

ON INFINITIVAL COMPLEMENT CLAUSES

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1. *Introduction*

The revision of the Extended Standard Theory of transformational-generative grammar (in short EST) presented in Chomsky (1981) marks a further step in the move towards establishing a universal grammar (UG). It clarifies, and to a certain extent modifies, much of the intensive research into the syntax of a variety of languages, which has been carried out over the past ten or so years.¹ It also reveals the need for further modifications, particularly with respect to government in complement clauses and resultant Case marking, with which I shall be concerned here.

Chomsky conceives of UG as consisting of a number of subsystems, or modules, which can be accounted for according to a set of subsystems of principles. He sets up the following modules of UG:

- a. the lexicon
- b. the syntax
 - i. the categorial component
 - ii. the transformational component
- c. the phonetic form component (PF-component)
- d. the logical form component (LF-component)

The order in which I have listed the modules here is Chomsky's, and it reflects the order of primacy he assigns to them. Consequently the lexicon has the most basic function. The syntactic structures of a particular language are viewed as a projection from the subcategorization features of the lexical

¹ Cf. e. g. Chomsky (1972, 1975, 1977a, 1980a), Chomsky and Lasnik (1977), Bordelais (1974), Kayne (1975, 1979a), Quicoli (1976) etc.

items involved. These subcategorization properties must be satisfied at every level of the grammar.

The subsystems of principles discussed in Chomsky (1981) can be listed as follows:

- a. bounding theory
- b. government theory
- c. Theta theory (θ -theory)
- d. binding theory
- e. Case theory
- f. control theory

The specific problem with which I shall be concerned in the present paper is the simplification of the transformational component with regard to the status of certain types of complement clause, which will lead to suggestions concerning a revision of the COMP (complementizer) category in EST. For this reason the subsystems of principles which will assume a central position in my argumentation are *government theory* and *Case theory*, although it will be necessary to refer to the others at certain points.

2. Government, Case assignment and \bar{S} -deletion

Chomsky assumes that "in the syntax there is the single rule Move- α that constitutes the transformational component" (1981:18). This is an elegant and well-motivated simplification of the syntactic module made possible by the assumption of empty NP positions in the D-structure (deep structure). Empty NP positions are not marked thematically in the syntactic configuration by virtue of the lexical projection principle. They may be occupied by NPs moved from θ -positions by the rule Move- α , whether the NPs in question are phonetically realized or merely PRO, i.e. pronominal elements which receive no phonetic realization in the PF-component. If an NP is moved to an empty NP position (henceforth [N_{PE}]), it leaves behind a trace in S-structure with which it is logically bound in the LF-component. At S-structure NPs are assigned Case (surface structure morphological case) according to how they are governed by other categories in the syntactic configuration.

Among the configurations in which government holds are the following:

- (1) i. [$VPV NP_1 (NP_2)$], where V governs both NP_1 and NP_2
- ii. [$PP P NP$], where P governs NP
- iii. [$\bar{S} [COMP_{FOR}] [sNP_1 \text{ to } [VPV NP_2]]$], where the complementizer *for* governs NP_1 , but not NP_2
- iv. [$VPV [NP_1 NP_2 \text{'s } N]$], where V governs NP_1 , but not NP_2
- v. [$XPX [sNP \text{ to } VP]$], where $XP \in VP$ or $XP \in AP$ and X governs NP

- vi. [$VPV [\bar{S} COMP [sNP INFL VP]]$], where INFL governs NP
- vii. [$VPV [AP A \text{ (of) } NP]$], where V does not govern NP, *of* governs NP and A governs *of*-NP

The interesting cases for our present purposes are (lii), (liii), (1v), (1vi) and (1vii).

The category INFL (inflection) is an element "indicating in particular whether the clause is finite or infinitival" (Chomsky 1981:18). INFL has the values [\pm Tense], the positive specification indicating that the clause is finite, the negative specification indicating that it is infinitival. If it is finite, it will also contain feature specifications for person, number and gender, a complex which Chomsky symbolizes as AGR (agreement) (Chomsky 1981:52). The agreement, of course, is with the subject NP of the clause. Thus Chomsky concludes that INFL is the head of S, just as V is the head of VP, A the head of AP, and P the head of PP. There is one important proviso here, however. INFL will only contain AGR if it is marked as [$+$ Tense], and only then can it be considered the proper head of S governing the subject NP. Thus, in (1vi), INFL must contain [$+$ Tense] and the COMP will either be *that* or a *wh*-element, constituting the choice of feature specifications [\pm WH].

Problems arise when the COMP is empty, or rather, as we shall see, not generated, and thus not available as a landing site² for such quasi-quantifiers as *wh*-elements in the complement clause. When these are moved into a [$+$ WH] COMP, they automatically leave a trace (t) behind. An empty or non-generated COMP, however, logically entails [$-$ Tense] in the INFL of the complement clause. Thus, in the following configuration:

- (2) [$XPX [\bar{S} [sNP INFL VP]]$]

INFL ($=$ [$-$ Tense]) does not govern NP, but, then, nor does X. In addition to this the marker *to* which is given in (liii) and (1v) is a shorthand for a [$-$ Tense] marking in INFL. In order to reach the sort of configuration in which government holds and the NP can receive a Case marking; cf. (1v) above, Chomsky is forced to postulate a rule of \bar{S} -deletion. The subject of the clausal complement can then be assigned Objective Case through the rule of Exceptional Case Marking under the government of X.

In postulating such a rule, however, Chomsky contradicts the principle set out above that "there is the single rule Move- α that constitutes the transformational component". I deduce that this is a contradiction by virtue of the fact that \bar{S} -deletion must be postulated as a rule of the transformational component, since it is clear — at least for English — that the assignment of Case will not take place at D-structure.

² The term *landing-site* was coined by Baltin (1979).

3. Zero complementizers and empty complementizers

This fact has not escaped Chomsky's attention, and in Chapter 6 (pp. 295–6) he considers a suggestion made by Kayne (1980c), which derives from Chomsky and Lasnik (1977), that a zero complementizer COMP [\emptyset] with the status of a preposition governs the subject NP of the complement clause in the same way as the prepositional complementizer *for*. This is an attractive suggestion, for if we could uphold the existence of COMP [\emptyset], it would automatically obviate the need for a rule of \bar{S} -deletion. Unfortunately, I believe that, in the form in which Kayne presents it, it cannot be upheld, since it would lead to PRO elements being governed, thus violating an important principle with respect to the empty NP element PRO which will be given in Section 4.

This may indeed be the reason for Chomsky laying so much stress on \bar{S} -deletion. Indeed he suggests that a COMP [\emptyset] would automatically assign Objective Case by virtue of the Case Filter to the subject NP of the complement clause (Chomsky 1981:297–8):

- (3) *him to be here is hard to believe
 (4) *what is hard to believe is him to be here

Three problems arise in relation to the zero complementizer:

- a. How does it differ from a COMP marked with the feature [+WH], which may be filled with a *wh*-phrase, or from a non-generated COMP?
 b. Can a zero element be allowed to govern an NP and thereby lead to Case assignment?
 c. Is the COMP *for* a complementizer like *that* (if indeed *that* really is a complementizer!) or a preposition?

Before tackling these problems let us first review the status of COMP as presented in Chomsky (1981) and elaborate on certain hints which he gives as to ways in which COMP might be revised. It is taken as axiomatic that the following is the first in the categorial component:

- (5) $\bar{S} \rightarrow \text{COMP } S$

(5) also exists as a recursive rule under VP or AP. Thus the following crucial question arises: What is the status of COMP in both these cases? If we take it to be a complementizer, then are we justified in maintaining that it is also the head of the matrix sentence? Clearly only a complement clause needs to be attached to the matrix sentence through a complementizer. The matrix sentence itself is not the complement of any other structure. Yet some such rule as (5) must certainly be postulated for the generation of the matrix sentence in English, for how else would we account for *wh*-elements in direct questions and the consequent inversion of the first element of AUX with

the subject NP? The only other structure in English which would seem to require a landing-site at the head of \bar{S} is inversion after negative, restrictive and intensified phrases.³

At the level of the matrix \bar{S} , there certainly seems to be no analogue to the *that* complementizer at the head of a tensed clause or a *for-to* complementizer at the head of a tenseless clausal complement, unless of course we wish to maintain that a phonetically unrealized COMP node at the head of \bar{S} in the matrix sentence, to which Chomsky assigns the feature [–WH], is the sentential analogue of the clausal *that*, thus indicating that the sentence as a whole is assertive.

Is this position, then, a zero position similar to Kayne's COMP [\emptyset] or an empty position with a similar status to PRO, which is generated at D-structure but not realized phonetically? Or will it contain a feature [\pm WH]? If the latter is the case, which seems most likely, then we still have to explain a) why the COMP node at the head of the matrix sentence differs from the COMP node at the head of a clause when [–WH] is present, in that no such element as *that* is generated, and b) why it is that not only *wh*-elements but also negative, restrictive and intensified phrases may occur at the head of the matrix sentence and trigger off the inversion rule. I shall not go into any further detail on the nature of COMP at the head of the matrix sentence here, since it is my purpose to consider infinitival complement clauses and their complementizers, in particular the complementizer *for*. But the distinction between an empty or a zero COMP and one marked with the feature [\pm WH], or some other feature which would include negative, restrictive and intensified phrases as well as *wh*-phrases, at the level of D-structure is absolutely crucial in EST and may ultimately not be overlooked.

The first hint given by Chomsky as to a possible revision of the status of COMP is derived from Chomsky (1980a). He suggests that the expansion of COMP be optional so that "tensed clauses may have *that* or no complementizer in D-structure, and infinitives may have *for* or no complementizer" (Chomsky 1981: 54).

If COMP may be "empty" — and by "empty" I take it he now means "not generated in D-structure" — then there are four different ways of generating COMP:

- a. not generated at all
 b. generated as a genuine empty category and consequent landing-site
 c. generated as a zero category, a "shadow" in much the same way as PRO
 d. generated as an element which will receive a phonetic realization

³ I am deliberately simplifying matters here in ignoring the movement of adverbial elements (whether clausal, phrasal or lexical) to this position. Yet such movement does not involve any kind of inversion unless the element moved is quantified negatively, restrictively or by a *wh*-element.

To be somewhat more precise here, the non-generated COMP in Chomsky (1981) would still not preclude the generation of \bar{S} , thus ultimately necessitating a rule of \bar{S} -deletion. This is a principle I wish to reject. In addition, the "landing-site" COMP would receive the feature [+WH]. My argumentation is not greatly effected by this latter consideration, however.

4. The complementizer for and \bar{S} -deletion

If option a. can be so formulated that certain verbs are subcategorized for $VP[-S]$ rather than $VP[-\bar{S}]$ when no COMP is generated, i.e. if lack of COMP can be taken as the logical consequence of one type of lexical projection, then syntactic configurations will result in which direct relations may be allowed between the matrix verb and INFL in the clausal complement, and, more importantly, between the matrix verb and the subject of the clausal complement when [$-Tense$] appears. Option b. leads to the creation of a landing-site in the COMP node which *must* then be filled by a *wh*-phrase (or perhaps even by a negatively or restrictively quantified phrase, or by an intensified phrase, analogous to the rules for inversion at the level of the matrix \bar{S}). Option d. leads to the generation of *that*⁴, or, in terms of the theory of EST as it stands at present, of *for*. There does not seem at the moment to be any motivation here for a zero complementizer with the governing power of a preposition, as Kayne suggests and as is implied by option c.

However, Chomsky gives us a further important hint concerning COMP [or]. He takes it to be a "prepositional complementizer" in sentences such as [he following]:

- (6) Mary is eager for John to buy a Porsche
 (7) it would be a mistake for her to persuade him to buy one

According to the standard type of EST analysis, the D-structure of (6) must be given as follows:

- (8) Mary is eager [\bar{S} COMP[for] [s [NP John] INFL [VP buy a Porsche]]]

But what is the D-structure of (7)? (9) and (10) are at least possible candidates:⁵

⁴ This is clearly not the whole story, since we also have to provide an explanation for conjunctions connecting adverbial clauses with the matrix sentence, e. g. *because*, *since*, *as*, *when*, *although* etc. An adequate theory of complementation must make some provision for such connectives. For the moment, however, the problem must be left unsolved.

⁵ It should be pointed out here that none of the D-structures given in this article are complete. The reader is asked to overlook the incomplete nature of the structures. For example, in (9) and (10) I have not given the verb as *would*, since the [+Past] inflection would emanate from INFL, whereas in (8) I have not made any attempt to analyze the matrix sentence more fully. The essential problem is in any case the analysis of the infinitival complement clauses.

- (9) [\bar{S} COMP[s [\bar{S} COMP[for] [s [NP she] INFL [VP persuade him to buy one]]] INFL [VP will be a mistake]]]
 (10) [\bar{S} COMP[s [\bar{S} [s [NP PRO] INFL [VP persuade him to buy one]]] INFL [VP will be a mistake [PP [P for] [NP she]]]]]

Note that in (10) option a. has been chosen. Thus no COMP appears, and even if there were a *wh*-phrase in the complement clause, it could not be moved into the COMP position.

By the rule Move- α the sentential subjects in (9) and (10) might be extraposed to an empty position outside the scope of the VP in the matrix sentence. A trace would be left in a position governed by the INFL of the matrix \bar{S} , which would then be realized in the PF-component as *it*. If extraposition is not applied to (9), sentence (11) is generated:

- (11) for her to persuade John to buy one would be a mistake

This, however, is accorded very marginal acceptability by native speakers. By not applying extraposition to (10), (12) results:

- (12) to persuade John to buy one would be a mistake for her

But this is received rather reluctantly by native speakers and discreetly transformed into (13):

- (13) persuading John to buy one would be a mistake for her

The chips seem to be stacking up against (9) as a D-structure of (7).

The situation becomes clearer if we introduce sentence (14) with the adjective *easy*:

- (14) it is easy for Mary to get round John

Despite the fact that most American linguists would accept (15) with impunity,⁶ I take it to be ungrammatical:

- (15) *for Mary to get round John is easy

On the other hand, (16i) is again marginal and would be discreetly transformed into (16ii) by most informants:

- (16) i. to get round John is easy for Mary
 ii. getting round John is easy for Mary

⁶ Chomsky himself takes the example sentence (43) *For him to understand this lecture is difficult* as being perfectly grammatical in *Language and Mind* (p. 50 of the enlarged version, 1972). Nanni (1979) and Halpern (1980) also find the structure acceptable.

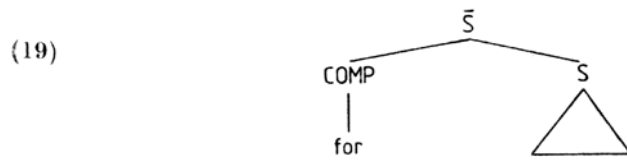
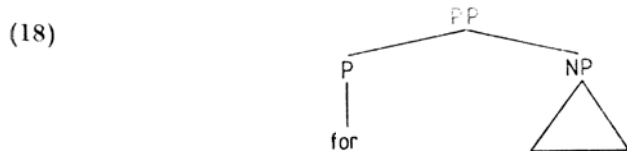
The evidence, then, points towards the rejection of (9) as the D-structure of (7). It appears that the *for her* and *for Mary* structures in (7) and (14) are PPs which are bounded within the VP of the matrix \bar{S} . In this case *for* is not a complementizer at all in such structures. This is essentially the analysis suggested by Deborah Nanni (1979). However, she rejects the AP analysis which I shall present here on the grounds that, since PPs and \bar{S} structures with COMP [*for*] may occur freely when adjectives such as *easy* are generated and may optionally be moved away from the adjective, they cannot be bounded by AP. This may be true when normal PP structures occur, but when complement clauses with *for* are generated, such movement results, as we have seen, in unacceptable (or marginally acceptable) structures. I shall argue that Nanni's analysis must be rejected in favour of the suggestion that adjectives like *easy* may be subcategorized for sentential PPs with the prepositional complementizer *for*. As such they must then be bounded by AP.

What can we now say about (8), which was given as a possible D-structure for (6)? If we move the *for John* structure in (6) to the head of \bar{S} , we get the following sentence:

(17) *for John Mary is eager to buy a Porsche*

The NP *John* in (17) is bounded by the PP, which in turn is bounded by the matrix \bar{S} , not by the clausal complement, so that the subject of the latter must be PRO. This must then be controlled by the nearest NP that does not violate the constraints of the LF-component, viz. *Mary*. Thus (17) could never be assigned the same semantic interpretation as (6).

In effect, the adjective *easy* must form an AP with a PP containing the preposition *for*. D-structure (8) does not show this. If Chomsky is correct in classifying the complementizer *for* as a prepositional complementizer, however, (and the analysis of the data up to this point would appear to confirm this line of thought), the clausal complement must be equivalent to an NP governed by *for*. Thus structure (18) is directly analogous to structure (19):



As I shall show, there is evidence to suggest a modification of (19), categorizing COMP as P and S as PP and thus bringing it into line with (18). However, let us now return to the status of the empty complementizer in D-structure (10). As we have seen, there is no possibility of a *wh*-element occurring in the COMP. But even if there were, movement to COMP must still be ruled out in the configuration given in (10), since the clausal element is in the subject position of the matrix \bar{S} . Hence sentence (20) is ungrammatical:

(20) **who to persuade to buy one would be a mistake for her*

If (9) were the correct D-structure, then the impossibility of moving a *wh*-phrase to COMP would emerge even more clearly, as we can see from the following sentences:

- (21) i. **for whom to persuade him to buy one would be a mistake*
 ii. **for whom her to persuade to buy one would be a mistake*

One possible conclusion is that option a. — that of not generating COMP at all — has been chosen, but that the choice involves non-generation of S in the infinitival complement clause. This would yield the following D-structure for (7):⁷

(22) [s[s[_{NP}PRO]INFL[_{VFP}persuade him to buy one]] INFL[_{VP}would be a mistake [PP[_Pfor][_{NP}she]]]]

A rule of \bar{S} -deletion need not now be postulated for (22). Since PRO is not governed (INFL in the clausal structure being [—Tense]), Case cannot be assigned to it and the major condition that Chomsky sets up for PRO, which I give here as (23), is not violated:

- (23) If α is an empty category, then α is PRO if and only if α is ungoverned.
 (Chomsky 1981: 60)

In point of fact there are a number of reasons for rejecting (22), to which I shall return in Section 9.

The major obstacle to the rejection of \bar{S} -deletion and acceptance of the optional generation of COMP is Chomsky's principle of non-government of PRO given in (23). Consider the following two sentences:

- (24) *John is eager for Mary to buy the next round of drinks*
 (25) *John is eager to buy the next round of drinks*

⁷ In giving D-structures for the following sentences in this section and in Section 9 I shall henceforth deliberately ignore the COMP node of the matrix \bar{S} and the \bar{S} boundary itself since their inclusion, although making the analysis more exact and correct, would not add anything to the main point of the argument.

Whatever the status of *for* in (24), it is quite obvious that it governs the NP *Mary*, which is the subject NP of the clausal complement. Consider first a Chomskyan analysis of (25), which would include an S node above S:

(26) John is eager [\bar{S} [s [s [NP PRO] INFL [VP buy the next round of drinks]]]

PRO is ungoverned here and cannot thus be assigned a Case marking. Hence there is good reason to retain S in the D-structure.

Note, however, that (26) is generated by that version of option a. above which requires the generation of \bar{S} . After Case marking has been assigned this must then be deleted by \bar{S} -deletion. We might, however, consider (27) as a possible alternative D-structure for (25):

(27) John is eager [s [NP PRO] INFL [VP buy the next round of drinks]]

As I have indicated, there are two possible variants of option a., generation of \bar{S} (i.e. a maximal projection from the lexicon) or non-generation of \bar{S} (i.e. a non-maximal projection). The first alternative, which is essentially what Chomsky suggests, would always lead to \bar{S} -deletion, since no elements could be moved into that position. On the other hand, referring back to the configurations in which government of NP holds, we see that by (1v) the adjective *eager* in (27) (the second alternative of option a.) governs the PRO subject of the complement clause, thus violating (23).

So far, however, we have not consulted configuration (lvii):

(1) vii. [VP V[AP A (of) NP]] where V does not govern NP, *of* governs NP and A governs *of*-NP

Chomsky himself suggests that *of*-NP may be a PP. When *of* does not occur in the D-structure configuration of (lvii), NP must remain ungoverned. In effect, this is the answer to the paradox evident in Kayne's empty preposition hypothesis. I shall argue that there are indeed such phonetically non-realized preposition positions, but that they cannot govern the c-commanded NP. Just as the "shadow" PRO cannot be governed, neither can the "shadow" \emptyset preposition (henceforth PREP) govern.

If this is correct and if we refer back to my analysis of \bar{S} with COMP [*for*] as a prepositional phrase, then the following D-structures for (24) and (25) can be postulated:

(28) John is [AP [A eager] [PP [P for] [s [NP Mary] INFL [VP buy the next round of drinks]]]]]

(29) John is [AP [A eager] [PP [P PREP] [s [NP PRO] INFL [VP buy the next round of drinks]]]]]

Imagine that *for* is generated in (29) and carried through into S-structure, after which it is deleted in the PF-component. PRO will then be governed at the level of D-structure. If we allow an empty PREP to be generated, PRO

must remain ungoverned. There is then no need to posit any deletion transformation. Remember that I am suggesting here that PREP is an analogue of PRO, in that it is implicitly understood to be present but receives no phonetic realization in the PF-component. In view of sentences such as (30), which can occur in certain dialects of English, I would tentatively postulate that government of PRO in those dialects is relaxed for government by a preposition in contrast to government by a verb:

(30) John is eager for to buy the next round of drinks

The simple fact remains that in (29), according to (lvii), PRO remains ungoverned. Thus we obviate the need to postulate \bar{S} -deletion in the transformational component. At the same time, however, we have substituted the configuration \bar{s} [$COMP$ for S] by PP [P for S].

5. The PREP analysis extended

This type of analysis would be fine but for the following sentences:

(31) Mary wanted to buy the next round

(32) Mary wanted John to buy the next round

(33) John tried to order the drinks at the bar

(34) John believed Mary to be a drunkard

Let us assume for the moment that, contrary to Chomsky's analysis, \bar{S} is not generated in (31)–(34). In (32) and (34) no great problems are presented. The following D-structures would be generated:

(35) Mary wanted [s [NP John] INFL [VP buy the next round]]

(36) John believed [s [NP Mary] INFL [VP be a drunkard]]

According to the system of government, the verbs *wanted* and *believed* will govern the subject of the clausal complement, viz. *John* and *Mary*, and the Case Filter will assign an Objective Case marking to them. However, the postulate of an empty COMP and the need to delete \bar{S} arose from the fact that, unless we find some other method of analysis, the generation of S c-commanded by V would leave PRO governed by the verbs of the matrix sentences, as is clear from an analogous D-structure analysis of (31) and (33):

(37) Mary wanted [s [NP PRO] INFL [VP buy the next round]]

(38) John tried [s [NP PRO] INFL [VP order the drinks at the bar]]

Quite clearly this sort of analysis with *want* and *try* will not do. Chomsky's principle that PRO should not be governed is well motivated and ought not to be jettisoned simply to bring the analysis of (31) and (33) into line with

that of (32) and (34). The solution is, I believe, relatively simple and makes use of the modification of the complementizer *for* suggested in the previous section.

In certain dialects of English, though not in standard British English, the prepositional complementizer *for* still occurs with verbs like *want* and *try*, so that the following sentences are theoretically possible:

- (39) Mary wanted *for* to buy the next round
 (40) Mary wanted *for* John to buy the next round
 (41) John tried *for* to order the drinks at the bar

Chomsky touches on the possibility of a rule of *for*-deletion (Chomsky 1981: 69) and makes two suggestions, a) that such verbs as *want* sometimes allow \bar{S} -deletion and b) that "there is a rule of *for*-deletion in immediate post-verbal position for these verbs in the PF-component". He opts for the second solution and suggests that "*want*-verbs do not permit \bar{S} -deletion as a marked option".

If Chomsky is correct in his assumption, the D-structure for (31), taking the original [\bar{S} COMP S] structure to be a prepositional phrase [PP P S], would be:

- (42) Mary wanted [PP[P_{FOR}][S[NP_{PRO}] INFL [VP_{buy} the next round]]

The prepositional complementizer *for* will then be deleted in the PF-component. I have already rejected this type of analysis with deletion of *for* in the case of *eager* unless of course the dialect in question allows (23) to be violated when a P rather than a V is the governing category, since PRO will clearly be governed at D-structure in (42).

It depends, of course, at what level condition (23) should be operative. If we require that government should operate at S-structure, then *for* would have to be deleted in the transformational component and we simply exchange one complication of this part of the syntax, viz. \bar{S} -deletion, for another. If we allow *for* to be deleted in PF-component, then by extension government holds only there and not at D-structure or S-structure. But surely, just as the projection of a syntactic configuration from the lexicon must hold at every level, i.e. within every module of the grammar, so too should the principles of binding, control and government.

The most satisfactory solution to adopt is that Kayne's empty preposition, now reformulated as the empty "shadow" element PREP, is generated at D-structure, just as we suggested for sentences with *eager*. On this analysis the D-structures for (31)–(33) will be (43)–(45):

- (43) Mary wanted [PP[P_{PREP}][S[NP_{PRO}] INFL [VP_{buy} the next round]]
 (44) Mary wanted [PP[P_{PREP}][S[NP_{John}] INFL [VP_{buy} the next round]]
 (45) John tried [PP[P_{PREP}][S[NP_{PRO}] INFL [VP_{order} the drinks at the bar]]

In (43) and (45) PRO will not be governed because the preposition *for* is not

generated. Contrary to Kayne, I am thus assuming that a zero element, which like PRO is not given a phonetic realization, will not be a governor. Once again it may be the case that in certain dialects of English which allow the prepositional complementizer *for*, prepositions govern differently from verbs. Sentence (40) is clearly more acceptable than (39) and (41). In dialects of English which allow sentences like (39) and (41) to be generated, on the other hand, condition (23) is relaxed when the governor is a preposition.

6. Case assignment in infinitival complements: the PERC hypothesis

The principal problem that remains to be solved before I proceed to extend the analysis to other types of infinitival complements and small clauses is that of Case assignment. Case markings are assigned in accordance with the principles of government and binding. Generally speaking, Nominative Case will be assigned to an NP under government by INFL when the latter contains [+Tense] and AGR, Objective Case under government by V and Oblique Case under government by P. In modern English Oblique Case and Objective Case in effect fall together, so that whether we call *me* a surface structure Objective Case in (46) or a surface structure Oblique Case in (47) is immaterial, since the same phonetic realization is assigned to both:

- (46) Mary saw me in the Pickled Walnut pub last night
 (47) in fact she was sitting right next to me the whole evening

Thus it can be reasonably argued that, whereas in French, as Kayne has shown, government by a preposition leads to inherent Case marking (Case marking at D-structure level), government by prepositions and verbs leads in both cases to one type of unified Case marking in English. Thus in (28) *for* governs and assigns an Objective (or Oblique) Case marking to the NP *Mary*, just as the V *buy* in the clausal complement governs and assigns Objective Case to the NP *the next round*.

D-structures (43)–(45) pose problems, however. Let us consider first how Exceptional Case marking is assigned in Chomsky (1981). For sentence (34) Chomsky would give the following D-structure:

- (48) John believed [\bar{S} [S[NP_{Mary}] INFL [VP_{be} a drunkard]]

The NP *Mary* is not governed by the verb *believed* in the matrix \bar{S} and will therefore not be assigned Objective Case. In order to reach a configuration in which government holds, a rule of \bar{S} -deletion is postulated. Such a rule would result in an S-structure identical to the D-structure given in (36), which I repeat here for convenience:

- (36) John believed [S[NP_{Mary}] INFL [VP_{be} a drunkard]]

Thus Exceptional Case marking must somehow allow Case to be assigned from the matrix V. Case marking has, in other words, to percolate down into the clausal complement. With a verb like *believe* this is entirely unnecessary. The simplest solution is to subcategorize *believe* in the lexicon for a maximal complement structure with COMP [*that*] and [+Tense] or a non-maximal complement structure without COMP and with [-Tense]. In the second case there is a direct relation of government between the V of the matrix \bar{S} and the subject of the complement clause, which, as we shall see in Section 10, is the analysis needed for small clauses.

Percolation of Case into the complement structure where a category above S other than \bar{S} forms a barrier must be possible, just as it is possible for elements of the complement clause in such structures to cross over the barrier in the opposite direction and be moved into the COMP [+WH] slot in the matrix \bar{S} . Assignment of Case across the boundary of the complement clause is what I consider to be genuine Exceptional Case marking. And it is, I maintain, what happens in infinitival complement clauses after such verbs as *want* and *try*, and such adjectives as *eager* when the prepositional complementizer is PREP.

According to this analysis PP does not form an impenetrable barrier to movement out of and Case marking percolation into the complement clause. As we shall see in Section 9, \bar{S} does form an impenetrable barrier. Let us consider the following data:

- (49) i. Mary is eager to meet John at the Pickled Walnut
 ii. where is Mary eager to meet John
 iii. who is Mary eager to meet at the Pickled Walnut
- (50) i. Mary is eager for Eunice to meet John at the Pickled Walnut
 ii. where is Mary eager for Eunice to meet John
 iii. who is Mary eager for Eunice to meet at the Pickled Walnut
 iv. *who is Mary eager for to meet John at the Pickled Walnut
- (51) i. Mary wanted to buy the drinks last night
 ii. when did Mary want to buy the drinks
 iii. what did Mary want to buy last night
- (52) i. Mary wanted John to buy the drinks last night
 ii. when did Mary want John to buy the drinks
 iii. what did Mary want John to buy last night
 iv. who did Mary want to buy the drinks last night
- (53) i. Mary wanted for Eunice to meet John at the party
 ii. where did Mary want for Eunice to meet John
 iii. who did Mary want for Eunice to meet at the party
 iv. *who did Mary want for to meet John at the party
- (54) i. John tried to buy a round last night

- ii. when did John try to buy a round
 iii. what did John try to buy last night

In (49)–(54) *wh*-quantification of any phrase in the complement clause except the NP governed by *for* when the latter is generated may cross the PP barrier into the COMP of the matrix \bar{S} .⁸ There is thus no clear reason why Case assignment should not be percolated in the opposite direction into the NP subject of the complement clause across the PP barrier, thus killing two birds — cyclic *wh*-movement and \bar{S} -deletion — with one stone. Under the percolation analysis (henceforth PERC) Kayne's postulate of an empty preposition is upheld, although PREP will not govern an NP, and there is no need to set up a rule of \bar{S} -deletion in the transformational component.

7. Possible counterexamples: *tell, ask, order* etc.

If PERC is an acceptable explanation of Case marking in infinitival complements without *for*, the configuration which allows it to operate should be generalizable to other types of infinitive complement and to so-called "small clauses" (cf. Williams 1975). Accordingly, I will extend the range of data to see how the hypothesis fares.

Consider first clausal complements projected from the lexicon by verbs such as *tell, beg, warn, ask, order, persuade* etc.:

- (55) Eunice told John to meet Mary at the station
 (56) Mary begged me to invite John
 (57) Mary warned John not to buy another round
 (58) Mary asked me to invite John
 (59) she ordered me to send the parcel tomorrow
 (60) Eunice persuaded John to take Mary out

In (55)–(60) the second NP is bounded by the VP of \bar{S} and is thus directly governed by V. It must receive its Objective Case marking from this configu-

⁸ Borsley (1981) offers a number of plausible arguments from Polish that movement of *wh*-phrases from their original position into the COMP of the matrix \bar{S} involves deletion rather than cyclic *wh*-movement. He correctly observes that Chomsky himself (Chomsky 1980a) considers the impossibility of *wh*-movement to be a result of the violation of the subadjacency condition, since \bar{S} and S have to be taken as bounding nodes. The argument I am presenting here allows us to conserve the notion of *wh*-movement, though not in quite the way Chomsky envisages it, without resorting to a transformation of *wh*-deletion, as Borsley wishes. Reverting to a deletion transformation would mean adding to the transformational component, which is precisely the opposite of what I am proposing in the present paper. Movement out of S and PP, however, *does* seem possible in the data I am presenting here (cf. in particular Section 10, sentences (126) and (127)), so that I, for one, *am* willing to suggest that S is not a bounding node in infinitival complement clauses.

ration. This means that the subject of the clausal complement is PRO. The verbs in (55)–(60) are not all alike in their subcategorization features, however, and do not provide a coherent set of data when *wh*-phrases are moved from positions in the complement clause, as is evident from the following sentences:

- (61) i. who did Eunice tell John to meet at the station
 ii. Eunice told John who to meet at the station
 (62) i. who did Mary beg me to invite
 ii. *Mary begged me who to invite
 (63) i. what did Mary warn John not to buy
 ii. Mary warned John what not to buy
 (64) i. who did Mary ask me to invite
 ii. Mary asked me who to invite
 (65) i. what did she order me to send tomorrow
 ii. *she ordered me what to send tomorrow
 (66) i. who did Eunice persuade John to take out
 ii. *Eunice persuaded John who to take out

In (61)–(66) a *wh*-phrase in the clausal complement may cross over the clause boundary and be moved by Move- α into the COMP node of \bar{S} , but only in (61), (63) and (64) may a *wh*-complementizer appear in the complement clause. In addition to this it isn't *Mary* who does the inviting in (64i) but *I*, whereas in (64ii) the situation is reversed. It would thus appear that *tell*, *ask* and *warn* take *wh*-complement clauses, but not *beg*, *order* and *persuade*.

If we maintain the principle that \bar{S} is a barrier to strong crossover phenomena and to PERC, it follows that (61ii), (63ii) and (64ii) can indeed be allotted a D-structure with \bar{S} and a COMP with the feature [+WH], which must then be filled by a *wh*-phrase from the complement clause. Likewise it follows that none of the other grammatical sentences in the data may contain \bar{S} . What type of D-structure may be suggested?

Let us take (60) as a paradigm case, since Chomsky discusses in some detail but with rather inconclusive results whether *persuade* should occur with small clause complements or some other complement clause type (Chomsky 1981: 107–8). The following structure must be excluded, since PRO would be governed:

- (67) Eunice persuaded John [_S[_{NP}PRO] INFL [_{VP}take Mary out]]

On the other hand, *persuade* does not allow *wh*-elements to occur in the complementizer position, so that (68) is also excluded, even though PRO is no longer governed:

- (68) Eunice persuaded John [\bar{S} [+WH][_S[_{NP}PRO] INFL [_{VP}take who out]]]

With the exception of *order*, however, all the verbs in (55)–(60) also appear in the following structural frame: [_{VP}V NP PP], cf. (69):

- (69) i. tell x of y
 ii. beg x for y
 iii. warn x of y
 iv. ask x for y
 v. persuade x of y

Notice also that the prepositions *of* and *for* are precisely those which may be omitted in certain syntactic configurations. I conclude that the PP complement structure with PREP and PRO in the subject position in the infinitival complement clause is a reasonable analysis for (55)–(60), as exemplified by (70):

- (70) Eunice persuaded John [_{PP}[_PPREP] [_S[_{NP}PRO] INFL [_{VP}take Mary out]]]

The D-structure for those verbs which may take \bar{S} can be exemplified for (61ii) as follows:

- (71) Eunice told John [\bar{S} [+WH] [_S[_{NP}PRO] INFL [_{VP}meet who at the station]]]

The fact that *tell*, *ask* and *warn* are understood in one way when followed by a *wh*-complement clause and in another way when followed by a prepositional complement stems from two different subcategorizations for these two complement clause types in the lexicon. The semantic interpretation of the two configurations will differ correspondingly. Similarly the fact that PRO in a *wh*-complement clause with *ask* is controlled by the subject NP of the matrix \bar{S} , whereas it is controlled by the object NP when in a prepositional complement clause, must be traceable to the subcategorization features of *ask* in the lexicon.

Summing up, I conclude that verbs such as *ask*, *tell*, *order* etc. are not counterexamples to the PREP hypothesis. On the contrary, they provide additional evidence for PREP in that some sort of mechanism is needed to allow for the type of crossover phenomena such as I have discussed in the previous two sections. There is a clear distinction between *wh*-infinitival complements and PREP (or *for*) infinitival complements, and this distinction is expressed in the lexicon in terms of the subcategorization features of the verbs and adjectives concerned. In the following section more serious counterexamples to PREP and PERC will be examined.

8. Further apparent counterexamples: *remember*, *begin*, *decide* etc.

Much more serious possible counterexamples to PREP are the following sentences:

- (72) John decided to sell his Porsche

- (73) Mary remembered to put the cat out
 (74) we regret to say that the parcel has not arrived
 (75) John began to have serious doubts about Mary's honesty

In each case except (75) PRO must be the subject of the clausal complement. Thus a lexical projection without either \bar{S} or PREP would leave PRO ungoverned, as is clear from (76):

- (76) John decided [_S[_{NP}PRO] INFL [_{VP}sell his Porsche]]

On the other hand, in both (72) and (73) it is possible to move a *wh*-phrase into the COMP position of the clause or the COMP position of the matrix \bar{S} , cf. (77)–(80):

- (77) John decided what to sell
 (78) what did John decide to sell
 (79) Mary remembered which animal to put out
 (80) which animal did Mary remember to put out

Sentences (72), (73), (77) and (79) are all assertions, and as such possible answers to questions. Sentences (78) and (80) are questions, so we now have to fit the appropriate assertions to them. (78) and (80) entail that John has decided to sell something, i.e. his decision has been made, and that Mary has remembered to put out one of the animals, i.e. she has recalled what it was she had to do. Uttering (77) and (79) as replies to (78) and (80) is extremely odd. At best the speaker would be avoiding the issue, and at worst he would be pulling the questioner's leg. More appropriate questions for (77) and (79) would be something like the following:

- (81) i. what did John decide
 ii. what sort of decision did John make
 (82) i. what did Mary remember
 ii. what was it that Mary remembered

Thus it would appear that there are two subtly different semantic interpretations for *decide* and *remember* which can be traced back to different types of lexical subcategorization for clausal complements. On the one hand, a *wh*-phrase may be moved out of the complement clause, thus allowing the hearer to conclude that John decided something and Mary remembered something. On the other hand, the *wh*-phrase may fill the COMP node within the complement clause and be interpreted as part of the statement that John questioned what he ought to sell and Mary which animal it was that she was to put out.

In the circumstances, by far the simplest assumption is that *decide* and *remember*, like *ask*, *warn* and *tell*, take either a clausal complement with PREP

or one with COMP[+WH]. Thus the following two D-structures may be posited for (72) and (73):

- (82) John decided [_{PP}[_PPREP][_S[_{NP}PRO] INFL [_{VP}sell his Porsche]]]
 (83) Mary remembered [_{PP}[_PPREP][_S[_{NP}PRO] INFL [_{VP}put the cat out]]]

whereas (84) and (85) are the D-structures for (77) and (79):

- (84) John decided [_SCOMP[+WH][_S[_{NP}PRO] INFL [_{VP}sell what]]]
 (85) Mary remembered [_SCOMP[+WH][_S[_{NP}PRO] INFL [_{VP}put which animal out]]]

Sentence (74) is a more difficult counterexample, since there is no analogue to (78) and (79) with a *wh*-complementizer. Thus (86) is ungrammatical:

- (86) *we regret what to say

On the other hand, (87) is a reasonable, although in the sort of situation in which (74) might be uttered a rather odd and perhaps provocative question, whereas (88) is not an appropriate question to (74):

- (87) what do you regret to say
 (88) what do you regret

The evidence is admittedly rather slender, but I submit that, once again, the most logical D-structure analysis of (74) is with PREP, as in (89):

- (89) we regret [[_{PP}[_PPREP][_S[_{NP}PRO] INFL [_{VP}say that the parcel has not arrived]]]

Sentence (75) has been added to the list of possible counterexamples in this section because it is often felt that the infinitive complement is the object of *begin*. This is not the case, however. The NP *John* cannot be allotted the θ -role of Agent in (75) as it can in (90):

- (90) John began the discussion

So it is incorrect to take *John* as the D-structure subject of the matrix \bar{S} . (75) should rather be analyzed as a process which began at some point in time and for which the causative element, the Agent or Source, is omitted. I would suggest a similar analysis to infinitive complement clauses with *seem*, *appear* and *happen*, i.e. one which posits raising of the subject in the matrix sentence. An empty NP will be generated in that position in D-structure, and the movement of *John* out of the complement will leave a trace with which it is bound. However, in order to allow free movement of material out of the clausal complement we must not have a S node. It would thus

seem that (91) is a reasonably adequate D-structure for (75):

- (91) [_{NP}] INFL [_{VP}begin [_S[_{NP}John] INFL [_{VP}have serious doubts about Mary's honesty]]]]

After Move- α has raised the NP *John* to the empty [_{NP}] slot, the following S-structure is generated, which Chomsky suggests is also an adequate LF-representation:

- (92) John_i [_{VP}began [_{st_i} to have serious doubts about Mary's honesty]]]

I therefore conclude that *begin* followed by an infinitival complement is in no way a counterexample to PREP and PERC.

9. *Easy and difficult revisited*

In Section 4 I considered an analysis of sentences containing adjectives such as *easy* and predicate NPs such as *a mistake*, which took the infinitive clause to be the subject of the matrix \bar{S} ⁹. Since the PRO subject of the clause would not be governed by the verb of the matrix \bar{S} if the clause were not taken to be a maximal projection, it was suggested that a rule of \bar{S} -deletion could be obviated. However, the analysis given in Section 4 was deficient in certain important respects. Consider first the following sentences:

- (93) it was difficult to find the correct analysis
 (94) it was difficult for John to find the correct analysis
 (95) finding the correct analysis was difficult for John
 (96) to find the correct analysis was difficult
 (97) ?for John to find the correct analysis was difficult
 (98) what was difficult for John
 (99) what was it difficult for John to find
 (100) what was difficult for John to find
 (101) what was difficult to find
 (102) the correct analysis was difficult to find

The type of analysis sketched out above would give us the following D-structure for (93):¹⁰

- (103) [_S[_S[_{NP}PRO] INFL [_{VP}find the correct analysis]] was difficult]

⁹ Halpern (1980) has given a wealth of interesting information on the *easy to please/eager to please* complex, but does not, to my mind, reach any significant conclusion concerning the generation of these infinitival complement clauses, or make any attempt to link them up with other infinitive clauses.

¹⁰ Once again the reader is reminded that the D-structures are not given in full detail.

I take it that the INFL of the matrix \bar{S} , which has not been given in (103) but is represented in the past tense, third person singular form *was* of the verb *be*, must govern the clausal subject of the whole sentence. \bar{S} does not create a barrier to government (cf. (liii) and (lv) in Section 2), so that in effect PRO is governed by INFL in the matrix sentence. (23) is thereby violated and (103) cannot be the D-structure of (93). I also suggested that the infinitive clause could be extraposed to an empty position either within the VP of the matrix \bar{S} or to the right of the whole string, thus leaving a trace which would be realized in the PF-component as *it*.

But this analysis does not show a proper understanding of the notion of trace. A trace is an empty category which results from the movement of a θ -marked, governed NP to an empty NP position which is not θ -marked. It is never realized morphologically, although it may have an effect on the phonetic realization of the surface string. The antecedent-trace relation observes subadjacency (Chomsky 1981:136). Thus, although the NP *it* would actually be governed in the proper sense by INFL in the matrix \bar{S} (cf. the Empty Category Principle (ECP) in Chomsky 1981:250), it is unclear whether the subadjacency relationship could be upheld, and it is certainly not the case that *it* could be realized from an NP-trace. Thus the analysis of (93) using a D-structure such as (103) is impossible.

On the other hand, we do not want to reintroduce the empty COMP analysis and \bar{S} -deletion. Notice also that (99) cannot be generated with the S analysis if we take \bar{S} to be a barrier to movement out of an embedded clause. In Section 4 there were two reasons for postulating the analysis of *for John* in (97) as a PP outside the bounds of the infinitival clause. Firstly, despite Chomsky's insistence that (97) is well-formed (cf. e.g. *Language and Mind*, p. 50), I have never yet found a native speaker who will accept it unreservedly — if indeed he does not reject it outright. And secondly, the existence of a sentence like (95) and the apparent ease with which adverbial phrases can be interposed between the PP and the infinitival clause suggest that the prepositional analysis is more satisfactory.

Let us now consider the possibility that the PP is in fact an instance of PREP+S or *for*+S. What sort of D-structure might be proposed for (93)? Recall that the analysis of the verb *begin* in Section 8 rested on the assumption that the subject NP position of the matrix \bar{S} was an empty NP category, [_{NP}]. Let us therefore examine the following analogous D-structure for (93):

- (104) [_{NP}] was difficult [_{PP}[_PPREP] [_S[_{NP}PRO] INFL [_{VP}find the correct analysis]]]

The S of the infinitival clause has been taken as analogous to an NP. Thus it can be moved out of the PP by Move- α and occupy the empty NP slot,

thereby generating (96). The pronoun *it* in (93) must be realized if [NPE] is not filled.

We may now postulate the following D-structure for (94):

(105) [NPE] was difficult [PP[_{for}] [S[NP_{John}] INFL [VP_{find the correct analysis}]]]

If this is the correct D-structure for (94), we have an immediate solution to the low acceptability of (97). Move- α has shifted a PP into an empty NP slot!

Thus adjectives such as *difficult*, *easy*, *hard* etc. and predicate NPs such as *a mistake* trigger raising to subject NP position in the matrix sentence, like *seem*, *likely* and *begin*. If, as I have suggested, PP is not a barrier to movement out of the infinitival clause, then we can expect a *wh*-phrase to be raised to the COMP position or to the [NPE] position in the matrix sentence (cf. (99), (100) and (101)). Likewise we can expect raising of the NP governed by the verb in the infinitival clause (cf. (102)) or of the whole S governed by the preposition (cf. (94)), this latter movement being possible because S in this position is equivalent to an NP. All of these structures can be generated with ease, whereas (97) remains dubious at best. The clause *finding the correct analysis* I take to be an $\bar{N}P$, so that the most logical complementary question to it is (98).

10. Concluding remarks

I have not by any means examined every type of infinitival complement clause which can occur in English. The following sentences display infinitival structures which have had to be omitted here, but which, I am convinced, can be integrated into the general analysis of infinitival clauses either as prepositional phrases with *for* or PREP, or as maximal \bar{S} projections with a [+WH] COMP, or as simpler S projections bounded by VPs which contain raising predicates (e.g. *begin*, *seem*, *likely* etc.):

- (106) John was the only guest to bring a bottle of whisky
- (107) there's nowhere to go and nothing to see
- (108) Mary's party was the wildest to be held for years
- (109) John stopped to have a smoke
- (110) Mary gave John the money to buy the drinks
- (111) Eunice opened the window for John to climb out

One sentence type which I have considered but left in a rather isolated position in Section 6 involves the verb *believe* with a simple S projection, which is one of Chomsky's paradigm cases for \bar{S} -deletion and Exceptional Case marking. There is evidence that the S projection is in fact a small clause

with a [-Tense] INFL marking. As Chomsky quite correctly points out, most of the verbs which take an infinitival complement clause will also have a maximal projection with COMP [\pm WH] and in many cases a [+Tense] INFL marking. This is also true with *believe*. But what is interesting with *believe* is that the non-maximal projection that I have suggested may only be generated when the verb of the complement clause is marked as stative. It may even be the case that only *be* with a predicate NP, AP or PP is allowed, since the sentences with other stative verbs than *be* have a rather dubious status of grammatical acceptability:

- (112) I believe John to be rich
- (113) John believed Mary to be a drunkard
- (114) ?Eunice believed John to possess a fortune
- (115) ?Mary believed Eunice to have a crush on John
- (116) *John believed Mary to come late
- (117) *we believed them to want to come to the Pickled Walnut

Note that (116) and (117) are simply ungrammatical. If we now compare *believe* with verbs like *consider*, which have non-maximal S projections and are thus often followed by small clause complements, we see that these complements are always stative and always with the verb *be* understood or with the connective *as*:

- (118) John considered Mary beautiful
- (119) John considered Mary to be beautiful
- (120) Eunice regarded John as a snob
- (121) some like it hot
- (122) we prefer our tea with milk
- (123) Mary wants the car repaired

In (121)–(123) we also see *like*, *prefer* and *want* with small clause complements, displaying the variety of lexical projection in terms of complement structures. *Believe* is not on its own in projecting a small clause with a [-Tense] INFL marking; *know* also appears in similar structures:

- (124) we know you to be honest
- (125) Mary knew John to be in love with Eunice

The analysis of infinitival complement structures presented in this paper is based on the assumption that a rule of \bar{S} -deletion is not necessary in the transformational component of the syntax. If we consider the complementizer *for* to be a preposition with a sentential NP, it is logical to suggest that \bar{S} can be replaced by PP. Kayne's suggestion of a zero preposition can then be maintained, but only if we stipulate that an empty category like PRO or PREP may neither be governed nor govern. Given this necessary condition

on the occurrence of PREP, *wh*-phrases may be moved out of the complement clause into the COMP of the matrix sentence. Such movement may occur without the *wh*-phrase having to be first moved to the COMP node of the complement clause, leaving a trace behind, and then being moved from there to the matrix COMP position, leaving a further trace behind. Indeed, if this type of analysis is maintained, a complex set of government relations and θ -marking for *wh*-phrases in COMP in complement clauses must be postulated, which will not hold at the level of the matrix COMP. The reason for this lies in the fact that a trace must be governed and θ -marked, and the element moved must move to a non- θ -marked position. My analysis dispenses with the need to postulate an \bar{S} node boundary to an infinitival complement clause, and any *wh*-phrase moved out of the clause to the COMP in the matrix sentence will thus not violate this boundary and in doing so the subjacency condition. At the same time only one trace need be left in the original NP position. Compare the following two sentences in respect of their (un) grammaticality:

(126) what did Mary seem to want John to prefer to do

(127) *what did Mary say that John seemed to prefer to do

My analysis allows for just one movement from the most deeply embedded infinitival clause to the COMP of the matrix \bar{S} without any steps on the way or any intervening traces. This is precisely because no \bar{S} boundary is violated on the way. In (127), on the other hand, an \bar{S} boundary prevents *what* from getting through to the matrix COMP, so that (127) violates the subjacency condition.

The subject of an infinitival complement clause may not move out of the clause if governed by *for* or the INFL of the clause, just as in fact Chomsky's Nominative Island Constraint (NIC) predicts. On the other hand, Case marking may percolate through into an NP in the subject position if PREP occurs.

Summing up, the PREP analysis predicts the syntactic behaviour of infinitival complement clauses in a wider range of cases than the *for-to* COMP analysis without having to postulate a rule of \bar{S} -deletion. The only cost, it would seem to me, is the acceptance of any empty category PREP, which will receive no phonetic realization in the PF-component but will also not act as a governing category. Even this hypothetical element is not so hypothetical when we consider that standard British and American English differ quite markedly in the use of *for* in infinitival structures. Where American English frequently uses *for* in certain types of configuration, British English apparently has the empty PREP. In a number of dialects, both in Britain and America, *for* is inserted before PRO where I have suggested the D-structure presence of PREP. Conditions of government will have to be relaxed for these dialects, but in general they offer us good evidence of the original

presence of a preposition, which is now generated, like PRO, as a shadow category. However, PREP is a crucial element in explaining the behaviour of infinitival complement clauses just as PRO is a crucial element in the theories of control and binding, and I submit that it allows us to make some useful modifications to the body of EST which may be viewed as a modest contribution to the wider theory of UG.

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