

CONTROL FROM COMP AND COMPARATIVE SYNTAX*

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The conception of Universal Grammar as a system of principles and parameters from which a specific core grammar can be derived by fixing the parameters of the system, has led to a renewed interest in comparative syntax.

Indeed, the powerful analytic tools resulting from recent theoretical developments, not only contributes to discover deep similarities between superficially very different languages, but also permits the discovery of systematic patterns of variations and allows one to reduce them to different choices in the value of some parameter of the system.

Here, we want to look at one particular principle of UG (the ECP) and the crosslinguistic variation surrounding its scope of application. More specifically, we will be concerned with subject/object asymmetries which obtain with respect to both syntactic and LF *wh*-movement, and with the nature of proper government of *wh*-traces in subject position.

Chomsky (1981) proposes to account for subject/object asymmetries, exhibited in English for example by the so-called *that-t* phenomena, (**who do you think t that t came*) by means of the Empty Category Principle (ECP), a principle governing the distribution of empty categories at LF. The ECP can be stated as:

[α e] must be properly governed

The notion proper government has received many definitions in the literature. For heuristic reasons, the initial one will be presented here:

β properly governs α iff β governs α ¹

a) $\beta = X^0$

b) β is an NP coindexed with α .

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Essentially, this principle requires that empty categories (more precisely trace of NP-and *wh*-movement) be locally controlled.

In this view, the observed subject/object asymmetries are a consequence of government: whereas the object of a verb is governed by a lexical category (namely the verb itself), the subject is not. The question arises how the condition on proper government is fulfilled for traces in subject position. It is generally assumed that in cases of subject extraction in matrix clauses (e.g. *who t came*) the subject trace is properly governed by the *wh*-phrase in the adjacent COMP (by virtue of being coindexed). In cases of long extraction, the complementizer *that* in *who do you think t (*that) t came* must be absent so as to allow the trace in COMP to properly govern the trace in subject position. We will refer to proper government of *wh*-traces in subject position, our main concern here, as *Control from COMP*.

Within the framework outlined above, restricting ourselves to *wh*-questions, we will first present data on subject/object asymmetries, discussing Vata, a West-African language (Kru family) in section 1, and French in section 2. We will argue that the ECP explains the configuration of data in both Vata and French and that our analysis supports the hypothesis that the ECP applies at the LF level of representation as first argued for in Kayne (1981) and subsequently in Rizzi (1982) and Jaeggli (1980). Our analysis shows that there is some crosslinguistic variation as far as Control from Comp is concerned: in Vata, contrary to French, a subject trace can never be properly governed from COMP, not even in matrix clauses. Many questions arise as to what Control from COMP is and what determines the possibility or the impossibility in a given language for Control from COMP. The analysis of the French data bears on these questions, in that they establish that movement to COMP in LF does not lead to proper government configurations, supporting a similar conclusion reached in Aoun, Hornstein & Sportiche (1981) (henceforth AHS). We will argue that, since the *wh* phrase in COMP cannot be the element which properly governs the trace in subject position, it must be the COMP node itself which properly governs it, by virtue of the existence of a COMP indexing rule.

In section 3, we address the problem of how the crosslinguistic variation can be accounted for and propose the Control from COMP parameter. This parameter is discussed with respect to certain well-studied languages (English, Dutch and Italian) in 3.1 and 3.2. In 3.3 it is discussed from the point of view of the language learner. In 3.4, we address some apparent problems for our analysis which arise in languages like Chinese (Huang, 1982) which lack a rule of syntactic *wh*-movement applying in the formation of *wh*-questions. In 4, finally, we summarize the major findings of this article.

1. SUBJECT OBJECT ASYMMETRIES IN VATA

In Vata, a West-African language (Kru family), spoken in the Ivory Coast, there exist two strategies for the formation of *wh*-questions, either by the application of (syntactic) *wh*-movement, moving the *wh*-phrase into COMP, or by leaving the *wh*-phrase in its A-position (henceforth *wh*-in-situ). We will discuss both strategies in turn and show that they display subject/object asymmetries.²

1.1. *Wh*-movement

The sentences in (1) contain examples which are representative of extraction out of subject and non-subject position:³

- (1) a. *áló *(ǎ) lē sáká lá*
 who *(heR) eat rice *wh*
 'Who is eating rice'
 b. *yī kòfi lé (*mí) lá*
 what Kofi eat (*it) *wh*
 'What is Kofi eating'

When the subject is questioned, a resumptive pronoun must occur in subject position.^{4,5} When non-subjects are questioned, resumptive pronouns are excluded.

This generalization holds in all constructions which involve *wh*-movement, i.e. *wh*-questions, focus constructions, and relative clauses. Data on extraction of subjects and non-subjects in focus constructions and relative clauses are presented in (2) and (3) respectively:

- (2) a. *kǎ mǎ *(ǎ) lē sáká*
 man PRON *(heR) eat rice
 'It is the man who is eating rice'
 b. *sáká má kǎ lé (*má)*
 rice PRON man eat (*it)
 'It is rice the man is eating'
- (3) a. *kǎ mǎmǎ *(ǎ) lē bǎ sáká*
 man REL-PRON *(heR) eat REL rice
 'the man who is eating rice, ...'
 b. *sáká mǎmǎ kǎ lé bǎ (*má)*
 rice REL-PRON man eat REL (*it)
 'The rice the man is eating, ...'

These data show that *wh*-movement of subjects requires the presence of a resumptive pronoun, notwithstanding the occurrence of a *wh*-phrase (1a), a focused pronoun (2a) or a relative pronoun (3a) in COMP. Resumptive pronouns are excluded from any other position.

The same asymmetry between subjects and non-subjects is observed with apparent unbounded movement:

- (4) a. *àlɔ̀ n̄ gūgū nā *(ɔ̀) yì lá*
 who you think that *(heR) arrive *wh*
 'who do you think arrived'
 b. *àlɔ̀ n̄ gūgū nā wá yɛ̀ (*mɔ̀) yé lá*
 who you think that they see (*him) PART *wh*
 'Who do you think they saw'

Before turning to the analysis of these data, it is necessary to make some remarks on the resumptive pronoun. The resumptive pronoun has the segmental form of a nominative third person pronoun, but differs from it in bearing a low tone instead of the mid high tone (ɔ̀) third person pronouns usually carry. (For a description and an analysis of this low tone pronoun, see Koopman & Sportiche (1983)). The resumptive pronoun agrees with the *wh*-phrase, as can be seen in the following examples (cf. Kaye (1982) on the selection of pronouns in Vata)

- (5) a. *yī n̄ gūgū nā i ɓlɛ̀ lá*
 what you think that itR fall *wh*
 'what do you think is happening'
 b. *yī gbɔ̀ n̄ gūgū nā ɔ̀ ɓlɛ̀ lá*
 what thing you think that itR fall *wh*
 'what do you think is the matter'
 c. *yī kɔ̀a n̄ gūgū nā wà fú lá*
 what men you think that theyR die *wh*
 'what kind of men do you think died'
 d. *zàlɔ̀ kɔ̀ ɓɛ̀ ɓɛ̀ kpálɛ̀*
 zàloko there thereR beautiful-be
 'It is Zaloko that is nice'

Finally, the resumptive pronoun behaves syntactically like a *wh*-trace (cf. Koopman & Sportiche (1983)): constructions containing a resumptive pronoun behave in the same way as to the cluster of properties which is characteristic of *wh*-movement (Chomsky, 1977), as do constructions containing a *wh*-gap. In other words, although gaps are not allowed to occur in subject position, constraints (in particular Subjacency) may not be violated either.

To sum up, *wh*-constructions in Vata display a subject/object asymmetry (which is in fact a subject/non-subject asymmetry): although *wh*-movement of non-subjects must result in a structure containing a gap, a gap is excluded in cases of extraction of the subject [NP, S] of a tensed clause, in which case a resumptive pronoun must occur.⁶

Interestingly, when put into proper perspective, this array of data bears striking resemblance to those of, say, English, which are dealt with in terms of the ECP. It seems therefore natural to explain the impossibility of a gap in subject position in terms of the ECP. To this effect, let us assume that in Vata the trace in subject position is not properly governed, even if it is coindexed with a *wh*-phrase in an adjacent COMP (contrary to English *who t came*). (Note incidentally that the absence of Exceptional Case Marking verbs or of small clauses makes it impossible to find any examples of traces in subject position). Thus, something must take place in Vata in order to save these structures, which is the insertion of a resumptive pronoun. Given the fact that Vata's resumptive pronouns behave in all respects like *wh*-traces, it is attractive to treat the resumptive pronoun as the "spelling out" or the "lexicalization" of the trace, which is, if one adopts Chomsky's hypothesis (1981) about the internal structure of empty categories (there is in fact one empty category NP which contains pronominal features) nothing else than the lexicalization of the pronominal features of the *wh*-trace. Under this analysis, the agreement phenomena described in (5) are directly accounted for.

The analysis raises a question however concerning Vata's second strategy for forming *wh*-questions. Why does Vata have to make use of the spelling out of *wh*-trace, which seems to be a marked move, instead of exploiting an already existing possibility in the language, which consists of not applying *wh*-movement to subjects? We turn to this question in the next section.

1.2. *Wh-in-situ*

As mentioned above, there exists a second strategy for the formation of *wh*-questions in Vata, which is to leave the *wh*-phrase in A-positions (*wh*-in-situ).⁷ The distribution of *wh*-phrases in-situ turns out to be very interesting and reveals a second subject/object asymmetry: although *wh*-phrases may appear in object position (6), they are excluded from subject position (7).⁸

- (6) *n̄ lɛ̀ yī lá*
 you eat what *wh*
 'what do you eat'

- (7) a. * *àlò yi' lá*
 who came wh
 b. * *ñ gūgū nā àlò yi' lá*
 you think that who came wh

This subject/object asymmetry only occurs with *wh*-quantifiers, as the contrast in grammaticality between (7) and (8) shows, in which the non-*wh* form *àlò* 'the other one' or a quantified expression occurs in subject position:

- (8) a. *àlò yi'*
 the other one arrived
 b. *kò' kwá yi'*
 man each arrived

An adequate theory should account for the subject/non-subject asymmetry and for the difference in behavior between *wh*-quantifiers and other quantifiers. Let us follow Aoun, Hornstein & Sportiche (1981) (AHS) and Huang (1982) in assuming that structures like (6) and (7) are subject to an LF movement rule which moves the *wh*-phrase into COMP at LF (AHS's rule of *wh*-raising). Application of *wh*-raising to the S-structures (6) and (7) yields LF representation (9) and (10):

(9) [S' [COMP *wh*-phrase_i][S [VP [e]_i]]]

(10) [S' [COMP *wh*-phrase_i][S [NP e]_i ...]]

Now, configuration (10) is similar to the one derived by syntactic *wh*-movement, which is ruled out by the ECP, as we argued above. If we adopt the hypothesis of Kayne (1979) (published in 1981) that the ECP applies at the LF level of representation, the explanation of the ungrammaticality of (7) is straightforward and identical to the one put forth to account for the impossibility of a *wh*-trace in subject position: the *wh*-phrase in-situ has to move into COMP at LF by *wh*-raising, leaving behind a trace which falls under the ECP. Now, we already concluded that Control from COMP is excluded in Vata in configurations like (10). The ungrammaticality of (7) can thus be directly accounted for if we assume that the LF representation (10) violates the ECP, because the trace is not properly governed. (Note that in configurations like (9) no problems arise, since the trace is governed by the lexical category V).⁹

Both subject/object asymmetries can thus be brought back to the fact that the configuration [COMP [*wh*-phrase_i]][e]_i does not constitute a

proper government configuration in Vata. Derivations containing a trace in subject position resulting from the application of *wh*-movement or *wh*-raising, are ruled out at LF by the ECP. It therefore follows that there does not exist any choice in Vata for questioning subjects, other than the application of syntactic *wh*-movement, after which the escape mechanism consisting in the lexicalization of features of the trace can and, in fact, must, take place.

As noted above, non-*wh*-quantifiers contrast with *wh*-quantifiers in that they do occur in subject position. This contrast can be accounted for if we assume, following AHS, that both types of quantifiers are subject to different rules in LF: *wh*-quantifiers to *wh*-raising (moving the quantifier into COMP) and other quantifiers to Quantifier Raising (QR, May (1977)) adjoining the quantifier to S).¹⁰

1.3. In the preceding sections, the following account was given for both subject/non-subject asymmetries in Vata: *wh*-phrases move into COMP either by syntactic *wh*-movement or by *wh*-raising at LF, leaving behind an empty category which is subject to the ECP. On the assumption that in Vata a *wh*-phrase in COMP can never properly govern a trace in subject position, the explanation is simple: after syntactic *wh*-movement of the subject, the language must resort to an escape mechanism in order to escape the effects of the ECP (hence the lexicalization of the trace). *Wh*-phrases are excluded from subject position at S-structure since the output of *wh*-raising will lead to an ECP violation. This account provides arguments for several hypotheses:

- It provides an additional argument for the LF status of the ECP
- It provides evidence for the hypothesis that *wh*-phrases are moved in LF by *wh*-raising, leaving behind an empty category
- It provides evidence in favor of two separate processes in LF: *wh*-raising and QR (as AHS argue)

Interesting questions arise with respect to comparative syntax: what constitutes the difference between Vata and English with respect to Control from COMP? What type of language represents the unmarked case with respect to Control from COMP? What is Control from COMP? Where does it hold? Before addressing these questions, we will first show that the analysis concerning the subject/object asymmetries involving the French *wh*-word *quoi* sheds light upon the nature of Control from COMP, and is directly relevant for determining the Control from COMP parameter.

2. CONTROL FROM COMP: THE DISTRIBUTION OF QUOI

The distribution of the French question word *quoi* has been extensively

discussed in the literature, among others by Obenauer (1976, 1977), Hirschbühler (1978) and Goldsmith (1981).¹¹ Here, we will show that *quoi*'s idiosyncratic distribution can be reduced to the existence of one language specific filter. The existence of this filter will allow us to study directly some properties of Logical Form (LF), and gain insight in the nature of Control from COMP. More specifically, we will argue that:

- a. It provides a simple and strong argument in favor of the hypothesis that the ECP applies at LF
- b. It shows that movement to COMP in LF does not create proper government configurations for subjects.

2.1. In French, *wh*-questions are formed either by syntactic *wh*-movement, moving the *wh*-word into COMP, or by leaving the *wh*-word in-situ. We discuss the distribution of *quoi* for standard French in both constructions.

2.2. *Quoi* in COMP

Examples (11), (12) and (13) illustrate the distribution of *quoi*, as opposed to that of a "regular" *wh*-word such as *qui*, in direct and indirect questions.

- (11) a. *Qui/*quoi as-tu vu*
Who/*what did you see
b. *A qui/à quoi penses-tu*
About who/about what are you thinking
- (12) a. *Je me demande qui/*quoi tu as vu*
I wonder who/*what you saw
b. *Je me demande à qui/à quoi tu penses*
I wonder about who/about what you are thinking
- (13) a. *Qui/quoi voir*
Who/what to see
b. *Je me demande qui/quoi voir*
I wonder who/what to see

These examples illustrate the impossibility for *quoi* to appear in the COMP of a tensed sentence (11a, 12a), unless it is preceded by a preposition (11b, 12b). *Quoi* may appear freely in the COMP node of an infinitival sentence (13a, 13b). The distribution of *quoi* can thus be summarized as follows: *Quoi* cannot appear exhaustively dominated by a [+Tense] COMP node.¹² In order to account for this distribution, an odd fact, we adopt the following filter:

- (14) * $[\text{COMP } \text{quoi}]$, where COMP exhaustively dominates *quoi*
[+T] [+T]

This filter is in essence a reformulation (integrating Chomsky & Lasnik, 1977) of the rule PAS-DE-QUOI of Obenauer (1976), and can be considered the core of the analysis of the *quoi/que* and *ce que* alternations (see Koopman, 1982a).

Since Chomsky & Lasnik (1977), it is generally assumed that filters apply in the phonological component (PR). What is important for the discussion here is to show that filter (14) cannot apply at the LF level of representation. The following argument shows this is in fact the case. Consider the (non-echo) question (15) in which a *wh*-word occurs in-situ:

- (15) *Tu as fait quoi*
You did what

As discussed in the section on Vata, structures like (15) are subject to the LF rule of *wh*-raising, which derives representations at LF like (16):

- (16) [_S [COMP *quoi*_i] tu as fait [e]_i]

Suppose now that (14) applies at LF. Then (16) would be marked ungrammatical, since *quoi* occurs in a Tensed COMP which exhaustively dominates it. But (15) is grammatical. We therefore conclude that (14) cannot apply to the output of *wh*-raising, hence not at LF. We may thus assume it applies at PR (or at S-structure).

2.3. *Quoi* in-situ

Examples (17), (18), and (19) illustrate the distribution of *quoi* and *qui* in-situ.

- (17) a. *Tu as décidé quoi*
You decided what
b. *Tu as vu qui*
You saw who
- (18) a. *Tu comptes sur quoi*
You count on what
b. *Tu comptes sur qui*
You count on who

- (19) a. **Quoi est tombé*
What happened
b. *Qui est tombé*
Who arrived

The distribution of *quoi* is asymmetric: whereas *quoi* can appear in-situ in object position (17a), or as the object of a preposition (18a), it is excluded from subject position (19a).

Indeed, the ungrammaticality of (19a) allows us to establish that *quoi* may not appear in subject position. To see this, suppose first that in the surface structure (19a) *quoi* occurs in COMP. Then the sentence would be ruled out by the filter (14). Suppose next that *quoi* in (19a) does not occur in COMP, but rather in subject position. The ungrammaticality of (19a) shows however that this analysis is not available; *quoi* is therefore excluded from subject position.

Before showing that a natural explanation can be given for the observed subject/object asymmetry in terms of the ECP, note that we cannot assume that the paradigm of *quoi* is defective in having no nominative form¹³ (besides from being undesirable from a theoretical point of view).

In the first place, it is possible to find *quoi* in subject position, in which case the sentence must receive an echo interpretation and intonation (showing incidentally that the restriction that *quoi* be excluded from subject position only holds for general questions).¹⁴

- (20) *QUOI a été décidé*
WHAT has been decided

A second argument can be constructed based on constructions which contain multiple *wh*-questions and in which stylistic inversion has applied.¹⁵

- (21) a.? *Je me demande où e_i a été arrêté qui_i*
I wonder where has been arrested who
b.? *Je me demande où e_i est tombé quoi_i*
I wonder where has fallen what

In these sentences, a *wh*-word in subject position has been moved by stylistic inversion to postverbal position. Although not perfect, (21a) and (21b) exhibit no contrast in judgment. Furthermore, the judgments in (21b) do not compare with the impossibility of sentences like (19a). We conclude that the question mark status of (21) is due to the postverbal *wh*-subject, rather than to *quoi* lacking nominative Case. The examples thus show it is impossible to stipulate the paradigm of *quoi* is defective.

2.4. Returning now to the question why *quoi* cannot appear in-situ in subject position in non-echo questions, suppose *quoi* is generated in subject position in D-structure. Depending on the application of *wh*-movement which is optional in French, the S-structures (22) are derived.

- (22) a. [S' [COMP *quoi_i*] [[e'_i] est arrivé]]
b. [S' [COMP] [*quoi* est arrivé]]

We know that (22a) will be filtered out by (14), since *quoi* cannot be exhaustively dominated by a tensed COMP. Nothing so far, however, rules out S-structure (22b). We will see that (22b) is in fact excluded by the ECP in LF, in exactly the same way as *wh*-phrases in-situ are excluded from subject position in Vata. In LF, *quoi* in (22b) must move in COMP by *wh*-raising (which is obligatory), yielding (23):

- (23) LF: [S' [COMP *quoi_i*] [e_i] est arrivé]

If we assume now that the trace in (23) is not properly governed, the impossibility of *quoi* in subject position is immediately accounted for. We may thus conclude that in French, just as in Vata, movement to COMP in LF does not lead to a configuration in which proper government for subject traces holds.

Independent motivation for the assumption that movement to COMP in LF never creates proper government configurations derives from the analysis of *wh*-in-situ and Superiority put forth in AHS (1981). Let us briefly sum up their argumentation. They consider the following pair:

- (24) a. I know who saw what
b. *I know what who saw

The difference in grammaticality between these two forms cannot be stated at LF because the application of *wh*-raising to them yields the representations (25a) and (25b).

- (25) a. I know [COMP *who_i what_j*] [e_i] saw [e_j]
b. I know [COMP *what_j who_i*] [e_i] saw [e_j]

These forms are identical, besides the order of the *wh*-phrases in COMP. The difference, they claim, must therefore lie at S-structure. It is at S-structure that there exist such rules as deletion of *that* in English, or the change of *que*→*qui* in French. These rules affect the COMP node and have

the effect of allowing proper government of the trace in subject position. They are furthermore specific to S-structure, since in English for example, the presence or the absence of the complementizer *that* does not have any effect on ECP violations created by LF rules like *wh*-raising, viz. (26a) (vs (26b) in which no ECP violation occurs):

- (26) a.* Who expects (that) who leaves
b. Who expects (that) John likes who

This brings them to propose that:

1. It is the COMP node itself rather than the *wh*-phrase contained in it which properly governs the subject position. (A similar idea has been put forth in Bennis (1980)).
2. It does so iff it is coindexed with the subject position. The way it gets an index is by means of the following (optional) percolation rule applying at S-structure.¹⁵

- (27) $[COMP X_i'' \dots] \rightarrow [COMP_i X_i'' \dots]$ iff COMP dominates
only *i*-indexed elements

Thus, the index of a phrase contained in COMP can optionally percolate up if the COMP dominates only *i*-indexed elements.

The idea is clear: configurations of proper government involving COMP must be present at S-structure, or, in other words, movement to COMP in LF (i.e. *wh*-raising) does never create a proper government configuration.

Extending this analysis to *quoi* yields the desired results: no well formed sentence can correspond to the S-structure in (22b).

In sum then, the impossibility of *quoi* appearing in subject position is excluded in the same way as *wh*-in-situ in subject position in Vata: *quoi* in subject position at S-structure, must move in COMP in LF by *wh*-raising. The ECP applies to the output of *wh*-raising. Since movement to COMP in LF does not create proper government configurations for the subject trace,¹⁶ which can only be created by the COMP indexing rule (27) at S-structure, cases of movement to COMP from the subject position in LF will be ruled out by the ECP.

Consider next a string like *qui est arrivé*, to which, by the same reasoning as above, the following S-structures can correspond:

- (29) a. $[S' [COMP_i qui_i] [[e]_i est arrivé]]$ (*wh*-movement &
b. $[S' [COMP \dots] [qui_i est arrivé]]$ (27))

Now note that (29b) is not a possible S-structure, since it will lead to an ECP violation in exactly the same way (22b) does. S-structure (29a) however leads to a well-formed sentence because (27) can apply at S-structure. This is an interesting result: French is forced to apply syntactic *wh*-movement to *wh*-phrases in subject position, although *wh*-movement is optional elsewhere, and we may conclude this is generally the case: if a language has both *wh*-movement and *wh*-in-situ, it won't have any other choice for extracting the subject than to apply *wh*-movement to it. This account thus argues against prohibiting string vacuous rule application as has been proposed for example in George (1980).

2.5. The distributional properties of *quoi* bear on several theoretical issues, concerning the LF status of the ECP, the nature of proper government and the functioning of LF rules. The success of the theoretical framework we adopt is measured by the explanatory power of the (relevant parts of) the theoretical framework: besides filter (14), which excludes *quoi* if it is exhaustively dominated a Tensed COMP, nothing further needs to be stipulated.¹⁷ The exclusion of *quoi* from subject position is explained in the same way as *wh*-phrases in subject position in Vata: the subject trace resulting from *wh*-raising in LF is not properly governed and hence violates the ECP. This account provides a simple and strong argument in favor of the hypothesis that the ECP applies at LF, as argued in Kayne (1981) and Rizzi (1982). This is a welcome result given the subtlety of grammatical judgments on which their arguments are based.

The cases of Vata and French seem to be unique to us in the sense that their structure is such that there exists direct evidence for obligatory movement of *wh*-subjects in matrix clauses, notwithstanding the option of *wh*-in-situ in both languages.

3. THE CONTROL FROM COMP PARAMETER

3.0. In two unrelated languages, Vata and French, which both have the rules of syntactic *wh*-movement and *wh*-raising, subject/object asymmetries with respect to these rules are explained in a simple way by the ECP. The two languages differ however with respect to the possibility of Control from COMP for subject traces. In Vata, Control from COMP is never possible, neither at S-structure nor at LF. In French, Control from COMP is possible, but can only be created at S-structure by means of the COMP indexing rule (27). This implies that a *wh*-trace in subject position must be properly governed at S-structure. Thus, even in a language which allows Control from COMP it is a restricted phenomenon involving a COMP indexing rule.

Considering now Vata in the light of the French data, it appears that Vata is not that different from French as it may seem at first sight. Indeed, the only difference (in this respect) is the presence of a COMP indexing rule like (27) in French. If one assumes that Vata lacks a COMP indexing rule, the difference is immediately accounted for. Let us assume accordingly that the Control from COMP parameter is the presence or the absence of a COMP indexing rule in a given language. How does this account extend to other languages? We will turn to this question now, discussing first languages which seem to lack Control from COMP (Italian 3.1), and secondly languages which have COMP indexing (English and Dutch 3.2.), showing that systematic differences between these languages follow from the way COMP may be indexed.

3.1. Italian

Before discussing Italian, let us mention some languages which seem to be potential candidates for lacking a COMP indexing rule, among others, several languages of the Kru family (Bete of Gbadi, Koyo (Kokora, 1976), Dida de Lakota etc.) Yoruba, Kikuyo,¹⁸ and Duala (Epée 1976). Clearly, only careful analyses will teach us if they do lack Control from COMP.

It has been argued by Rizzi (1982) that *wh*-extraction out of the subject position [NP, S] is not possible in Italian, despite apparent cases such as (30)

- (30) *Quante pietre sono cadute*
How many stones are fallen
'How many stones fell down'

In fact, he argues, the *wh*-phrase in COMP in (30) has not been extracted from subject position, but rather from postverbal position. The evidence he provides for this claim is based on the interaction of *wh*-movement and the syntax of the clitic pronoun *ne* (Belletti & Rizzi, 1981). In Italian, the clitic pronoun *ne* pronominalizes an N' which is preceded by an indefinite quantifier. Crucially, this N' must occur in the VP and be governed by the verb:

- (31) a. *Mario *(ne) ha prese alcune* —
Mario *(of-them) has taken some
b. *Alcune *(ne) sono cadute*
Some *(of them) are fallen

With one class of verbs (Burzio's (1981) "ergative" verbs) postverbal subject NPs behave like objects:

- (32) a. *Sono cadute alcune pietre*
are fallen some stones
b. **(ne) sono cadute alcune* —
*(of them) are fallen some

Noting that the obligatoriness of *ne* is preserved under *wh*-movement, pronominalization of the N' and the occurrence of *ne* can now be used as a detector for the position *wh*-movement takes place from. Rizzi then considers the following data:

- (33) *quante *(ne) sono cadute*
how many *(of them) are fallen

The obligatoriness of *ne* indicates that movement could not have taken place from the subject position (in which case *ne* would be excluded), but must have taken place from postverbal position. Rizzi concludes accordingly that extraction from subject position is not possible in Italian, even in matrix clauses.¹⁹ In terms of our terminology, Italian lacks a COMP indexing rule, and resembles Vata in this respect.

3.2. English and Dutch

The account presented for French in 2 carries over to English directly. Control from COMP exists in English (*who t came*). We can safely assume that COMP indexing is subject to the same conditions as in French: the COMP can only acquire an index at S-structure, if it dominates a *wh*-phrase or a *wh*-trace (explaining the necessary absence of *that* in cases of long extraction), or if it dominates an operator and *that* in relative clauses (assuming that *that* appearing in relative clauses bears an index (Pesetsky, 1982)).

The situation in Dutch is somewhat different. As has been noted originally by Perlmutter (1971), violations of the *that t* filter occur in Dutch. Chomsky & Lasnik (1977) suggest that the *that t* violations in Dutch may be subject to dialectal variation. These dialects have subsequently been called Dutch A and Dutch B by Maling and Zaenen (1978) (or Belgium (sic) (Dutch A) and Dutch (Dutch B) by Bennis (1980)). Typical examples of subject extraction in Dutch A and Dutch B are presented in (34):

- (34) a. *Wie denk je dat (er) gekomen is* Dutch A
 Who think you that there come is
 b. *Wie denk je dat *(er) gekomen is* Dutch B
 Who think you that *(there) come is
 'Who do you think came'

Thus, a trace is allowed in subject position in Dutch A, whereas it is excluded in Dutch B. Maling & Zaenen try to relate the possibilities of *that t* violations in Dutch A with the optionality of the dummy subject *er* in the same dialect. (The apparent violations in Dutch A would then be on a par with the apparent *that t* violations in PRO drop languages such as Italian). Maling & Zaenen predict that both dialects of Dutch differ systematically with respect to the dummy project *er*. Bennis (1980) argues that this prediction is not borne out. He proposes instead that the difference between both dialects can be accounted for if one assumes that COMP indexing differs for both dialects. He proposes that in Dutch A, the COMP can get the index of the *wh*-phrase even if it dominates both the *wh*-phrase (or trace) and a lexical complementizer. In Dutch B however, COMP indexing works as in English or in French, and can only take place if COMP dominates the *wh*-phrase or a trace.

Here, we will show that, contrary to Bennis's claim, *that t* violations occur in all dialects of Dutch. Moreover, we show that they occur in both matrix and subordinate clauses, and that the behavior of *er* does not directly bear on the problem of proper government for subject traces.

First, we assume that the verb second rule in Dutch moves the finite verb into the complementizer position, as has been proposed by Den Besten (1978). Consider now the following sentences which are drawn from the Dutch B dialect which seems to be the more restrictive one as far as extraction of subjects is concerned.

- (35) a. [_{COMP} *wie_i* *is*] *(*er*) *gekomen*
 'who came'
 b. *wie_i denk je [t_i dat] *(er) gekomen is*
 who think you that there come is
- (36) a. [_{COMP} *wie_i heeft*] *(*er*) *iets gezien*
 who has there something seen
 'who has seen something'
 b. [*wie_i denk*] *je [t_i dat] *(er) iets gezien heeft*
 who think you that there something seen has
 'who do you think saw something'

- c. [*wie heeft*] *(*er*) *hem/Jan gezien*
 who has him/John seen
 'who has seen John/him'
 d. [*wie denk*] *je [t_i dat] *(er) hem/Jan gezien heeft*
 who think you that him/John seen has
 'who do you think saw him/John'

These examples show that *er* seems to be obligatory with intransitive verbs (35), and with transitive verbs with indefinite objects (36a, 36b), whereas marginally possible with transitive verbs with definite objects (36c, 36d). They show furthermore that there is no contrast for possibilities of extraction between matrix clauses and subordinate clauses. Assuming the appearance of *er* is dealt with by some independent mechanism, the examples in (36c, and 36d) show that even in Dutch B *wh*-traces are possible in subject position. We conclude accordingly that Control from COMP exists in Dutch, and that there exists a rule of COMP indexing (37) which allows the COMP node to acquire an index, even if it contains both the *wh*-phrase and the finite verb, or a *wh*-trace and the complementizer:

- (37) [_{COMP} *wh*-phrase_{*i*}] → [_{COMP_{*i*}} *wh*-phrase_{*i*} ...]

This analysis of Dutch thus implies that languages may differ as to the actual form of the rule for COMP indexing.²⁰

According to our account, there is no difference in Dutch between extraction of subjects in matrix clauses or embedded clauses, the reason being that both contain doubly filled COMPs.²¹ Note that we predict that languages with verb second rules like Dutch will either not allow *wh*-extraction of subjects at all (lacking COMP indexing), or allow it showing *that t* violations in both matrix and, providing there exist bridge verbs, embedded clauses.

The data in (35) and (36) show furthermore that it is necessary to dissociate Control from COMP and the appearance of *er*, which has to be accounted for in a different way. We will not elaborate further hereon this hazy area of Dutch syntax.²²

Consider again verb second phenomena. According to Den Besten (1978), English subject/Aux inversion is to be analyzed as a verb second rule which moves the auxiliary into COMP. Still, Dutch and English differ systematically with respect to *that t* violations.²³ Now, consider the following examples:

- (38) a. [_{COMP_{*i*}} who_{*i*}] [e_{*i*}] came
 b. * [_{COMP} who_{*i*} did] e_{*i*} come
 c. [_{COMP} who_{*i*} did] John see e_{*i*}

Curiously, *do* cannot move into COMP in (38b), whereas the finite verb must move into COMP in Dutch. The account developed so far provides an explanation for this fact, relying crucially on the different functioning of Control from COMP. Suppose that *do* did move into COMP in (38b). COMP indexing would be blocked and the sentence would violate the ECP in exactly the same way **who do you think t that t came* does. Thus, instead of posing a problem for our analysis, the examples in (38) may in fact support it, since providing an account for a different functioning of verb second in English and Dutch.

3.3. In order to account for the crosslinguistic differences which obtain with respect to Control from COMP, we have proposed the Control from COMP parameter. Some languages, we have argued, lack a COMP indexing rule, while others have one. Moreover, there exists crosslinguistic variation as to the conditions under which COMP can acquire an index. (cf English and French versus Dutch). The questions about Control from COMP may be asked in a slightly different way, taking the point of view of the language learner. Given UG and the Control from COMP parameter, the following questions arise: What is the unmarked value for the Control from COMP parameter? What data are sufficient for the language learner to determine the value of the parameter? How does the language learner determine the actual form of the COMP indexing rule? Although we would like to relate the possibility for Control from COMP with independent properties,²⁴ it is sufficient for our purposes here to show how the relevant information can be deduced. Note that we have shown that in a language with syntactic movement, one is forced to apply *wh*-movement to subjects.

Consider now Vata. The case of Vata is straightforward: given the impossibility of inversion and the obligatoriness of subjects in tensed sentences, the language learner, hearing the resumptive pronoun in subject position, and noting that similar facts holds in focus constructions and relative clauses (which have *wh*-pronouns in COMP), concludes there is no COMP indexing. Vata does not give any particular insights into the question what the unmarked option in UG is. Indeed, it could represent both the unmarked or the marked case. If it would represent the marked case, it could be argued that there exists positive evidence for concluding the lack of Control from COMP, i.e. the presence of the resumptive pronoun. We do not believe, without much argument however, that Vata represents the marked case. It seems to us that if we consider a hypothetical language in which there are always alternative ways for the extraction of subjects, this language will be of the Vata type, for there is no need for assuming Control from COMP. That is, we assume that the unmarked value for the Control from COMP parameter is the absence of a COMP indexing rule. In

this view, Italian lacks Control from COMP, because due to free inversion and null subjects, there does not seem to be any need for assuming it.

The language learner of French, concludes on the basis of sentences like *qui t a téléphoné* (recall *qui* has to move in syntax) that Control from COMP exists. The actual form of the COMP indexing rule can probably be deduced from surface forms like *qu'est-ce que tu penses t qui t a été donné à Pierre*, i.e. the COMP node can acquire an index if it dominates more than one element, one of which lexical, with the same index.

A similar story holds for English, where sentences like *who t came* and *the door that t opened* (*that* bears an index, following Pesetsky, 1979) lead to the same COMP indexing rule as in French. Moreover, the asymmetric behavior of *do* (*who t came* and *who did John see t* cf (38)) may be sufficient for the language learner to deduce the actual form of the COMP indexing rule (need for domination of elements bearing the same index).

The situation in Dutch is slightly different. On the basis of the data discussed in 3.1., there is Control from COMP in Dutch. Now, given the verb second rule which moves a finite verb into COMP, the actual rule for COMP indexing differs from the French or English rule: indeed, the COMP may be indexed even if it contains elements with different indices. It thus follows that Dutch systematically differs from English or French in allowing *that t* violations.

Note that, while some important questions are simply begged, we showed that the information concerning the Control from COMP parameter can be deduced in a relatively simple way.

3.4. The grammar of the languages which have been discussed up to this point, all contain the syntactic rule of *wh*-movement. In most of these languages, *wh*-phrases occur in-situ, either in restricted environments (multiple *wh*-questions) in general questions or in both.

As we have seen, *wh*-phrases are excluded from subject position at S-structure, since the trace left by the LF rule of *wh*-raising fails to be properly governed. What happens now in languages which do not derive *wh*-questions by means of syntactic *wh*-movement, but always have *wh*-phrases in-situ?

Chinese (Huang, 1982) and Mahou²⁵ (a Northern Mande language, spoken in the Ivory Coast) have this property. Our analysis so far leads us to expect that *wh*-phrases cannot occur in subject position, since the trace left by *wh*-raising would not be properly governed in LF. This prediction is not borne out: in both languages, there are no ECP effects with respect to *wh*-phrases in-situ (Huang, 1982). Given the ECP as a principle of UG, how can these data be analyzed in a way which is consistent with our findings above?

It is generally assumed (Chomsky, 1981) that the LF rules are subject to very little variation among languages, since direct evidence to their nature is extremely limited. It is possible, and entirely desirable, that whatever variation there may be is in fact limited in the sense that it is in a way a reflex of some aspects of the grammar for which overt evidence is presented to the language learner.

Now, the fact that there are no ECP effects with *wh*-phrases in-situ in subject position is only a problem if we assume *wh*-raising to be subject to *wh*-raising in all languages, or, put differently, if the only available way for interpreting *wh*-phrases in-situ is by application of *wh*-raising.

Suppose in fact that what is fixed is the actual LF vocabulary, possibly comprising QR (adjunction to S), *wh*-raising (movement into COMP) and focus interpretation (which, according to Koopman & Sportiche (1983) is not a movement rule, but adopting essentially a proposal of Van Riemsdijk & Williams (1980) rather an interpretation rule which consists of the insertion of an operator binding a variable by means of co-indexing on.) Suppose furthermore that the language learner chooses between the available mechanisms for the interpretation of specific constructions, and that this choice is determined by some overt properties of the language.

Concretely, this would mean that in French or in Vata, *wh*-raising moves a *wh*-phrase into COMP at LF, because there is overt evidence for doing so (syntactic *wh*-movement). In Chinese or Mahou however, no syntactic *wh*-movement applies to *wh*-phrases. There is thus no a priori reason to suppose *wh*-raising actually moves the *wh*-phrase into COMP (or adjoins it to S), while leaving an *empty category*. Rather, the absence of ECP violations suggest that the LF representations do not contain a trace, and resemble English focus constructions in this respect. We propose tentatively that *wh*-questions in Mahou or in Chinese are not interpreted by a rule of *wh*-raising, but rather by a rule which inserts a *wh*-operator which binds the *wh*-phrase by means of it being coindexed. The LF representations corresponding to the Chinese or French S-structures in (39) and (40) would be roughly (41) and (42):

(39) *Zhangsan xiangxin shei mai-le shu* (Huang, 1982, (4))

Zhangsan believe who bought book

'Who does Zhangsan believe bought books?'

(40) *Jean croit que tu as vue qui*

John believes that you saw who

(41) LF: [x_i [*Zhangsan xiangxin shei_i mai-le shu*]

(42) LF: [*COMP qui_i*] *Jean croit que tu as vu [e]_i*

The problem we set out to discuss in this section can be analyzed in a way which is consistent with our analysis, and may lead to new insights into available processes at LF and how they are put to use.

4. CONCLUSION

In this article, we have discussed one particular principle of UG the ECP, and the crosslinguistic variation surrounding its scope of application. The discussion was entirely restricted to subject/object asymmetries which obtain with respect to both syntactic and LF *wh*-movement, and to the nature of proper government of *wh*-traces in subject position. The configuration of data can be summarized as follows:

Language	Short <i>wh</i> -movement (Syntax)	Long <i>wh</i> -movement (Syntax)	Wh-in-situ	Multiple <i>wh</i> (Superiority)
Vata	*[COMP wh_i] [t_i ...	*... [COMP t_i $n\bar{a}$] [t_i ...	*[S [NP wh_i] ...	-
Italian	*[COMP wh_i] [t_i ...	*... [COMP t_i <i>che</i>] [t_i ...	-	-
English	[COMP _{<i>i</i>} wh_i] [t_i ...	*... [COMP t_i <i>that</i>] [t_i [COMP _{<i>i</i>} t_i <i>that</i>] [t_i ...	-	*[COMP wh_j] [S [NP wh_i]
French	[COMP _{<i>i</i>} wh_i] [t_i ...	*... [COMP t_i <i>que</i>] [t_i [COMP _{<i>i</i>} t_i <i>qui</i>] [t_i ...	*[S [NP wh_i] ...	*[COMP wh_j] [S [NP wh_i]
Dutch	[COMP _{<i>i</i>} wh_i V] [t_i [COMP _{<i>i</i>} t_i <i>dat</i>] [t_i ...	-	*[COMP wh_j V] [S [NP wh_i]
Mahou	-	-	...[S [NP wh_i] ...	no superiority effects
Chinese	-	-	...[S [NP wh_i]	no superiority effects

A first dichotomy concerns languages with syntactic *wh*-movement and languages without. Languages with syntactic *wh*-movement all show ECP violations whereas languages without do not. We proposed tentatively that this is a consequence of how available mechanisms at LF are put to use. Whereas languages with syntactic *wh*-movement apply (in fact, have to apply) *wh*-raising to *wh*-phrases in-situ, languages without *wh*-movement interpret their *wh*-questions by a process similar to Focus interpretation.

Turning our attention now to languages with syntactic *wh*-movement, and leaving idiosyncratic differences aside, we proposed that the explanation of this, at first sight chaotic picture, involves the ECP, for whose LF character we provided strong evidence, and the Control from COMP parameter. First, all the ungrammatical sentences are excluded by the ECP, covering both short and long *wh*-extraction, and *wh*-raising in simple and multiple *wh*-questions. We argued, *wh*-raising in LF will never lead to proper government of the trace in subject position, but syntactic *wh*-movement will in some languages. In order to account for this variation, we proposed the Control from COMP parameter, which consists in the presence or the absence of a COMP indexing rule at S-structure. This COMP indexing rule has the effect of permitting the COMP node itself to properly govern the subject position, by virtue of its being coindexed.

We assumed that the unmarked case for this parameter in UG is the absence of a COMP indexing rule, explaining both Vata and Italian as the unmarked case. We furthermore assumed that languages only make use of the marked option of a COMP indexing rule if no other option is available for the questioning of subjects. Interestingly, it turns out that languages which have Control from COMP differ as to the conditions under which it takes place. These conditions interact with language specific phenomena, such as verb second, yielding systematic patterns of variation (which show there is no difference between short and long *wh*-movement) which, therefore, place no burden on the language learner.

NOTES

1. We adopt the following definition of government (Aoun & Sportiche (1981): α governs β iff φ a maximal projection, then φ dominates α iff φ dominates β .
2. This section is a compact version of *Subject Object Asymmetries in Vata* (Koopman, 1980).
3. Vata is a tone language which has four tones represented as T, (high), T (mid high) T (mid) and T (low). For the discussion in this article, the following information is relevant: all tensed sentences contain an overt subject, and no subject AUX inversion, nor free inversion occurs. The reader is referred to Kaye (1981, 1982) for details on the phonological system, and to Koopman (1980, 1982, 1983), Koopman & Sportiche (1983) and Sportiche (1983a) for some aspects of its syntactic structure.

4. This is actually a simplification of the data, since a second surface structure corresponds to (1a):

- (i) a. $\bar{a}l\bar{s}$ $\bar{l}\bar{e}$ $s\bar{b}k\bar{a}$ $l\bar{a}$
 who L eat rice *wh*

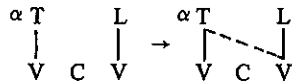
In (i), a low tone follows the *wh*-phrase. This low tone cannot be analyzed as a floating tone occurring in *wh*-constructions, but appears actually to be a residue of the optional deletion of the segmental form of the resumptive pronoun which is phonologically conditioned. We thus conclude (1a) and (i) are basically similar.

5. It can be shown that the resumptive pronoun occurs in subject position and is not a clitic (Koopman, 1983).

6. The asymmetry is double: on the one hand the distribution of traces is asymmetric. On the other hand, the distribution of resumptive pronouns is so too. That is, resumptive pronouns are excluded from object position (4b). A functional explanation may be given for this fact in exploiting a suggestion made by Chomsky (1981). There may be a general principle (the Avoid Pronoun Principle) which has the effect of excluding lexical pronouns whenever their non-lexical variant may be used. This would imply that resumptive pronouns are impossible in object position, since a gap can be used.

7. Although this is a possibility, the option of overt *wh*-movement is clearly preferred.

8. The tones in (7) and (8) are actually surface tones. We need to refer to surface tones here in order to show that the *wh*-phrase occurs in subject position for the following reasons: In Vata, there is a phonological process by virtue of which tones are attracted by a low tone in the appropriate context. This rule can be formulated as follows:



Now, as noted in fn3, there may be just the tonal remnant of the resumptive pronoun in subject position. So, we actually have to assume the above rule of tone attraction took place in order to be able to show the *wh*-phrase is excluded from subject position. (compare (8) where attraction has occurred). Note finally that the attraction rule is insensitive to the presence of *wh*-trace as the following example shows:

- (i) $y\bar{i}$ $w\bar{a}$ $n\bar{i}$ $[e]_i$ n
 what they NEG-A do
 'What have not they done'

9. As pointed out by an anonymous TLR reviewer, the fact that *wh*-phrases may occur as the object of a postposition implies either that P is a proper governor, or that there is no P-stranding in LF.

10. Assuming adjunction to S to yield a proper government configuration for the trace left by QR.

11. Part of this section has been presented at NELS XII, under the title "Theoretical Implications of the Distribution of *quoi*" (Koopman, 1982)

12. *Quoi* is excluded if it is exhaustively dominated by a Tensed COMP, rightly predicting the occurrence of *quoi* with pied-piped material in COMP such as (i), taken from Hirschbühler (1978):

- (i) $[_{COMP} [_{NP} \text{quoi que tu n'aimes pas}]]$ Pierre a-t-il acheté

13. Goldsmith (1981) for example argues that "quoi is unpredictably defective in its paradigm in having no nominative form (p. 562)". He is however referring to a morphosyntactic use of the term nominative, arguing that the nominative clitic form which exists in the paradigm for pronouns lacks for *quoi*. The arguments

given in the text can therefore not be taken as refutations of Goldsmith's hypothesis, as he has pointed out to me.

14. These examples have been suggested to me by J.R. Vergnaud.

Dominique Sportiche has suggested the following examples to me, in which nominative *quoi* lands in a [-Tense] COMP, escaping (14):

- (i) ?? Qui_i dire qui e_i est arrivé
 (ii) ?? Quoi_i dire qui e_i est arrivé

These examples have a marginal status, due to the (near) impossibility of a *wh*-word originating in a tensed clause to land in a COMP which dominates an infinitival sentence (crossing from a plus to a minus Tensed COMP). These examples show again that there is no contrast between (i) and (ii).

15. The condition that COMP dominates only i-indexed elements is necessary in order to account for cases of long extraction like:

- (i) qui tu penses t_i qui_i t_i a été battu

We adopt AHS's proposal that *qui* is a complementizer base-generated with an index, contrary to *que*.

16. Note that this rules out in principle that *that* deletion or the *que*→*qui* rule would apply in LF.

17. Québec French differs only minimally from standard French in this respect. There seem to exist two dialects with respect to *quoi* in Québec French. In one dialect (1), described in Lefebvre (1982), filter (14) has been generalized to all tensed COMPs (i.e. those containing the complementizer and those without a lexical complementizer). In the other dialect (2), filter (14) functions as in French, and *quoi* is allowed to appear in Tensed COMPs providing a lexical complementizer is present:

Dialect 1	Dialect 2.
* quoi que tu fais	quoi que tu fais
* quoi tu fais	*quoi tu fais
* Je me demande quoi (que) tu fais	Je me demande quoi *(que) tu fais

18. I base myself on data from Yoruba provided by Pulleyblanc, and data from Kikuyo presented by Clements at the 1979 Conference on African Linguistics (Illinois). The interpretation of the data is strictly my own.

19. Our discussion of Dutch will show that this argument is not sufficient. In fact, for the argument to go through, it must be shown that extraction of subjects is equally impossible in non-ergative contexts. On this matter, see Sportiche (1983).

20. This conclusion on Dutch is quite interesting, since it rules out in principle an account in which the COMP indexing rule (27) is taken as a universal rule, and which would derive the apparent absence of a COMP indexing rule in Vata to be the effect of the presence of an abstract complementizer blocking rule (27) from applying.

21. This account predicts the occurrence of indirect questions with doubly filled COMP nodes even if extraction took place from the subject position:

- (i) Ik vraag me af [wie ^{of} dat] t_i hem gezien heeft
 I wonder who if/that him seen has
 'I wonder who saw him'

According to my judgment examples like (i) are perfectly acceptable and are given as such in the literature (Koster (1978) example (218a), Reuland (1982) ex (39)). According to Bennis (1980) however, (i) is ungrammatical.

22. In the dialect under discussion, there seems to be a correlation between the distribution of indefinite NPs and the extraction site of *wh*-phrases. In *wh*-questions

in which *er* is obligatory, the subject has rather been extracted from a properly governed position in the VP:

(i) wie_i is er t_i gekomen

who is there come

Interestingly in the corresponding active sentences, indefinite NPs also seem to be excluded from subject position:

(ii) a. ?* iemand is gekomen

b. er is iemand gekomen

23. On these matter see also Koopman (1983a).

24. In Koopman (1983), it is proposed that the possibility of Control from COMP is related to independently motivated differences concerning the COMP node. In Vata, the *wh*-position does not really form a unity with the COMP node which probably occurs sentence final. In other words, the sentence initial position in Vata really behaves as a specifier, whereas COMP in English displays certain headlike characteristics. Taking COMP to be the head of S', and assuming only heads are governors, it follows Control from COMP is possible in English, but excluded in Vata since it does not qualify as a governor (being a non-head).

This assumption is in no way incompatible with the account presented in the text. It would imply that Vata and Italian are similar, for different reasons. In Vata, Control from COMP would be excluded in principle, while in Italian Control from COMP is not excluded in principle, but absent since there is no need for assuming it.

25. Thanks to Bamba Moussa for the information on his language, Mahou.

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