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Right Dislocation in Franco-Canadian*

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1.0 The Phenomenon

This paper is concerned with the syntax of right dislocated sentences in Franco-Canadian. The phenomenon is illustrated in (1) below:

    (1) Je l'ai vu hier, ton chum.
         I him saw yesterday, your buddy.

Dislocated sentences have traditionally been derived from their non-dislocated counterparts by a copying rule which moves the NP in question to one end or the other of the sentence, leaving a pronominal copy behind. We will show that Franco-Canadian right dislocation defies this type of analysis, and that it must be accounted for interpretively. First of all, let us establish what the facts are.

1.1 Almost any NP in a sentence may be dislocated, as shown in (2)–(7). Subjects, direct objects, indirect objects and oblique objects may, but possessors and targets of comparison may not. These last two types of NP's may be left dislocated, however.

    (2) Il est parti, mon père.
        he has gone, my father
    (3) Je l'ai rencontré à Laval, ton ami.
        I him met   at Laval, your friend.
    (4) a. On lui a demandé de venir, le président.
            we him asked   to come   the president
        b. On lui a envoyé des fleurs, ma mère.
            we to-her sent   flowers   my mother
    (5) a. Je suis arrivé avec elle, Marie.
            I have arrived with her Marie
        b. Les enfants ne vont pas partir sans lui, le petit chien.
            the children will not leave without him, the little dog.
    (6) a. *Son fils est tombé malade, Jean-Paul.
            his son has fallen sick   Jean-Paul.
        b. Jean-Paul, son fils est tombé malade.
            Jean-Paul, his son has fallen sick.
    (7) a. *La petite fille danse bien mieux que lui, ce garçon.
            the little girl dances much better than him this boy
        b. Ce garçon-là, la petite fille danse bien mieux que lui.
            that boy, the little girl dances much better than him.

1.2 Some PP's may be right dislocated. However, these are very restricted. Only those PP's which have pronominal copies, such as de+NP (en) or à+NP (y) may be dislocated.

    (8) a. Je lui donnerai un coup de pied, à cet espèce de cochon.
            I to-him will give a kick,   to this ...pig...
        b. *Je pense souvent à elle, à Suzanne.
            I think often of her of Suzanne.
    (9) a. J'en ai déjà trop vu, de ces maudits films.
            I of-it have already too-much seen, of these damn films.
        b. *On est bien fier de lui, nous-autres, de ce garçon.
            we are very proud of him, us,   of this boy
   (10) a. Je l'ai trouvé là, moi, derrière ton char.
            I it found there, me, behind your car
        b. *Je suis arrivé avec elle, moi, avec Marie.
            I   arrived   with her, me, with Marie

1.3 More than one NP may be dislocated in the same clause.

    (11) Il l'a fait là, ça, là-bas, lui. (spontaneously uttered)
          he it did there, that, there, him
    (12) On lui en a donné, Pierre, du gâteau.
          We to-him of-it gave, Pierre, some cake

The maximum number of NP's that can be dislocated in the same clause seems to be three:

    (13) *On lui en a donné pour eux, nous-autres, Jean, des bonbons,
          we to-him of-it gave for them, us,   Jean,   candy,
        ses enfants.
        his children.

1.4 A single NP may be dislocated twice:

    (14) Je l'aime bien, lui, mon fils.
          I him love well, him, my son

The upper limit of three right dislocated NP's seems to hold even when two of the NP's are coreferential:

    (15) Il les a mangés, lui, Pierre, les gâteaux.
          he them ate   him, Pierre, the cakes
    (16) *Elle lui en a donné, lui, Pierre, des gâteaux, Marie.
          she to-him of-it gave, him, Pierre, cakes,   Marie.

There seems to be no necessary relationship between the left-to-right order of elements in the sentence proper, and that of the corresponding dislocated elements.[1]

2. The Transformational Analysis

Ignoring for the moment sentences with dislocated PP's, such as (8) and (9), we formulate the following transformation to account for right dislocation:

    RD: (iterative, optional)
        X – NP – Y   ⟹ 1 2 3 2
                        [+pro]

The transformation must be iterative, since it can apply more than once to the same NP, and more than once in the same clause. I am

assuming that it is cyclic, since it applies within embedded clauses:

(17) Le fait qu'il est rentré de bonne heure, ton frère,
    the fact that he returned ..early..   your brother
    prouve qu'il n'y a pas grand'chose à faire en ville.
    proves that there isn't much   to do in town

RD will have to be constrained somehow, so as to apply no more than three times in each clause, and also no more than twice to the same NP. Unless dislocated NP's are marked with some *ad hoc* feature, so that one can count them, it will be impossible to tell from a phrase marker how many times the rule has applied. The restriction will therefore have to be stated globally, in essentially the following terms:

RD may apply a maximum of three times in one cycle, and a maximum of twice to one NP.

However, even this does not account for the data. Consider the following derivation:

(18) Je aime Pierre beaucoup

(19) RD: Je aime lui$_i$ beaucoup Pierre$_i$

(20) RD: Je aime lui$_i$ beaucoup Pierre$_i$ lui$_i$.

(21) Clitic Placement: *Je l'aime beaucoup, Pierre, lui.

When RD applies twice to the same NP, the dislocated pronoun must somehow show up to the left of the dislocated NP. (21) is ungrammatical; the grammatical sentence is (22):

(22) Je l'aime beaucoup, lui, Pierre.

One way to handle this would be to say that RD cannot apply to the pronominal copy left behind by a previous application of RD. It can, however, apply to move an NP which has already been moved once by RD. All such restrictions must be stated globally, in any case. In addition, a new rule-type must be proposed, namely a type of transformation which can apply several times within one cycle, and can apply directly to its own output. There are other rules, like affix hopping and some agreement rules, which apply in several places in one clause, But I know of no other transformation which can feed itself.

3.0 The Interpretive Approach

3.1 Jackendoff (1972) proposes the following rules of coreference for English:[2]

Reflexive: (cyclic)
    Mark NP1 αcoref NP2 if each of the following conditions
            [αrefl]
    holds: 1. NP2 does not appear on the anaphoric side of the
              table of coreference.
          2. NP2 is immediately dominated by VP or $\bar{\text{N}}$,
             except for a possible preposition.
          3. NP1 is in the main clause of the present
             cycle

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    4. NP2 does not precede and command NP1.
    If NP1 precedes NP2 the rule is OBLIGATORY,
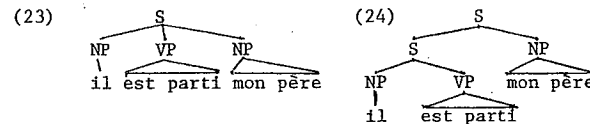   otherwise it is OPTIONAL.

Pronominalization: (cyclic, optional)
    Mark NP1 +coref NP2 unless NP2 precedes and commands NP1.
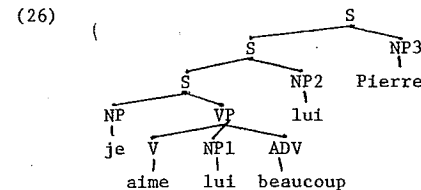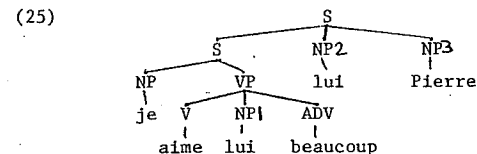   [+pro]

Disjoint Reference: (post-cyclic, obligatory)
    Mark NP1 −coref NP2 unless there is an entry NP1 ±coref
    NP2 or NP2 ±coref NP1 in the table of coreference.

Coreference in non-dislocated Franco-Canadian sentences works exactly the same way as it does in English. Jackendoff's rules can thus be incorporated into the grammar of Franco-Canadian. In fact, I know of no language where the condition on the rule of Pronominalization does not hold. That is, pronominalization may be restricted further, as in Japanese,[3] but it will never apply when the pronoun precedes and commands the full NP. Consider now the following possible surface structures for sentence (2):

(23)   (24)

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(23)        S                    (24)          S
     NP    VP    NP                     S            NP
     |                            NP    VP    mon père
     il est parti mon père        |
                                  il  est parti
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In (23), *il* precedes and commands *mon père*. If pronominalization is the rule responsible for establishing coreference between *il* and *mon père*, and if the generalization about pronominalization is to be preserved, then (23) cannot be the right structure. If (24) is the structure, then pronominalization can establish coreference, since *il* does not command *mon père*.

However, further problems arise with respect to sentences like (22):

```
(25)                       S
             S           NP2    NP3
       NP    VP          lui    Pierre
       |                            
       je  V    NP1   ADV
       |    |     |
      aime lui beaucoup
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(26)                       S
             S           NP3
        S        NP2     Pierre
       NP   VP   lui
       |
       je  V   NP1   ADV
       |    |    |
      aime lui beaucoup
```

In both (25) and (26), pronominalization can establish coreference between NP1 and either or both of NP2 and NP3. However, in (25), coreference cannot be established between NP2 and NP3. This will cause an inconsistent table of coreference to be constructed, as follows:

(27)   NP1 +coref NP2
         NP1 +coref NP3
         NP2 -coref NP3

The structure shown in (26) does not suffer from this problem, since NP3 commands NP2 as well as NP1.

We must therefore conclude that if pronominalization is responsible for establishing coreference in right dislocated sentences, then each right dislocated NP is Chomsky-adjoined to the sentence to its left. This conclusion is unattractive for several reasons. First, the assumption that the rule involved is pronominalization is not necessarily justified. Second, it is difficult to see how one could restrict the number of right dislocated NP's associated with a given clause. Third, the base rule S → S NP violates the X-bar convention. Fourth, the concepts of clause and of cyclic domain will have to be redefined unless each of the S-nodes in (26) is to count as a separate cyclic domain.

3.2 Let us consider the consequences of using the rule of pronominalization to establish coreference in right dislocated sentences. Recall that pronominalization marks an NP and a pronoun as +coref unless the pronoun precedes and commands the NP. Pronominalization will thus apply in the following situation:

(28) Le fait [qu'on est arrivé chez Marie à minuit] l'a
      the fact   that we arrived at Marie's at midnight her
      pas mal fâchée.
      quite   angered

Here, the pronoun commands the antecedent, but the antecedent precedes the pronoun. Right dislocated structures, if they are like (26), provide the same type of structure as does (28). (29) should therefore be grammatical.

(29) *Pierre$_i$ est sorti, lui$_i$.
       Pierre   left   him

Since it is not, we must question the assumption that pronominalization is involved in right dislocated sentences.

3.3 Various possibilities arise at this point. One of the most inviting is that right dislocation is not a sentence-grammar phenomenon. The right dislocated material is not part of the sentence at all, but belongs to some larger unit. However, this can quickly be shown to be inadequate. First, dislocated elements occur at the end of the clause containing their corresponding pronouns. They cannot occur in a higher clause.

(30) L'idée qu'on doit l'écouter, ce maudit bloke, me
      the idea that we must him listen-to, this damn Anglo, me
      fatigue à mort.
      tires to death.
      "The idea that we have to listen to him, this damn Anglo,
      gives me a pain in the neck."
(31) *L'idée qu'on doit l'écouter me fatigue à mort, ce
      the idea that we must him listen-to gives me a pain, this
      maudit bloke.
      damn Anglo.

Second, various constituents may be moved to the right of the dislocated material:

(32) Je l'ai vu, Pierre, chez ma cousine hier soir.
      I him saw, Pierre, at my cousin's yesterday evening.

The existence of sentences like (32) casts doubt on any analysis which has the right dislocated element Chomsky-adjoined to the clause. This type of structure would cause transformations moving material to the right of the right dislocated element to violate the Right Roof Constraint (Ross, 1967). The impossibility of the Chomsky-adjoined structure forces us to conclude that right dislocated sentences are truly counterexamples to the generalization that a pronoun can never precede and command its antecedent.

3.4 If one abandons the attempt to preserve this generalization, then it is no longer necessarily the case that right dislocated elements are in a higher clause than their corresponding pronouns. It then becomes possible that right dislocated sentences have structures more like the one in (23). The following is a possible rule of coreference assignment for right dislocated sentences with structures like (23):

RDI: Mark NP1 +coref NP2 if each of the following conditions
           [+pro]   holds:

      1. NP1 and NP2 command each other.
      2. NP1 precedes NP2.

This rule will correctly assign coreference in all cases of right dislocation, but it will also erroneously assign coreference to il and Jean in (33) below:

(33) Il a vu Jean.
      he saw Jean

The problem is that right dislocated NP's are the only ones which may be coreferent with pronouns which precede and command them. We must therefore have some way of identifying these NP's.

3.5 I must confess that I do not have a truly satisfying solution to this problem. However, I do have a solution that seems to work. First, right dislocated NP's are identified by being daughters of a phrase category which I shall call REPRISE (REPLAY). This category is a daughter of S and a right sister of VP. It has the structure

shown below:

$$\text{REPRISE} \rightarrow \{^{NP}_{PP}\} \ (\{^{NP}_{PP}\} \ (\{^{NP}_{PP}\}))$$

Second, there is a rule of coreference assignment for REPRISE, as follows:

RPR: Mark $\{^{NP}_{PP}1\}$ +coref $\{^{NP}_{PP}2\}$ if all of the following hold:

$[+pro]$

1. NP/PP1 and NP/PP2 command each other
2. NP/PP1 precedes NP/PP2.
3. NP/PP2 is immediately dominated by REPRISE.

Third, there is a rather messy surface structure constraint which blocks sentences wherein an NP/PP in REPRISE has not been interpreted as coreferent with something outside REPRISE.

The existence of REPRISE as a constituent seems to be supported, albeit somewhat weakly, by the fact that although right dislocated elements may occur either before or after some adverbial PP's, an adverbial PP may not in general intervene between two right dislocated elements.

(34) a. Je l'ai lancée à travers la rue, moi, la balle.
         I it threw   across the street me   the ball
     b. Je l'ai lancée, moi, la balle, à travers la rue.
     c. *Je l'ai lancée, moi, à travers la rue, la balle.

4.0 Reprise

The analysis I have proposed is anything but explanatory. However, it would help at this point to determine exactly which facts it accounts for, and which are still left undescribed.

4.1 Good Points

4.1.1 The rather strange limit of three dislocated elements per clause, regardless of reference, is accounted for by an equally strange phrase structure rule expanding REPRISE. It is possible that this limit could be shown to follow from a theory of syntactic processing. If so, the expansion rule for REPRISE would be:

$$\text{REPRISE} \rightarrow \{^{NP}_{PP}\}*$$

4.1.2 The possibility of having a pair of coreferential elements in REPRISE is accounted for by condition 3 on the coreference rule. It is stated that NP/PP2 must be in REPRISE; nothing is said about where NP/PP1 can or cannot be.

4.1.3 The impossibility of 'unbounded right dislocation' is captured by condition 1. If two elements command each other, then they are clausemates.

4.1.4 Cases where the dislocated element is a PP are accounted for by requiring that the rule of coreference assignment find a proform coreferent to a constituent immediately dominated by REPRISE. The only proforms which can be coreferent to PP's are the clitics en (de+NP), y (locative & directional PP's), and lui/leur (indirect objects); and the full forms là and là-bas (locative and directional PP's). It therefore follows that most

PP's will not be interpretable in REPRISE.

4.2 Bad Points

4.2.1 I have had nothing to say about the apparent applicability of the Keenan-Comrie accessibility hierarchy to the rule of coreference interpretation. An investigation of the implications of this fact is beyond the scope of this paper.

4.2.2 I have not developed any kind of general theory of coreference which will predict when pronouns can precede and command their antecedents. Until such a theory is developed, right dislocation in Franco-Canadian remains an unexplained phenomenon.

5.0 Speculations about Coreference

I am aware of two other cases where pronouns precede and command their antecedents. These are appositive constructions, and sentences containing parenthetical expressions:

(35) a. I saw him, that little freckled kid, on the beach last week.
     b. *I saw that little freckled kid, him, on the beach last week.
(36) a. He had, John realized with a shock, slept right through the morning news report.
     b. ?John had, he realized with a shock, slept right through the morning news report.

There are several characteristics that these cases share with Franco-Canadian right dislocation. First, the constituent containing the full NP (REPRISE, the appositive phrase, or the parenthetical) is syntactically superfluous to the rest of the sentence, since it participates in no cyclic transformations that I know of, and plays no role in any subcategorization restrictions. Second, none of these constructions is appropriate when the pronoun is not either discourse-anaphoric or deictic. The following exchange illustrates the strangeness that results from violating this:

(37) Who did you see today?
      Well, I saw him, that little freckled kid, on the beach, but there wasn't really anyone else around.

The function of these three constructions seems to be essentially the same: to provide further information, as an 'afterthought', about some constituent, by interjecting a syntactically superfluous constituent into the sentence. The constituent with which the afterthought is associated must refer to something which already forms part of the discourse context.

So it looks as though we have a class of syntactically disparate, but functionally similar, exceptions to the backward pronominalization constraint (no pronoun may precede and command its antecedent). I know of no other exceptions to this constraint. I would therefore like to make the somewhat rash, but tempting, claim that no language may allow violations to the backward pronominalization constraint unless these violations involve constructions which serve the same function as the three discussed here.

Notes

* I am grateful to Paul Mercier and Robert Paré for their help with some of the grammaticality judgments, and to Michael Szamosi for valuable comments. None of these people necessarily agrees with anything I propose in this paper.

1. This fact is consistent with the model of syntactic processing developed in Cowper (1976).

2. In fact, Jackendoff combines as one rule what I have here as Reflexive and Pronominalization. I have kept them apart for the sake of clearer exposition, since I will be concerned only with Pronominalization. More recent treatments of coreference, (Chomsky, 1973, and others) have taken the tack of assigning disjoint reference, rather than coreference, by cyclic interpretation rules. Right dislocation in Franco-Canadian presents equally severe problems for that analysis.

3. See Cowper and Kimura (1979) for a discussion of pronominalization in Japanese.

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On the Nature of Morphophonemic Rules

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In this paper I will be considering 'morphophonemic rules' in the sense of Jakobson (1948); i.e. rules that govern alternations of phonemes which involve grammatical or lexical conditioning. Phonological neutralization rules--what Jakobson called automatic alternations--are sometimes referred to as morphophonemic, but I will not consider them as such.

Even restricted in this way, the term 'morphophonemic rule' covers such a wide range of phenomena that it is extremely dangerous to make generalizations about them. I will limit myself to a criticism of the claims made about morphophonemics made by the adherents of what is called 'Natural Generative Phonology,' but I hope that in the process I will say something substantive about the nature of morphophonemics. The claims that I hope to show to be false are:

1) Vennemann's (1974) and Hooper's (1976:14) claim that rules that involve positive conditioning by boundaries are necessarily nonphonetic, and therefore morphophonemic.
2) Vennemann's (1974) attempt to diachronically explain external sandhi phenomena as the result of a grammatical restructuring whereby the phonetic form of a word pronounced in isolation becomes its lexical representation.
3) Vennemann's (1974) claim that all words in all their forms are listed in the grammar.
4) Hudson's (1975) and, following him, Hooper's (1976: 73-4) amendment to Vennemann's position, claiming that all allomorphs are listed in the grammar, with segmental alternations indicated disjunctively in braces.
5) Hooper's (1976:13) claim that all rules express transparent surface generalizations.
6) Hooper's (1979) claim that the influence of phonology on morphophonemic rules is limited to syllable-structure and phonotactic constraints.

We will first deal with the problem of the relevance of word boundaries for phonetics, which affects the definition of the distinction between phonological and nonphonological rules. Vennemann takes the (to me) dogmatic position that boundaries are grammatical elements, and therefore rules conditioned by boundaries are grammatically conditioned--not phonetic. This is logical, and Vennemann is above all a consistent and logical thinker. Practically, however, phonemicists have always assumed that word boundaries could be properly used to determine phonetic variants. This is in large part due to their methodology, since they compared words to determine the segments which were used to distinguish words. Applied blindly, this could lead to a confusion between word-final position and prepausal position. Prepausal position is clearly a phonetic environment. Word-fin-