

Published in Explorations in Generative Grammar. A Festschrift for Dong-Whee Yang

Edited by Young-Sun Kim, Byung-Choon Lee, Kyoung-Jae Lee, Kyun-Kwon Yang, Jong-Yuri Yoon, Hankuk Publishing co, Seoul, 1994, pp 544-570.

## CONDITION C AND EPISTEMIC CONTEXTS : A CASE STUDY OF EPITHETS AND ANTI-LOGOPHORIC PRONOUNS IN FRENCH\*

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### 1. Introduction

Epithets and pronominals *en* and *y* in French have a variety of Binding properties that are unexpected on conventional approach to Binding Theory. We argue, in the spirit of earlier work (see Yang (1984), Pica (1987), among others), that the linguistic variety observed cross-linguistically (and perhaps more surprisingly, within a single language) derives from the morphological properties of the anaphoric elements. More specifically, epithets and pronominal elements like *en* and *y* are predicates modifying null but semantically active nouns, and must therefore refer to the Speaker. This property explains why they must be employed in what we define as Epistemic Contexts and are subject to Condition C of Binding Theory.

Drawing largely on our earlier work (cf. Pica & Snyder (1994.a,b), Pica (1994a,b)), we suggest that the effects of Condition C itself derive from several distinct principles such as a process of identification and a process of approximation, which we define in the body of the text. We present in the conclusion some consequences of our analysis with respect to what used to be thought as one module of the grammar, Binding Theory, which is now be derived from independent mechanisms of the Grammar.<sup>1</sup>

### 2. On Epithets

It has often been assumed that epithets, like R-expressions, obey Principle C of Binding Theory (cf. Higginbotham (1985), Lasnik & Stowell (1991), Lasnik (1989), among others) The data that seems to support this claim in French, is exemplified by the following paradigm:

- (1) a. \*Ce salaud<sub>i</sub> pense que Marie aime Jean<sub>i</sub> (non-epistemic)<sup>2</sup>  
(The bastard thinks that Marie loves Jean)
- b. Le frère de Jean<sub>i</sub> pense que Marie aime ce salaud<sub>j</sub>  
(The brother of John thinks that Marie loves the bastard)
- c. \*Ce salaud<sub>i</sub> pense que Marie aime le frère de Jean<sub>j</sub>  
(The bastard thinks that Mary loves the brother of John)
- d. Le frère de Jean<sub>i</sub> pense que Marie aime la mère de ce salaud<sub>j</sub>  
(The brother of John thinks that Marie loves the mother of the bastard)

As shown by (1.a) and (1.c), the epithet cannot c-command another R-expression (its antecedent). Whenever neither the antecedent or the epithet c-commands the other, the sentence is grammatical (e.g. 1.b, d). However, it is remarkable that if epithets are

truly R-expressions, they can be bound by an antecedent which c-commands them, as in (2) (see also examples in (5) below).

- (2) Jean<sub>i</sub> pense que Marie aime ce salaud<sub>i</sub> (epistemic only)  
(Jean thinks/realizes that Marie loves the bastard)

This example differs crucially from the others in (1) in that it requires that the evaluation of the proposition expressed by the embedded clause is calculated with respect to the Speaker, rather than with respect to the matrix subject. The Speaker's evaluation is what we shall consider to be the *external evaluation*, a notion which incorporates the traditional concept of *epistemic reading*<sup>3</sup>. Why should epithets escape principle C in precisely these contexts? Ruwet (1990), who noticed a similar phenomenon with respect to the verb *mériter* (*to deserve*), suggests that this fact should not be treated in purely syntactic terms. He develops a treatment directly inspired from phenomenology (see also Ruwet (1991)). Although this phenomenon has been, as Ruwet notices, mostly unexplored in traditional generative grammar, we propose that it is the manifestation of the interaction of various principles of the grammar.

Extending an idea proposed by Kayne (1994.a) for relative clauses and modified NPs, we suggest that all types of NPs containing epithets have a complex internal structure of the type illustrated in (3):

- (3) [DP ce [ CP salaud<sub>i</sub> [ C de [ NP Jean e<sub>i</sub> ] ] ] ]

Following Szabolcsi (1981), (1983), (to appear), we propose that NPs have a CP structure, which we assume, is necessary in order to create a predicative structure (that is, to modify the D). This yields the interpretation of something close to a relative clause *Ce Jean qui est un salaud* (*the John who is a bastard*).

This amounts to treat the N in the DP as a kind of predicate. However, bare epithets like (4) differ from fully referential R-expressions like *Jean*, in that the former is referentially deficient, in the sense that the referential content of the N remains unspecified (cf. Pica & Bonneau (1994)).

- (4) [ DP ce [ CP salaud<sub>i</sub> [ C de [ NP N e<sub>i</sub> ] ] ] ]

Therefore, it must seek an antecedent which supplies the content of the N. Let us assume the following condition on deficient R-expression elements:

(I) Suppletion Principle

- (a) A deficient R-expression is interpreted with respect to the Speaker.  
(b) A deficient R-expression needs an element with which it enters into a "resemblance" relationship.

In the spirit of Cardinaletti & Starke (1994), we assume that "strongly deficient" elements seek to be associated with the "strongest" antecedent, that is with the Speaker, in other words, the most deictic element in the discourse (see also, Milner (1978), Banfield (1982) among others). Part (b) of the Suppletion Principle is in fact a more specific instantiation of a more general principle proposed in Pica & Snyder (1994.a) and Pica (1994.b) for reflexive pronouns and non-reflexive pronouns, respectively (see section 2.1 for details).

The principles proposed in these latter works derive Principle A and B of the Binding Theory from the general notions of *partition* and *approximation*, which appear to

be pervasive throughout the grammar (see also Bonneau & Pica (1994)). If these Principles extend fully to R-expressions, we can show that even Principle C is derived from the notion of partition and approximation. We shall discuss the theoretical consequences of this hypothesis in the final section of this paper.

Returning now to the problem raised by (2), the question that arises can be reformulated, in our terms, by determining how the epithet approximates the “value” of its antecedent in accordance with the Principle of Suppletion.

Reflexive and non-reflexive pronouns seem to be able to satisfy the Principle of Suppletion in a local domain, as shown in Pica & Snyder (op. cit.) and Pica (op. cit.) respectively. Referential expressions do not induce a semantic partition by themselves (perhaps for morphological reasons) and must approximate their antecedent in a non-local domain. In order to see how this can be achieved, let us compare the example in (2) with the following paradigm, adapted from Ruwet (1990):

- (5)
- a. Jean<sub>i</sub> mérite que l’on dise du bien de ce salaud<sub>j</sub>  
(Jean deserves that one speak (SUBJ) well of the bastard)
  - b. Jean<sub>i</sub> vaut la peine que l’on accorde de l’attention à ce salaud<sub>j</sub>  
(Jean is worthy that one pay (SUBJ) some attention to the bastard)
  - c. Cet homme<sub>i</sub> risque que Marie tombe amoureuse de ce salaud<sub>j</sub>  
(This man take the risk (epistemic reading) that Marie fall (SUBJ) in love with the bastard)
  - d. Cet homme<sub>i</sub> exige que Marie tombe amoureuse de ce salaud<sub>j</sub>  
(This man deserves (epistemic) that Marie fall (SUBJ) in love with the bastard)
  - e. Cet homme<sub>i</sub> menace que Marie tombe amoureuse de ce salaud<sub>j</sub>  
(This man threatens (epistemic) that Marie fall (SUBJ) in love with the bastard)

In all these examples, the matrix verb forces the embedded clause to be interpreted with respect to the speaker’s evaluation, which implies, as we shall see below, that the epithet *ce salaud* can refer to *Jean*, in apparent violation of principle C of BT.

Contrary to the traditional assumption, (Ruwet (1990)), this phenomenon extends to all kind of verbs (e.g. communication verbs, verbs of saying (cf. Banfield 1982)) provided that the appropriate context is created. For example, the introduction of a discourse particle like *bien* (*indeed*) creates this condition:

- (6) Jean<sub>i</sub> a bien dû penser que l’on dit du mal de ce salaud<sub>j</sub>  
(Jean has indeed must think/realize that one speaks badly of the bastard)

This strengthens our view that these examples are not to be treated as exceptional, but constitute a manifestation of a deep property of the Binding of epithets and R-expressions in general. It also shows that the notion of c-command is not sufficient or even appropriate to explain the behavior of epithets with respect to Principle C.

We express the fact that the embedded clause is interpreted with respect to the Speaker’s evaluation, by treating it as a predicate rather than a clausal complement. That it is not a clausal complement can be shown from the fact that it is an island to extraction, as shown in (7), an observation reminiscent of Ruwet (1972) and Pica (1992):

- (7) \* Comment Jean<sub>i</sub> a-t-il mérité que l'on dise du mal de ce salaud<sub>i</sub> ?  
(How did Jean deserve that one speak (SUBJ) badly of the bastard?)

Interestingly (7) patterns with (8), as predicted by our analysis, according to which the whole clause is interpreted as epistemic, when the embedded clause contains an epithet (see example (2) above):

- (8) \* Comment Jean<sub>i</sub> a-t-il pensé que l'on dit du mal de ce salaud<sub>i</sub> ?  
(how did Jean think/realize that one talks badly of the bastard?)<sup>4</sup>

As suggested in Pica & Bonneau (1994), CPs must be dominated (and licensed) by a null D, and thus are DPs. What distinguishes embedded clauses like (5) and (6) from true complement clauses is again - like in the case of NPs above - the degree of defectivity of the clause. It is precisely the defective nature of the embedded clause in (5) and (6), which forces it to raise into the specifier of the DP at LF, where the whole DP will be interpreted as a predicate, as an epistemic context, as represented in (9):

- (9) Jean mérite [DP [CP [DP l'on dise du mal de ce salaud<sub>i</sub>] ] [D que [ e<sub>i</sub> ]]

The defectivity of the embedded clause in (9), is indicated by the fact that its tense is subject to strict concurrent constraints, as illustrated by (10), (to be contrasted with (11)):

- (10) a. \*Jean<sub>i</sub> méritait que l'on disait du mal de ce salaud<sub>i</sub>  
(Jean deserved (epistemic) that one talked badly of the bastard)
- b. Jean<sub>i</sub> méritait que l'on dise du mal de ce salaud<sub>i</sub>  
(Jean deserved (epistemic) that one talk (SUBJ) badly of the bastard)
- (11) a. \*Jean<sub>i</sub> pensait que l'on disait du mal de ce salaud<sub>i</sub>  
(non-epistemic reading)  
(John thought/realized that one talked badly of the bastard)
- b. Jean<sub>i</sub> avait bien dû pensé que l'on puisse dire du mal de ce salaud<sub>i</sub>  
(epistemic reading)  
(Jean had indeed might think/realize that one speak (SUBJ) badly of the bastard)

This suggests that complement clauses come in different types according to the discourse context. This is a surprising phenomenon in a traditional view of configurationality.

However, it has been observed by Kuroda (1973), (1974), (1975) that these distinctions are overtly manifested in languages like Japanese by the particle *yo*, which we take to be in C. Kuroda's distinction between two types of embedded contexts in *non-reportive* and *reportive styles*, corresponds, we believe, to our distinction between *non-epistemic* and *epistemic contexts* respectively. The very same distinction is expressed by the opposition between *style indirect libre* (German *erlebte Rede*) and *style indirect (Represented Speech and Thought)* discussed in Banfield's (1973) and (1982) studies of languages where this distinction is not expressed overtly, such as French and English. Banfield assumes that this distinction is implicit in French and English. What we show here is that, many languages have these distinctions whether encoded in the overt

component of the syntax or not, and that this property reveals a deep characteristic of UG.

Our analysis allows us to resolve a number of long standing linguistic and philosophical debates related to the nature of style.<sup>5</sup> It also sheds some light on the nature of epithets, and others elements which, as Benveniste (1966) points out, are sensitive to, in our terms, the different ways a narration or a discourse can be evaluated.<sup>6</sup>

More specifically, we capture Milner's intuition that there is a relationship between these elements and quantificational NPs.

In our view this follows from the fact that both epithets and R-expressions have a predicative structure which involve a modification of an N as in *ce pauvre garçon*, where *pauvre* is assumed to be a "quantifier-like" element, in our terms a predicate. However, we side with Ruwet (1983), on the fact that the property of the element is determined by its configurational position rather than by a specific labeled node in which the element moves, as Milner claims.

## 2.1 On approximation

Pica & Snyder's (1994.a) analysis of reflexive pronouns claims that all reflexives are bi-morphemic. Pica (1994.b) proposes the following principle of identification:

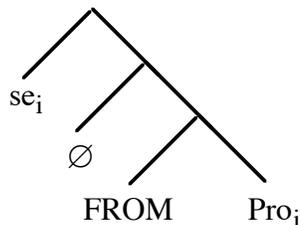
### (II) Principle of identification

A reflexive pronoun must satisfy the two following conditions:

- (a) a process of feature identification where a morpheme of the anaphor is identifying the anaphor with respect to  $\phi$ -features.
- (b) a process of disjunction where the second part of the anaphor is expressing the requirement that the nominal part of the anaphor is to be interpreted as *related* but *distinct* from its antecedent.

These two principles can be illustrated with the French reflexive *se*, which, we propose has a structure similar to (12):

(12)



*Se* is part of a complex word headed by a covert noun  $\emptyset$  whose meaning is close to *même* (self), as in *soi-même*.

Consider example (13), from Zribi-Hertz (1978):

- (13) a. Jean<sub>i</sub> se<sub>i</sub> pose  
 ("Jean self-puts")  
 (Jean sits)
- b. Jean<sub>i</sub> pose son<sub>i</sub> cul  
 ("Jean puts his backside")  
 (Jean sits)

One part of the anaphor in (13.a) is identifying the antecedent of the anaphor. This process is achieved through LF cliticisation of *se* to the head of the agreement node related to the antecedent. The respective  $\phi$ -features of the antecedent and *se* are identified by Spec-Head relationship, thus satisfying II(a).

The abstract noun  $\emptyset$ , which we take to be a relational noun of some kind (most typically an abstract body-part), as overtly realized in (13.b), together with the abstract preposition FROM satisfies the process of disjunction of the anaphor (or part of it) from its antecedent, II(b).

We believe that both processes apply throughout Binding theory, and that different Binding Domains reflect different strategies available to the various elements. As Pica (1994.b) shows, non-reflexive pronouns' identification is not done by movement of a specific morpheme at LF. Rather, it is done by comparing the  $\phi$ -features of the Agreement nodes of the pronoun and its antecedent. Approximation, in the case of strong pronouns, is done through the process of disjunction.<sup>7</sup>

The Principle of Suppletion, expressed in (I), can now be reformulated in such a way that it derives entirely from the Identification. We can express this in the following way:

(III) Identificational Principle for R-expressions:

- (a) an R- expression can be bound within its sentence iff it can approximate the "value" of its antecedent.
- (b) an R-expression can approximate the value of its antecedent in epistemic contexts through approximation, which is achieved through the following disjunction : while the epithet is evaluated through the Speaker, its antecedent is evaluated through the matrix clause.

Although this principle and the identificational principle suggested above are based on essentially the same concepts, and use the same two processes, they raise the question of why the domain of identification for pronominal elements appears to be more "local" than for R-expression.

Although we do not have a full answer to this puzzle, we would like to speculate that this phenomenon, again, would follow from the nature of these two different expressions: Pronouns having partition operators (see however footnote (7)), the domain of identification and partition overlap completely. Pronouns are consequently evaluated with respect to two Agreement nodes related to a given and unique Predicate (much in the spirit the Disjoint Agreement Principle of Pica (1994.a)). On the other hand, R-expressions are not associated with partition operators, and must therefore be evaluated with respect to another NP (another agreement node) in the next sentence which contains an appropriate antecedent (that is, an antecedent with which, they can enter into approximation relationship).

If these leading ideas are on the right track, we can also derive Principle C of Binding Theory from the general principles involved in the concept of approximation.<sup>8</sup>

Note that, one could alternatively claim that these principles are at play with R-expressions. One could rather simply assume that the Disjoint Reference follows from the predicative nature of the clause containing the epithet.

It is indeed well-known (Safir's (1985) Predicate Principle) that R-expressions and predicates escape Principle C of Binding Theory:

- (14) Il<sub>i</sub> est son<sub>i</sub> propre cuisinier  
(He is his own cook)

However if this were true, one would not be able to account for the following examples (compare with (5.d)):

- (15) \* L'imbécile<sub>i</sub> exige que l'on dise du mal ce salaud<sub>i</sub>  
(The idiot<sub>i</sub> requires (epistemic) that one talk (SUBJ) badly of the bastard<sub>i</sub>)

The expression *l'imbécile* taken in this context forces the matrix subject to be evaluated with respect to the Speaker, even though the matrix verb is epistemic, and involves complex predicate formation, leading to a violation of (III.a) above. Hence, a theory that would rely only on predicate formation as a mean to escape Principle C would be at lost to explain the ungrammatical status of (15), and other similar examples with *en* to be discussed in the next section.

On the other hand, this type of examples suggests clearly that a theory like ours, which relies on the concept of *evaluation* and *approximation* accounts in a natural way for the status of this example. Furthermore it does not need to appeal to a mysterious exception to Condition C (cf. Safir (1985), among others).

Finally, note that the notion of Epistemic Context that we have been using is much broader than the one discussed in traditional literature. We will define Epistemic Predicate, as a Predicate which refers to the Speaker's evaluation. This includes standard epistemic predicate like *promettre*, *mériter*; but will also includes predicates like subject experiencer predicates, in the spirit of Pica (1992). That this may be true is suggested by the following example, as compared with (2):

- (16) Ces hommes<sub>i</sub> craignent que l'on dise du mal de ces salauds<sub>i</sub>  
(These men fear that one speak (SUBJ) badly of the bastards)

Pollock's (1976) observation that "quantifier climbing" occurs only in non-epistemic contexts, gives further support to our analysis, since climbing is not possible out of a Complex Predicate (e.g. (17 a,b) adapted from Pollock):

- (17) a. Jean a (bien) dû tout manger (epistemic reading)  
(“Jean has (well=indeed) must everything eaten”)  
(Jean might indeed have eaten everything)
- b. Jean a tout (bien) dû manger (non epistemic only)  
(“Jean has everything well eaten”)  
(Jean has eaten everything well)

The epistemic reading is clearly indicated by the presence of the adverb *bien* which has the meaning of *indeed*. in (17.a). In (17.b), as expected, the adverb may only have a manner reading.

### 3. On the “Anti-logophoric” elements *en* and *y*

Ruwet (1990) observes an interesting puzzle, with respect to the behavior of the pronouns *en*, and *y*, when referring to a human antecedent, which relates closely, as he notices, to the behavior of epithets in French.

These pronouns may only refer to this type of antecedent, if embedded, in our terms, in an Epistemic Context:

- (18) a. Jean<sub>i</sub> mérite qu'on en<sub>i</sub> parle  
(Jean deserves that one of-him speak (SUBJ))
- b. Jean<sub>i</sub> exige qu'on en<sub>i</sub> parle (epistemic only)  
(Jean requires that one of-him speak)
- c. \* Jean<sub>i</sub> exprime qu'on en<sub>i</sub> parle (non epistemic reading)  
(Jean expresses/realizes that one of-him speaks)
- d. Jean<sub>i</sub> vaut la peine qu'on y<sub>i</sub> pense  
(Jean is worthy that one of-him think (SUBJ))
- e. Jean<sub>i</sub> exige que les gens y<sub>i</sub> pense (epistemic only)  
(Jean requires (epistemic) that people of-him think (SUBJ))

As shown at the end of the previous section the epistemic reading of the verb can be reinforced by adding certain discourse particles like the adverb *bien* (indeed), as in (19), which contrasts with (18.c) above:

- (19) L'avare<sub>i</sub> a \* (bien) dû (\*bien) exprimer que l'on en<sub>i</sub> dit du mal  
(The scrouge has (well) must (well) express that one of-him slanders)

*En* in (19) can be coreferent with the matrix subject *only if* the adverb *bien* is preverbal with the meaning of the adverb *indeed* in English (i.e. is “weak” in Cardinaletti and Starke’s 1994 sense). This consequently forces an epistemic interpretation of the matrix verb which we express through incorporation of the adverb into the matrix verb. This meaning does not occur when *bien* is interpreted as a manner adverbial modifying the embedded verb, as predicted under the current analysis.

Once again, however, one cannot say that, much as in the case of epithets above, *en* escapes Principle C because of Complex Predicate formation, since examples like (20) would be left unaccounted for (compare in particular (20.b) with (15) above).<sup>9</sup>

- (20) a. \*Je<sub>i</sub> mérite que cette femme en<sub>i</sub> tombe amoureuse  
(I deserve that this woman with-me fall (SUBJ) in love)
- b. \*Je<sub>i</sub> vau<sub>x</sub> la peine que cette femme en<sub>i</sub> tombe amoureuse  
(I am worthy that this woman with-me fall (SUBJ) in love)
- c. \*Tu<sub>j</sub> risques que cette femme en<sub>i</sub> tombe amoureuse  
(You take the risk (epistemic) that this woman with-you fall in love)
- d. \*Tu<sub>j</sub> mérites que cette femme en<sub>i</sub> tombe amoureuse  
(You deserve that this woman with-you fall in love)

The ungrammaticality of this paradigm is also linked to the deviance of (21), reminiscent of the ungrammaticality of (15) above:

- (21) ?\* l'idiot<sub>i</sub> mérite que Marie en<sub>i</sub> tombe amoureuse  
(The idiot deserves that Marie with-him fall in love)

More generally, in sentences evaluated with respect to the matrix subject, *en* seems, at first glance, to exhibit long-distance disjoint reference effects. These effects have been termed “anti-logophoric” by Ruwet. Whenever the predicate clause raises, as in Epistemic Contexts (as in the case of the preverbal *bien* in (19)), the epistemic reading is possible, and thus the Disjoint Reference effect disappears.

Let us adopt the hypothesis according to which *en* (at least when it refers to a human antecedent) is a predicate embedded in an R-expression, as illustrated in (22):<sup>10</sup>

(22) [ DP [ D [ CP  $en_i$  [ C de [ NP N  $e_i$  ] ] ] ] ]

The defective character of R-expression (22) and the Principle of suppletion (I.a) above readily account for the fact that *en* (or more precisely the null N associated with it) must be evaluated with respect to the Speaker and can consequently be used in Epistemic contexts.

The analogy with epithets is confirmed by the parallelism between (1), and (23) below:

- (23) a. \*Cet homme<sub>i</sub> exige que l'on  $en_i$  soit amoureux  
(This man requires (non-epistemic) that one with-him be (SUBJ) in love)
- b. Le frère de cet homme<sub>i</sub> pense que l'on  $en_i$  est amoureux  
(The brother of this man thinks that one with-him be (SUBJ) in love)
- c. \*Cet homme<sub>i</sub> pense que Marie  $en_i$  aime le visage  
(The man thinks (non-epistemic) that Marie loves with-him the face)
- d. Le frère de cet homme<sub>i</sub> pense que Marie  $en_i$  aime le visage  
(The brother of this man thinks (non-epistemic) that Marie loves with-him the face)

This analysis of *en* resolves another puzzle, that Ruwet (1983) points out: whether *en* refers to an animate or not, *en* appears in non raising and control contexts:

- (24) a. Sa<sub>i</sub> description (de ce linguiste) semble  $en_i$  être correcte  
(His description (of this linguist) seems (epistemic) of-him to be correct)
- b. Sa<sub>i</sub> description (de ce linguiste) mérite d' $en_i$  être publiée  
(His description (of this linguist) deserves of-him to be published)
- c. Sa<sub>i</sub> description (de ce linguiste<sub>j</sub>) menace d' $en_i$  être correcte  
(His description (of this linguist) threatens (epistemic) of-him to be correct)

This phenomenon is puzzling under the traditional assumption according to which *en* appears only in raising context, as first suggested, for Italian by Belletti & Rizzi (1981).

The facts illustrated in (24) follow straightforwardly from the hypothesis that the epistemic reading implies some form of predicate raising, and hence involves a specific type of restructuring. This hypothesis extends as well to Raising Predicate or Control Predicate, which we assume, can also involve an “epistemic” restructuring process. This

type of restructuring differs however from standard restructuring, as in Italian (Rizzi (1982)), which probably involves verb raising.

This is what we see with quantifier climbing in the following examples from Pollock (1976).<sup>11</sup>

- (25) a. Jean a tout dû manger  
(Jean has all must eat)  
b. Jean a tout semblé manger  
(Jean has all seemed/appeared to eat)

We therefore predict that these two types of restructuring are mutually exclusive, whence that “quantifier climbing” would not occur in an Epistemic context, a prediction borne out by the following paradigm:<sup>12</sup>

- (26) a. \*Il<sub>i</sub> a tout semblé vouloir qu'on en<sub>i</sub> dise  
(He has all seemed/appeared to want that one of-him say (SUBJ))  
b. \*Il<sub>i</sub> a tout menacé qu'on en<sub>i</sub> dise  
(He has all threatened that one of-him say (SUBJ))

The same observation holds for several classes of verbs studied by Ruwet (1983) in the context of the Raising/Control distinction<sup>13</sup>:

- (27) a. Sa<sub>i</sub> description (de ce linguiste) commence à en<sub>i</sub> être connue  
(His description (of this linguist) begins to of-him be known)  
b. Sa<sub>i</sub> description (de ce linguiste) est susceptible d'en<sub>i</sub> être connue  
(His description (of this linguist) is likely to of-him be known)

In all the cases where *en* appears to refer to the subject (or part of it), the clause has an epistemic reading (is evaluated with respect to the Speaker) and quantifier climbing is impossible, as illustrated by the following contrast:<sup>14</sup>

- (28) a. Sa<sub>i</sub> famille a commencé à en<sub>i</sub> dire quelque chose  
(His family has begun to of-him say something)  
b. \*Sa<sub>i</sub> famille a tout commencé à en<sub>i</sub> dire  
(His family has all begun of-him to say/speak)

#### 4. Conclusion

As we have shown *en* and *y* have the property of “Epistemic” R-expressions (epithets) in the sense that they must be evaluated with respect to the speaker. We suggested that this property is due to the defective character of these elements, which, interestingly, seem to pattern with certain demonstrative expressions:

- (29) a. \*Paul<sub>i</sub> pense que l'on va renvoyer celui-ci<sub>i</sub>/cet employé<sub>i</sub>  
(Paul thinks (non-epistemic) that one will fire that one/ this employee)
- b. Le frère de Paul<sub>i</sub> pense que l'on va renvoyer celui-ci<sub>i</sub>/cet employé<sub>i</sub>  
(The brother of Paul thinks (non-epistemic) that one will fire that one/ this employee)

Our analysis obviously suggests that other elements might not have this property. We suggest that strong pronoun like *lui* is just an example of this type:

- (30) Cet invalide<sub>i</sub> exige que l'on prenne soin de lui<sub>i</sub>  
(This invalid (man) requires that one take (SUBJ) care of him)

*Lui* in (30) is indeed not sensitive to the distinction between Epistemic and non Epistemic Reading of the matrix verb in (30), which corresponds to the two distinct interpretations of *exiger*.

As Ruwet observes again, citing examples from M. Plenat, there is (as expected under our analysis) a tendency to prefer the pronoun *lui* in contexts that are not evaluated with respect to the Speaker but rather with respect to the subject of the matrix.

Note that the theory developed in this paper leads us to the conclusion that only deficient R-expressions like *en*, *y* or epithets are subject to the effects of Epistemic Contexts. This follows from the fact that these expressions which do not undergo LF movement cannot achieve approximation within their clauses.

This suggest the following principle:

Principle for the computation of Binding Domains:

For a given element  $\alpha$ , the binding domain of  $\alpha$  is the least extended constituent in which approximation of  $\alpha$  with its antecedent can be achieved.

Our analysis also raises the question of knowing whether elements which cannot be employed in epistemic contexts actually exist.

It is interesting to note in this respect that the long distance reflexive pronoun *soi* (self) cannot be used in epistemic contexts (an observation reminiscent of Kuroda's remarks about the Japanese reflexive *zibun*), as illustrated by the following paradigm:

- (31) a. \*Personne<sub>i</sub> ne mérite que l'on dise du mal de soi<sub>i</sub>  
(Nobody neg deserves that one speak (SUBJ) badly of self)
- b. \*Personne<sub>i</sub> n'exige que l'on dise du mal de soi<sub>i</sub>  
(Nobody neg requires (epistemic) that one talk (SUBJ) badly about self)
- c. Personne<sub>i</sub> ne risque l'on dise du bien de soi<sub>i</sub>  
(Nobody neg takes the risk (epistemic) that one speak (SUBJ) badly about selv)

This supports the view of Pica (1994.b) that *soi* involves LF movement in order to achieve local approximation with its antecedent. We leave this intriguing topic aside, as well as many important other related issues, such as the role of indices and the notion of reference in the Grammar, for further research<sup>15</sup>. The framework sketched in the present article should however clearly indicate the kind of work that remains to be done, and we

hope, suggests one of the ways the amazing empirical diversity we face might be dealt with.<sup>16</sup>

Montreal, September 1994

## NOTES

\* Portions of this research have been presented in talks at the Lexicon Seminar of MIT (Cambridge Mass), at a seminar on the lexicon at UQAM (Montreal), at Cuny Graduate Center (New York), and was extensively discussed on several occasions at the Center for Comparative Poetics (GDR 730 of CNRS, & Ecole Nationale des Langues Orientales, Paris). Special thanks to R. Dor, H-N Castañeda, N. Chomsky, J. Greenberg, R. Kayne, P. Lusson, J. Roubaud, J. Rooryck, W. Snyder and C. Tancredi and to J. Bonneau who read several drafts of this manuscript and made several suggestions implemented in the text. This work, which is part of a larger enterprise on the nature of Binding was partly supported by the Social Sciences and Humanities Research Council of Canada (Grant n° 411-92-0012). I am in debt to Prof. D-Y Yang whose important work on Binding Theory (see Yang (1984)) I was first exposed during a GLOW Coloquium in York (1981). We have been able to discuss these ideas further during his stay at MIT in 1992, see Yang (1989). These discussions influenced directly and indirectly many ideas suggested in this paper. All errors remain of course my responsibility.

<sup>1</sup> The reference to the Minimalist framework, as formulated in Chomsky (1992), and to Kayne's (1994.b) complementary project, with respect to linguistic variation is implicit, throughout. Most examples discussed in the text are directly or indirectly inspired by the data for Ruwet (1990), who treats them in phenomenological terms.

<sup>2</sup> Ruwet's (1990) important study of this kind of Construction (in response to Lamiroy (1991), (1992), does not seem to distinguish an epistemic reading from a non-epistemic reading in sentences like (1). This state of affairs, we would like to suggest, is due to the fact that Ruwet uses, as he puts it, "his favorite actors" from the literature. Ruwet seems to believe that texts extracted from the literature, or more or less influenced by it, should be taken more seriously than our intuitions. If we are on the right track, this methodology has a serious drawback, since it indirectly influences the judgments of the cultivate informants, which Ruwet mentions in his footnote 0. We modify Ruwet's examples, which we use as an explicit starting point, to more anonymous ones.

<sup>3</sup> The distinction between Root and Epistemic verbs can be illustrated by the contrast between (i) and (ii), from Pollock (1976) :

- (i) Pierre a tous dû les lire (root reading)  
(Pierre was obliged to read them all)
- (ii) Pierre a dû tous les lire (epistemic reading)  
(Pierre must have read them all)

This distinction has often been treated in terms of two lexical entries corresponding to Raising (Epistemic sense)/Control (Root sense) (Ruwet (1972), Pollock (1976)), or taken to suggest that the Control/Raising distinction does not really exist (Ruwet (1983)). See also in this context, Rooryck (1990).

We come back to this issue in the next section, where we show that our analysis solves this well-known puzzle. (see also, about English, Perlmutter (1970)).

On the notion "epistemic" and its relation to the study of modality and propositional attitudes, see Seuren (1969), Doherty (1987), von Wright (1955), among many others. We hope to be able to come back to the relationship between different types of elements and different types of propositional attitudes, from a more general point of view, elsewhere.

<sup>4</sup> Example (8) in the text should be compared with (i) below, which does not contain any epithet, and where the matrix verb is, in our terms, not forced to be interpreted as “epistemic” :

- (i) Comment Jean a-t-il pensé que l’on disait du mal de lui ?  
(how did Jean think that one talked badly of him?)

<sup>5</sup> Note that, if put in the perspective of Pica & Bonneau (1994), this analysis sheds some light on the emergence of the non reportive style, a topic to which we hope to come back else where.

Interestingly, the analysis developed in the text suggests that notions like *point of view*, *camera-angle* (Kuno (1987), Cantrall (1973)) issued from the vocabulary of visual art and *subject of consciousness* issued from the vocabulary of philosophy (Kuno (op. cit), Ruwet (1990)) could all be expressed in configurational terms, an obviously desirable result. It also suggests, perhaps a more serious point, that the syntax of non-reportive and reportive styles should *not* be confused. This distinction, which is also reminiscent of Benveniste’s (1966) opposition between *récit* (narration) and *histoire* (history) should at least be kept in mind. This explains Pollard & Sag’s (1992) obvious puzzlement when they notice that some examples from Zribi-Hertz (1989), that are currently used in the literature cannot be spoken. See also note (1) above.

<sup>6</sup> Of particular interest are narrative texts in which there is no speaker with respect to which the elements can be evaluated (as discussed, in different terms, by Kuroda (1974) and Banfield (1982)). We hope to come back elsewhere to binding in these contexts, which, as Kuroda puts it, “create a false reality in the mind of the speaker” .

<sup>7</sup> This is done through a partitioning operator in the case of strong pronoun. See, Pica (1994.b) on the case of clitics, which can only be related to proeminent antecedents, as noticed in Cardinaletti & Starke (1994).

<sup>8</sup> Note in this context Pica & Snyder’s(1994.b) analysis of Weak Cross-Over which amounts to say that Weak Cross-Over can surprisingly be reduced to failure of variable binding at LF. If this analysis is on the right track, one of the main argument in favor of traditional formulation of Condition C (without any reference to approximation) vanishes.

<sup>9</sup> Note that it is not the fact that *en* cannot be related to a first or second person antecedent which explains the ungrammaticality of the examples in (20), since *en* can “refer” to first and second person antecedent as illustrated in (i):

- (i) a. Elle se souvient de moi<sub>i</sub> comme j’ aime qu’on s’en<sub>i</sub> souvienn  
(She recalls me as I like that one of-me recall (SUBJ))  
b. Il me parle de vous<sub>i</sub> comme je veux qu’on en<sub>i</sub> parle  
(He speaks about you as I like that one of-you speak (SUBJ))

<sup>10</sup> That “en” is also a predicate when it is related to an inanimate antecedent is suggested by the fact that “en” must define some intrinsic (inalienable) property of the null head it is related to, as illustrated by the following contrast (see also note (14) below:

- (i) La préface<sub>i</sub> (de ce livre) mérite d’en<sub>i</sub> être lue  
(The preface (of this book) deserves of-it to be read)  
(ii) ?La couleur<sub>i</sub> (de ces chaussures) méritent d’en<sub>i</sub> être changée

(The color (of these shoes) deserve of-them to be changed)

See on that matter, and related topics, Kupferman (1987), Rooryck (1992), Tasmowski-De Ryck (1990), among others.

<sup>11</sup> See also, Ronat (1974).

<sup>12</sup> Note in particular that epistemic context cannot be embedded under factive, a natural state of affairs if this type of embedding involves overt or covert predicate formation:

\* La douleur fait exiger à cet invalide les soins les plus exigeants  
(Pain makes require to this invalid the most appropriate care)

<sup>13</sup> See in this context, Kayne (1980), who notices that the traditional analysis of *en* cannot be right and should be replaced by an alternative analysis.

<sup>14</sup> Our analysis, we believe, allows us to account for several properties of related constructions, noted again by Ruwet (1983). Interestingly none of these observations found a natural explanation in the framework of generative grammar, in which they were ignored:

Examples like (i) have a punctual interpretation only, a natural restriction, in our terms, if they are epistemic contexts, hence involves predicate formation, as we suggest in the body of the text:

(i) ? Le père<sub>i</sub> (de cet enfant) menace de ne jamais en<sub>i</sub> être reconnu  
(The father (of this child) threatens of never of-him to be acknowledged)

(ii) ?\* Le père<sub>i</sub> (de cet enfant) a brusquement menacé de ne jamais en<sub>i</sub> être reconnu  
(The father (of this child) has abruptly threatened of never of-him to be acknowledged)

Sentence like (i) involves an “object of creation” (a child, for example) whose internal qualities can be evaluated, a natural restriction, since the null N with which *en* is predicated of, is related to an upper NP:

(iii) \*Le frère<sub>i</sub> (de cet enfant) menace de ne jamais en<sub>i</sub> être connu  
(The brother (of this child) threatens to never of-him to be known)

Note finally that adjectives related to verbs that accept both non-epistemic and epistemic interpretation only accept the latter interpretation, as predicted by our analysis since adjectives are obviously predicates. So, *cet enfant est prometteur* is interpreted as “*this a promising child*”, not as, “*this is a child who make promises*” .

<sup>15</sup> See however Pica (1994.b).

<sup>16</sup> In forthcoming work, we discuss the central question of how and when different types of R-expressions may have the property discribed in this article. We show in this work that typological properties of these elements follow from very general principles related to the nature of Binding; principles which also derive conditions B and C of Binding Theory.

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