

## Agreement and the Finiteness of V2: Evidence from Child Language

Teun Hoekstra  
Leiden University

Nina Hyams  
UCLA

### 1. The finiteness of Verb Second.

The verb second phenomenon, whereby the verb is moved to C, is restricted to finite verbs.<sup>1</sup> This is true both for the general V2-phenomenon in true V-second languages and in the residual cases of V2 as in English questions, for example. One might therefore assume that finiteness is a general property of movement to C. Indeed, in their analysis of children's *-ing* WH-questions, such as (1a), Guasti & Rizzi (1996) take the position that it involves I-to-C movement of a finite, though silent instance of *is*, as in (1b):

- (1) a. What Mommy doing?  
       b. [<sub>CP</sub> What O<sub>is</sub> [<sub>IP</sub> Mommy <sub>i</sub> doing]] (Guasti & Rizzi 1996)  
 (2) Cowboy riding.

While we agree with Guasti & Rizzi that such structures do involve a silent auxiliary moved to C, for reasons of something like the WH-criterion (Rizzi 1990), we shall argue that the silent auxiliary in (1a) is non-finite, as is the silent auxiliary in declarative participle constructions such as (2). The option of fronting a *non-finite* auxiliary in (1a) arises in the child's grammar as a consequence of the independent absence of a finiteness requirement on root sentences, the so-called Root Infinitive (RI) phenomenon (cf. Wexler 1994, Hoekstra & Hyams 1995, among many others).<sup>2</sup>

Child grammar gives us here a window on the V2-phenomenon that is unavailable in adult grammars. We conjecture that V2 is exclusively driven by the WH-requirement. The apparent finiteness requirement in adult V2 is a conspiracy of the exigencies of the WH-criterion and the independent finiteness requirement. Our results therefore confirms the reality of the root infinitive phenomenon, and constitutes an argument against theories such as Philips (1995), which claims that the root infinitive phenomenon is merely a consequence of lack of merger. It equally argues against Rizzi's (1994) truncation account of the root infinitive phenomenon, which predicts an incompatibility between WH-questions and RIs.

Our argument in support of the claim that V2 does not inherently require finiteness in child language involves an analysis of the types of subjects found in root participle structures such as (1a) and (2). We will

show that the subjects of such sentences have the same properties as subjects of (other) non-finite structures [sections 2 and 3]. Our analysis of subjects is based on a theory of Spec-head agreement proposed in Hoekstra, Hyams & Becker (1996) (HHB).

### 2. Spec-head agreement as licensing of marked forms.

#### 2.1. Overview of previous claim

HHB argue that various properties of the root infinitive stage can be explained as a function of spec-head agreement (SHAG). We first show that children acquiring a range of different languages observe adultlike S-V agreement in finite clauses and do so from the earliest recordings. We further reasoned that since children's grammars allow both finite and non-finite verbs, at least in certain language types (cf. Hoekstra & Hyams 1995), the choice of a finite vs. non-finite verb might also restrict the choice of subject (cf. Clahsen et al. 1996 for a similar proposal). It was already known that RIs allow a much higher percentage of null subjects than do finite verbs (Krämer 1993; Haegeman 1995; Roeper & Rohrbacher 1995). In HHB we focused on properties of overt subjects, noting that alongside the (apparent) optionality of finiteness in the verb systems, there is an optionality of determiners in the noun system. So, during the relevant stage we find children using fully specified DPs such as *the truck* as well as bare nominals such as *truck*. We proposed that such bare nominals are non-finite DPs, analogous to non-finite clauses, and that non-finiteness in the DP-system, as in the verb system, arises from the underspecification of the functional head Number (see Hoekstra & Hyams (1995) for further details). Abstracting away from other types of overt subjects (eg. proper names, mass terms etc.), we made a specific claim about the distribution of subjects across finite and non-finite verbs, as in (3)

- (3) a. A finite verb will take a finite DP-subject  
       b. A non-finite verb will take a non-finite DP

Definite DPs (eg. *the truck*) and plural DPs (eg. *trucks*) are finite; bare nominals (eg. *truck*) and null subjects are non-finite. Note that the predictions in (3) rest on the assumption that the child's grammar is restricted by SHAG. The non-finiteness of the verb in RI-sentences follows from the absence of a finiteness specification in its specifier DP.

The predictions in (3) were supported by evidence from early English and German. Table 1 (which reproduces Table 5 from HHB) shows the distribution of subject DPs with and without a determiner in obligatory position with finite and non-finite verbs in a number of Adam's files in the CHILDES database.<sup>3</sup>

Table 1: Determiners and finiteness in main verbs and BE: Adam

|           | <i>Non-finite V</i> | <i>Finite V</i> |
|-----------|---------------------|-----------------|
| 0-Det     | 39                  | 4               |
| Overt Det | 2                   | 53              |

As we see in Table 1, DPs with overt determiners are largely found as subjects of finite verbs, while absence of determiners correlates with the occurrence of non-finite verb forms. We found further support for the SHAG hypothesis from 4 German speaking children (data from M. Becker). These data are reproduced in Table 2 (which reproduces Table 8 from HHB). It shows that while non-plural subjects distribute evenly across finite and non-finite verbs, plural subjects, which are finite according to our analysis, occur exclusively with finite verbs, as we predicted.

Table 2: Finiteness and plural subjects in early German

|          | <i>Finite (V2) V</i> | <i>Non-finite (final) V</i> |
|----------|----------------------|-----------------------------|
| Plural   | 22                   | 1                           |
| Singular | 46                   | 43                          |

There were, however, two sets of data that did not comply with the central hypothesis. On the one hand, we found that Nina (cf. note 2) had too many overt determiners in subjects of non-finite verbs. These data are in Table 3, which is Table 6 of HHB. Unpredicted cases are boldfaced.

Table 3: Determiners and finiteness in main verbs and BE: Nina

|                  | <i>Non-finite V</i> | <i>Finite V</i> |
|------------------|---------------------|-----------------|
| 0-Determiner     | 9                   | 3               |
| Overt Determiner | <b>12</b>           | <b>34</b>       |

On the other hand, the German children showed too many null determiners with finite verbs, as shown in Table 4 (cf. Table 7 of HHB).

Table 4: Finiteness and subject determiners in early German

|                  | <i>Non-finite V</i> | <i>Finite V</i>      |
|------------------|---------------------|----------------------|
| 0-Determiner     | 11                  | <b>9<sup>t</sup></b> |
| Overt Determiner | 2                   | 9                    |

These problems were noted, but put to the side as potential sampling errors that might have resulted from the limited size of these corpora. However, in analyzing another language - Dutch - we discovered an interesting systematicity to the unpredicted cases which leads us to refine our original claims. While we still maintain the general mechanism of SHAG, we will propose that it applies in the

child's grammar (and potentially in various adult systems) in conjunction with markedness considerations.

## 2.2. Refining the claim: Niek

So let us now turn to the Dutch data. We investigated the files of Niek, one of the children in the CHILDES database (McWhinney & Snow 1985), transcribed by L. Elbers and F. Wijnen. We examined a total of 4750 verbal utterances and coded them according to finiteness of the verb and finiteness of the subject DP. We excluded proper nouns and quantified subjects as their status is unclear. Table 5 lays out the results of this analysis. We see first that the predominant subject type for non-finite verbs is the null subject. This result has already been obtained for other children acquiring Dutch and many other languages and is not surprising from a theoretical point of view. There are also many null subjects occurring with finite verbs. These are largely amenable to a topic drop analysis, as proposed originally by de Haan & Tuijnman (1988), and discussed in HHB and elsewhere.

Let us now consider the subject types that are most central to our hypothesis, subjects constructed with a count noun, that is, those that should take a determiner, and also pronouns. Recall that our hypothesis predicts that plural DPs and DPs with a overt determiner (finite DPs) will occur with finite verbs, while those missing a determiner (non-finite DPs) should occur with non-finite verbs (cf. 3). Pronouns also count as finite since they involve a specification of D and hence are also predicted to occur with finite verbs.

Table 5: Distribution of DP subjects: Niek

|           | <i>Non-finite V</i> | <i>Finite V</i> |
|-----------|---------------------|-----------------|
| 0 subject | 592                 | 739             |
| Overt Det | 0                   | 241             |
| Plural    | 2                   | 128             |
| Pronoun   | 73                  | 2520            |
| 0-det     | 24                  | <b>282</b>      |
| -----     |                     |                 |
| Total     | 723                 | 3997            |

As we see in Table 5, overt determiners, plurals and pronouns behave as predicted, occurring almost exclusively with finite verbs. Note that the finite utterances outnumber the non-finite utterances by about 6:1 in Niek's data, so that higher frequencies of plurals, pronouns and overt determiners are expected. But the obtained frequencies are in fact much higher than 6:1. For example, all else being equal, we would expect plurals to occur 6 times more often with finite verbs than with non-finite verbs, but the ratio is closer to 64:1. The same is true

for pronouns and overt determiners. We take these results as strong support for our hypothesis.

The hypothesis fails, however, in the case of determinerless DPs: they are found both with non-finite verbs, as expected, and finite verbs, contrary to the requirement of SHAG. Formulated slightly differently, the finiteness of the verb is not licensed by a corresponding finiteness in its specifier. In this regard Niek's data are reminiscent of the German data in Table 4, which also showed too many null determiners with finite verbs. Notice that this is the opposite problem that we observed in Nina data in Table 3, where we find that there are 12 unpredicted overt determiners with non-finite verbs. Why would English differ in this way from Dutch and German? The answer to this question requires a reconsideration of the spec-head requirement.

### 2.3. Licensing of marked forms.

If SHAG is taken as a requirement that a head agree in features with its specifier, Dutch and other languages with impersonal constructions, such as (4a), present an immediate problem since there is no subject in the specifier that the finiteness of the verb could be checked by.

- (4) a. Dutch  
Er/in het stadion wordt gevoetbald.  
there/in the stadium becomes footballled  
'One is playing football in the stadium.'
- b. Arabic  
daxal-at n-nisaa?-u.  
entered-3sgF the-women-NOM  
'the women entered'
- c. n-nisaa?-u daxal-na.  
the-women-NOM entered-3plF  
'the women entered'
- d. Fiorentino  
Gl'è venuto delle ragazze.  
Clitic3sg-is come some girls  
'Some girls have come'

Obviously, this problem can be eliminated by postulating an empty expletive in the specifier position which matches the features of the finite verb, but that solution is entirely driven by the problem that it is meant to solve. In fact, breakdowns of agreement between head and specifier are a more general phenomenon. For instance, the weak agreement in Arabic (Fassi-Fehri 1994) and post-verbal subjects in the northern Italian dialects (Brandi & Cordin 1991), illustrated in (4b,d) respectively. When such breakdowns occur, the verb form that appears is

usually called the 'default form'. We might say, then, that a default form is a form that does not require licensing by features in its specifier. So, in Dutch, for example, a first person verb form is licensed only if a first person subject occupies its specifier, but a third person singular verb form is licit autonomously since the 3rd person singular is the default form.

The situation in English is decidedly different. The verb form that occurs with third person singular subjects is the marked form, viz. *dances*. This is not only true at the level of morphological marking, where only this form occurs with an extension, but we see it in child language as well, in the sense that third person subjects may occur with it or with the English unmarked form, as illustrated in (5).

- (5) Daddy dances/dance.

As we will see, the problems noted in section 2.2 disappear at once if SHAG is taken to be a licensing requirement of marked features only. Let us revise the Spec-Head agreement requirement accordingly:

- (6) A marked verb form must be licensed by its specifier. An unmarked verb form is licit autonomously.

Under the formulation in (6), a finite 3rd person verb in Dutch can occur with a non-finite subject DP, as in (7a), since it is the default form and need not be licensed by an agreeing Spec. On the other hand, the finite verb in English is a marked form which must be licensed under Spec-Head agreement; hence the ungrammaticality of (7b). With respect to non-finite forms the situation is reversed; a Dutch infinitive is negatively specified for finiteness and hence cannot take a finite subject, as in (7c), while the English bare form, as the unmarked form, may occur with a fully specified subject DP, as in (7d).

- (7) a. Hondje zit hier.  
doggie sits here  
b. \*Doggie sits here.  
(cf. The doggie sits here.)  
c. \*Het hondje/hij hier zitten.  
the doggie/he here sit-inf.  
d. The doggie/he sit here.

The boldfaced numbers in Tables 3, 4, and 5 are no longer counterexamples under this revised Spec-Head requirement, which is independently motivated by impersonal constructions and other breakdowns in agreement in adult languages.

This reformulated Spec-Head requirement also captures a striking asymmetry in the distribution of subject pronouns in Dutch vs. English; in Dutch pronouns

occur almost exclusively with finite verbs and are rare with RIs, as shown in Table 5. In English, in contrast, pronouns occur with both finite and unmarked verbs, as we will see below (cf. Tables 6 and 7).

We note here that this analysis changes the status of the non-finite verb form in English, which has generally been assumed to be an infinitive, as claimed by Wexler (1994). Rather, on this analysis the non-finite verb is literally that - a non-inflected form. Since English does not have a form marked for infinitive, this unmarked form also is found where infinitives are selected. However, that does not make the form itself into an infinitive.<sup>5</sup> As we will see later, this difference between a true morphological infinitive and the bare English form has repercussions elsewhere in the grammars of Dutch and English.

We conclude that the distribution of subjects in early grammar is restricted by SHAG in as far as it excludes conflicting specifications of features in the head and the specifier, and requires marked choices to be licensed by appropriate corresponding features.

### 3. Subjects in Aux-less structures.

#### 3.1. Subjects in non-wh questions

Now that we have developed a more specific hypothesis concerning the distribution of subject types across different inflectional choices, let us return to sentences like (1a) and (2) and our original question: is the non-overt auxiliary in such structures finite or non-finite? Recall that Guasti & Rizzi (1996) make the assumption that in WH-questions, at least, the null auxiliary which is moved to C is finite (cf. 1b).

To test this hypothesis, we compared the distribution of subjects in sentences with main verbs, copula *be*, and auxiliary *be*. We take null *be* sentences, as in (8a,b) to be the non-finite counterparts of finite *be*, under the reasonable assumption that the finite forms of *be* carry specified inflectional morphology, so that a null form appears if no such specification is present (cf. Jaeggli & Hyams 1988; Dechaine 1994, among others.)<sup>6</sup>

- (8) a. Big Bird tall.                      b. Grover singing.

The SHAG requirement in (6) yields the expectations in (9) for English:

- (9) a. Finite main verbs and overt forms of *be* occur with finite DP subjects, i.e. pronouns and DPs with overt determiners, (e.g. *the dog/he barks/is naughty*).  
 b. Finite main verbs and overt forms of *be* should not occur with non-finite DPs, (eg. *\*dog barks/is naughty*).  
 c. Non-finite (default) main verbs and the null copula occur with all types of DP subjects, i.e. pronouns, nouns with and without determiner, (eg. *he/the dog/doggie bark/naughty*).  
 d. Root participle sentences pattern like other non-finite constructions in allowing all types of DP subjects. (eg. *he/the dog/doggie barking*).

We again used Adam's and Nina's data (cf. note 3) to test the predictions in (9). We first looked at declarative *be*-sentences. We excluded utterances with null subjects, proper names, and quantified DPs. The results for Adam are summarized in Table 6. The column NP represents bare N subjects, i.e. DPs from which the determiner is missing, while the category DP comprises pronouns and DPs with overt determiner. On the vertical axis we list the different verb types.

Table 6: Adam's subject types with finite and non-finite verbs

| <u>Verb</u>       | <u>Subject</u> |           |              | <u>Examples</u>         |
|-------------------|----------------|-----------|--------------|-------------------------|
|                   | <i>NP</i>      | <i>DP</i> | <i>total</i> |                         |
| finite main V     | <b>2</b>       | 81        | 83           | (the) dog/he barks      |
| finite copula     | <b>1</b>       | 269       | 270          | (the) dog/he is ill     |
| finite auxiliary  | <b>2</b>       | 67        | 69           | (the) dog/he is barking |
| -----             |                |           |              |                         |
| non-finite main V | 26             | 45        | 71           | (the) dog/he bark       |
| null copula       | 57             | 221       | 278          | (the) dog/he ill        |
| null auxiliary    | 8              | 29        | 37           | (the) dog/he barking    |
| -----             |                |           |              |                         |
| total             | 96             | 712       | 808          |                         |

As before, the boldfaced numbers are the non-predicted cases. As we can see, the number of such cases is extremely low - only 5 out of a total of 808 utterances. Thus, Adam's data bear out the predictions in (9): finite verbs occur with DP subjects and they do not occur with underspecified NP subjects; non-finite verbs occur with all types of subjects; and root participle constructions, such as (2), pattern fully with the non-finite cases, and not with the finite cases, as they take bare NPs in their subject position. We take these results as strong corroboration of our hypothesis.<sup>7</sup>

Nina's data are consistent with the hypothesis, as Table 7 shows, though not very revealing since overall Nina has very few bare NPs.

Table 7: Distribution of subject type over different verb types: Nina

| Verb         | Subject |     |       | example                 |
|--------------|---------|-----|-------|-------------------------|
|              | NP      | DP  | total |                         |
| finite V     | 1       | 67  | 68    | (the) dog/he barks      |
| finite cop   | 1       | 304 | 305   | (the) dog/he is ill     |
| finite aux   | 1       | 89  | 90    | (the) dog/he is barking |
| -----        |         |     |       |                         |
| non-finite V | 1       | 56  | 57    | (the) dog/he bark       |
| null cop     | 3       | 36  | 39    | (the) dog/he ill        |
| null aux     | 1       | 21  | 22    | (the) dog/he barking    |
| -----        |         |     |       |                         |
| total        | 11      | 573 | 584   |                         |

### 3.2. Subjects in WH-questions.

Let us look finally at WH-utterances of the type in (1a). Our main hypothesis is that the non-overt auxiliary is non-finite and that V2 is not subject to a finiteness requirement. We can now test this by looking at the range of subjects found in such constructions. Our specific prediction is as in (9d): if the non-overt auxiliary *be* is non-finite, then all subject types will be allowed.

We note first that WH-questions with participles frequently have null subjects, as observed by Roeper & Rohrbacher (1995), and illustrated in (10). This finding is consistent with the claim that the auxiliary in such sentences is non-finite.<sup>8</sup>

- (10) a. What looking for?  
 b. Why going to open it?  
 c. Why doing em on my finger #huh?

Next we consider overt subjects: if the null auxiliary is finite, then bare NPs are not expected. Of Adam's 22 WH-questions with *-ing* and a subject projected from a common noun, 12 (more than 50%) lack a determiner where it is required in the adult language.<sup>9</sup> An example is provided in (11):

- (11) What cowboy doing?

We therefore conclude that the null auxiliary in such constructions is non-finite and that V2 in English is not subject to a finiteness requirement, but rather is necessary to meet the WH-criterion. This stage of child language, where finiteness is not a requirement on root clauses thus offers a window into the V2 phenomenon which is unavailable in adult language.

### 4. COMP asymmetries

Let us turn finally to Crisma's (1992) observation that in certain languages WH-questions do not appear in a root infinitive form even though the language otherwise shows an RI stage. This seems to be true for German (Kursawe 1994), Dutch (Haegeman 1994), French (Crisma 1992) and Swedish (Santelmann 1995). Our finding in the previous section that early English allows non-finite V2 is therefore in sharp contrast with the situation encountered in these languages.

In order to explain why these languages show Crisma's effect, while early English does not, we note a related difference in the C systems of the adult grammars: the V2 languages, in contrast to English, do not allow WH-infinitives in their complement clauses, as illustrated in (12a). We propose that the ungrammaticality of adult (12a) parallels the ungrammaticality of child (12b).<sup>10</sup>

- (12) a. \*I weet niet wat voor Piet te kopen  
 I know not what for Peter to buy  
 (cf. I don't know what to buy for Peter.)  
 b. \*Wat Papa doen?  
 What Daddy do-inf.

But rather than formulating this as a stipulated property of C, we propose that these restrictions follow from the constraint in (13):

- (13) (In V2-languages,) infinitives are incompatible with overtly specified features in the XP of their specifier.

The intended effect of (13) is to block infinitives from moving to C, both overt movement in main clauses, and covert movement in embedded clauses<sup>11</sup>, whence the ungrammaticality of (12a,b). But the generalization in (13) will also cover cases such as (7c), where the infinitive occurs with a specified DP subject. In fact, (13) really reduces to the Spec-Head requirement in (6), once we understand "infinitive" to be a marked form. The infinitive in the V2 languages is a true infinitive, that is, a form which is negatively specified with respect to grammatical agreement features.

It is now clear why (13) does not hold for English. In English, the infinitive (or bare form) is unmarked. It therefore allows WH-phrases in its specifier, when it is moved to C, and it can also take fully specified DP subjects and pronouns, as we saw earlier (cf. 7d and 9d).

The explanation for Crisma's effect in the V2 languages extends straightforwardly to French. Although French is a residual V2 language like English, it has a real morphological infinitive (eg. *manger, dormir*). We expect, then, that it will not have infinitival WH-questions, such as \**Où aller Papa?* This is indeed the case, as originally observed by Crisma (1991) (cf. also Hamann

1996).

We have thus argued that English allows non-finite I to C. Unfortunately, the elements that move are not overtly realized, so that the argument is rather indirect. One might reject this claim altogether, and assume that sentences such as (1a) and (2) are small clauses of some sort, with an adjoined WH-phrase in the case of (1a). However, such an approach could not explain a neat further difference between English and Dutch-like languages, which is that while declarative utterances such as *Mamma weg* (Mommy away) are readily attested in Dutch, their WH-counterparts, such as *Waar Mamma?* (Where Mommy) are not. In English, on the other hand, both the declarative and WH-versions are fine. This is immediately predicted by our null-BE analysis. The declarative sentences (*Mamma weg*) involves a non-finite *be*, whereas a non-finite verb is excluded in the Dutch interrogative counterpart (*Waar Mamma*), since in the real V2 languages only finite verbs undergo I to C - in marked contrast to English in which infinitives may also undergo movement to C. A small clause analysis provides no basis for an explanation of this contrast.

#### Notes

\*The research for this paper was supported with a grant from NWO, the Dutch Organisation for Scientific Research, which is hereby gratefully acknowledged.

1. We exclude from this discussion non-finite verb movement in the Balkan languages (cf. Rivero 1994) and AUX to Comp movement as in Italian (Rizzi 1981).
2. The main point of Guasti & Rizzi's paper is not to argue for finite *be*, but rather to explain the relative infrequency of subject WH *-ing* questions, such as *Who going?* as compared to object WH *-ing* questions, eg. *What Mommy doing?*. They explain this asymmetry by an appeal to non-inversion in the case of subject WH questions, coupled with certain assumptions about truncation and the identification of null elements. It is questionable, however, whether the asymmetry requires a grammatical explanation. We believe that it is rather a statistical effect arising from the relative infrequency of subject questions overall (eg. about 5% of Eve's WH questions are subject questions) and the density of *-ing* questions (eg. about 1 in 3 for Eve). The resulting probability of a subject WH *-ing* question is about 1.6%, which is approximately what Guasti & Rizzi found for Eve. (We are grateful to Elissa Fultz for providing these data.)
3. For the various analyses presented in HHB and in the present study we analyzed the Adam corpus from age 2;3 to 3;7 (files 01, 08, 10, 12, 14, 20, 22, 24, 28, 30, 32, 34) (CHILDES database, MacWhinney & Snow 1985; Brown 1973) and the Nina corpus from age 2;4-2;10 (files 22, 28, 30, 31, 32, 33, 36) (CHILDES database, MacWhinney & Snow 1985; Suppes 1973).

4. The number of overt determiners given in table in HHB is 1 (9), since we found 8 of the 9 examples to be unclear in one respect or another and therefore difficult to construe as certain counterexamples (cf. HHB for discussion of the particular examples). However, under the current analysis they no longer constitute counterexamples, as we will see shortly.
5. This assumption has a number of consequences which we discuss in forthcoming work (Hoekstra & Hyams forthcoming).
6. During the Root infinitive Stage children do not use non-finite overt instances of *be*, which is in conformity with this analysis.
7. Further support for the hypothesis that root participle constructions are non-finite can be obtained from the Case marking of pronominal subjects. As Schütze (1995) observes, oblique subjects occur with non-finite lexical verbs and with missing *be* constructions (eg. *him go*, *him going*), but not with finite verbs or finite forms of *be* (*\*him goes*, *\*him is going*).
8. Guasti & Rizzi (1996: note 6) discuss these cases since the occurrence of null subjects in a position other than the specifier of the root, as is the case in such WH-questions, is problematic for the truncation hypothesis (Rizzi 1994). They note that the vast majority of such cases involve a non-finite verb and that the null subject in these cases is thus different from root null subjects since it is "licensed in uninflected environments". We agree with this latter claim, but note that it is incompatible with Guasti & Rizzi's position that the null auxiliary is finite in sentence such as (1a).

Rizzi (pc) suggests that while our claim of a non-finite AUX might be correct for bare N and null subjects, full DP subjects are consistent with a finite form as well. While this is certainly an interesting possibility, the hypothesis wrongly predicts that other languages would similarly allow WH-questions with a null finite auxiliary or copula.

9. It would be desirable to directly compare the subject types in WH-questions with and without overt auxiliaries. Unfortunately, the number of overt auxiliaries in WH-questions is extremely low, as noted also by Guasti & Rizzi (1996: note 9). We found only two examples in Adam's files where the subject is constructed on the basis of a common noun. These are given in (i) and note that both have an overt determiner, as expected. The same is true for copula constructions with overt forms of *be*, exemplified in (ii).

- (i) What is that man doing?  
What is the giant doing?
- (ii) What is the string for?  
What is this record about?  
What is the string for?

10. There are occurrences of embedded infinitival questions of the form in (i).

- (I) Ik weet niet wat te doen/zeggen.  
I don't know what to do/say.

But the construction as such is not productive. No embedding is ever found, and

in simple complementations the verb is basically limited to *doen, zeggen* (do, say), without further modification or complementation beyond the WH-object. So the sentences in (ii) and (iii) are ill-formed.

- (ii) \*Ik weet niet wat je morgen te zeggen.  
'I don't know what to tell you tomorrow'.  
(iii) \*Ik weet niet wat te zeggen dat je moet doen.  
'I don't know what to say that you should do'.

11. In this regard we follow Law (1991) in assuming that in embedded clauses V-to-C movement generally takes place as an instance of expletive replacement. This view is consistent with later developments (cf. Chomsky 1995).

## References

- Abney, S. (1986) *The English noun phrase in its sentential aspect*. diss. MIT.
- Brandi, L. & P. Cordin (1991) Null subjects, Subject Clitics and inversion. In: O. Jaeggli & K. Safir (eds), *The null subject parameter*. Dordrecht: Foris Publications.
- Brown, R. (1973) *A First Language*. Cambridge, MA: Harvard University Press.
- Chomsky, N. (1995) *The Minimalist Program*. Cambridge, MA: The MIT Press
- Clahsen, H. S. Eisenbeiss & M. Penke (1996) :anguage lerning in eearly syntactic development. In H. Clahsen (ed.) *Generative Perspectives on Language Acquisition*. Amsterdam: J. Benjamins.
- Crisma, P. (1992) On the acquisition of Wh-questions in French. In *GenGenP*, Geneva: University of Geneva, 115-122.
- Dechaine, R.-M. (1993) *Predicates across categories*. diss. UMASS
- Fassi Fehri, A. (1993) *Issues in the Structure of Arabic Clauses and Words*. Dordrecht: Kluwer.
- Guasti, M.-T. & L. Rizzi (1996) Null AUX and the acquisition of residual V2. *BUCLD 20 Proceedings*, 284-295.
- Haan, G. de & Tuijnman, (1988) Missing subjects and objects in child grammar. In P. Jordens & J. Lalleman (eds.) *Language Development*. Dordrecht: Foris.
- Haegeman, L. (1994) Root infinitives, Tense and Truncated structures. *Language Acquisition* 4:3, p. 205-255.
- Hamann, C. (1996) To move or not to move. *GenGenP*. University of Geneva.
- Hoekstra, T., N. Hyams & M. Becker (1996) The underspecification of Number and the licensing of root infinitives. *BUCLD 20*, 293- 306.
- Hoekstra, T. & N. Hyams (1995) The syntax and interpretation of dropped categories in child language: A unified account. *Proceedings of WCCFL XIV, CSIL, Stanford University*.
- Hoekstra, T. & N. Hyams (forthcoming.) Aspectual and interpretive differences in root infinitives in Dutch and English (provisional title). To appear in A. Sorace (ed.)
- Jaeggli, O. & N. Hyams (1988) Morphological Uniformity and the Setting of the Null Subject Parameter. *NELS* 18, p. 238-253
- Krämer, I. (1993) The Licensing of Subjects in Early Child Language. In *MIT Working Papers in Linguistics* 19, p. 197-212.
- Kursawe, C. (1994) Fragesätze in der deutschen Kindersprache. MA-thesis, University of Düsseldorf.
- Law, P. (1991) Verb movement, expletive replacement, and head government. *The Linguistic Review* 8, p. 253-285
- McWhinney, B. & C. Snow (1985) The child language exchange system. *Journal of child language* 12, p. 271-296.
- Phillips, C. (1995) Syntax at age 2: Crosslinguistic differences. *MITWPL* 26, 325-382.
- Radford, A. (1988) Small children's small clauses. In: *Transactions of the Philological Society* 86, p. 1-46
- Rivero, M.-L. (1994) Clause structure and V-movement in the languages of the Balkans. *NLLT* 12, p. 63-120.
- Rizzi, L. (1981) *Issues in Italian Syntax*. Dordrecht: Foris Publications.
- Rizzi, L. (1990) *Relativized minimality*. Cambridge (Mass.): MIT-press.
- Rizzi, L. (1994) Some notes on linguistic theory and language development: the case of root infinitives. In *Language Acquisition* 3, p. 371-393
- Roeper, T. & B. Rohrbacher (1995) True Pro-drop in Child English and the Principle of Economy or Projection. *UMass m.s.*
- Santelmann, L. (1995) *The acquisition of verb second grammar in child Swedish*. Cornell University diss.
- Schütze, C. (1995) Children's subject case errors. Evidence for case-related functional projections. *FLSM* 6 (IULC), p. 155-166
- Suppes, P. (1973) The semantics of children's language. In: *American Psychologist* 88, p. 103-114.
- Wexler, K. (1994) Optional infinitives, verb movement and the economy of derivation in child grammar. In: D. Lightfoot and N. Hornstein, (Eds.), *Verb Movement*. Cambridge University Press.