH in (21), a pronoun is needed that is compatible with both 3P singular and plural. It seems that an ideal candidate is so. In complement position, pro receives a default interpretation as 3P, singular or plural, unless a (contrastive) context explicitly requires another person:

(24) a. Is she / Are you coming with pro or without pro?
    (pro = spouse, friend, kids, parents, *me, *you)

b. Is she coming with you or without pro ? (pro = you *them *him)

The specifier position of the lexical WITH phrase requires a second person pronoun. I would like to argue that this second person pronoun cannot simply correspond to the pronoun you, but rather is instantiated as PRO.

First, I would like to show that the element in the specifier position of the lexical structure for you cannot be the pronoun you. I will take seriously the idea that the internal syntactic structure of these pronouns serves as a Binding domain. In that case, the pro in the lexical structure for 2P.PL pronouns, which I provisionally take to be [you [WITH pro]], is free in its domain, which corresponds to the lexical structure [you [WITH pro]] itself. As such, pro within plural 2P pronouns is able to corefer with the subject of the sentence containing the 2P.PL pronoun, since pro and the subject are not in the same domain. This accounts for disjoint reference in the sentences (7), repeated here.

(7) a. [i1] vous2p-i a sauvés d’une mort certaine
    ‘He saved you2p-i from certain death’

b. [i1] vous2p-i a acheté des billets
    ‘He bought you2p-i tickets’

However, this analysis fails to offer an explanation for the fact that the singular you encased in the structure [you [WITH pro]] of 2P.PL pronouns does not display disjoint reference with the subject of the sentence, as illustrated in (11), repeated here:

(11) a. * Tu vous as sauvés d’une mort certaine
    ‘You saved you from certain death’

b. * Tu vous as acheté des billets
    ‘You bought you tickets’

A pronoun you within the lexical structure [you [WITH pro]] would also have that very structure for a domain, in terms of the definitions of domain assumed in (14). Being free in the domain of the lexical structure, it should be able to corefer disjointly with a second person subject in the sentence, contrary to fact.

Let’s suppose, however, that the element in specifier position of the internal structure of 2P.PL pronouns is not the pronoun you, but PRO. PRO’s behavior with respect to the Binding theory is very different from that of the pronoun you. Manzini (1983) showed that PRO behaves like an anaphor with respect to Binding conditions, although it is an exceptional anaphor in that it does not take its own sentence as its domain, but rather the immediately superordinate sentence (cf (25)). This observation has prompted various reformulations of Binding conditions (Manzini 1983, Chomsky 1986, Kayne 1991).

(25) [CP1 Sue said [CP2 that Mary] wanted [CP3 PRO=2S] to walk to work]

Secondly, in the specific island context of sentential subjects, PRO may receive a pronominal-like ‘default’ interpretation, preferably 1P or 2P, but a sufficiently elaborate context will elicit 3P interpretations as well (for discussion see Bresnan 1982:328, Van Haften 1982:118, Vanden Wyngaard 1990:216). The sentence (26a) shows that the interpretation of the PRO subject of the gerund cannot be reduced to control by an empty argument of the matrix verb, and (26b) illustrates that PRO may, but need not, be controlled by the subject of the immediately superordinate sentence:
It is important at this point to underscore that I assume PRO to receive a pronominal-like interpretation in these cases. In this view, a pronominal-like ‘default’ interpretation has clearly defined characteristics: it is preferably 1P or 2P, and only a well defined context elicits 3P. I claim that this pronominal-like interpretation of PRO does not change its accessibility to the immediately superordinate domain, which is illustrated in (25). Despite its pronominal-like interpretation, the domain of PRO still coincides with the superordinate domain as in (25). The relevant Binding-theoretical domain of pronominal-like PRO in (26a) is CP1, not CP2, and in (26b) it is CP3, not CP4. Crucially, then, PRO’s pronominal-like ‘default’ interpretation does not change and limit its domain to the lowest one.

I now propose that 2P.PL pronouns have the following lexical structure:

**(27)**  
Lexical representation for you
dual: (final version)  
[PRO [WITH pro]]

Since this syntactic structure is a lexical one, anaphoric PRO will not have an immediately superordinate domain to take an antecedent in. It can be assumed that a pronominal-like ‘default’ interpretation ensues as a result of this situation. The only interpretation compatible with a lexicalization as 2P.PL requires that PRO have the ‘default’ interpretation 2P: any other interpretation would result in a lexicalization different from 2P.PL. pro in the complement position of WITH in (27) receives a 3P interpretation as in (26a). As a result, the representation (27) yields an interpretation ‘you with him’ ‘her’ ‘them’. Since PRO needs to be un governed (Chomsky 1981), it will always appear in the specifier position of (27). I will assume that the element in specifier position in the structure (27) determines person agreement of the entire complex. I will have nothing to say here about the way in which plural number obtains in the complex. Note that this is, to a large extent, an independent problem which also arises both in cases of syntactic coordination, where plural number can arise as the result of the coordination of two singular pronouns (see also fn 9). It should be stressed that the principles applying to the structure (27) are syntactic in nature.

Of course this proposal should not be taken to mean that all PRO in the lexicon receive a ‘default’ interpretation: they only do so when inserted into a syntactic structure. It could be obj ected that this contravenes the idea that Binding theory only applies at LF. This would of course make any interpretation of the structure in (27) impossible. There are two solutions to this problem: either a direct relation between lexical syntactic structures and LF has to be allowed, or it should be assumed that structures such as (27) are fully syntactic in nature, and perhaps spelled out as a single word only after reinsertion in the lexicon. I will henceforth represent (27), in which PRO has received a pronominal-like ‘default’ interpretation as [PR0you [WITH pro]].

These assumptions now allow for a principled explanation of the restriction on disjoint reference with 2P.PL dependent pronouns noted in (11) (*you — vous*). Upon insertion of a 2P.PL pronoun you into a syntactic object position, the PRO encased in the specifier position of that pronoun retains its status as an anaphor with a pronominal-like 2P interpretation. Insertion into a syntactic structure provides anaphoric PRO with a Binding domain immediately outside the internal structure of the pronoun. The presence of this Binding domain will not change anything to the pronominal-like ‘default’ 2P interpretation of anaphoric PRO. As a result, PRO behaves as a 2P pronoun with respect to its interpretation, but its Binding domain will involve the immediately superordinate CP. This now accounts for the impossibility of disjoint reference with 2P.PL pronouns illustrated in (11). Qua anaphor, the Binding domain of PROyou contained within vous in (11) extends to the entire CP. However, since PROyou already has a pronominal-like interpretation, it must be interpretedively free in that domain. As a result, disjoint reference with a second person singular subject is correctly ruled out.

One question remains, however. I have represented the lexical decomposition of 2P.PL pronouns with a 2P.SG pronoun in specifier position, and a 3P pronoun in complement position. This order nicely fits the facts of disjoint reference. Nevertheless, the question arises what prevents this lexical decomposition from displaying the reverse order of pronouns, with 3P PRO and 2P pro? Clearly, nothing in the nature of PRO and PRO rules out such a structure.

It seems however that an independent constraint can be held responsible for the order within the lexical decomposition proposed. Schwartz (1988) and Aissen (1989) argue that languages with comitative codetermination of agreement (cf. supra) display a Person Hierarchy Constraint (PHC): the person of the comitative adjunct cannot outrank the person of the pronominal head on the hierarchy 1 < 2 < 3. Hence, there are never forms of the type you with me or they with me/you. Although the exact nature of this constraint is unclear, Schwartz (1988) suggests it is universal. 7 Transposing this analysis to the lexical structure (26), this means that a ‘reverse’ order within [PRO [WITH pro]], in which 3P would be in specifier position and 2P in complement position of the comitative WITH, would contravene the PHC.

At this point, I would like to come back to the cases mentioned in fn.3. I had noted that there was a rather sharp contrast between the (nonfocused) English and Dutch sentences on the one hand, and their French counterparts on the other, as illustrated in (28):

**(28)**  
a. Why didn’t you save you
dual?  
(y’all) you guys some money (Jonathan Bobuljak, p.c.)

b. # Waarom heb je julie niet wat geld bespaard door de bus te nemen?

c. * Pourquoi tu ne vous as pas épargné un peu d’argent en prenant le bus?

The reason for this sharp contrast should be sought in the fact 2P.SG and 2P.PL pronouns in English and Dutch are morphologically related. The simplest analysis for English you should take it to be a 2P pronoun that is underspecified for number, accommodating both SG and PL interpretations. Dutch julie ‘you.PL’ arguably is morphologically complex, containing 2P je ‘you’ + lie etym. people’. I would then argue that English and Dutch do not have the complex internal structure for 2P.PL proposed in . As a result, the lexical decomposition analysis proposed in (27) applies to French vous ‘you.PL’, but it does not hold for English you and Dutch julie ‘you.PL’ pronouns, licensing a partially reflexive reading in (28a,b), but not in (28c).

Let us now briefly recapitulate the results of this analysis hitherto. Disjoint reference of 3P antecedents into a 2P dependent as in (7) is possible because the 3P pronoun contained inside the 2P dependent is free in its domain, the lexico-syntactic structure of the pronoun. Disjoint reference of 2P antecedents into a 2P dependent as in (11) is ruled out because the 2P PRO contained inside the 2P dependent does not have the lexico-syntactic structure of the pronoun for a domain, but rather the matrix clause. In this way, the observation can be

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7 It is likely that this constraint is related to a similar person hierarchy constraint observed in agreement with coordinated NPs, where the ‘lowest’ person (1p<2p<3p) determines agreement.
derived that the 3P, but not the 2P, person inside 2P.PL pronouns is ‘shielded’ from Condition B effects with respect to disjoint reference.

2.3 First person plural

I now turn to disjoint reference with 1P.PL pronouns as dependents. Recall that a successful analysis of these cases should ensure that any pronoun (1P, 2P, 3P) inside the lexical structure of 1P.PL, is available for disjoint reference, as illustrated in (5b-6b) and (7-8), repeated here:

(5) b. Je nous ai sauvés d’une mort certaine
    ‘I saved us from certain death’
(6) b. Je nous ai acheté des billets
    ‘I bought us tickets’

(7) a. Il nous a sauvés d’une mort certaine
    ‘He saved us from certain death’
    b. Il nous a acheté des billets
    ‘He bought us tickets’

(8) a. Tu nous as sauvés d’une mort certaine
    ‘You saved us from certain death’
    b. Tu nous as acheté des billets
    ‘You bought us tickets’

I have already shown that there is a radical difference between 1P.PL pronouns and 2P.PL pronouns in this respect: 2P.PL pronouns do not allow for disjoint reference with 2P.SG antecedents (*tu – vous), 1P.PL pronouns do not display such a restriction (*je – nous). This restriction of disjoint reference to 1P was called the paradigmatic asymmetry in (13b). I would like to argue that this striking difference is due to the greater interpretive, and hence compositional, complexity of 1P.PL pronouns.

A syntactically based lexical representation for 1P.PL pronouns should not only take into account that French or English 1P.PL pronouns are ambiguous between an inclusive and an exclusive reading, but also that exclusive and inclusive forms for 1P.PL are quite common in a number of other languages. A lexical representation for 1P.PL pronouns should be able at once to account for such ambiguity and to allow for different lexicalizations of both inclusive and exclusive interpretations. I would like to suggest that the following representation might to a large extent meet these requirements:

(29) Lexical representation for we/ us : [[PRO WITH pro] WITHOUT pro]

Once again, every element of this representation, as well as its interpretation, need justification. The most striking part of the representation is the head WITHOUT. I would like to assume that this head accounts for both inclusive and exclusive readings: ‘me and you without him/her/them’ or ‘me and him/her/them without you’.

The intuition behind what might be called a ‘negative comitative’ ensconced within the lexical representation of 1P.PL is that both inclusive and exclusive (readings of) 1P.PL pronouns properly exclude either 2P or 3P. It is not clear to us whether there are counterparts of this lexical representation in syntactically overt comitative constructions.

The interpretation of the various empty pronouns making up the structure (29) also needs to be justified. First of all, the PHC will ensure that the pronoun interpreted as 1P corresponds to PRO, the highest element in the structure. Recall PRO within the structure (27) for 2P.PL you received a 2P interpretation through PRO’s default interpretation in a lexical syntactic structure. I assume that likewise the 1P interpretation of PRO in (29) is obtained via the default interpretation of PRO as 1P.9 The pro’s in complement position of WITH and WITHOUT are interpreted as 2P or 3P. Admittedly, the structure (29) must be augmented with a stipulation that both pro’s may not both be interpreted as 3P. The latter possibility allows for an undesirable interpretation of (29) as ‘me with him/her/them without him/her/them’. I will leave such problems aside for now. Note however that the constraint which independently excludes sets of both the type *me without(out) me and *you without(out) you will immediately rule out a number of possible combinations between the three positions the representation allows for. I will not go further into the predictions of the structure in (29) (see fn 6), being well aware of its obvious limitations and drawbacks.

The hypothetical representation of 1P.PL pronouns in (30) can now be put to use to derive to the properties of disjoint reference noted in (5b-6b) and (7-8), repeated above. These observations suggested that 1P.PL dependents can be disjointly co-referential with 1P, 2P, and 3P antecedents. The question arises as to why PRO in (29) does not extend its Binding domain to the matrix clause, thus making disjoint reference between the pronominal interpretation of 1P PRO and a 1P antecedent impossible, contrary to fact. Note that, by assumption, PRO in 1P.PL (29) sits in the Specifier of a Specifier position, while PRO in the less complex 2P.PL (27) sits in the Specifier position itself. Therefore, PRO in 1P.PL (29) is itself embedded too deeply to be able to take the superordinate domain as its domain. By contrast, in the lexical structure of 2P.PL pronouns, the specifier position of PRO enables it to take the superordinate syntactic structure, in case the matrix clause, as its Binding domain. Since PRO in 1P.PL pronouns is too deeply embedded, the Binding domain of PRO will reduce to the lexical structure of the 1P pronoun itself. As a result, the 1P PRO can be disjointly referential with a 1P pronoun outside of this lexical structure. The paradigmatic asymmetry noted in (13b), i.e. the fact that disjoint reference between pronouns with identical person features is limited to 1P, is correlated with the more complex syntactic structure of 1P.PL pronouns.

Inform me that Locano might also have a generalized inclusive. These might be represented as in (i) and (ii), respectively:

(i) [[PROsauvés WITH pro] WITHOUT pro{acheté}]
(ii) [[PROsauvés WITH pro{acheté}memo] WITHOUT pro{acheté}]

The representation in (ii) admits of a limited ‘all-inclusive’ reading, the WITHOUT phrase then only excluding those 3P referents that are not included in the speech situation. See Cysouw (2005) for a typological overview of person paradigms.

9 It is not altogether clear how person agreement of the verb with the 1st person pronoun represented in the structure (28) is ensured. This problem is reminiscent of the way in which agreement takes place in First Conjoint Agreement as discussed in van Koppen (2005): in both cases, the element in the specifier of the conjunct, resp. the internal structure of the pronoun, determines agreement. The problem of agreement with plural pronouns also shares other similarities with coordinated structures, in the sense that percolation of features, most likely via unification (Dalrymple & Kaplan 1997) is necessary to obtain plural number. I will leave this problem for further research.
Note however that this argument rests entirely on the assumed syntactic configuration for 1P.PL where 1P PRO is conveniently too deeply embedded for it to access the higher Binding domain. I admittedly have no independent evidence for this assumption, as one reviewer graciously points out. Whichever alternative analysis one might want to propose for these cases, however, the essential point I wish to make here stands: the grammaticality contrast between 1P.PL and 2P.PL pronouns in the context of a singular – plural dependency (je – nous vs *tu – nous) is due to the greater interpretive complexity of 1P.PL.

A number of questions remain. Disjoint reference is possible between 3P.PL antecedents and a 1P or 2P.PL dependents, as in (30a). However, disjoint reference cannot take place between a 1P.PL pronoun antecedent interpreted inclusively (‘me and you’), and a dependent 1P.PL pronoun interpreted as ‘me, you and them’, as shown by (30b). Of course, the sentence (30b) is grammatical under a strictly reflexive reading:

(30) a. Ils (de) nous (de) ont acheté des billets
   ‘They bought us/you tickets’

b. *Nous (me) vous (me) avons/ sommes acheté des billets
   ‘We bought us/you tickets’

In terms of the representation in (30), this observation might mean that a phrase headed by WTH is inaccessible as a unit for disjoint reference. I leave this for further research.

Finally, the question in (13a) needs to be addressed: why is local disjoint reference only possible if the dependent element is plural and the antecedent singular? Recall that sentences with disjoint reference involving a singular dependent and a plural antecedent are sharply ungrammatical (cf (5a-6a), repeated here).

(5) a. *Nous m’avons sauvé d’une mort certaine
   ‘We saved me from certain death’

b. *Nous m’avons acheté des billets
   ‘We bought me tickets’

Taking into account the representations for 1P.PL and 2P.PL pronouns, the question might arise as to why these sentences are ungrammatical: the 1P.SG or 2P.SG pronoun in object position should be free in its domain, in view of the fact that their 1P and 2P antecedents within the syntactic structure of 1P.PL and 2P.PL pronouns are too deeply embedded to be in the same domain as the object pronouns. The answer to this question is relatively straightforward, however. The distinct pronominal elements present within the lexical representation of plural personal pronouns are not syntactically ‘accessible’ in the same way as pronominal elements in a (nonlexical) syntactic structure in subject position would be. In terms of government, it can be assumed that all elements contained within a lexical representation of 1P and 2P plural pronouns can c-command out of these pronouns.

This assumption is not unmotivated. In fact, it has to be assumed for all syntactic structures resulting from head – head incorporation under Baker’s (1988) Government Transparency Corollary. For instance, clitic pronouns incorporating into a functional complex also find themselves attached at a level within the complex from which the trace of that clitic cannot be c-commanded, unless government transparency is invoked.

I claim that the structure of pronouns likewise involves a lexical-syntactic configuration of pronominal heads which enables all pronominal subparts of the syntactically complex pronoun to c-command from the position of the pronoun itself. As a result, the object pronouns will not be free in their domains, and (5a-6a) will be ruled out. Note that this analysis is corroborated by additional facts. Not only 1P.SG pronouns are excluded from disjoint reference with the higher 1P.PL pronoun, even 2P.SG pronouns fail to show disjoint reference in this configuration:

(31) a. *Nous (me) tu avons sauvé d’une mort certaine
   ‘We saved you from certain death’

b. *Nous (me) tu avons acheté des billets
   ‘We bought you tickets’

Recall that the 2P antecedent within the 1P.PL pronoun is by assumption enscorched deeper inside its lexical structure (cf (29)). Nevertheless, the sentences are ungrammatical on a disjoint reference reading. I would submit that this is the case because the 2P pro inside the 1P.PL c-commands the 2P. SG te ‘you’ in (31) from the position of the 1P.PL pronoun itself. Note that this c-command is not a result of feature percolation, but that it is rather related to Baker’s (1988) GTC applying to the lexical structure of 1P.PL and 2P.PL pronouns.

In other words, the individual pronouns contained within the lexical structure of plural pronouns can ‘look outside’ their lexical structure for Binding purposes into the syntactic structure they are inserted, but pronouns in the syntax cannot ‘look into’ the internal structure of plural pronouns. This theoretically motivated asymmetry is responsible for the syntactic asymmetry noted in (13a).

3. Conclusion

Local disjoint reference between singular and a plural pronouns have been shown to display two curious asymmetries. There is a syntactic asymmetry: local disjoint reference between pronouns is only possible if the dependent pronoun is plural and the antecedent singular (Pronoun1 > Pronoun1ij vs. *Pronoun1ij > Pronoun). In addition, a paradigmatic asymmetry can be observed: disjoint reference between pronouns with identical personal features is limited to 1P.

I have tried to show that these restrictions can be explained if personal plural pronouns are viewed as syntactically complex and subject to principles of Binding and control. The syntactic asymmetry can be derived from an asymmetry between syntax and the lexicon: the elements ‘inside’ the complex structure of plural pronouns can ‘look out into’ the syntax and c-command singular pronouns, but singular pronouns cannot ‘look into’ the lexical-syntactic structure of plural pronouns. The paradigmatic asymmetry is derived from the interaction of Binding principles applying to PRO and the greater syntactic complexity of 1P.PL pronouns.

References


Binding into pronouns