

1st person plural anaphora in Brazilian Portuguese and chains

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0. Introduction

Speakers of Brazilian Portuguese (BP, from now on) may express the notion ‘1st \person plural’ (1pl) by means either of a 1pl pronoun, or of the expression *a gente* ‘the people’.¹ Interestingly, *a gente* can be an antecedent of a 1pl pronoun only if the anaphoric relation does *not* fall in a specific local domain:

- (1) a *A gente viu uma cobra atrás de nós*
The people saw-3s a snake behind us
- b *Nós vimos uma cobra atrás de nós*
We saw-1pl a snake behind us
 ‘We saw a snake behind us’

- (2) a **A gente já nos viu na TV*
The people already us saw-3s on the TV
- b *Nós já nos vimos na TV*
We already us saw-1pl on the TV
 ‘We already saw ourselves on the TV’

Standard binding theory (Chomsky 1986) has nothing to say about the contrast between (1a) and (2a): since an anaphoric relation is possible in (1a), and (2b) is *not* a violation of Condition B, (2a) isn’t either. As we will see, the effect in (2a) coincide with the local domain of a *chain* (section 4), suggesting that some condition on anaphoric relations should refer to this notion, as in Reinhart & Reuland’s theory of *reflexivity* and *A-chains* (summarized in section 1). I will argue that (2a) is excluded because A-chains are constrained by a requirement of *ϕ -feature compatibility* independent of the compatibility constraint on *coindexing* relations in general (section 3). I will, then, suggest that this result may be captured by a reformulation of Reinhart & Reuland’s *Chain Condition* which raises, however, some further conceptual questions (section 5).

1. Reflexivity and the Chain Condition

Binding Theory, in a broad sense, governs the distribution of anaphoric forms by imposing conditions on the *coindexation* relations such forms can entertain. In Reinhart & Reuland’s system (R&R 1992, 1993 and 1994), there are two sorts of such conditions. The ‘traditional’ conditions A and B are reframed as conditions

¹ I’m grateful to Carlão Mito and Ana Denise Lacerda for helping me with judgements, and to Hans Bennis and the LIN reviewer for their comments. I’m the only one to blame, of course.

on *reflexivity* — on coindexation of arguments of a *predicate*. *Hierarchical* constraints on coindexation (e.g. c-command), however, are not incorporated into the binding conditions themselves, but into a condition on *A-chains*, the *Chain Condition*. First, consider the *reflexivity* module, which is formulated as in (3):

(3) *Conditions:*²

- A If a syntactic predicate is *i*-reflexive-marked, then it is *i*-reflexive.
- B If a semantic predicate is *i*-reflexive, then it is *i*-reflexive-marked.

Condition A allows a reflexive marker (e.g. *himself*) to be used logophorically (without a local antecedent) only in case it is *not* an argument of a syntactic predicate (one with a subject), accounting for contrasts such as: (4), between an anaphor within an adjunct PP and one within a selected PP, in which case R&R argue that the anaphor is an argument of the verb; and (5), between an anaphor within the object (as one of its conjuncts) and the anaphor being itself the object:

- (4) a Susan said that there were five tourists in the room [apart from *herself*]
 b *Susan said that [Max spoke with *herself*]
- (5) a Max boasted that the queen invited [Lucie and *himself*] for a drink
 b *Max boasted that [the queen invited *himself*] for a drink

Condition B says that reflexive *semantic* predicates require a reflexive marker: hence, the pronoun is out in (6b) but not in (6a) because an implicit 'story-teller' argument coreferential with the anaphoric form turns the NP object into a reflexive semantic predicate; and the pronoun is out in (7b) but not (7a) because distributive but not collective readings are interpreted as 'sentential coordination' at the semantic level (hence, only (7b) has a reflexive semantic predicate):

- (6) a Max heard [a story about *him/himself*]
 b Max told [a story about **him/himself*]

² The definitions referred to by the conditions are (R&R 1993:678):

- (i) The *syntactic predicate* formed of (a head) P is P, all its syntactic arguments, and an external argument of P (a subject).
- (ii) The *syntactic arguments* of P are the projections assigned Θ -role or Case by P.
- (iii) The *semantic predicate* formed of P is P and all its arguments at the relevant semantic level.
- (iv) A predicate is *i*-reflexive iff two arguments are *i*-indexed (hence, coindexed).
- (v) A predicate is *i*-reflexive-marked iff either P is inherently *i*-reflexive (e.g. *wash* and *behave*), or one of P's arguments is an *i*-indexed SELF anaphor (e.g. Eng. *himself* and Dutch *zichzelf*).

- (7) a [Max and *Lucie*] talked about *her*
 Max & Lucie (λx (x talked about Lucie))
 b **[Felix but not Lucie] praised her*
 [Felix (λx (x praised Lucie))] but not [Lucie (λx (x praised Lucie))]

R&R's Condition B, however, cannot capture all effects of the standard Condition B: in ECM and raising structures such as (8a,b) the pronoun is not an argument of a reflexive *semantic* predicate; still, (8a,b) are out. Such cases are excluded by the standard Condition B because the pronoun is bound in its governing category:

- (8) a *He* believes [**him/himself* to be smart]
 b *Lucie*_i seems to **her/herself* [_i to be beyond suspicion]

In R&R's system these cases are taken care of by the *A-chain* module, which results of a generalization of the notion of *chain* to all cases of coindexation under government — hence, not only movement dependencies but also anaphoric dependencies may fall under this notion (see R&R 1991 in particular):

- (9) *The Chain Condition*: A maximal A-chain $(\alpha_1, \dots, \alpha_n)$ contains exactly one position, α_1 , which is [+R].³

Now the *Chain Condition* excludes (8), presuming that English pronouns are [+R] (R&R 1994:12-3 argue that English pronouns but not anaphors are specified for [*case*]). The main empirical argument R&R present for the division of tasks as they propose in (3)/(9) comes from the behavior of the Dutch anaphor *zich*, which seems to behave as an anaphor in some contexts (ECM), and as a pronoun in others (transitive structures and inside adjuncts). With some additional assumptions, the system can be extended to cover the basic facts of 3rd person singular anaphora in German and Frisian, too (see R&R 1993, 1994).

Notice, now, that R&R's system does not include any explicit requirement for *feature compatibility* between the antecedent and the anaphoric form. Of course there is an *implicit* constraint incorporated in the *coindexing* relation. Since coindexing is intended to represent *semantic covaluation as determined by*

³ The basic definitions adopted by R&R are (cf. R&R 1994):

- (i) $C = (\alpha_1, \dots, \alpha_n)$ is a *chain* iff C is the maximal sequence such that: (a) there is an index *i* such that for all *j*, $1 \leq j \leq n$, α_j carries *i*, and (b) for all *j*, $1 \leq j \leq n$, α_j governs α_{j+1} .
 (ii) α *governs* β iff α m-commands β , and there is no γ that is a barrier for β and excludes α .
 (iii) $C = (\alpha_1, \dots, \alpha_n)$ is an *A-chain* iff it is a chain and for all *j*, α_j is an A-position.
 (iv) α is [+R] iff α is fully specified for ϕ -features = $\{[\alpha\text{person}], [\beta\text{gender}], [\delta\text{number}], [\gamma\text{case}]\}$.

linguistic knowledge,⁴ it presumably imposes the restriction that only expressions which can have the same reference can also be coindexed. But reference, in the simplest cases, is a matter of ϕ -feature specification (see Bouchard 1984), hence coindexing has an indirect effect: expressions whose ϕ -feature specification do *not* allow them to denote the same reference may not enter in anaphoric relations to each other either. This seems enough to exclude an anaphoric relation between, say, a 3rd person singular feminine pronoun and an NP which is masculine, as in (10) below. A feminine pronoun can only refer to, that is, have an index which refers to, entities whose relevant denoting noun is grammatically categorized as feminine (see, again, Bouchard 1984:14-7): that's why *she*, but not *he*, is incompatible with the index *i* in the context of (10):

- (10) *The boy_i said he/*she_i is sick-and-tired of chips*

It is an empirical question, however, whether this feature-compatibility requirement derived from coindexing is enough to ensure the appropriate match between antecedent and anaphoric form in all cases. What I will argue is that it is not.

3. Binding and ϕ -feature compatibility

As I said before, spoken BP may express the notion '1st person plural' with the expression *a gente*, literally 'the people'. Although this form has the internal make-up of a full NP, externally it behaves as a pronoun, giving rise to Principle B effects (11), not to Principle C effects, cf. (12) versus (13):⁵

- (11) a *A gente criticou a gente *(mesmo) no último artigo que escrevemos*
*The people criticized the people *(self) in the last article (we) wrote*
*'We criticized *us/ourselves in the last article we've written'*
 b *A gente sempre desconfiou da gente *(mesmo)*
*The people always distrusted of the people *(self)*
*'We always distrusted *us/ourselves'*
 c *A gente tirou uma foto da gente *(mesmo) em Paris*
*The people took a picture of the people *(self) in Paris*
*'We took a picture of *ours/ourselves in Paris'*

⁴ In opposition to semantic covaluation as determined by *contextual knowledge*: see Fiengo & May (1994) and references cited there.

⁵ Actually, the Principle B effects in (11) are not as strong as the Principle C effects of (13). I'll be abstracting away from this and similar effects, which I discuss in Menuzzi (in progress).

- (12) a *A gente* soube que o Paulo criticou *a gente* no artigo dele
The people knew that Paulo criticized *the people* in the article of him
 'We came to know that Paulo criticized us in his article'
- b *A gente* acredita que o Paulo sempre desconfiou *da gente*
The people believes that Paulo always distrusted of *the people*
 'We believe that Paulo always distrusted us'
- c *A gente* escondeu a carteira do Paulo atrás *da gente*
The people hid Paulo's wallet behind *the people*
 'We hid Paulo's wallet behind us'
- d *A gente* viu uma foto *da gente* no jornal
The people saw a picture of *the people* in the newspaper
 'We saw a picture of ours in the newspaper'
- (13) a **O João* soube que o Paulo criticou *o João* no último artigo dele
João knew that Paulo criticized *João* in the last article of him
 '*João knew that Paulo criticized João in his last article'
- b **O João* acredita que o Paulo sempre desconfiou *do João*
João acredita that Paulo always distrusted of *João*
 '*João knew that Paulo always distrusted João'
- c **O João* escondeu a carteira do Paulo atrás *do João*
João hid Paulo's wallet behind *João*
 '*João hid Paulo's wallet behind João'
- d **O João* viu uma foto *do João* no jornal
João saw a picture of *João* in the newspaper
 '*João saw a picture of João's in the newspaper'

As we already know, too, *a gente* not only may express the meaning '1st person plural', but also enter into an anaphoric relation with 1pl pronouns:

- (14) a *A gente/Nós* viu/vimos uma cobra atrás de *nós*
The people/We saw-3s/saw-1pl a snake behind *us*
 b *Nós/A gente* vimos/viu uma cobra atrás *da gente*
 'We saw a snake behind us'
- (15) a *A gente/Nós* já viu/vimos uma foto *nossa* no jornal
The people/We saw-3s/saw-1pl a picture of *ours* in the newspaper
 b *Nós/A gente* já vimos/viu uma foto *da gente* no jornal
 'We saw a picture of ours in the newspaper'
- (16) a *A gente/Nós* acha/achamos que o Paulo já *nos* viu na TV
The people/We think-3s/think-1pl that Paulo already *us* saw on the TV

- b *Nós/A gente* achamos/acha que o Paulo já viu *a gente* na TV
 'We think that Paulo has already seen us on the TV'
- (17) a *A gente/Nós* perguntou/perguntamos quando *nós* apareceríamos na TV
The people/We asked-3s/asked-1pl when *we* would-appear on the TV
 b *Nós/A gente* perguntamos/perguntou quando *a gente* apareceria na TV
 'We asked when we would appear on the TV'

It is clear, however, that, although referentially compatible with 1pl pronouns, *a gente* does *not* share their ϕ -feature specification. First, *nós* triggers the 1pl form of the finite verb, but *a gente* triggers the 3rd person singular form, as you see in (14)-(17) above. Second, *a gente* can have an *arbitrary* interpretation and enter in anaphoric relations with an impersonal subject, as in (18), but 1pl pronouns cannot, as in (19) (a qualification similar to fn.4 applies to (19)):

- (18) a *A gente_{ij}* sempre imagina que __ *se_i* pode escapar do perigo
The people_{ij} always imagines that __ *se_i* can escape from the danger
 'One/We always think(s) that one can escape from the danger'
 b __ sempre *se_i* imagina que *a gente_{ij}* pode escapar do perigo
 __ always *se_i* imagines that *the people_{ij}* can escape from the danger
 'One always thinks that one/we can escape from the danger'
 c __ sempre *se_i* pensa que os outros conseguem tolerar *a gente_{ij}*
 __ always *se_i* thinks that the others can tolerate *the people_{ij}*
 'One always thinks that other people can tolerate one/us'
- (19) a *Nós_i* sempre imaginamos que __ *se_{*ij}* pode escapar do perigo
We_i always imagines that __ *se_{*ij}* can escape from the danger
 'We always think that one can escape from such situations'
 b __ sempre *se_i* imagina que *nós_{*ij}* podemos escapar do perigo
 __ always *se_i* imagines that *we_{*ij}* can escape from the danger
 'One always thinks that we can escape from the danger'
 c __ sempre *se_i* pensa que os outros conseguem *nos_{*ij}* tolerar
 __ always *se_i* thinks that the others can *us_{*ij}* tolerate
 'One always thinks that other people can tolerate us'

Finally, the 1pl pronoun *nós* requires the 1pl clitic to express reflexivity, but *a gente* requires the 3rd person reflexive *se*:

- (20) a *Nós* já *nos* vimos na TV
 b **Nós* já *se* vimos na TV
We already *us*/**se* saw-1pl on the TV
 'We already saw ourselves on the TV'

- (21) a **A gente já nos viu na TV*
 b *A gente já se viu na TV*
*The people already *us/se saw-3s on the TV*
 'We already saw ourselves on the TV'

The contrast between (20a) and (21a) is intriguing when compared with the well-formed (14)-(17): why would an anaphoric relation between *a gente* and a 1pl pronoun be fine in (14)-(17), but not in (21a)? Notice that it cannot be the case that the pronominal clitic in (21a) triggers a simple violation of Condition A, Condition B, or of the Chain Condition, since it is fine in (20a).⁶

Apparently, we would have to say that, although both paradigms for 1pl are *referentially compatible*, they are not *feature compatible* for coindexing purposes. Remember that, if there is any requirement for feature compatibility between the antecedent and the anaphoric form in R&R's system, this requirement is the one derivative from coindexing — two forms can be coindexed only if they can corefer. But the sort of feature incompatibility we see in (21a) is *not* the same we see in (10): (14)-(17) show that *a gente* and 1pl pronouns may corefer to each other inspite of their feature specification.

What the unacceptability of 1pl anaphora in (21a) shows is that the feature compatibility requirement which is derivative from coindexing is not sufficient for such cases. In (21a), as opposed to (14)-(17), a stronger requirement is needed: not only the ϕ -feature specifications of the related forms must allow them to denote the same reference, but such forms have to be feature-compatible to each other, too. Still, only the former requirement is part of R&R's system. Clearly the distinctive property of (21a) wrt. (14)-(17) is the *local* nature of the relation. So, what we have to do is to determine the locality of the effect in (21a) and, then, see if there is an appropriate way of introducing this stronger constraint — *ϕ -feature compatibility in a local domain* — in R&R's theory.^{7,8}

⁶ This fact itself raises some questions to R&R's system — how does (20a) satisfy Condition B and the Chain Condition? — which I discuss in Menuzzi (in progress).

⁷ Given (14)-(17), it seems fair to say that *a gente* and 1st person plural pronouns may bear the same index, that is, that in such sentences there *is* an anaphoric relation and not 'accidental coreference'. Still, against the spirit of *coindexing* (see fn. 4), one might suggest that the problem with (21a) is that *a gente* and 1st person plural pronouns *cannot* be coindexed. I leave to the reader to check that even so there would not be any straightforward way of ruling out (21a) in R&R's system.

⁸ For Burzio 1989 the *locality constraint on anaphors* comes from the fact that *anaphors* are always unspecified for ϕ -features: they would require *agreement* to receive some specification, and agreement is always a local relation. We may wonder why agreement itself should be local: a plausible conjecture is that agreement is just the morphological spell-out of other structural relations. In fact, I will argue that agreement (i.e., *feature compatibility*) follows from a condition on *chains* in the case of the BP data. Notice, incidentally, that (14)-(17) argue against the idea that binding in *general* requires agreement (see Bouchard 1984:17, Burzio 1991:87, Franks & Schwartz:234).

4. The locality effect on BP 1pl anaphora

There are, in principle, three ways of incorporating such a requirement in the theory without changing its present format: either the syntactic predicate in (21a) would not count as reflexive, violating Condition A; or it would not count as reflexive-marked, violating Condition B, or finally the chain (*a gente_i, nos_i*) would somehow violate the Chain Condition. The first option is not very plausible on empirical grounds: we would miss a generalization, namely, that (21a) is out for the same basic reason that at least one of (22a,b,c) is:

- (22) a **Nós já vimos a gente na TV*
 We already saw the people na TV
 ‘*We saw us on the TV’
 b **Nós consideramos a gente pronto(s) pr’o que der e vier*
 We consider the people ready for what gives and comes
 ‘*We consider us ready for whatever will come’
 c **Nós escolhemos o Paulo e a gente pr’a diretoria*
 We chose Paulo and the people for the board
 ‘*We chose Paulo and us for the board’

As we see in the sentences *b.* of (14)–(17), the problem with (22a,b,c) is not that the pronoun *nós* cannot be the antecedent of *a gente*. Furthermore, (22a,b,c) are *not* a Condition A violation either: as we’ve seen in (11) above, *a gente* itself doesn’t count as a reflexive-marker — rather, it is pronominal. Additionally (22b) is not a violation of the Condition B, but only of the Chain Condition, and (22c) is not a violation of the Chain Condition, but only of Condition B. So, if any of R&R’s conditions is responsible for the problem of (21a), it has to be (one of) the conditions on *pronouns* — either Condition B, or the Chain Condition, or both. In the best of the worlds, the trouble would reside in only one condition — we would have to fix only this one. Of course we cannot see if this is possible looking just at (21a), where the domains of Condition B and the Chain Condition coincide. What we have to do is to look at sentences where their domains do *not* coincide.

First, consider the cases in which *a gente* can be an antecedent of a 1pl pronoun: as we see in (14)–(17), this is possible in contexts where no condition is active. For example, in (14) the 1st person pronoun is inside an adjunct, in which case they are not co-arguments nor are they in a chain configuration (since adjuncts are barriers to government).

Let’s look now at the contexts where *a gente* cannot be an antecedent of 1pl pronouns. (21a) suggests it cannot when the domains of Condition B and the Chain Condition coincide (that is, when the domains of the *semantic predicate*

and of *government* coincide). This may be confirmed by (23) and (24), if objects of selected PPs are in the government domain of the main predicate:

- (23) a **A gente* nunca confiou em *nós*
 a' *A gente* nunca confiou na *gente* *(*mesmo*)
 b **Nós* nunca confiamos na *gente*
 b' *Nós* nunca confiamos em *nós* *(*mesmos*)
 'We never trusted (in) ourselves'
- (24) a *as cartas da *gente* pra *nós*
 a' as cartas da *gente* pr'a *gente* *(*mesmo*)
 b **nossas* cartas pr'a *gente*
 b' *nossas* cartas pra *nós* *(*mesmos*)
 'our letters to ourselves'

Furthermore, *a gente* cannot be an antecedent of a 1pl pronoun in contexts subject only to the *Condition B*: in (25) the pronoun is a conjunct in a coordinated argument — it does not form a chain with the subject, but they are co-arguments at the relevant semantic level; in (26) the pronoun is embedded in an object with an implicit external argument, which does not count for chain formation:⁹

- (25) A: Quem vocês escolheram pr'a diretoria da escola?
 'Who have you chosen for the school board?'
 a B: **A gente/Nós* escolheu/escolhemos o Paulo e *nós*
 b B: **Nós/A gente* escolhemos/escolheu o Paulo e *a gente*
 '*We've chosen Paulo and us'
- (26) a **A gente/Nós* tirou/tiramos um foto *de nós* no Rio
 b **Nós/A gente* tiramos/tirou uma foto *da gente* no Rio
 '*We took a picture of ours in Rio'

(27) and (28) below, on the other hand, show that *a gente* cannot be the antecedent of a 1pl pronoun where the *Chain Condition* alone is active: in ECM and raising configurations the NPs anaphorically related are not co-arguments of the same semantic predicate:

⁹ Cf. R&R 1993:704-5. Since the definition of a *reflexive predicate* refers to coindexation and applies to *semantic predicates* (cf. Condition B), presumably even an implicit argument can be coindexed with a projected one. It is, then, unclear to me why the Chain Condition cannot apply at the semantic level. If it can, we should take a new look at Condition B.

- (27) a **A gente nos* considerava pronto(s) pr'o que desse e viesse
 a' *A gente se* considerava pronto pr'o que desse e viesse
 a'' *A gente* considerava *a gente* *(*mesmo*) pronto pr'o que desse e viesse
 b **Nós* considerávamos *a gente* pronto(s) pr'o que desse e viesse
 b' *Nós nos* considerávamos prontos pr'o que desse e viesse
 'We considered ourselves ready for whatever would come'
- (28) a **A gente nos* parecia pronto(s) pr'o que desse e viesse
 a' *A gente* parecia *à gente* *(*mesmo*) pronto(s) pr'o que desse e viesse
 b **Nós* parecíamos *à gente* pronto(s) pr'o que desse e viesse
 b' *Nós nos* parecíamos prontos pr'o que desse e viesse
 b'' *Nós* parecíamos *a nós* *(*mesmos*) pronto(s) pr'o que desse e viesse
 'We seemed to ourselves ready for whatever would come'

It might seem now that we have to worry about the formulation of both Condition B and the Chain Condition. A careful consideration of the data, however, reveals that this is not so. Notice the whole trouble is caused by one specific form of the 1pl pronominal paradigm, the object clitic *nos*. Only this form may occur in contexts reserved for anaphors — in contexts where pronominals usually violate either the Chain Condition or Condition B, but *nos* does not (as in (20a), (27b') and (28b')). This possibility, however, is blocked when the antecedent of *nos* is *a gente* ((21a), (27a) and (28a)). But other 1pl pronouns do not occur as anaphors, whatever their antecedent is — *a gente* or *nós* ((23b'), (24b'), (25a), (26a), (28b')). For such cases, we do not need to add anything to R&R's theory.

Consider the distribution of the problematic form, the object clitic *nos*. This form is always a syntactic argument of the matrix verb, although sometimes it may not be its semantic argument, as in the case of ECM (27a,b'). Furthermore, since it attaches to the verb, this clitic is always governed by the subject, hence always in a chain configuration with it, even if the subject itself is not a semantic argument of the verb, as in the case of raising (28a,b').

Given these facts, if we say that *nos* violates Condition B when *a gente* is the antecedent, then we would still have to say something else for contexts where only the Chain Condition is violated, namely ECM and raising. On the other hand, if we say that *nos* violates the Chain Condition when *a gente* is the antecedent, then we don't need to say anything else: as far as the object clitic *nos* is concerned, the contexts governed by the Chain Condition properly include the contexts governed by Condition B. So, the conclusion appears to be: (20a), repeated below, satisfies the Chain Condition because the antecedent *nós* is compatible in ϕ -features with *nos*; (21a), on the other hand, violates the Chain Condition because the antecedent *a gente* is *not* compatible in ϕ -features with *nos*:

- (20a) *Nós já nos vimos na TV*
We already us saw-1pl on the TV
 'We already saw ourselves on the TV'
- (21a) **A gente já nos viu na TV*
*The people already *us saw-3s on the TV*
 'We already saw ourselves on the TV'

The question is: why does the Chain Condition appear to be related to the stronger feature-compatibility requirement?

5. Conclusion: Chains and ϕ -feature compatibility

We do not need much speculation to find out the answer: the relation between the Chain Condition and the stronger feature-compatibility requirement comes from the nature of *chains*. What intuition does the notion of *chain* stand for? The most obvious candidate is: a representation of a syntactic object which is discontinuous, and a syntactic object is just a bundle of syntactic features. Now, think of the fact that the notion of *object* implies *identity*: in order for x to be an object, x must be identical to or non-distinct from itself. Applied to syntactic objects, this reasoning implies that x is the syntactic object $\{F_1, \dots, F_n\}$ iff $x = \{F_1, \dots, F_n\}$. But chains are discontinuous, so we may not want to require full identity of feature specification for all its positions. Still, there should be a notion of identity which allows us to identify two positions as part of a chain. What the BP data show is that coindexation may provide a necessary condition for chain identity, but surely not a sufficient one. *Chains must be morphologically consistent*, that is, if two positions x and y belong to the same chain, they must be feature-compatible. For A-chains, this means: if two positions x and y form an A-chain, then they must be compatible for ϕ -features¹⁰. That's why the A-chain (*a gente_i, nos_i*) is ill-formed: it does not satisfy one of the identity criteria for chains — *feature compatibility*.

There are several ways of integrating this idea in R&R's system (the discussion which follows owes to elucidating remarks by the LIN reviewer). Technically, we might just add the feature-compatibility requirement to R&R's Chain Condition:

¹⁰ Presumably the relevant notion of *feature-compatibility* is *non-distinctness* of feature specification (Franks & Schwartz 1994). But this formulation may have problems if R&R are correct in including [*case*] among ϕ -features, an issue which I cannot address here.

(29) *The Chain Condition*: A maximal A-chain $(\alpha_1, \dots, \alpha_n)$ is such that:

- (i) it contains exactly one position, α_1 , which is [+R], and
- (ii) for all α_i , $1 \leq i \leq n$, α_{i+1} is feature-compatible with α_i .

The reformulated Chain Condition captures the same facts as R&R's and, additionally, the facts of 1pl anaphora in BP we discussed before. Notice, however, that (29) appears to be a conjunction of two rather different constraints: (29i) was conceived by R&R as strictly relevant to *A-chains* (see R&R 1992:405-7); but, as suggested by the initial discussion of this section, (29ii) is best conceived as a condition on the *identity of chains* in general (e.g., Rizzi 1990:91-2 adopts feature-compatibility as part of the definition of chains). This might suggest that R&R's original Chain Condition and the feature-compatibility requirement should be kept as separate conditions. On the other hand, the fact that the two clauses of (29) have a sort of 'complementary action' might indicate that they should follow from a unified principle: (29i) basically constrains the feature specification of the chain's *head*, implying an indirect constraint on the non-head positions (the head must be [+R], non-heads [-R]); inversely, (29ii) basically constrains the feature specification of *non-head* positions with respect to the head (each non-head must be feature-compatible with the next higher position, so that the head must be the position which, by transitivity, sets the feature identity of the whole chain). Further research should tell us whether both constraints are to be unified and, if so, how to do it.

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