ON ADJECTIVE PLACEMENT IN ROMANCE AND GERMANIC EVENT NOMINALS*

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0. Introduction

In recent years a number of studies have pursued the idea that a significant parallelism exists between the structure of clauses and that of nominal arguments. In particular, both nouns and lexical verbs are taken to be introduced by a series of functional categories whose succession and selectional properties are constrained by principles of UG.

In this framework, in which a correspondence has been established between CP/DP and VP/NP the problem arises of where APs are located within the nominal structure: in fact, unlike adverbs, which have already been subjected to a restrictive analysis assigning them to different categories which occupy different positions in the clausal structure, adjectives are still often treated in an unprincipled way as elements right- or left- adjoined to nominal projections, with a huge number of superficial exceptions treated as lexical idiosyncrasies. In this work, on the contrary, I will show that regularities comparable to those found in the behaviour of adverbs can be detected in the distribution of adjectives as well, and that these support the idea, current in the '70s, that adverbs and adjectives are contextual variants of the same abstract category. To capture such regularities I will propose that adjectives should be treated essentially in the same

way as adverbs: a number of different subcategories will be distinguished, which will be assigned fixed positions inside the X-bar structure of DPs; each subcategory will be able to appear only in the Spec of a specified functional projection. Such an account allows us to derive the restrictions on the order and the cooccurrence of adjectives from the independent principles of UG governing the sequence of the functional categories introducing the head noun.

1. The Romance/Germanic asymmetry.

A theory of DPs arguing for a strict parallelism between the structure of noun phrases and that of clauses has to deal with an immediate problem: the asymmetry with respect to the placement of adjectives and subjects of NPs in Romance and Germanic. In fact, as the clausal structure is assumed to be the same crosslinguistically, we would expect the same generalization to hold for the DP structure as well.

Nonetheless, it is a well-known fact that all Germanic languages consistently place adjectives on the left of the head N, regardless of their type, while the behaviour of Romance languages is less homogenous: some adjectives precede the head noun, others follow it, others can be found in both positions (sometimes changing their meaning); moreover, the various Romance languages differ with respect to the choice of adjectives which are assigned to each one of the groups above. As for subjects, all Germanic languages allow (and often require) the external argument, bearing a morphological genitive marker, to appear in pre-nominal position; in Romance, on the other hand, both the external argument and the internal one surface on the right of N, and are introduced by a preposition.[1]

This asymmetry is susceptible of two possible analyses: one possibility is to postulate that Germanic and Romance languages have a different base structure, with adjectives and external arguments generated on the left of N in Germanic and on the right of N in Romance. This is the approach adopted in Giorgi & Longobardi (1991) and Lamarche (1991) among others. The other possibility is to assume that both in Germanic and in Romance adjectives and external arguments are generated on the left of the head, and that in Romance N is raised to a higher functional head across them. This is the analysis originally suggested in Cinque (1990) and subsequently developed in various works (Crisma (1990), Bernstein (1991, 1993), Valois (1991a, 1991b), Cinque (1993) among others). In

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1   This is not true when the argument is a possessive or an argument adjective. See below section 1.1. and fn. 30.

the next section I will briefly compare the two hypotheses, referring in particular to Giorgi & Longobardi (1991) and to Cinque (1990, 1993).

1.1. Head-movement approach vs. Head-subject parameter

Examining the distribution of arguments in the noun phrase, Giorgi & Longobardi (1991) note that the Romance languages and the Germanic ones systematically differ: while in the Germanic languages the subject precedes the head and the object follows it, in the Romance languages the external argument follows the complement, and both arguments are found on the right of the head:

(1)   a.   Rembrandt's portrait of Aristotle
      b.   Il ritratto di Aristotele di Rembrandt

They also show that there is asymmetric c-command among the arguments of the head N, with the internal argument always lower than the external one,[2] independently of their linear order.

On the basis of these considerations, they propose that the position of arguments inside a maximal projection is to be determined not by a simple 'Head first/last' parameter but by two distinct parameters, the Head-Complement and the Head-Subject parameters. Their proposal is that the complements of the nouns are universally generated under N' in a position "sister" of N, and that the Head-complement parameter determine their relative order. The same happens with external arguments, which are generated under N" in a position "sister" of N', and whose position is constrained by the Head-subject parameter. In Romance languages the Head-Complement and the Head-Subject parameters are set in the same direction, with both the subject and the complement generated to the right of the head noun. Germanic sets the Head-Complement parameter on the right and the Head-Subject parameter on the left. The structures they propose for the noun phrase in the two groups of languages are reported in (2)a. and (2)b. below, where b indicates "internal arguments" and a "external semantic functions".[3] The latter definition includes not only subjects or R-related argu-

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2   I leave out the problem of the position occupied by the possessor, which, according to Giorgi & Longobardi (1991) is higher than that of the subject.

3   It is important to note that, according to this proposal, there is a crucial difference between Romance and Germanic, namely that SPEC position is basically empty in Romance and filled by the subject of NP in Germanic. This has several effects on

ments, but also APs, which cannot be considered internal arguments for they are not subcategorized by the head.
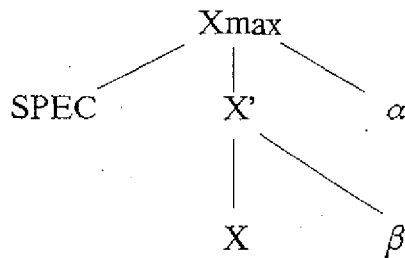
(2)   a.: Romance   b.: Germanic
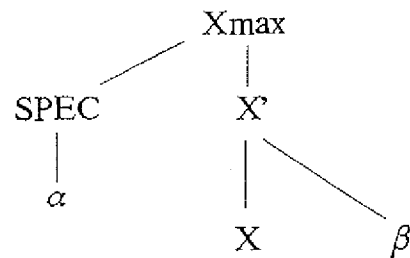
This hypothesis makes the following prediction: as Romance base order is NOS, we would expect that the arguments of N will always be allowed to surface in this order, with the possibility of deriving via extraposition the order NSO. As Giorgi & Longobardi note, however, this expectation is not totally confirmed by the facts: when the subject of the noun phrase is expressed by an argument adjective, the only possible order is NSO (see Giorgi & Longobardi (1991), Cinque (1990, 1993)):

(3)   a.   L' invasione tedesca dell' Austria
        b.   *L' invasione dell' Austria tedesca

The same effect can be observed with attributive adjectives: Romance attributive APs can either precede the head noun or appear between N and its complement, while the order N-compl-AP is unattested:[4]

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control, binding and other phenomena involving the arguments in the noun phrase, which would otherwise remain unexplained (see Giorgi & Longobardi (1991) for details). As far as I know, no one of the subsequent works assuming a parametrical rule of N-raising deals with these effects (but see Longobardi (forthcoming)).

4   With normal intonation. See Cinque (1993) for discussion of the order with an intonational break.

(4)   a.   La loro brutale aggressione all' Albania

     b.   La loro aggressione brutale all' Albania

     c.   *La loro aggressione all' Albania brutale

(examples from Cinque (1993))

This is also unexpected, given that the Head-subject parameter is supposed to determine also the position of attributive APs. In order to account for these facts, Giorgi & Longobardi postulate a surface condition which forces adjectives to be adjacent to the head N they modify; this condition is satisfied by an obligatory extrapositon of the object (see Giorgi & Longobardi (1991), ch 3 fn. 19).[5] Sentence (4)a., on the other hand, is derivable by an optional raising of the adjective to a prenominal position. It is interesting to note that, according to this analysis, the only two possible sequences are derived via movement, while the combination reflecting the base order (see (2)a.) is ill-formed.

On the basis of this evidence, Cinque (1990, 1993) takes a different approach: he assumes that both Romance and Germanic noun phrases have the same base structure, namely (2)b., with the complement generated on the right of the head N and the external argument occupying the Spec position, always on the left. Then he derives the order N-AP[6]-compl. in Romance via N-movement to a higher projection, which, paralleling what has been proposed for other languages, could be a projection of AGR or nominal INFL (see Szabolcsi (1987, 1989)). The structure he proposes for DPs is the following, where α indicates the external argument, β the internal one and γ the attributive AP:[7]

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5   Note that in no case can the NSO order of the example (3)a. be derived moving the argument adjective, for the latter must always stay in its base position, as explained in Giorgi & Longobardi (1990). In fact, though argument adjectives can receive a θ-role, they are not capable of binding an anaphoric expression:

(i)*Le opinioni americane$_i$ su se stessi$_i$

Therefore, if moved, they could not bind an anaphoric trace in their base position.

This property of argument adjectives also explains why they can never express the internal θ-role of the noun phrase: in this case they would be generated under N', but they would not be able to realize agreement because they could not move to a Spec position.

6   Argument or attributive.

7   FP is a generic label for "Functional Phrase".

(5)

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                    DP
                   /  \
              SPEC     D'
                      /  \
                     D    FP
                         /  \
                     SPEC    F'
                            /  \
                           F    ???
                           Ni  /   \
                              γ     NP
                                   /  \
                               SPEC    N  \
                                |      |   \
                                α      ti   β
                               Rom.
                              Germ.
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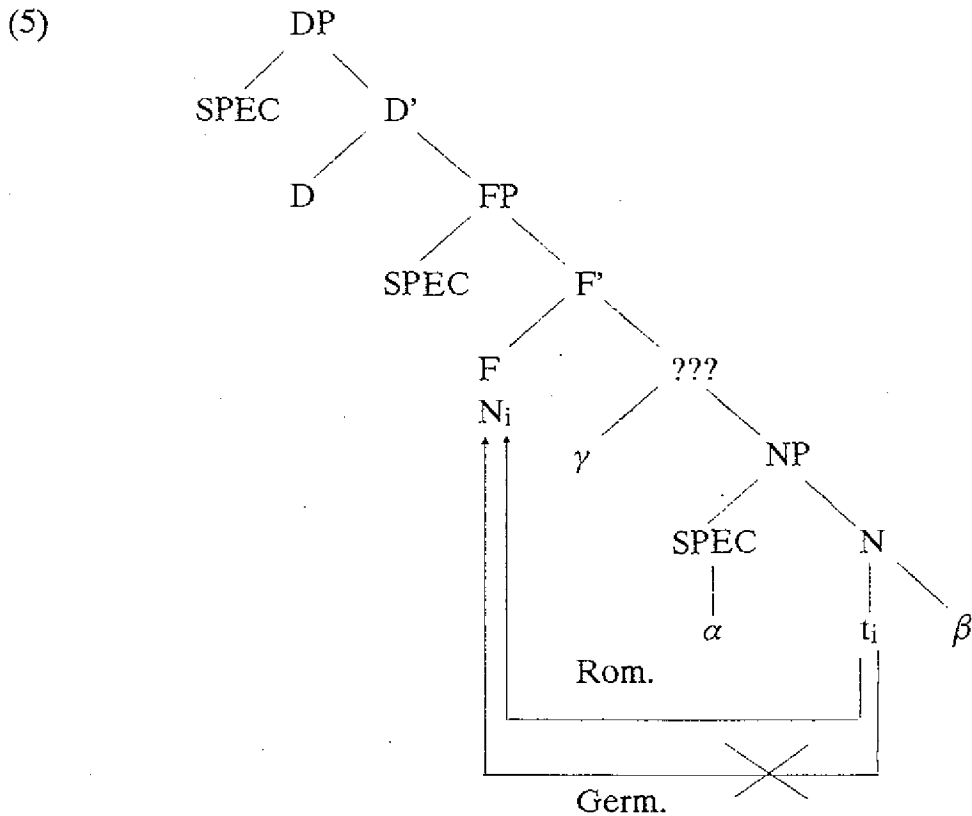
This hypothesis offers several advantages:
(i) it assignes to Germanic and Romance the same base structure for noun phrases; the difference of surface order between the two groups of languages can be ascribed to a parametrical rule of N-movement, which is obligatory in Romance and absent in Germanic;[8]

(ii) an obligatory rule of object shift to the right sounds rather stipulatory, if it is true that rightward movement rules are usually marked and generally subject to particular conditions, like the "heaviness" of the constituent moved, for example. The parametrical N-movement rule, on the other hand, qualifies as a general, independently motivated head-movement rule;

(iii) it allows argument adjectives to be assigned to a SPEC position, where they can receive an abstract case via SPEC-Head agreement: this is particularly

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8   At least in syntax; it is possible that N-raising is obligatory at the syntactic level for some languages, and can be delayed till LF for others. See Longobardi (1993), Cinque (1993).

important because argument adjectives, as they bear a θ-role, need to receive a case at S-structure in order to be visible at LF;

(iv) it provides an immediate explanation for the Consistency effects with respect to the distribution of adjectives noted in Cinque (1990):

(6) a. Gli amici antipatici di Gianni

   b. *Gli amici antipatici a Maria di Gianni

   c. Gli amici di Gianni antipatici a Maria

These data can follow from the Consistency Principle only assuming that postnominal APs are generated on a left branch:

(7) *Consistency Principle:*

An XP immediately expanding a lexical[9] category on the non-recursive side is directionally consistent in every projection.

(Giorgi & Longobardi (1991) p. 112)

(6)b is ill-formed because the AP occupying a left branch has been expanded to the right. The grammaticality of the sentence is restored in (6)c via AP-shift.

The discussion presented so far does not take a stand about the exact position occupied by attributive APs in the structure: in principle they could either be adjoined to NP or to some higher functional projection, or occupy some Spec position.[10] The issue will be addressed in the next sections, where some evidence will be presented that should help to decide between the two alternatives (see also Cinque (1993)).

I will focus now on the constraints affecting the placement of adjectives and their cooccurrence restrictions, in order to determine their structural position.

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9   Note that in the formulation given the Consistency Principle is effective only in case the left branching of a *lexical* category is expanded. This restriction was meant in order to allow full XPs expanding to the right to appear in Spec IP and Spec CP. It is clear that, given that the type and number of functional projections seems to be much higher, some modification is needed in order to exclude all and only ungrammatical cases.

10 Some authors have argued that prenominal adjectives in Romance should be analyzed as heads. I will not address directly this issue. See Bernstein (1993) for a specific proposal and Cinque (1993) for discussion.

1.2. Adjective placement in Romance

Traditional descriptive grammars generally assume that the unmarked position for Romance adjectives is postnominal, though they allow for some adjectives to be stylistically preposed.[11] The latter option is generally assumed to be motivated on semantic grounds, for, while postnominal adjectives seem to have a "restrictive" function, prenominal adjectives are generally reported to be "unnecessary" and to have essentially an "ornamental" function. Moreover, "adjective preposing" seems to be governed by substantially arbitrary lexical idiosyncrasies, for there are some adjectives that in no case can precede the noun.[12] Such an account leaves several issues open:

(i) it predicts that any adjective will be able to surface in postnominal position in Romance, but this is certainly not true:

(8)   a.   L' ultima pubblicazione di Gianni...

     b.   *La pubblicazione ultima di Gianni...

(ii) it has no explanation for the fact that some adjectives change their meaning according to the position they occupy (prenominal or postnominal):

(9)   a.   Le numerose famiglie che hanno aderito a questa iniziativa...

     b   Le famiglie numerose che hanno aderito a questa iniziativa...

(iii)it is factually inadequate since it is not true that prenominal adjectives have only an ornamental function: sometimes they bring an essential contribution to identify the referent of the DP. For example, (10) a. and b. below do not necessarily denote the same individual:

(10)   a.   il probabile vincitore di queste elezioni...

      b.   il vincitore di queste elezioni...

(iv) it has no principled explanation for the restrictions on the cooccurrence and relative order of adjectives in prenominal position.[13]

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11   This description fits most of the Romance languages, though there are some peripheral varieties that exhibit a different behaviour: Walloon, Sardinian and Rumanian, for example (see Bernstein (1991) (1993)).

12   This approach to prenominal adjectives in Romance is essentially adopted in several recent generative works; see Giorgi & Longobardi (1991), Valois (1991 a,b), Zamparelli (1993).

13   Of these restrictions I will give several examples in the next sections.

The proposal by Cinque (1990) presented in (7) above is clearly compatible with the description of adjective placement in Romance found in normative grammars, for it is able to capture the generalization that most adjectives surface postnominally in Romance, still generating them on a left branch.

This hypothesis, however, does not help us to determine the base position of those adjectives which seem to be able to appear before the noun, whether they are generated prenominally or raised there, nor to find an answer to problems (i), (ii) and (iv) above.

First of all, we need to establish whether there is only one structural position accessible to adjectives, namely the one marked with y in (7), or more than one. If we assume that there is only one position in which adjectives can be generated, we have to admit that successive adjunctions are allowed to this position in order to account for the sequences of non-coordinated adjectives, but we also have to build up a theory which excludes all ungrammatical combinations. Still, such an account would not make any prediction about adjective preposing in Romance, and we would need to stipulate some *ad hoc* condition. The other possibility is to assume that there are different structural positions in which selected adjectives can be generated. The restrictions on number and order of cooccurring adjectives would then naturally follow. Such an account would also predict all possible cases of prenominal adjectives in Romance: instead of building up a rule of adjective-preposing, one can simply assume that adjectives always occupy their base position: thus adjectives which must obligatorily appear on the right of N are generated in a low position, which is always crossed by the raised noun, while those adjectives which always surface prenominally are generated in a higher position, that in no case is crossed by the noun.

The latter alternative looks more appealing, provided that we devise out some criterion that will allow us to define different subcategories of adjectives, and assign each subcategory a specific position in the structure.

2. Attributive adjectives: classes and structural positions

Given the background assumption taken above that a substantial uniformity exists between the clausal structure and the nominal one, a promising approach to a theory of adjectives is immediately apparent: adjectives can be regarded as the nominal counterparts of adverbs in clauses, and therefore their classification and distributional properties will be susceptible to an analysis along the same lines.[14] This move is not simply motivated by the evident lexical correspondence

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14   It is clear that such an approach will force us to restrict our attention to event nomi-

between adverbs and adjectives. It also allows us to reinforce the already established parallelism between the structure of clauses and that of noun phrases. In fact, as in the clausal structure the asymmetry between Romance and Germanic with respect to adverb placing is accounted for by assuming a parametrical rule of V-raising independently motivated, in the nominal structure too a parametrical rule of N-raising will account for the superficial difference in the distribution of adjectives in the two groups of languages.[15]

2.1. Adverbs

2.1.1. Types of adverbs

It should be noted that the puzzling behaviour of Romance adjectives is not an isolated case. Rather, it closely resembles that of adverbs: there are adverbs that can surface only in a position high in the structure, never crossed by the verb, others appear preverbally in English but postverbally in the Romance languages, others surface only in a right peripheral position; moreover, as we will see directly, there are adverbs that can occupy different positions, sometimes changing their meaning. A detailed description of these facts is found in Jackendoff (1972). He distinguished six classes of adverbs, according to the position they occupy in the sentential structure:

(a) adverbs which can appear in all three positions accessible to adverbs in the sentence (i.e. initial, auxiliary[16] and final position), changing meaning accordingly: *cleverly, clumsily, carefully, carelessly, happily, truthfully, specifically, frankly*;

(11) a. Clumsily (,) John dropped his cup of coffee
Goffamente (,) Gianni rovesciò il suo caffè

b. John clumsily dropped his cup of coffee
Gianni rovesciò goffamente il suo caffè

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nals. We will see later to what extent our proposed analysis can be adapted to other types of nominals too.

15 A similar approach implies that the position of adjectives in the structure is fixed. This treatment of adjectives is analogous to the treatment of adverbs in Pollock (1989).

16 Note that the position called by Jackendoff "auxiliary position" is preverbal in English but postverbal in Italian: Italian lexical verbs are in fact raised to AGR (see Pollock (1989)), so they pass over the adverb.

    c. John dropped his cup of coffee clumsily
         Gianni rovesció il suo caffè goffamente

(b) adverbs which can appear in all three positions, without changing their meaning: *quickly, slowly, reluctantly, sadly, quietly, indolently, frequently, immediately, often, soon;*

(12) a. Quickly (,) John dropped his cup of coffee
         Velocemente(,) Gianni rovesció il suo caffè
     b. John quickly dropped his cup of coffee
         Gianni rovesció velocemente il suo caffè
     c. John dropped his cup of coffee quickly
         Gianni rovesció il suo calfè velocemente

(c) adverbs which can appear in initial and auxiliary position: *evidently, probably, unbelievably, certainly, understandably, unfortunately, naturally, apparently;*

(13) a. Evidently Horatio has lost his mind
         Evidentemente Orazio ha perso la testa
     b. Horatio has evidently lost his mind
         Orazio ha evidentemente perso la testa
     c. *Horatio has lost his mind evidently
         *Orazio ha perso la testa evidentemente

(d) adverbs which can appear in auxiliary and final position: *completely, easily, purposefully, totally, altoghether, handily, badly, mortally, tremendously;*

(14) a. *Completely Stanley ate his Wheaties
         *Completamente Stanley ha mangiato i Wheaties
     b. Stanley completely ate his Wheaties
         Stanley ha completamente mangiato i Wheaties
     c. Stanley ate his Wheaties completely
         Stanley ha mangiato i Wheaties completamente

(e) adverbs which can appear only in final position, usually non-*ly* adverbs, considered by Jackendoff (1972) intransitive prepositions: *more, less, before, early, fast, home, slow, terribly, lengthwise, indoors, downstairs;*

(15) a. *Well Sam did his work
         *Bene Sam ha fatto il suo lavoro
     b. *Sam well did his work
         *Sam ha bene fatto il suo lavoro

c. Sam did his work well

?? Sam ha fatto il suo lavoro bene

Sam ha fatto bene il suo lavoro

Final position is characteristic also of "strictly subcategorized" adverbs, i.e. of adverbs occurring with verbs as obligatorily selected phrases, otherwise the sentence is meaningless:

(16) a. Steve dresses elegantly

b. *Steve dresses

(17) a. Gianni si comporta educatamente

b. *Gianni si comporta

(f) adverbs which can appear only in auxiliary position, the "*merely* class": *merely, truly, simply, utterly, virtually, hardly, scarcely*.

(18) a. *Merely Albert is being a fool

?? Semplicemente Alberto si sta comportando da scemo

b. Albert is merely being a fool

Alberto si sta semplicemente comportando da scemo

c. *Albert is being a fool merely

*Alberto si sta comportando da scemo semplicemente

Jackendoff noted that there is a strict connection between the position occupied by adverbs and their interpretation. This is particularly evident with adverbs of class (a): (11)a expresses a quality ascribed to the subject, while (11)c indicates the manner in which the action expressed by the verb was accomplished. (11)b is ambiguous. Jackendoff names the first reading "subject-oriented" and the second one "manner". There is a third type of reading which is characteristic of adverbs occurring in initial position, which express the speaker's opinion about a certain event; Jackendoff labels it "speaker-oriented".

The fact that the position in which an adverb can surface is determined by its meaning, is confirmed by the behaviour of adverbs of the classes (c) and (d): adverbs of class (c) are semantically incompatible with a manner interpretation, and for this reason they can never appear in final position, while adverbs of class (d) can not be interpreted as speaker- or subject-oriented adverbs and, as a consequence, they are excluded from the initial position.

2.1.2. Position of adverbs

In order to assign each of the adverbial categories above to a specific position in the structure, we have to refer to more recent studies, assuming binary branching and a complex functional structure.

One proposal for the position of adverbs is formulated by Belletti (1990). Belletti, following Pollock (1989), assumes that the node IP is in fact made up of at least two maximal projections, AgrP and TP. Then she distinguishes two classes of adverbs, "sentence" adverbs, corresponding to speaker- and subject-oriented adverbs, and "lower" adverbs, corresponding to manner and strictly final adverbs. The former class is generated always adjoined to the maximal projection of the highest inflectional functional category, Agr(S), even when a speaker-oriented adverb follows the sentential subject. According to Belletti, in fact, these cases can be explained admitting that the subject has moved to a TOP position, crossing the adverb.

"Lower" adverbs are generated in a position left- or right- adjoined to VP. In Romance languages, the position occupied by a lower adverb is always crossed by the raised verb:

(19) a. Gianni sbaglia completamente

      b. *Gianni completamente sbaglia

The problem with "lower" adverbs is that sometimes, with complex tenses, they seem to be able to appear higher in the structure:

(20) a. Gianni ha sbagliato completamente

      b. Gianni ha completamente sbagliato

To deal with these data, Belletti proposes that another position in the structure may be accessible to "lower" adverbs; as these effects are observable only with complex tenses, she proposes that this type of adverbs can be also adjoined to a participial AgrP or to TP.

As for the *merely* class, Belletti argues that it is assigned an independent position, higher than the one occupied by "lower" adverbs. This can be seen on the basis of their cooccurrence:

(21) a. Hanno semplicemente completamente distrutto la casa.

      b. *Hanno completamente semplicemente distrutto la casa.

More recently, Cinque (forthcoming) has proposed a much more articulated structure of functional projections. He distinguishes several classes of adverbs, each occupying the Spec position of a functional projection and bearing a semantical relation with its head.

In such a framework, the fact that some adverbs can surface both before and after the verb in Romance languages is accounted for assuming that the past participle raises obligatorily up to a certain point, and optionally higher. Postulating that the number of obligatory and optional steps allows for parametrical variation, he derives many cross-linguistic asymmetries with respect to the distribution of adverbs.

Apparent cases of optional adverb placing (as in (20) above) need some clarification: in Cinque's system a different base position should correspond to a different interpretation of the adverb, which, at a first sight, doesn't seem true for the relevant examples. The other possibility is to assume that, as past participle raising allows for some optional steps, the adverbs of the *completamente*-class (a class of manner adverbs) can be optionally crossed by the raised participle. As Cinque shows, the latter account is not the correct one. In fact, manner adverbs which belong to the subcategorization frame of a verb can never precede the past participle. Compare:

(22) a. Gianni ha declinato l' invito
      b. Gianni ha declinato gentilmente l' invito
      c. Gianni ha gentilmente declinato l' invito

(23) a. *Gianni ha trattato i miei genitori
      b. Gianni ha trattato gentilmente i miei genitori
      c. *Gianni ha gentilmente trattato i miei genitori

What these examples seem to suggest is that there are actually two different positions accessible to manner adverbs, and that only one of them can satisfy the subcategorization requirements of the verb. Under this perspective, examples like (20) and (22) above should be reconsidered, in order to see whether the position occupied by the adverb has really no influence on the meaning of the whole sentence.

Summing up, we have seen that adverbs can be divided into several classes, and that each class of adverbs is generated in a specific position in the structure. Some adverbs are ambiguously assigned to different classes, and can therefore be generated in different structural positions.

2.2. Speaker-oriented and manner adjectives

What clearly emerges from the evidence above is that the position occupied by adverbs is in part responsible for their interpretation. The possibility of finding an adverb in a certain position will therefore be predictable on the basis of its semantical compatibility with the interpretation assigned to that position.

The problem arises now of whether it is possible to detect similar effects in the distribution of adjectives too. First of all, we should distinguish speaker- and subject- oriented adjectives, manner adjectives, and individuate a class of adjecti-

ves corresponding to Jackendoff's *merely* class.[17]Then we should try to determine whether they occupy different positions in the structure and whether there is a link between the position they occupy and their interpretation.[18]

One possible way to test these expectations is to look for examples of adjectives which can be interpreted as speaker-oriented or as manner adjectives depending on the position they occupy; in other words, we are looking for a class of adjectives in all similar to Jackendoff's class (a) of adverbs. In this respect, Germanic languages do not help much. In fact, as adjectives in Germanic always surface prenominally, it is impossible to determine at which level their are attached, unless there is more than one.[19] Romance languages, on the other hand, provide some means of signalling the level of attachment of adjectives: a low adjective, in fact, will be invariably crossed over by the raised N, and will therefore surface postnominally. Prenominal adjectives, on the other hand, can be thought to occupy some position higher than the one reached by the head noun. What we expect, then, is that in Romance an adjective which is compatible both with a speaker-oriented and a manner interpretation will be able to appear both before and after the noun, receiving the former interpretation when preceding the noun, and the latter when following it. This is indeed what we find:

(24)   a   L' evidente provocazione di Gianni...(= it is evident that Gianni is provoking somebody)

        b   La provocazione evidente di Gianni...(= Gianni is provoking somebody in a manifest way)

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17   Adverbs of the class (e) (non *-ly* adverbs) do not seem to have a lexically related adjectival counterpart. As for subcategorized adverbs, nothing comparable is found in the nominal system. In fact it seems that adjectives are never obligatorily selected in the same sense as corresponding adverbs can be. Compare:

(i) Gianni si comporta *(gentilmente)

(ii) Il comportamento di Gianni

This is probably not due to chance but it is likely to be related to other well-known differences in the government and selection abilities of nouns and verbs (cf. Kayne (1981), Grimshaw (1990)).

18   A similar proposal was independently formulated in Valois (1991a, 1991b). His analysis, however, differs significantly from the one I have proposed in Crisma (1990) and am proposing here; some problems with it will be addressed in the next sections (cf. below *passim*).

19   Cooccurrence restrictions and relative order will be tested below.

(25) a Il felice atteggiamento assunto da Gianni durante tutta la durata del
processo.. (= the speaker approves of Gianni's behaviour)

  b L' atteggiamento felice assunto da Gianni durante tutta la durata del
processo...(= Gianni put on a happy pose)

The data presented above indicate that it is indeed possible to distinguish two
different classes of adjectives, and that each class is likely to occupy a different
structural position. We need therefore to build up a DP structure with at least
two distinct positions capable of hosting attributive APs, one for speaker-
oriented adjectives and one for manner adjectives; in Romance, the noun raised
to a functional head will be able to cross over the lower position, but not the
higher one, as shown in the phrase marker below:

(26)
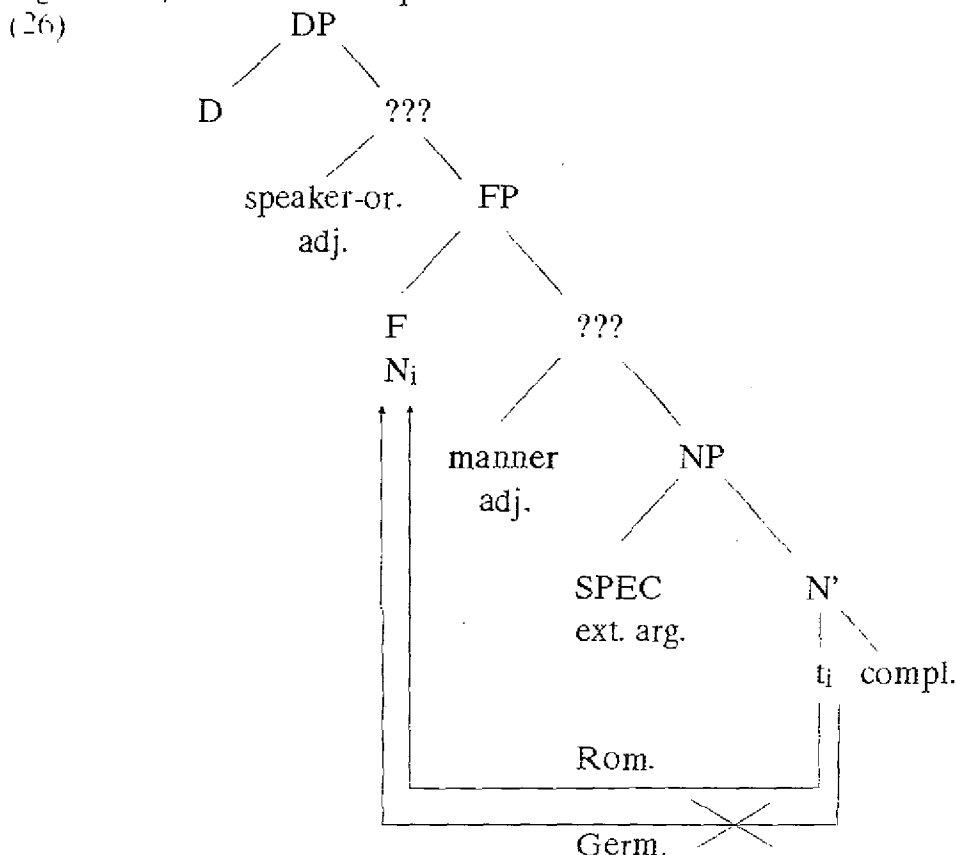
We should now try to determine which kind of position adjectives occupy; in
other words, we need to establish the exact nature of the ???-nodes in (26)
above. In principle, there are two possible alternatives: attributive adjectives can
be thought to be generated either in an adjoined position or in a Spec position.
The latter hypothesis is more restrictive than the former one, for it predicts that

a sequence of two (or more) non-coordinated adjectives belonging to the same class will be ill-formed. This is indeed what we find:[20]

(27)   *L' atteggiamento ostile tedesco americano (two argument adjs.[21])

(28)   *La probabile naturale reazione di sdegno (two speaker-or. adjs.)

(29)   *L' atteggiamento ostile arrogante di Gianni (two manner adjs.)

All these sentences become perfectly grammatical if the two adjectives are coordinated. Note however that coordination is possible only among adjectives belonging to the same class:

(30)   *La distruzione terribile e tedesca di Varsavia (Giorgi (1988), p. 311)

(31)   *Il probabile e goffo comportamento di Gianni

All this evidence seems to indicate that there is one and only one position available for each class of adjectives, and that recursion is not allowed.

---

20   Valois (1991a,b) and Bernstein (1993) argue exactly the opposite, namely that it is possible to find cooccurrence of two adjectives belonging to the same class. Valois (1991b, p.167) reports the following example:

(i) The clever careful invasion of Jupiter

I will argue that classifying adjectives on the basis of their distributional properties without considering their meaning is rather misleading: adjectives belonging to Valois's *frequently* class, in my system, have the property of being compatible both with a speaker-oriented (or rather subject-oriented see below 2.3.) and with a manner reading, therefore they can be generated in two different slots.

Bernstein (1993, ch.2, fn.31), on the other hand gives the following two examples of multiple adjectival modification:

(ii) The nice *big round* ball

(iii) The *long narrow* white shelf

It is not obvious that the two underlined adjectives in example (ii) do belong to the same category. In this respect, see Sproat & Shih (1988, 1990) and Cinque (1993). Example (iii) is less clear; it could be made compatible with the idea of APs in Spec only if it could be shown that it is a case of asyndetical coordination or, as an alternative, a sort of fixed formula (analyzable as a compound).

21   Recall that I assumed, along with Cinque (1990), that argument adjectives are generated in the external argument position, namely Spec,NP (see (7) above). The cooccurrence of two argument adjective, however, would be independently excluded by the θ-criterion.

The adjunction hypothesis can deal with these facts only by stipulating that only one adjunction is possible to each maximal projection (as in Valois (1991a,b)); yet, in order to function, it would need two further stipulations (see Cinque (1993)): (i) that adjectives are always adjoined to the left; (ii) that there is some semantical or selectional relation between the adjoined position and the FP to which it is attached.

None of the stipulations above is needed if we assume that adjectives are generated in Spec. The structure I will tentatively adopt for Romance DPs is therefore the following, with speaker-oriented and manner adjectives generated in the Spec position of two distinct functional projections, and the head N undergoing a two-step movement:

(32)

```
                    DP
                   /  \
             SPEC      D'
                      /  \
                    D      FP1
                          /  \
                     SPEC      F1'
                speaker-or.   /  \
                    adj.     /    \
                           F1       FP2
                           Nᵢ      /  \
                            |     /    \
                            |  SPEC     F2'
                            | manner adj.  /  \
                            |            /    \
                            |          F2      NP
                            |_____|     /  \
                                        |   SPEC    N'
                                        |  ext. arg.  |  \
                                        |             |   \
                                        |             tᵢ   compl.
                                        |_____|
                                              Rom.
```
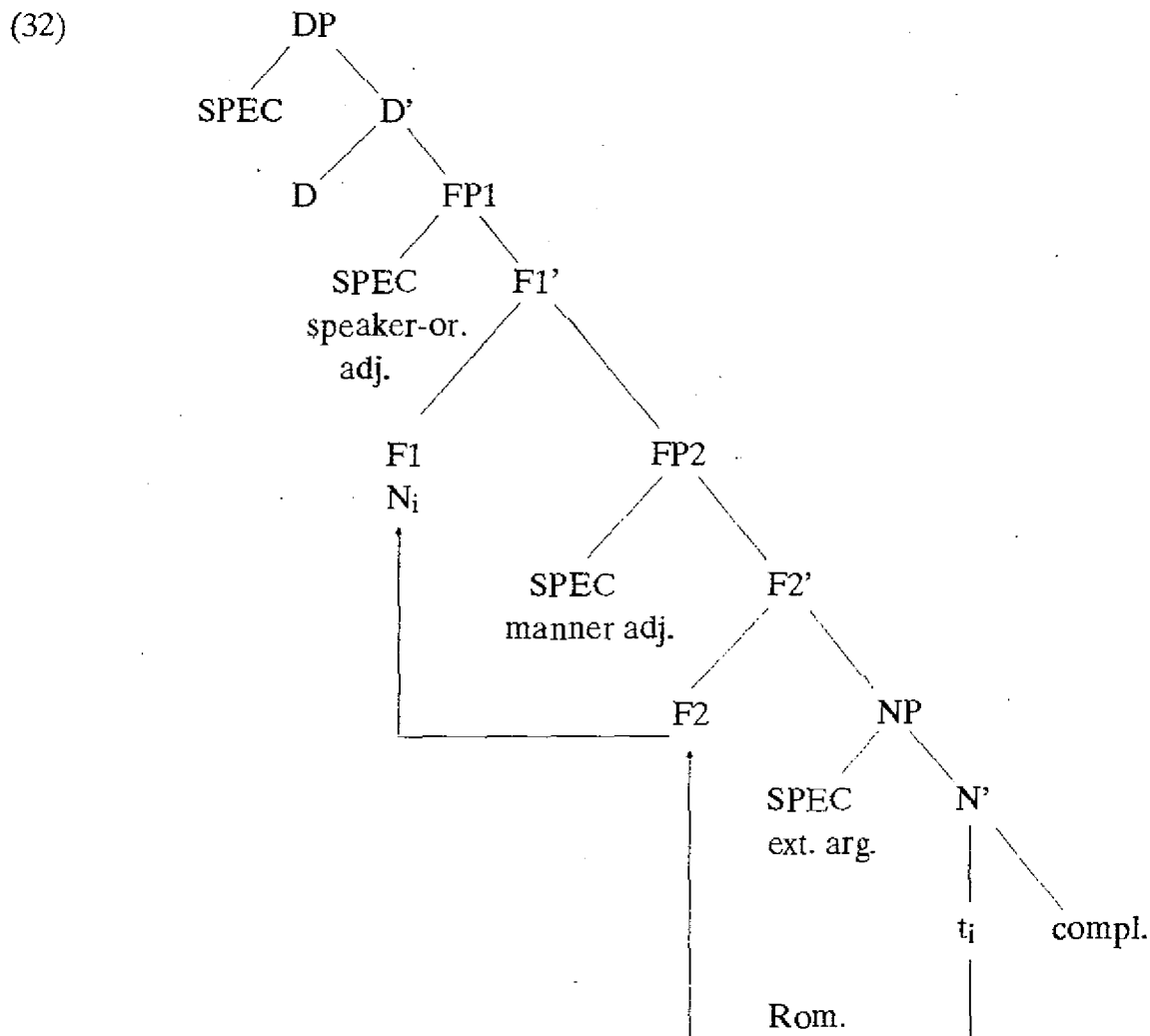
This structure also predicts that in Germanic languages, where no overt N-raising takes place, speaker-oriented, manner and argument adjectives will all appear prenominally, but that the same ordering and cooccurrence restrictions as in Romance will hold; we predict then that coordination will be possible only among adjectives belonging to the same category, that no more than one instance for each category will be possible in non-coordinated sequences of adjectives, and that the hierarchy speaker-oriented > manner > argument adjective will be respected. This is indeed what we find:

(i) coordination:

(33) a. The American and German attitude toward President Eltsin (arg. & arg.)

     b. John's childish and clumsy behaviour (manner & manner)

(34) a. *The terrible and German destruction of Warsaw (manner & argument)

     b. *John's likely and clumsy behaviour (speaker-or. & manner)

(ii) sequences of non-coordinated adjectives belonging to the same class:

(35) a. *The German American attitude (arg. - arg.)

     b. *The possible probable reaction (speaker-or. - speaker-or.)

     c. ?*John's hostile arrogant attitude (manner - manner)

(iii) relative order:

(36) a. The probable hostile American reaction

     b. *The probable American hostile reaction

     c. *The American probable hostile reaction

     d. *The American hostile probable reaction

     e. *The hostile probable American reaction

     f. *The hostile American probable reaction

2.3. Subject-oriented adjectives

As it emerged from my brief summary of the theory of adverbs in 2.1. above, sentence adverbs are divided into two different classes, speaker-oriented and subject-oriented adverbs. We would expect then to find subject-oriented adjectives corresponding to the class of subject-oriented adverbs, and that these adjectives will appear in a position high in the structure (preceding manner adjectives in both Romance and Germanic languages, and possibly also preceding the head N in Romance). Such a prediction is not easy to test, because adjectives corresponding to subject-oriented adverbs are often ambiguous between a subject-oriented reading and a manner reading, even in prenominal position:[22]

(37)   L' accurata descrizione di Gianni (dell' incidente)

There is however one test that can be applied in order to determine whether an adjective is indeed interpreted as subject-oriented: subject-oriented adverbs can appear only in sentences with an agent overtly present:[23]

(38)   a.   Intelligentemente, il direttore ha promosso Gianni
       b.   ?*Intelligentemente, Gianni è stato promosso

The same effect seems to hold for nominals as well:

(39)   L' intelligente rinuncia di Gianni (a candidarsi alle elezioni)

(40)   ?*L' intelligente promozione di Gianni

Some additional evidence suggesting that subject-oriented adjectives are distinct from manner adjectives comes from examples where a subject-oriented

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22   The possibility of having an adjective with a manner interpretation in prenominal position in Romance is so far unexpected given the structure I proposed in (32). The problem will be discussed at length in section 2.4. below.

23   Cf. Lonzi (1991).

adjective and a manner adjective semantically clashing with it modify the same noun:

(41)   L' astuto comportamento ingenuo[24] di Gianni (ha preso in contropiede i suoi avversari)

The sentence above can be interpreted only if the higher adjective is interpreted as subject-oriented, i.e. if it conveys the speaker's attitude towards the subject, like the corresponding adverb:

(42)   Astutamente Gianni si è comportato ingenuamente

All these data seem to indicate that a subject-oriented interpretation is indeed available for adjectives. We should now try to establish whether the distinction between speaker- and subject- oriented adjectives is structural or semantic, namely, whether the two classes are assigned to two distinct structural positions or to the same one. The former hypothesis predicts that the cooccurrence of a speaker- and a subject-oriented adjective will be always possible in non-coordinated structures and that the relative order will not be free, while the latter predicts that they will be allowed to modify the same head only if coordinated. The evidence is rather contradictory:

(43)   a.   *Il probabile astuto comportamento ingenuo di Gianni
       b.   ?Il probabile astuto comportamento di Gianni (*astuto* has a (sort of) manner interpretation, see fn. 22)
       c.   ??Il probabile e astuto comportamento ingenuo di Gianni

---

24   The insertion of a manner adjective is needed in order to force the subject-oriented reading for the second adjective of the sequence. However, the ill-formedness of this example cannot be due to the fact that there are three adjectives modifying the same head: in fact, if we replace the manner adjective by an argument one the sequence improves considerably:

(i) Il probabile astuto comportamento americano

In this sentence *astuto* is no longer interpreted as subject-oriented but it has rather a manner interpretation.

While there is a rather sharp contrast between (43)a. and (43)b., suggesting that speaker- and subject-oriented adjectives cannot cooccur,[25] (43)c indicates that they cannot easily be coordinated either. What could be said on the basis of this evidence is that speaker- and subject-oriented adjectives do compete for the same position, and it is for semantic reasons that they cannot be coordinated.[26] One problem with this account is that it breaks the parallelism so far established between adverbs and adjectives: in sentences, in fact, speaker- and subject-oriented adverbs do not seem to occupy the same structural position, for , according to Jackendoff (1972), they can cooccur and the relative order is always speaker-oriented > subject-oriented. He notes also that while speaker-oriented adverbs can precede epistemic modals, subject-oriented adverbs must always follow them. On the basis of this evidence, Cinque (forthcoming) proposes that there are two ModPs in the clausal structure, an epistemic ModP and a root ModP. In this system, speaker-oriented adjectives are in Spec of epistemic ModP, while subject-oriented adverbs are in Spec of root ModP. The fact that only one position is available in the nominal system, either for a speaker-oriented or for a subject-oriented adjective, could suggest that the two ModP of the clausal structure correspond to a single functional projection in the DP structure. The hypothesis is not implausible, given that the nominal inflectional system is much poorer than the clausal one.

Another potential problem could be posed by the fact that if the relative order of the speaker- and the subject-oriented adjectives is reversed in (43)a., the expression, already clearly ill-formed, is even more readily recognized as ungrammatical:

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25   Cinque (p.c.) suggests that the impossibility of the cooccurrence of a speaker- and a subject-oriented adjective can be due to the fact that they have the same grade of absoluteness in the sense of Sproat and Shih (1988, 1990). Italian, then, would be like Chinese in not allowing two adjectives with the same grade of absoluteness to cooccur. If this is the right explanation, we must expect that English will always allow a speaker- and a subject-oriented adjective to cooccur, for in English there seem to be no restriction on the cooccurrence of two adjectives belonging to different classes with the same grade of absoluteness. My informant, however, tends to reject a sequence speaker-oriented > subject-oriented:
(i) ?* John's probable wise departure

26   This effect would be similar to that found in sentences like:
(i)* Ieri ho preso il raffreddore e due biglietti per il cinema
where the two complements, though occupying the same structural position, have a different semantic relation with the verb and cannot be coordinated.

(44) *L'astuto probabile comportamento ingenuo di Gianni

This might simply be due to a processing effect, i.e to the delay in the perception of the ill-formedness of the string: in fact the ungrammaticality of (43)a is detected only when the processing of the string has reached *ingenuo*. For, if the manner adjective were missing or replaced by an argument adjective the sequence would be acceptable (see (43)b and fn. 24); my impression, then, is that the string is less immediately rejected owing to a sort of reverse of the classical "garden path" effect. In (44), on the contrary, the ill-formedness of the sentence is detected as soon as the second adjective is processed. We have seen, in fact, that the sequence *probabile astuto* is possible in prenominal position if *astuto* receives a sort of manner interpretation. The reverse order, however, is always banned, whatever the interpretation of *astuto*:

(45) *L' astuto probabile comportamento di Gianni

On the basis of this evidence, I will assume that (43)b. does not instantiate a speaker-oriented > subject-oriented sequence, wherefrom it is possible to conclude that the distinction between speaker-oriented and subject-oriented adjectives is semantic rather than structural, for they seem to compete for the same position.

The discussion in this section has revealed that the picture so far outlined is inadequate to describe all cases of multiple adjectival modification (at least in Romance). This because we had to argue that also prenominal adjectives in Romance can receive a manner interpretation. To this problem I will turn directly.

2.4. An unexpected asymmetry: pre-nominal "manner" adjectives in Romance

Given the structure (32) above, the pre- or post-nominal position of adjectives in Romance event nominal should be entirely predictable on the basis of their interpretation. We have seen that the same adjective can have a different meaning depending on the position it occupies (cf. section 2.2. above). What we expect, then, is that when only one of the two possible interpretations for an adjective is semantically plausible in a certain context, there will be only one position available to that adjective. An adjective like *naturale* for example, can be used both with a speaker-oriented and with a manner reading, and can therefore appear either on the left or on the right of N, but when it modifies a noun which does not admit its use as a manner adjective, the only possible sequence is AP-N. Compare:

(46)　a.　La naturale reazione di Gianni in una situazione tanto imbarazzante...

　　　　b.　La reazione naturale di Gianni in una situazione tanto imbarazzante...

(47)　a.　Il naturale disappunto di Gianni

　　　　b.　?*Il disappunto naturale di Gianni

We might expect a parallel pattern concerning manner adjectives, in other words, we would expect that an adjective which cannot give rise to a speaker- or subject-oriented reading will not appear prenominally. This expectation is not fulfilled:

(48)　a.　La soluzione definitiva del problema

　　　　b.　La definitiva soluzione del problema

These data are not particularly surprising in the light of the parallelism between adjectives and adverbs, for we saw that also manner adverbs seem to have at least one extra position in the structure (see (20) and (22) above). However, the problem remains of how to deal with these cases. As we took as a basic assumption that adjectives, like adverbs, cannot be moved from their base position, we have in principle two possible alternative ways to explain the two positions apparently accessible to manner adjectives, paralleling what has been said with respect to adverbs. One possibility is to assume that there is only one position in which manner adjectives can be generated, and that N-raising across this position is optional. The fact that manner adjectives can surface both before and after the noun would then be the consequence of a certain freedom of the scope of N-movement. This option poses a theoretical problem, for, in a minimalist framework, we must assume that movement is possible insofar as it is required, therefore we do not expect any step in the derivation to be inherently optional.[27]

The other possibility would be to assume (along the lines of the analysis of the placement of manner adverbs suggested in Cinque (forthcoming)) that there are in fact two different positions accessible to this type of adjectives. If there are two positions potentially accessible to adjectives, we might expect some difference in the interpretation. As noted in Cinque (1993), this is in fact what happens: in certain contexts only a postnominal manner adjective yields a good result. Compare:

27　But see Cinque (forthcoming) for apparent optional steps of past-participle raising in Romance.

(49) a. La loro aggressione brutale all' Albania
      b. La loro brutale aggressione all' Albania

(50) a. Le aggressioni brutali vanno severamente condannate
      b. *Le brutali aggressioni vanno severamente condannate

(examples from Cinque (1993))

Cinque accounts for this evidence assuming that a prenominal adjective like *brutale* would always receive a subject-oriented interpretation. In sentence (50)b. there is no specific subject, a subject-oriented interpretation of the adjective would therefore not be available and the sentence would be ill-formed. Such an account is however totally incompatible with the evidence I presented in section 2.3. above, where I showed that a sequence of two prenominal adjectives in Romance is possible, but that speaker- and subject-oriented adjectives occupy the same structural position. What we need then is an extra prenominal position for manner adjectives, distinct from the position occupied by speaker- and subject-oriented adjectives. On the basis of the relative order of prenominal adjectives in Romance, we can conclude that such a supposed position of prenominal manner adjectives[28] is lower than that of speaker- and subject-oriented adjectives (see also (44) and (45) above):
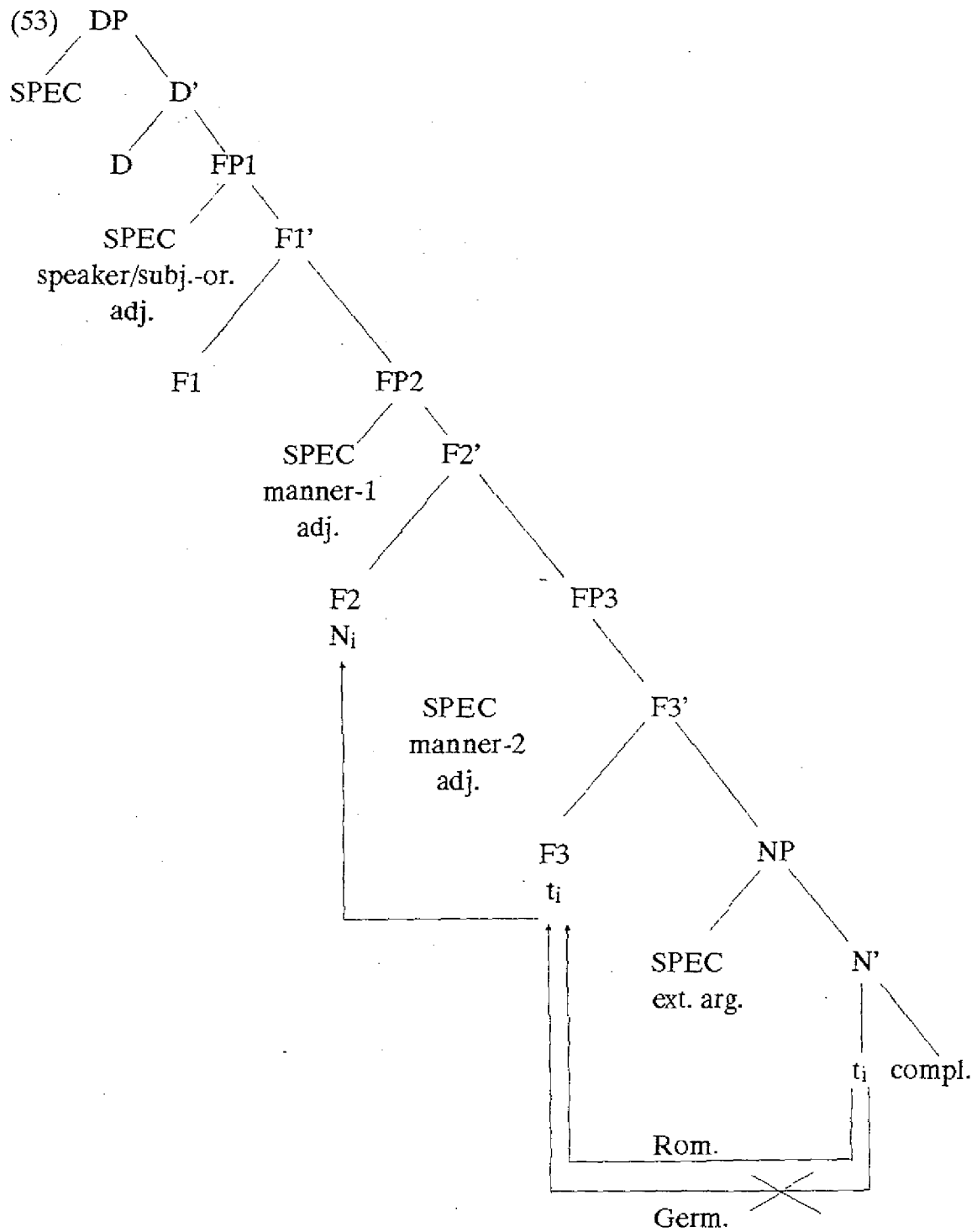
(51) a   L' evidente deliberata provocazione di Gianni
          John's evident deliberate provocation

      b   *La deliberata evidente provocazione di Gianni
          *John's deliberate evident provocation

(52) a   La probabile definitiva soluzione del problema
          The likely definitive solution to the problem

      b   *La definitiva probabile soluzione del problema
          *The definitive likely solution to the problem

I will therefore propose the following structure:[29]

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[28] Henceforth manner-1, to distinguish them from postnominal corresponding adjectives, henceforth manner-2.

[29] Note that this structure predicts that a manner-1 adjective and a manner-2 adjective may cooccurr. Actually, examples of this kind seem to me a bit marginal, though my judgement is not shared by all speakers (see for example Cinque (1993)).

(53) DP

SPEC   D'

D   FP1

SPEC   F1'
speaker/subj.-or.
adj.

F1   FP2

SPEC   F2'
manner-1
adj.

F2   FP3
N_i

SPEC   F3'
manner-2
adj.

F3   NP
t_i

SPEC   N'
ext. arg.

t_i compl.

Rom.

Germ.

The problem remains of how to deal with Cinque's examples in (50). I think that what makes sentence (50)b. ungrammatical is not the lack of an overt or understood subject but rather its being interpreted as generic. In fact, when a specific interpretation is made available the insertion of a manner-1 adjective does not compromise the acceptability of the sentence:

(54) Le brutali aggressioni che hanno sconvolto questa città nelle ultime settimane (non hanno ancora un colpevole)

(55) Queste brutali aggressioni (non hanno ancora un colpevole)

Apparently, then, manner-1 adjectives would be able to occur only in specific contexts. Actually, the phenomenon is much more complex and suggestive, and it will be therefore discussed at length in section 3. below.

2.5. *"Mere"* adjectives

To complete the parallelism between adverbs and adjectives[30] we should be able to determine whether there is a class of adjectives comparable to the *merely* class of adverbs. As already noted in Jackendoff (1972, p. 55), adjectives corresponding to adverbs like *merely, simply, truly, virtually, utterly* form a class with peculiar characteristics which seem to hold crosslinguistically; several recent works on the structure of the noun phrase have addressed the problem of how *mere* adjectives must be analyzed, trying to avoid treating the restrictions on their occurrence as pure lexical idiosyncrasies (see for example Bernstein (1993, pp. 50-54), Cinque (1993), Zamparelli (1993) among others). The properties distinguishing *mere* adjectives from common attributive adjectives are the following:

(i) they cannot be used predicatively:

---

30 It should be noted that there are classes of adjectives modifying event nominals which I will not consider, namely numeral adjectives and possessive adjectives. In Italian possessives are realized as adjectives which can cooccur with an overt determiner and usually appear in the leftmost position in the sequence of adjectives modifying a head; this position is probably a derived one, for possessives need to be generated under NP in order to receive a θ-role. Numeral adjectives include items like *molti, pochi, numerosi* and the like that have a double use, either as determiners or as adjectives. In the latter case they occur in an intermediate position between possessives and speaker-oriented adjectives (see Crisma (1990) and Giusti (1992) for details).

(56) a. *John's proposal is mere
      b. *La proposta di Gianni è mera

(57) *Ritengo la proposta di Gianni mera

(ii) they cannot be modified:

(58) a. *A very mere man   (Bernstein (19⁰⁄₃))
      b. *Una molto mera proposta

(iii) they appear in a relatively high position. This is clear in Italian, where the
level of attachment of an adjective is signalled by its position with respect to
the head, for an adjective generated in a low position will always appear on
the right of the noun after N-raising; we can easily see that this option is
totally excluded for *mero*, while *semplice* admits the postnominal position
but changes its interpretation (into a manner one):

(59) a. Gianni ha fatto una mera proposta
      b. *Gianni ha fatto una proposta mera

(60) a. Gianni ha fatto una semplice proposta
      b. Gianni ha fatto una proposta semplice (other meaning)

One interesting proposal for the treatment of *mere* adjectives is found in
Bernstein (1993). According to her, properties (i)-(iii) of *mere* adjectives imme-
diately follow if they are regarded as A rather than APs. It should be noted,
however, that other adjectives have one or two of the properties (i)-(iii), but
cannot clearly be analyzed as heads: speaker-oriented and manner-1 adjectives
cannot be crossed over by the noun, but they can be modified (*Le assai poco
probabili dimissioni di Gianni...*), while an adjective like *principale* cannot be
modified nor used predicatively, but it is found in postnominal position.

The other alternative would be to assign them to a Spec position in the
functional structure. As *mere* adjectives always appear on the left of the head
noun in Romance, we are forced to conclude that this supposed Spec position is
higher than the head to which the noun is raised. On the other hand, evidence
suggests that they must occupy a position lower than speaker-oriented adjec-
tives, for they always follow them:

(61) a. Il probabile semplice ammonimento dei responsabili non sarà un
           deterrente sufficiente

      b. The probable mere warning of those responsible will not be
          sufficient deterrent

(62) a. *Il semplice probabile ammonimento dei responsabili non sarà un
           deterrente sufficiente .

      b. ?*The mere probable warning of those responsible will not be a
          sufficient deterrent

Given the structure in (53) above, only Spec,FP2 qualifies as a suitable host for *mere* adjectives, which would then compete with manner-1 adjectives for the same position. An alternative solution would be to add another functional projection, intermediate between the one hosting speaker-oriented and the one hosting manner-1 adjectives.[31]

I do not think I have sufficient evidence to take a stand on the status and the structural position of *mere* adjectives, and I will therefore leave this issue for further investigation.

3. Specific/generic distinctions

We have seen in section 2.4. that the occurrence of manner-1 adjectives in Italian seem to be excluded from some generic contexts. In this section I will try to define more precisely the exact nature of this restriction, and to see whether it affects only manner-1 adjectives or also other categories of adjectives.

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31 In Crisma (1990) I treated this class of adjectives as APs competing with manner-1
    adjectives (called *quasi*-manner adjectives in Crisma (1990)) for the same Spec posi-
    tion; this on the basis of their distribution with respect to speaker-oriented adjectives
    and manner-1 adjectives. The correctness of this conclusion is however highly ques-
    tionable. It is true that *mere*-adjectives must occupy a position lower than that occu-
    pied by speaker-oriented adjectives. On the other hand it is not true that, as argued in
    Crisma (1990), they can never cooccur with manner-1 adjectives. Some examples can
    be found which do not sound too unacceptable
    (i)?La semplice concisa descrizione del tuo progetto non basterà da sola a procurarti
    l'approvazione del consiglio direttivo
    (ii)?La semplice completa ammissione delle proprie colpe...
    The judgements on this kind of sentences is far from uncontroversial, and therefore it
    does not allow us any safe conclusion.

I repeat here below the relevant data: manner-2 adjectives can freely be used in generic contexts, while the insertion of a manner-1 adjectives yields good results only when the DP refers to a specific event or series of events. Compare:

(63) Le aggressioni brutali vanno severamente condannate
      *Le brutali aggressioni vanno severamente condannate

(64) Le brutali aggressioni che hanno sconvolto questa città nelle ultime setti-mane (non hanno ancora un colpevole)

(65) Queste brutali aggressioni (non hanno ancora un colpevole)

(66) a. L' impegno costante alla fine è sempre premiato
      b. *Il costante impegno alla fine è sempre premiato
      c. Il costante impegno di Gianni alla fine è stato premiato

In order to account for these facts, one could tentatively assume that manner-1 adjectives are intrinsically incompatible with a generic interpretation owing to some feature of the head F2, whose Spec they occupy. This hypothesis, however, proves to be false because manner-1 adjectives can appear in the context of a generic interpretation, provided that the string is introduced by an indefinite article instead of a definite article (both in the singular and in the plural form):

(67) a. *Le brutali aggressioni possono lasciare tracce indelebili sulla psiche delle vittime brut.aggressioni
      b. Delle brutali aggressioni possono lasciare tracce indelebili sulla psiche delle vittime

(68) a. *La brutale aggressione può lasciare tracce indelebili sulla psiche della vittima brut aggressione
      b. Una brutale aggressione può lasciare tracce indelebili sulla psiche della vittima

These data seem to indicate that the ungrammaticality of (a.) sentences in the examples above is determined by the choice of the determiner rather than by some special feature of FP2. This hypothesis is further confirmed by the fact that

all the other categories of adjectives occurring in prenominal position in Romance display exactly the same behaviour as manner-1 adjectives: numeral adjectives (see fn. 30), speaker-oriented adjectives and *mere* adjectives can modify generic noun phrases only when the latter are introduced by an indefinite article, while they are excluded from definite generic contexts.[32,33] Compare:

(69) a. *I numerosi/probabili/semplici fallimenti non devono scoraggiare un bravo ricercatore

      b. Dei numerosi/probabili/semplici fallimenti non devono scoraggiare un bravo ricercatore

(70) a. *Il probabile/semplice fallimento non deve scoraggiare un bravo ricercatore

      b. Un probabile/semplice fallimento non deve scoraggiare un bravo ricercatore

These data, then, are a further indication that the nature of the determiner, rather than the specific/generic distinction, has some influence on the occurrence of some classes of adjectives. To be more precise, prenominal adjectives in Romance are excluded when an *expletive* article (in the sense of Longobardi (1993)) introduces the nominal expression. One way to account for this restriction is to postulate that the expletive article is too "weak" to select a series of functional projections which are normally selected, namely those FPs which, according to my analysis, host numeral adjectives, speaker-oriented adjectives and *mere* adjectives in their SPECs. This hypothesis would be very interesting for

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32   This constraint was already noted in Jackendoff (1972) for *mere* adjectives, but its formulation was somehow different. Jackendoff observed that *mere* adjectives can appear only in indefinite noun phrases, or in definite noun phrases which have a relative clause. Actually the occurrence of a *mere* adjective in a DP introduced by a definite article is possible also without a relative clause modifying the head, provided that a specific reading is made available:

(iii) La semplice/mera menzione del suo nome in nota non dà il meritato rilievo alla sua collaborazione

33   There are however some counterexamples to this generalization, namely some uses of *vero* and *primo*:

(i) Il vero amico non ti mente mai

(ii) Il primo figlio è spesso il più coccolato

It is not clear to me how these data should be handled, maybe they can be considered fixed formulas.

its theoretical consequences; for it would be an argument in favour of the claim that adjectives are in Spec rather than in an adjoined position: the distribution of adjectives in sentences (69) and (70) above would be accounted for only admitting adjectives bear a strong relation to the functional heads selected by the determiner; this is more plausibly a characteristic of SPECs rather than of adjoined elements. The idea that the restrictions on the occurrence of higher adjectives are due to the selectional properties of the determiner, however, is problematic: we must assume that at least one functional head will always be selected independently of the nature of the article, namely the functional head to which the noun is raised in Romance; if this head is always present, we would predict that at least one prenominal adjective will be always possible in Romance, the adjective occupying its Spec. Given the framework outlined so far, then, we would expect that a manner-1 adjective will always be able to cooccur with an expletive article. We have seen, however, that this is not true (cf. (67)a. and (68)a. above).

There are other possible analyses of the specific/generic distinction which come from the syntax of expletive articles. According to Longobardi (1993), the N position is always interpreted as referring to universal concepts, i.e. to kinds, while the D position usually hosts some operator ranging over the extension of the kind referred to by the N position. When the D position hosts an expletive article, on the other hand, N is raised at LF to the D position which in this case does not have any semantic content. Thus the DP designate the whole kind referred to by N, hence the generic interpretation. In such a framework, one could claim that adjectives somehow block N-movement to D at LF. However, it is not clear to me how the blocking effect of adjectives should be characterized, and I will therefore leave this issue for further research.

4. "Mirror image" effects

So far, I have argued that the distribution of adjectives in Romance and Germanic supports the idea that the internal structure of DP is the same in the two groups of languages, and that all superficial differences can be attributed to the level at which the rule of N-raising is applied, PF or LF. Now I will take into consideration some apparent counterevidence, and tentatively suggest how it can be dealt with. The facts are well-known: in many cases a sequence of two postnominal adjectives in Romance corresponds to a reversed sequence of two prenominal adjectives in Germanic:

(71) a. Una traduzione letterale completa (non è ancora disponibile)
      b. A complete literal translation...
      c. Eine vollständige wörtliche Übersetzung...

(72) a. Una traduzione completa letterale (non è ancora disponibile)
     b. A literal complete translation...
     c. Eine wörtliche vollständige Übersetzung...

The speaker's intuition in processing these sequences is that in sentences (71) a complete translation is singled out of a set made up of literal translations, while in sentences (72) a literal translation is singled out of a set made up of complete translations. It is on the basis of similar examples that some authors argue that adjectives are base generated on the right in Romance and on the left in Germanic (see for example Lamarche (1991)). Cinque (1993), defending the superiority of the N-movement approach over a directional parameter to account for adjective placement in the two groups of languages, deals with the mirror-image effects by means of the introduction of the notion of *predicative adjective*. According to his analysis, predicative adjectives are adjectives occurring in the predicate position of a reduced relative clause, and will therefore appear in a right-peripheral position, thus not intervening between the head N and its complement. This position would not be accessible to adjectives which cannot be used predicatively, like, for example *principale*. Having introduced this notion, Cinque (1993) explains away cases of mirror-image sequences of adjectives in Romance and Germanic claiming that in these cases one or both adjectives are used predicatively in Romance, and therefore they escape the ordering restrictions typically constraining the occurrence of attributive adjectives. He gives the following example:

(73) a. A beautiful red car
     b. Una bellissima macchina rossa
     c. Una macchina rossa bellissima

Examples (73)a. and b. display the same base order, with the only difference that N has crossed *rossa* -"red"- in Italian but not in English. In (73)c. at least *bellissima* -"beautiful"-, if not both *rossa* and *bellissima*, must be analyzed as predicative. This is shown by the fact that the two adjectives cannot both intervene between N and its complement, and at least the rightmost one must appear on the right of the complement, i.e. the position in which predicative adjectives are found, according to Cinque's analysis:

(74) a. *Una macchina rossa bellissima da corsa
       Una macchina rossa da corsa (,) bellissima
       Una macchina da corsa (,) rossa (,) bellissima

                      (examples form Cinque (1993))

As predicative adjectives surface on the right of the complement, this analysis predicts that all sequences of adjectives occurring between N and its complement will display the same relative order in Romance and Germanic, for they must be considered attributive adjectives and not predicative ones in Cinque's terms. However this expectation is not always confirmed by facts. Take examples (71) and (72) above; a complement of the head N can be inserted between the head itself and the two adjectives, but the sequence of the two adjectives in Romance remains the mirror image of the Germanic sequence:

(75) a. Una traduzione letterale completa del manoscritto (non è ancora disponibile)
b. A complete literal translation of the manuscript...

(76) a. Una traduzione completa letterale del manoscritto (non è ancora disponibile)
b. A literal complete translation of the manuscript...

I will claim that this evidence can be dealt with by assuming that some incorporation process has taken place. This is suggested by the fact that the adjective closest to the head N seems to be itself a head rather than a full AP, for it does not admit any modification:[34]

(77) a. Una traduzione letterale molto completa
b. A very complete literal translation...
c. Eine sehr vollständige wörtliche Übersetzung...

(78) a. *Una traduzione molto letterale completa
b. *A complete very literal translation...
c. *Eine vollständige sehr wörtliche Übersetzung...

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34 Obviously, all the following ungrammatical examples become acceptable if the two adjectives are felt as coordinated

(79) a. Una traduzione completa molto letterale
   b. A very literal complete translation...
   c. Eine sehr wörtliche vollständige Übersetzung...

(80) a. *Una traduzione molto completa letterale
   b. *A literal very complete translation...
   c. *Eine wörtliche sehr vollständige Übersetzung...

I will therefore propose the following structure:

English/German: ... AP ... [N° A N]
Italian: ... [N°$_i$ N A] ...AP...t$_i$

In Italian, A incorporates with N on its right, then the newly-formed compound undergoes regular N-movement, crossing over AP (which corresponds to the manner-2 position). In English and German A incorporates with N on its left, and the compound remains in its base position.[35,36]

4.1. The manner-2 adjective > argument adjective sequence

The DP structure outlined so far (represented in (53)) predicts that the sequence of manner-2 > argument adjectives will always be possible in post-nominal position in Romance. At a first sight this seems to be true:

(81) L' atteggiamento ostile/minaccioso americano
   The hostile American attitude...

(82) La risposta diplomatica/militare americana

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35 Notice that we had to postulate that, at least for incorporation, some directional parameter distinguishing Romance from Germanic must be assumed. Such an assumption, however, is independently needed in order to account for noun-compound formationl (see Giorgi & Longobardi (1991) and Cinque (1993) for some discussion).

36 Sequences of more than two adjectives yielding a mirror-image effect in Romance and Germanic cannot in principle be excluded, if we admit that incorporation can be recursive. My prediction is that in this case the only adjective which will admit some modification will be the most peripheral one.

As Cinque (1993) notes, however, the sequence N > manner adjective > argument adjective is no longer possible when N takes an overt complement:

(83)   *La reazione ostile americana alle critiche

On the basis of this evidence Cinque tentatively concludes that argument adjectives do not occupy the Spec position of the NP projection, but rather compete with manner(-2) adjectives for the same position, namely the Spec position of the first functional projection dominating NP. If Cinque is right, we need to explain why (81) is possible. Actually, there is evidence suggesting that in example (81) above *ostile* is incorporated and that *americano* occupies the manner-2 position; *ostile*, in fact, cannot be modified:

(84)   a.   *L' atteggiamento molto ostile americano

       b.   L' atteggiamento molto ostile degli americani

Such an account, however, is not totally satisfactory, for it does not explain how argument adjectives can receive a θ-role if they are not generated in Spec,NP.[37]

5. Non-eventive noun phrases

The theory of adjectives outlined so far has been entirely based on the observation of the distribution of nominal modifiers in eventive noun phrases, namely noun phrases indicating an event, headed by a noun which corresponds to a verb and as-signs precise θ-roles; this because it was possible to distinguish safely between argument adjectives, manner adjectives, speaker- and subject-oriented adjectives.

It would be desirable to extend the results obtained also to non-eventive noun phrases, i.e. noun phrases headed by nouns denoting real objects. This extension is not immediate, for several reasons: first, it would not make sense to speak of manner, speaker- and subject-oriented adjectives when they are referred to an object; second, it is not always possible to detect which sequences are reanalyzed as compounds and which are not. This has a great influence on the surface order:

(85)   an Italian straw hat

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37   Recall that argument adjectives cannot be moved from their base position, see fn. 5.

(86)   a silk Persian rug

In the first example the material denotes a particular type of hat, and it probably forms a compound and is therefore preceded by the adjective of nationality. In the second example, on the other hand, the adjective of nationality denotes a particular type of rug, and for this reason is closer to the noun than the material adjective.

A phenomenon which seems to confirm our theory of a complex structure characterizing the noun phrase is that the more an adjective implies a judgement on the part of the speaker, the higher it appears in the structure; remember that according to our hypothesis, speaker-oriented adjectives are the highest descriptive ones (see Cinque (1993) for an attempt to extend the analysis of adjectives in event nominals to object nominals, on the basis of the classification of adjectives presented in Sproat & Shih (1988, 1990)).

6. Conclusions

In this paper I presented some evidence arguing in favour of the superiority of the analysis in terms of N-movement over the Head-subject parameter in order to account for superficial differences in Romance and Germanic noun phrases. I also argued that the restrictions on adjective ordering and cooccurrence supports the idea that APs must be considered SPECs rather than adjuncts. In particular, I proposed that adjectives must be divided into different classes on the basis of their interpretation and that each class must be assigned a fixed position in the structure. I showed that the relative order of adjectives is the same crosslinguistically, the only difference between Romance and Germanic being the position of the head N with respect to the sequence of adjectives. I explained the residual cases of mirror image effects showing that an incorporation process takes place in these cases.

Several issues remain open: the exact nature and position of *mere* adjectives, the restrictions which prevent some adjectives from appearing in conjunction with expletive articles, the exact nature of adjective incorporation with the noun.

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