Attract F, accusative Case-checking and the position of the subject in French Stylistic Inversion with Causative and Perception verbs

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Abstract

A rather well-known aspect of French Stylistic Inversion is the impossibility of having a nominal object either precede or follow the inverted subject. A similar phenomenon is found in cases of French Stylistic Inversion with causative and perception verbs. The nominal subject of the infinitival complement can never appear with the inverted subject of the causative or perception verb. Both phenomena are usually referred to as Case-adjacency problems. In this paper, we will show that these Case-adjacency problems can be accounted for in a simple and straightforward manner under *Attract F* and *Procrastinate*, two constraints on movement formulated in Chomsky's Minimalist Program (Chomsky 1995, chapter 4).

1. Introduction[*]

One way of deriving WH-interrogatives in French is to generate the subject, which must be nominal, in VP-final position. The resulting construction is called *Stylistic Inversion*. The causative verb *faire* (make) and the perception verbs *regarder* (watch), *entendre* (hear), *voir* (see) and *écouter* (listen), and the verb *laisser* (let) displaying the structure of Stylistic Inversion always have the subject follow the infinitive:

Kayne (1972:104)

(1)   Que fera (*Jean) porter (Jean) à sa femme par son domestique?
    What will-do (Jean) bring (Jean) to his wife by his servant?
    ' What will Jean make his servant bring to his wife?'

(2)   Qu'a entendu (*Jean) chanter (Jean)?
    What has heard (Jean) sing (Jean)?
    ' What did Jean hear (someone) sing?'

With respect to the subject of the infinitival complement of causative and perception verbs the following can be observed: Causative verbs always have the subject follow the infinitive. In the case of perception verbs, the subject either precedes or follows the verb:

(3)   a   Jean a fait chanter Marie.
           Jean has made sing Marie

    b   Jean a entendu (Marie) chanter (Marie).
           Jean has heard Marie sing

A remarkable aspect of causative and perception verbs displaying the structure of Stylistic Inversion is that the inverted subject of the matrix clause can never occur with the nominal subject of the infinitival clause:

(4)   a * Qu'a entendu Marie$_{object}$ chanter Jean$_{subject}$?
       b * Qu'a entendu Jean$_{subject}$ Marie$_{object}$ chanter?
       c * Qu'a entendu Marie$_{object}$ Jean$_{subject}$ chanter?
       d * Qu'a entendu chanter Jean$_{subject}$ Marie$_{object}$?
          ' What did Jean hear Marie sing?'

Traditionally, cases like (4a-d) have been explained via the Case adjacency requirement, according to which the Case-assignee must be strictly adjacent to its Case-assigner (cf. Stowell 1981). Under the assumption that both the inverted subject of the matrix clause and the subject of the embedded predicate get their Case from V under government, the ungrammaticality of (4a-d) can be attributed to the circumstance that the rightmost NP is not adjacent to V and therefore it cannot get Case.

Stowell (1981) makes crucial use of the mechanism of Case-assignment under government for the explanation of the ungrammaticality of (4a-d). However, in the Minimalist Program (Chomsky 1995), functional licensing through government has been abandoned in favour of functional licensing under the strict local relationship of SPEC-Head agreement. Therefore, explanations like the one proposed by Stowell cannot be maintained any more.

In this paper, we will show that within the Minimalist Program the ungrammaticality of (4a-d) can straightforwardly be accounted for under *Attract F* and *Procrastinate*, two constraints on movement formulated in Chomsky's Minimalist Program (Chomsky 1995, chapter 4). However, an account of the relation between the inverted subject of causative and perception verbs and the nominal subject of their complement can only be fruitful if we have thorough knowledge of the position of the inverted subject and the structure of the infinitival complement. In section (2), we will take a close look at the position of the inverted subject in French Stylistic Inversion. In section (3), we will investigate the structure of the complement of causative and perception verbs. In section (4), we will tackle the ungrammatical cases illustrated in (4a-d).

2. The position of the inverted subject in French Stylistic Inversion

It is rather generally assumed that the position of the postverbal subject in French Stylistic Inversion corresponds to the base position of the subject inside the VP (Sportiche 1988, Deprez 1990, Friedemann 1991, Zubizarretta 1992, Valois & Dupuis 1992, Roberts 1993, Drijkoningen 1994):
(5)   Quand partira ce garçon?
           When will-leave this boy?
However, there is some controversy about the exact position of the subject inside VP. Some like e.g. Friedemann (1991) and Roberts (1993) believe that it is base generated to the *right* of the VP. However, Valois & Dupuis (1992) argue that base-generation of the subject to the right of VP causes huge problems with respect to the derivation of sentences like the following:

(6)   a   Le prix que présentera Marie à Pierre.*Valois & Dupuis(1992:328)*
            The price that will-present Marie to Pierre.
       b * Le prix que présentera à Pierre Marie.
            The price that will-present to Pierre Marie

Under an approach where the subject is to the right of VP, the unmarked word order is ungrammatical, as illustrated by (6b), whereas the marked word order in (6a) which is the result of extraposition of the PP-complement -a movement for which no clear motivation can be provided- is grammatical. The contrast between (6a) and (6b) follows quite naturally under an analysis where the subject is to the left of VP.

As we have seen in section (1), the subject of Stylistic Inversion with causative and perception verbs appears after the verb of the complement. This could lead to the conclusion that the hypothesis according to which the subject is to the right of VP is more appropriate for the derivation of (1) and (2). This conclusion is incorrect, because the problems for the derivation of cases where the PP-complements follow the subject pointed out above also crop up in cases of Stylistic Inversion with causative and perception verbs:

(7)   Qu'a entendu dire Jean à Marie?
           What has heard say Jean to Marie?

It seems that an analysis where the subject is to the left of VP is also the most plausible way to account for causative and perception verbs displaying the structure of Stylistic Inversion. Therefore, just like Deprez (1990), Zubizarretta (1992) and Valois & Dupuis (1992), we embrace the assumption according to which the subject in French Stylistic Inversion is to the *left* of VP. This claim is also consistent with Kayne's (1994:36) hypothesis that specifiers are universally to the left of their head.

A major consequence is that we do have to assume that the infinitive in examples like (1) and (2) moves to the functional domain of the matrix clause. This immediately raises the question whether this movement is restricted to interrogatives or does it also take place in declaratives as one would desire. In order to find an answer to this question, one needs to analyze the structure of the infinitival complements of the causative and perception verbs.

3. The structure of infinitival complements of causative and perception verbs

With respect to the structure of embedded predicates of perception verbs with preverbal subjects, two proposals can be distinguished. According to the first one, the structure of these constructions is monoclausal (Guéron & Hoekstra 1988). According to the second one, the structure is biclausal (Zubizarretta 1985, Reed 1992). Constructions with causative and perception verbs where the subject of the complement follows the infinitive can have three structures. Besides a biclausal structure (Aissen 1974, Rouveret & Vergnaud 1980, Reed 1992) and a monoclausal structure (Guéron & Hoekstra 1988, Den Dikken

1992, Pijnenburg & Hulk 1989), these constructions are also assigned both structures at the same time (Zubizarretta 1985, Goodall 1984). In this section, we will show on the basis of empirical arguments that constructions with perception verbs having the subject of their complement precede the infinitive are **biclausal**, whereas constructions with causative and perception verbs having the subject of their complement follow the infinitive are **monoclausal**.

The first question one has to answer with respect to infinitival complements where the subject precedes the infinitive is the following: Do they have a functional domain or are they merely consisting of a VP? Whether they have a functional domain can be tested through the distribution of VP-adverbs. According to Pollock (1989:366), VP-adverbs are to the left of VP. Assuming this view to be correct, the subject in the following sentences must be outside the VP:

(8)   Jean a vu Marie [$_{VP'}$ à peine [$_{VP}$ manger.
         Jean has seen Marie hardly eat.

Under the rather generally accepted claim that the accusative Case-feature in French is weak, which we adopt here, we must conclude that the infinitival complement in (8) has a functional domain. Otherwise there is no position for the subject *Marie*. This conclusion raises the following question: How articulated is this functional domain?

In Pollock (1989:366), it is observed that infinitives can appear to the left and to the right of VP-adverbs:

(9)   (Parler) à peine (parler) l'italien après cinq ans d'étude dénote un
         manque de don pour les langues. *Pollock (1989:377,378)*
         (To speak) hardly (to speak) Italian after five years of study
         denotes a lack of gift for languages.

Infinitives in the complements of perception verbs display the same behaviour. They can also move leftward over VP-adverbs:

(10)   Jean a vu Marie (manger) vite (manger).
         Jean has seen Marie eat quickly

Leftward movement of the verb over the VP-adverb implies movement to the functional domain. This means that under normal circumstances the verb has moved to TP. This movement raises the following question: Does TP in (10) host the subject *Marie* as well or is this subject somewhere else? The answer to this question can be found by investigating the possibility of having negation inside the infinitival complement.

It is rather generally accepted that negation has its own projection. In accordance with Pollock (1989:397), we locate this projection in between AgrSP and TP. As shown by the following examples, negation is allowed in the infinitival complement of perception verbs:

(11)   Jean a vu Marie ne pas manger vite.
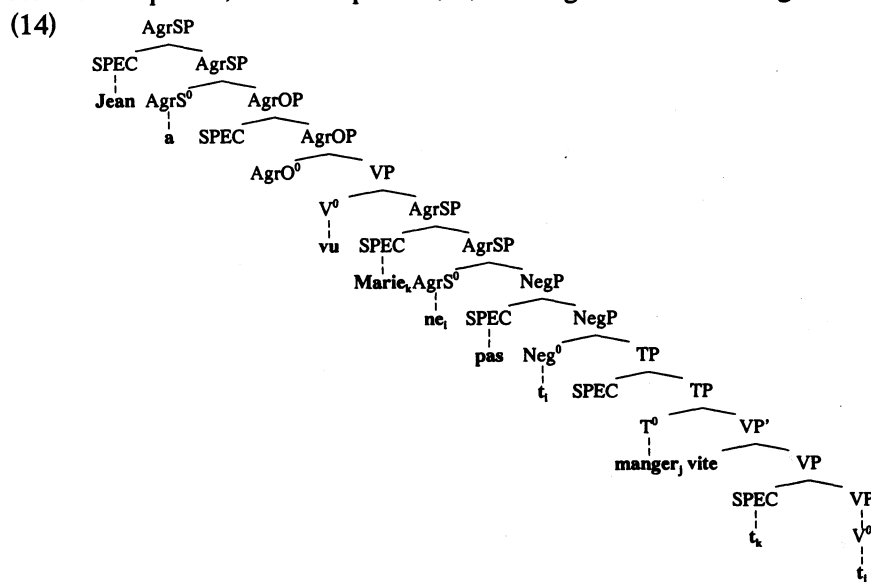   Jean has seen Marie not eat quickly

In the example in (11), the subject precedes negation. This entails that the subject must be in AgrSP in overt syntax. It cannot be in SPEC-AgrOP, since the accusative Case-feature in French is generally considered to be weak, as

we pointed out above. In accordance with Chomsky (1995), we assume that $AgrS^0$ contains a strong D-feature (EPP-feature). The need to check this strong D-feature causes the subject to move overtly.

Up till now, we have established that infinitival complements of perception verbs with preverbal subjects have an AgrSP and everything AgrSP can possibly dominate. The obvious question is whether this complement has a CP as well. The presence of a CP can be determined by verifying whether the infinitival complement can be introduced by a WH-element. In (12) this is quite unproblematic. However, (13) shows that WH-movement is impossible in complements of perception verbs and *laisser*:

(12)   Je lui ai dit à qui donner ce livre. *Pijnenburg & Hulk (1989:265)*
       I told him to whom to give this book.

(13)   Jean a laissé (*quand) Marie partir (quand)?
       Jean has let (when) Marie leave (when)?

Therefore, we conclude that embedded predicates of perception verbs where the subject precedes the verb have a functional domain introduced by AgrSP. As a consequence, the example in (11) is assigned the following structure:

(14)
```
AgrSP
 ├─ SPEC
 │   └─ Jean
 └─ AgrSP
     ├─ AgrS⁰
     │   └─ a
     └─ AgrOP
         ├─ SPEC
         └─ AgrOP
             ├─ AgrO⁰
             └─ VP
                 ├─ V⁰
                 │   └─ vu
                 └─ AgrSP
                     ├─ SPEC
                     │   └─ Marieₖ
                     └─ AgrSP
                         ├─ AgrS⁰
                         │   └─ neₗ
                         └─ NegP
                             ├─ SPEC
                             │   └─ pas
                             └─ NegP
                                 ├─ Neg⁰
                                 │   └─ tₗ
                                 └─ TP
                                     ├─ SPEC
                                     └─ TP
                                         ├─ T⁰
                                         │   └─ mangerⱼ vite
                                         └─ VP'
                                             └─ VP
                                                 ├─ SPEC
                                                 │   └─ tₖ
                                                 └─ VP
                                                     └─ V⁰
                                                         └─ tⱼ
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Embedded predicates of causative and perception verbs with postverbal subjects allow for overt WH-movement:
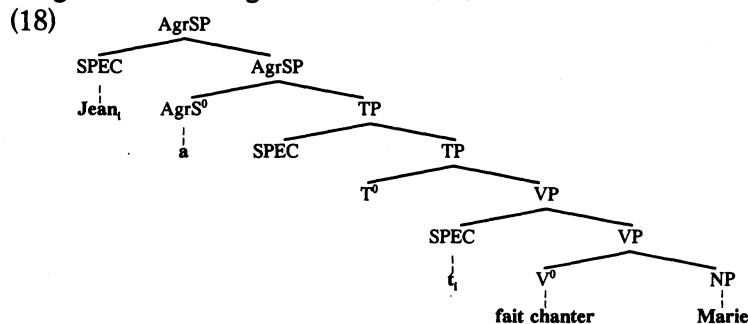
(15)   Je lui ai dit à qui donner ce livre. *Pijnenburg & Hulk (1989:265)*
       I to-him have said to whom give this book

(16)   * Tu as fait à qui donner ce livre?
       You have made to whom give this book?

This implies that they lack a CP. Kayne (1975:231) and Guéron & Hoekstra (1988:52) observe that negation is also impossible:

(17)   * Jean laissera ne pas aller ses enfants à l'école. *Kayne (1975:231)*
       ' Jean will let his children not go to school.'

Notably the impossibility of negation in complements of causative and

perception verbs with a postverbal subject strongly suggests that they lack a functional domain. As a consequence, we adopt the hypothesis according to which constructions containing causative and perception verbs with embedded predicates having the subject follow the verb are monoclausal. More specifically, we assume, following Zubizarretta (1985), that the embedded predicate is part of the VP of the matrix clause. This VP is headed by a 'complex verb' consisting of the infinitive and the causative or perception verb. Again following Zubizarretta, we assume that this complex verb internalizes the external argument of the infinitive as an object. As a result, we get the following structure for (3a):

(18)

```
                AgrSP
          _____|_____
        SPEC         AgrSP
         |        _____|_____
       Jeanᵢ    AgrS⁰        TP
         |     ___|____    ___|___
         a   SPEC      TP
                  _____|_____
                 T⁰          VP
                        _____|_____
                      SPEC         VP
                       |      _____|_____
                       tᵢ    V⁰            NP
                             |             |
                        fait chanter     Marie
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Having determined the structure of infinitival complements of perception verbs with preverbal subjects and the structure of infinitival complements of causative and perception verbs with postverbal subjects, we return to the cases of Stylistic Inversion with causative and perception verbs. As shown by the contrast between (1) and (2) on the one hand and (4a-d) on the other, Stylistic Inversion is only allowed with causative and perception verbs having an embedded predicate which lacks a subject. The immediate effect of this distributional restriction is that these cases can never be generated in the structure illustrated in (14). The reason is that the strong D-feature of AgrS⁰ will remain unchecked causing the derivation to crash, contrary to fact. The only possible alternative is the structure illustrated in (18) corresponding to cases where the matrix verb and the infinitive form a complex verb.

In section (2), we made the assumption that the subject of Stylistic Inversion is to the *left* of VP. We already pointed out that the consequence of this assumption is that the infinitive in (1) and (2) has to move to a position in the functional domain. The question that we have to ask ourselves now is whether the infinitive also moves in declaratives. Above, we assumed that the matrix verb and the infinitive start as a unit. It is very likely that this unit will be split up in the course the derivation. The question, however, is when this 'split-up' will take place.

If we look at causatives in a perfect tense, we see that they can be separated from the infinitive by adverbs:

(19)   Marie a fait complètement rater Jean. *Reed (1992:167)*
         Marie has made completely fail Jean.

If in these clauses the adverb is to the left of VP, then the causative and

infinitive are already split up inside the VP. However, one could wonder whether these adverbs are really to the left of VP. There might be other positions as well to which VP-adverbs can adjoin. Suppose that Pollock (1989) is right in assuming that adverbs are in the periphery of VP, never inside VP. From this assumption, it follows that in the example in (19) the participle must be in the functional domain. If the participle is somewhere in the functional domain, then the adverb *complètement* in (20) must be in a position different from the position immediately to the left of VP:

(20)   Marie a complètement fait rater Jean. *Reed (1992:167)*
          Marie has completely made fail Jean

Since it appears that VP-adverbs are not restricted to the position immediately to the left of VP, one could wonder whether the adverb *complètement* in (19) is really to the left of VP. We know that the subject *Jean* of the infinitival complement is still inside VP given the weak accusative Case-feature of the causative verb *faire*. Therefore, in order to get more clarity about the position of the adverb which precedes the infinitive, we need to verify whether the adverb can precede the subject of the infinitival complement. As shown by the following example, this appears to be the case:

(21)   Jean a vu manger vite ?Marie/MARIE (o.k. with stress on Marie)
          Jean has seen eat quickly Marie

We can derive two conclusions from this observation. The first conclusion is that the adverb in (19) is <u>not</u> in the position to the left of VP, but somewhere higher up in the structural hierarchy. The second and more important conclusion is that the verbal unit consisting of the causative/perception verb and the infinitive is split up in the functional domain in declaratives.

   Notably the latter conclusion is important for the analysis of Stylistic Inversion with causatives and perception verbs under an approach where the postverbal subject is base-generated to the left of VP, because it explains why the infinitive obligatorily precedes the subject

   In this section, we have proposed a derivational system for the grammatical cases of Stylistic Inversion with causative and perception verbs. Let us now see whether this system can rule out certain ungrammatical cases.

4. Accusative Case-checking in Stylistic Inversion and Attract F

As shown by the examples in (4a-d), cases of Stylistic Inversion with causative and perception verbs cannot have the subject of the embedded predicate precede or follow the inverted subject. In Section (2), we made the assumption that the subject of Stylistic Inversion is generated to the *left* of VP. This entails that in (4a) and in (4c) the object must have undergone overt movement. As the accusative Case-feature is weak in French, this movement is premature and the examples in (4a) and (4c) immediately fall out as violations of *Procrastinate*.

   The ungrammatical cases illustrated in (4b) and (4d) can be accounted for

under the principle of *Attract F* which is defined as follows:

Attract F (Chomsky 1995:297)

(22)   K *attracts* F if F is the closest feature that can enter into a checking relation with a sublabel of K.

K is a functional head which contains a feature which needs to be checked by a feature F on a category. One way of checking the feature on head K is by moving a similar feature F on a category in the VP-domain to K. However, there can be more than one eligible candidate for checking a feature of head K. Suppose we have two eligible candidates. Then, head K will always attract the closest eligible candidate. However, as pointed out by Chomsky (1995), if the closest candidate is in the domain of a head-chain established by verb movement between the projection hosting this candidate and the projection containing head K, then both candidates are considered to be equidistant with respect to head K.

Let us see how *Attract F* works in the derivation of the sentences in (4b) and (4d). As pointed out earlier, $AgrO^0$ checks the accusative Case-feature of the subject of the embedded predicate in *covert* syntax. On the basis of the immobility of the inverted subject of the main clause we assume that the nominative Case-feature is checked in *covert* syntax as well.[1] The effect is that, besides the subject *Marie* of the infinitival complement, the inverted subject *Jean* of the matrix clause is another potential candidate for checking the accusative Case-feature. Under normal circumstances, $AgrO^0$ will attract the subject of the matrix clause which is the closest potential candidate for checking the accusative Case-feature. However, if this subject is part of the head-chain established between VP and AgrOP as the result of movement of the verb, then the subject of the embedded predicate becomes equidistant from $AgrO^0$. Following Emonds (1978) and Pollock (1989), we assume that in French the verb moves to $AgrS^0$ in *overt* syntax. This entails that the head-chain between the VP hosting the postverbal subject and AgrOP containing the head which checks accusative Case does not exist any more in *covert* syntax. As a consequence, the subject of the embedded predicate and the inverted subject of the matrix clause in (4b) and (4d) cannot be considered as equidistant from $AgrO^0$. Therefore, it will always be the nominative Case-feature of the inverted subject which moves to $AgrO^0$ in constructions like (4b) and (4d). The checking relation between the nominative Case-feature of the inverted subject and the accusative Case-feature of $AgrO^0$ leads to a *mismatch*. As a consequence of this mismatch, the derivation is *cancelled*. Hence the ungrammaticality of (4b) and (4d).

5. Conclusion

In French Stylistic Inversion with causative and perception verbs, the subject of the infinitival complement cannot precede or follow the inverted subject of the main clause. In this paper, this phenomenon has been explained under *Attract F*, *Procrastinate,* and the following assumptions:

a. French verbs move in <u>overt</u> syntax (Emonds 1978, Pollock 1989).
b. The subject of French Stylistic Inversion is generated to the *left* of VP (Deprez 1988,1990, Valois & Dupuis 1992, Zubizarretta 1992, Kayne 1994, Drijkoningen 1994, de Wind 1996)
c. The <u>nominative</u> Case-feature in French can be weak (Drijkoningen 1994, de Wind 1996).
d. The <u>accusative</u> Case-feature in French is weak.

We have shown that within the derivational system consisting of these assumptions the ungrammaticality of cases of Stylistic Inversion with causative and perception verbs where the subject of the complement precedes the inverted subject of the matrix clause can be attributed to a violation of *Procrastinate* caused by premature movement of the subject of the complement to SPEC-AgrOP^0 of the matrix clause. In addition, we have shown that the ungrammaticality of cases of Stylistic Inversion with causative and perception verbs where the subject of the infinitival complement follows the inverted subject of the main clause is due to the circumstance that under *Attract F* AgrO^0 attracts the Case-feature of the subject of the matrix clause. This movement leads to *cancellation* of the derivation as a result of *mismatch* between the accusative Case-feature of AgrO^0 and the nominative Case-feature it has attracted.

Notes

1. See Drijkoningen (1994) and de Wind (1996) for a detailed analysis of nominative Case-checking in French Stylistic Inversion.

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