

## Verb second, the split CP and null subjects in early Dutch finite clauses

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### 1. AIM AND SCOPE OF THE PAPER

#### 1.1. THE EMPIRICAL DATA: NULL SUBJECTS IN EARLY DUTCH.

This paper deals with the null subject in finite root clauses in the early grammar of Dutch (and German).<sup>1</sup> Two types of null subjects will be distinguished in the discussion: preverbal null subjects illustrated in (1a) and post-verbal null subjects illustrated (1b) (for the latter, see Hamann 1992, Duffield 1993, Schaeffer 1993).<sup>2</sup>

- (1) a. [-] heb 't zo koud (Hein 2;9)  
have it so cold = 'I am so cold.'  
b. dropje wil [-] niet (Thomas 2;4; Schaeffer: 1993: 17)  
liquorice want not

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<sup>1</sup> The data in (1) are taken from the Childe corpus (McWhinney and Snow 1985).

In this paper I am only concerned with null subjects in finite clauses. There are also null subjects in non-finite root clauses (the so called root infinitive (RI), see sections 2.3.3.2. and 4.2.4.) in the early production. The following examples are taken from the *felke* material (see Appendix 2).

- (i) a. paardje slapen en felke 2.3.  
little horse sleep and  
b. ne broek grote broek afdoen felke 2.3.  
a trousers big trousers off-take

In (ia) the infinitival clause has an overt subject, in (ib) it lacks an overt subject. Overt subjects are rarer in RIs than in finite clauses.

Table I reproduce some of the data discussed in Haegeman (1995a: table (32a)) concerning the distribution of overt subjects in finite clauses and in RIs. As can be seen, the percentage of RIs with overt subjects is consistently lower than that of finite clauses with overt subjects, both for Hein and for *felke*:

Table I: Overt subjects in finite clauses and in RI; Hein (2;4-3;1)

Age Hein	Fin. cl: overt SU %	RI: overt SU %
2;4	57%	22%
2;5	65%	17%
2;6	68%	19%
2;7	71%	15%
2;8	65%	12%
2;9	67%	12%
2;10	70%	8%
2;11	74%	1%
3;00	72%	20%
3;01	72%	21%
average	68%	15%

For a discussion of the realization of the subject in RIs see Haegeman (1995a).

<sup>2</sup> For the properties of early Dutch see Wijnen and Verrips (1995).

Table II: *idem*; *felke* (1;10-2;3)

Age Felke	Fin.cl: overt SU %	RI: overt SU %
1;10	55.56%	27.03%
1;11	59.09%	30.99%
2;00		
2;01	41.94%	27.36%
2;02	57.78%	25.00%
2;03	75.27%	25.29%
total	63.18%	27.20%

### GenGenP (1996) - Haegeman V2, CP and Dutch Finite Null Subjects

Null subjects are generally attested in the early production of non pro drop languages.<sup>3</sup> In French (2a) and English (2b), the early null subject corresponds by and large to the specifier of the root (Rizzi 1994; see Haegeman 1995b, forthcoming, for apparent counterexamples; see also section 6.4.).

- (2) a. Oh! Est pour maman - A tout mangé.  
oh, is for mummy, has all eaten (Augustin 2.0.2) (see Hamann et al 1995)  
b. Want more (Rizzi 1994: 1, from Hyams 1986)

While the French and English null subject sentences in (2) do not belong to the core adult grammars (Thrasher 1977, Haegeman 1995b for non-core varieties where they are licit), (1a) is a grammatical adult Dutch sentence which is taken to illustrate the null discourse topic phenomenon discussed, among others, by Ross (1982) for German, also by Raposo (1986) and by Huang (1984). Given the availability of an adult Dutch (and German) counterpart to (1a), the question arises whether or not all occurrences of the early Dutch (and German) sentence initial null subject in finite clauses can be assimilated to the adult Dutch (and German) null subject, i.e. a manifestation of the null topic (as claimed, among others by de Haan and Tuijnman 1988). If the answer to this question were positive, we would be led to conclude that there is no grammatical development in the status of the initial null subject in Dutch, contrary to what is the case in English or in French. If the answer is negative, then at least some early Dutch (and German) null subjects differ from the adult null subjects and it would obviously be desirable to align the early Dutch (and German) null subject with its early English and early French analogues. The early Dutch (and German) post-verbal null subject in (1b), on the other hand, does not have an adult counterpart. Although the post-verbal null subject is comparatively rarer in the early grammar, it is a robust phenomenon (as shown for German by Hamann 1992, Duffield 1993; for Dutch see Schaeffer 1993). Given this difference between the status of the adult counterparts of (1a) and (1b), various questions arise. If we assume that (1a) corresponds to the adult Dutch (and German) null subject, then (1b), which has no adult counterpart, must be a separate phenomenon of the child grammar and unrelated to (1a). If, on the other hand, we can show that the early preverbal null subject in (1a) is not to be equated to the adult phenomenon, then the question arises whether the null subjects in (1a) and (1b) can both be treated as a function of one property of the early grammar, or if they are distinct phenomena, both specific to the early grammar.

In what follows, I will provide a number of arguments to show that the initial early null subject in Dutch (and German) is not to be assimilated to the adult null subject, but that at least some instantiations must be of the same type as the early null subject in other non pro drop languages. I will adopt Rizzi's analysis of the early null subject data in French and English and assume that early null subject is a function of structural truncation. On a more speculative note, I will then pursue the hypothesis that while the post-verbal null subject in Dutch (and in German) is not to be fully assimilated to the initial null subject, its occurrence also depends on structural truncation. In this paper I concentrate almost entirely on the early Dutch data but I assume that the analysis carries over to German.

#### 1.2. V2 AND THE STRUCTURE OF CP

A fruitful discussion of the early null subject in Dutch root clauses as in (1) must take into account the particular

<sup>3</sup> There are a restricted number of null subjects in embedded clauses. Table III gives the relevant figures for the three Dutch children we will be considering in this paper. There are no examples in *felke*, who at the period of recording does not use any embedded clauses.

Table III: subjects in embedded clauses (see also 1995)

	total	overt subject	null subject	unclear cases
Thomas	31	26	4 = 12.9%	1
Hein	46	35	6 = 13 %	5
Niek	41	30	6 = 14.6%	5

Many of the embedded clauses are used independently. Some examples are given in (i). I assume that my analysis for post-verbal subjects can perhaps apply here too.

- (i) a. als gaan naar [?] naar Hein. (Thomas 2;7)  
if go to Hein  
b. als pap op eet -, (Thomas 2;11)  
if pudding up eats  
c. als groot ben -, (Thomas 2;11)  
if tall am

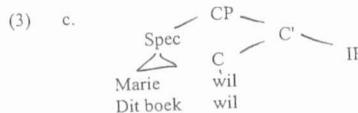
Many of Duffield's (1993) examples of embedded null subjects also concern embedded clauses without matrix clause.

grammatical properties of these sentences, specifically the verb second (V2) property. In this paper, I cannot review the vast literature on the subject of V2. For overviews of the literature, I refer to reader to, among others, Weerman (1989) and Zwart (1996). In this section, I provide an outline of the account for V2 which I will be assuming in this paper. The account is essentially based on seminal work by Koster (1978) and den Besten (1983), which it integrates into more recent proposals for the articulated structure of CP, 'the split CP' (Culicover 1991, Rizzi forthcoming). The account will be applied to Dutch data, I assume that it also extends to the other West Germanic V2 languages.

Consider the examples of Dutch V2 sentences in (5).



Typically, the finite verb *wil* ('want') is preceded by one single constituent: the subject *Marie* in (3a) and the object *dit boek* ('this book') in (3b). In many accounts of V2, the unicity of the constituent preceding the inflected verb is related to the structure of CP: it is assumed that in the V2 sentence the verb moves to C° and that, since CP only has one specifier, there can only be one constituent preceding the inflected verb (cf. den Besten 1983 and much later work). In this account, both subject initial (3a) and non subject initial (3b) V2 clauses concern exactly the same projection (CP). The verb occupies C° and the initial constituent is its specifier:

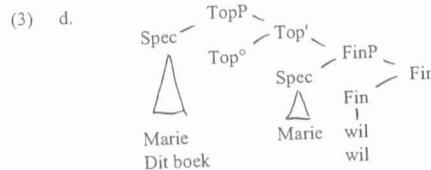


The above account of V2 crucially presupposes that the CP layer contains at most one head and one specifier. However, such a view on CP is problematic in the light of data such as those in English (4):

- (4) I swear [<sub>CP</sub> that during the holidays on no account will [<sub>IP</sub> I write a paper]]

In (4) there are at least two heads in the CP domain, one occupied by the complementizer *that*, the other by the inverted auxiliary *will*. The CP domain also contains two maximal projections, the PP *on no account* which arguably has a specifier head relation with the auxiliary *will*, and the PP *during the holidays*. Similar data can be obtained from French, Italian (Rizzi forthcoming), Hungarian (Puskas 1992, forthcoming) etc. Based on data such as those in (4) Rizzi proposes that the CP layer should not be conceived of as consisting of one projection but that it should be decomposed ('split') into a number of discrete projections (see section 3.2.2.).

For the analysis of Dutch (and the other West Germanic V2 languages) I will adopt an articulated structure of CP. Just like the English, French, Italian, Hungarian *etc* CP (cf. Rizzi forthcoming), the Dutch CP consists of an array of discrete functional projections, providing distinct landing sites for preposed topics, preposed *wh*-constituents and sentence-initial subjects. The topicalized constituent in (3b), for instance, will be assumed to occupy the specifier of the TopicProjection; the preverbal subject in (3a), on the other hand, will be assumed to occupy the specifier of the TopicProjection if topicalized. Otherwise it occupies the specifier position of the lowest projection in the CP layer, 'Finiteness Phrase' or FinP. (3d) is a provisional representation.



Given an articulated CP, the unicity of the single overt constituent preceding the inflected verb no longer follows simply from the structural constraints of CP and it must be derived from one or more other principles. In (3d), for instance there would be two potential landing sites for maximal projections preceding the finite verb: [Spec,TopP] and [Spec,FinP].

### 1.3. ORGANIZATION OF THE PAPER

The paper is organized as follows. Section 2 introduces the early null subject phenomenon and summarizes Rizzi's truncation approach. Section 3 introduces a theory of V2 taking into account the articulated CP structure. Section 4 provides a discussion of the distribution of early null subjects in Dutch and provides arguments against equating the early null subject with the adult null subject, the latter being analysed as a null topic. Section 5 analyses the initial null subject, section 6 the post-verbal null subject. In the latter section extensive attention is also paid to adult V3 phenomena. Section 7 summarizes the discussion and indicates some topics for future research.

## 2. NULL SUBJECTS IN FINITE CLAUSES IN EARLY GRAMMARS: THE TRUNCATION HYPOTHESIS

As a starting point, I briefly go over the null subject phenomenon in finite clauses in early French and early English. For reasons of space, I cannot do justice to the problem here. For more discussion see among others: Hyams 1986, Pierce 1989, Bloom 1990, Rizzi 1994, Roeper and Rohrbacher 1994, Sano and Hyams 1994, Valian 1991, Rohrbacher and Vainikka 1994 *etc.* A salient property of the null subject in finite clauses in English and French is that it is essentially found in the left periphery of the clause. For non-initial null subjects I refer the reader to Haegeman (1995b) and to section 6.4.

## 2.1. THE PRO-DROP ANALYSIS

Hyams (1986) argues that the occurrence of null subjects in the early English production is a grammatical phenomenon and cannot be reduced to extra grammatical factors (such as processing constraints *etc.*, for relevant discussion see also Bloom 1990, Valian 1991, Roeper and Rohrbacher 1994, Hyams and Wexler 1993). I share this position in the present paper, though I do not adopt Hyams' specific analysis, which ascribes the early null subject phenomenon to an early mis-setting - and subsequent resetting - of the pro drop parameter. A pro drop analysis of the early null subject raises a number of important empirical problems, discussed, among others, in Rizzi (1994). In French, for instance, early null subjects do not occur in questions with *wh*-preposing (cf. Haegeman 1995b for some exceptions, see also Roeper and Rohrbacher 1994), while null subjects in pro drop languages do occur in this context. Also, early null subjects do not occur in embedded clauses, an option which is available for the null subject in pro drop languages.

## 2.2. TOPIC DROP AND NULL SUBJECTS IN ABBREVIATED REGISTERS

Rizzi (1994) signals the similarities between the early null subject and the null subject attested in abbreviated registers of adult English and French, as discussed in Haegeman (1990, 1995b, forthcoming).

- (5) a. Origo rather contorted: says Italy is blind red hot devoted patriotic; has thrown her wedding ring into the cauldron too. Anticipates a long war... (*Diary of Virginia Woolf*, p. 6, 10 January 1936)  
 b. Me dit que l'architecte Perret est désireux de passer un moment avec moi  
 me says that the architect Perret is desirous of spending a moment with me  
 (Paul Léautaud, *Journal particulier*, p. 44: 6.2.133)

The distributional constraints on early null subjects in English and French carry over to the non-overt subject in the abbreviated register<sup>4</sup>. From now on, I refer to these null subjects as NSD. NSDs are incompatible with *wh* preposing and they do not occur in embedded clauses:

- (6) a. When will \*(he) invite me again?  
       b. Quand m'invitera \*(il-t-il) encore une fois?

(7) a. I think that \*(he) will invite me again.  
       b. Je pense que \*(il) m'invitera encore une fois.

<sup>5</sup> Haegeman (1990) analyses NSD as an incompatibility between NSDs and *wh*-movement.

<sup>4</sup> Though the null subject phenomenon is productive in abbreviated written registers, these do not constitute the only context where it is found. The null subject is also attested in informal speech in English. For an early discussion, see Thrasher 1977, see also Haegeman (1995b, forthcoming).

<sup>5</sup> In Haegeman (1990) I assume that the null topic operator and preposed *wh*-constituents are in complementary distribution, both occupying the unique [Spec, CP]. In view of the Split CP structure, to be elaborated below, the argumentation in Haegeman (1990) would have to be restated, since topicalized constituents and preposed *wh*-constituents do not target the same landing site. Bromberg and Wexler (1995) also point out that the incompatibility of *wh*-movement with the early null subject in English does not follow straightforwardly from the null topic analysis. (continues on next page)

instantiation of the null topic phenomenon also found, for instance, in Portuguese (Raposo 1986), (8a), and in German (Ross 1982), (8b):

- (8) a. OP A Joana viu [ec] na televisao ontem é noite.  
Joana saw on television last night  
b. OP Habe ich schon [ec] gesehen.  
has it already seen

The null topic analysis is often advocated to account for the early null subjects in finite clauses (Bromberg and Wexler 1995 for English, de Haan and Tuijnman 1988 for Dutch, Weissenborn 1990, Weissenborn and Verrips 1992 for German). But this analysis runs into problems (see also Rizzi 1994, Haegeman 1995b). If the NSD and the early null subject in English and in French are null topics, it is not expected that either NSDs or early null subjects might function as quasi arguments or as expletives, since such non-referential subjects typically occupy an A position and do not topicalize. This expectation is not borne out by the data: both in the child grammar (9a) and in the special registers of the adult grammar (9b,c) non referential null subjects are instantiated:

- (9) a. Yes, is toys in there (Hyams 1986: 93)  
b. He plumped the pillows up behind him and groped in the pocket of his tunic for a cigarette. Weren't any. (Barker, Pat. 1993, *The eye in the door*. Penguin edn, 130)  
c. Rained in the night, wind, rain and hail (Smart, Elizabeth, 1995, *On the side of the angels*. Flamingo/Harpers Collins. January 19, 1945, p. 27)

### 2.3. TRUNCATION AND ROOT NULL CONSTANTS

In my analysis I adopt Rizzi's account for early null subjects, integrating it in a theory of V2. As ingredients in his account of the early null subject, Rizzi (1994) proposes a more refined classification of null arguments (2.3.1.), associated with a reformulation of the ECP (2.3.2.), and coupled with a theory of structure truncation (2.3.3.). His approach also captures the NSD. I summarize the main components of his analysis in this section.

#### 2.3.1. The typology of empty categories

Among A'-bound traces, [-anaphoric] [-pronominal] categories, a distinction is introduced between [+variable] and [-variable] empty categories (Lasnik and Stowell 1991). The former involve 'quantification ranging over a possibly non-singleton set, in the latter the null element never ranges over a non-singleton set, rather it has its reference fixed to that of the antecedent' (Rizzi 1994: 158). Rizzi labels [-anaphor, -pronominal, -variable] empty categories 'null constants' (nc). The difference between the two types of empty categories, is illustrated in (10-11):

- (10) a. \* Who<sub>i</sub> did you get him<sub>i</sub> to talk to t<sub>i</sub>?  
b. \* John<sub>i</sub>, is easy [OP<sub>i</sub> [PRO to get him<sub>i</sub> to talk to t<sub>i</sub>]].
- (11) a. \* Who<sub>i</sub> did you get his<sub>i</sub> mother to talk to t<sub>i</sub>?  
b. John<sub>i</sub>, is easy [OP<sub>i</sub> [PRO to get his<sub>i</sub> mother to talk to t<sub>i</sub>]].

A'-movement creates a variable trace in the (a) examples and a non-variable trace in the (b) examples. Both types of A'-movement, that of the quantificational *wh*-operator and that of the non-quantificational null operator, give rise to SCO (10), which is as expected if the A'-bound trace is subject to principle C. Movement of the *wh*-phrase

Anticipating the discussion below, languages with the articulated CP system, topicalized constituents are compatible with preposed *wh*-constituents (cf. Puskas 1992, Rizzi forthcoming). Consider Italian (i):

- (i) Questo libro dove l'ha comprato?  
this book where it has-3sg bought

In (i) the object *questo libro* ('this book') topicalizes and is compatible with *wh*-preposing of *dove* ('where'). In Italian (ii) subject topicalization co-occurs with *wh*-preposing:

- (ii) Gianni dove è andato?  
Gianni where is-3sg gone

If the null subject in the non pro drop language is a null topic, we have to exclude topicalization of a null subject operator in sentences with *wh*-movement in these languages:

- (iii) \*OP<sub>i</sub> where will t<sub>i</sub> go?

(iii) is arguably excluded because the subject trace will not be properly governed (see Rizzi 1996 on ECP effects with subject-auxiliary inversion, see Haegeman 1995b for instances of non-initial null subjects). In pro drop languages, subject extraction may take place from a properly governed post-verbal position.

also leads to WCO, but null operator movement does not, (11).

#### 2.3.2. The ECP

A second ingredient in Rizzi's analysis is the reformulation of the identification clause of the ECP:

- (12) ECP: identification clause  
a. An empty category <-p> must be chain connected to an antecedent if it can be

The reformulation of the identification clause in (12a) has an important consequence: if a non-pronominal empty category is not c-commanded by any maximal projection, there is no potential antecedent position in the structure. In such circumstances, the empty category may remain antecedentless. (12a) will not allow an antecedentless variable empty category, since, being a variable, the empty category will have to be bound by an operator. In what follows I assume the identification clause (12a) can be generalized to other empty categories, including null operators, and non-overt heads (see also Haegeman (in preparation)).

- (12) ECP: identification clause  
b. An empty category must be chain connected to an antecedent if it can be

#### 2.3.3. Truncation of CP

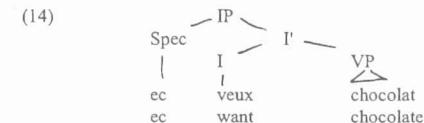
For the adult grammar, Rizzi postulates axiom (13):

- (13) Root -> CP

Rizzi assumes that the child grammar differs from the adult grammar in that (13) is not mandatory. Root clauses in the child grammar may be projected to the CP level, but they may also be truncated, i.e. not all functional projections have to be projected. When a projection is omitted, all the dominating projections are also absent (Rizzi 1994). Truncation may apply both to finite clauses and to non-finite clauses. In the latter case, the truncated structure is at the basis of the so-called root infinitives in the early grammar, to which I return in section 2.3.3.2; in the former, it creates the environment for the null subject in finite clauses of the non pro drop languages, to which I now turn.

#### 2.3.3.1. Early null subjects: the specifier of IP

According to Rizzi's analysis, the early null subject in French finite clauses is an antecedentless empty category in the specifier of the root, [Spec,IP].



Empty categories in the specifier of a root IP are not c-commanded by a potential antecedent. In the adult grammar, structures such as (14) would be illicit; by (13), all adult root clauses must be CP. If CP is projected, an empty category in [Spec,IP] violates the ECP: the specifier of CP being a potential antecedent position, the empty category will have to be identified. The specifier of CP itself, being an A'-position, is not a suitable host for a null constant according to Rizzi's analysis (Rizzi 1994: 162).

The incompatibility between early null subjects with *wh*-questions and with embedded clauses follows: in *wh*-preposing contexts, the CP level has to be projected to provide a landing site for the moved *wh*-constituent, hence there will be a potential antecedent position, [Spec,CP], with respect to the empty category in [Spec,IP]. Similarly, the embedded CP has to be projected for selectional reasons.

This analysis of early null subjects can be carried over to NSDs ( Rizzi 1994: 172, note 12; see Haegeman 1995b for extensive discussion of the registers allowing NSD).<sup>6</sup>

<sup>6</sup> A strict equation of the ec in the specifier of the finite IP with the 'null constant', i.e. the trace of a non-quantificational operator, is not possible (Rizzi class lectures 1996). The null operator -null constant chain is incompatible with a quasi argumental interpretation:

- (i) a. ?The train was running too fast [OP [PRO to consider [ t likely to stop]]] Rizzi 1986 (528: fn)

b. \*It was raining too heavily [OP [PRO to consider [ t likely to stop]]] Rizzi 1986 (528: fn)

The initial non-overt subject in the non pro drop languages is simply an antecedentless non-quantificational empty category. This empty category is allowed to remain antecedentless because (i) it is non-quantificational, and (ii) there is no potential antecedent position.

### 2.3.3.2. Root infinitives and root null subjects

The characteristic use of infinitives as declarative root clauses (RI from now on) in the early production is illustrated by French (15) (cf. Platzack 1990, Radford 1990, Grimshaw 1993, Poepel and Wexler 1993, Rizzi 1995, Wexler 1994 etc.).

- (15) Michel dormir là.  
Michel sleep there (Philippe 2,2, Friedemann 1992: 135)

Rizzi (1995) proposes that child RIs are also truncated structures, i.e. structures which do not project the full array of functional categories. Assuming a hierarchy of functional categories in (16), RIs lack TP and any of the dominating functional projections.

- (16) CP > AgrSP > NegP > TP > AgrOP > VP

I do not provide a detailed discussion of this proposal, see Rizzi (1995, also Haegeman 1995a) for arguments. Suffice it to say that child RIs systematically lack the overt evidence which would attest that CP, AgrSP and TP are projected (see Levow 1995 for discussion and some problems). For instance, the absence of *wh*-movement in RIs will follow if we assume that CP is not projected. The fact that overt subjects are rare (cf. the Dutch data in note 1) can be related to the non-availability of AgrSP. The absence of perfective auxiliaries in RIs follows from a truncation approach if we assume, following Guasti 1993, that perfective auxiliaries must be licensed by T°. In Haegeman (1995a, 1996a) I have extended Rizzi's account of RIs to Dutch. See also section 4.2.4.

### 2.3.3.3. Development of early null subjects and of RIs

In Rizzi's analysis, both the early null subject phenomenon and the RI phenomenon depend on the availability of clausal truncation and on the fact that the root need not be CP in the child grammar. The correlation between the decrease in the null subject data and that in root infinitives signalled for French by Pierce (1989: 38) and discussed in Rasetti (this vol.) follows quite naturally from the analysis in Rizzi (1995: 173, note 14).

## 3. VERB SECOND AND THE ARTICULATED CP

### 3.1. THE LEFT PERIPHERY IN DUTCH: THE DATA

#### 3.1.1. Verb Second

Typically, the Dutch finite verb occurs in second position and is preceded by one constituent.<sup>7</sup> The first constituent in a V2 sentence may have a range of grammatical functions, including subject (17a), non-subject argument (17c, 17d), and adjunct (17b). The first constituent may be a *wh*-phrase (17d), or a topicalized constituent ((17b), (17c)).

- (17) a. Marie zal morgen dit boek kopen.  
Marie will tomorrow this book buy  
b. Morgen zal Marie dit boek kopen.  
tomorrow will Marie this book buy  
c. Dit boek zal Marie morgen kopen.  
this book will Marie tomorrow buy  
d. Welk boek zal Marie morgen kopen.  
which book will Marie tomorrow buy

When the first constituent is a subject (as in (17a)), it may (18a) - but need not - be a topic. In (18b) the subject is a weak pronoun (WP). In (18c) and in (18d) a topic interpretation for the first constituent is unavailable: quasi-

<sup>7</sup> For (i) I assume that a null operator occupies the first position.

- (i) a. Kom je morgen terug?  
come you tomorrow back?  
b. Ik ga naar buiten. Komt er daar een man aangelopen....  
I go outside. Comes there there a man running...

For the examples in (ii), see the discussion of topicalization in the main body of the text.

- (ii) Die man, die ken ik  
that man, that know I

arguments and expletives do not topicalize.

- (18) a. Marie zal morgen het boek kopen.  
Marie will tomorrow the book buy  
b. Ze zal morgen dit boek kopen.  
she (WP) will tomorrow this book buy  
c. Het zal morgen regenen.  
it will tomorrow rain  
d. Er zullen morgen veel mensen komen.  
there will tomorrow many people come

The initial constituent of the V2 clause is not necessarily an A'-element, but may also be an A-element: non-referential quasi-arguments, expletives and weak pronouns typically occur in A positions.<sup>8</sup>

In the general case the finite verb may not be preceded by more than one constituent:

- (19) a. \* Morgen dat boek zal Marie kopen.  
tomorrow that book will Marie buy  
b. \* Morgen ze zal dat boek kopen.  
tomorrow she will that book buy

The following examples, however, are perfectly licit cases of V3. In these examples, the preposed topic is picked up by a preposed *d*-pronoun. I return to these cases below. For other cases of V3 see sections 6.5.2. and 6.5.3.

- (20) a. Jan die ken ik.  
Jan that know I  
b. In Gent daar kennen ze dat niet.  
In Gent there know they that not

#### 3.1.2. The non-overt specifier of the root: null topics and null quasi-arguments

Dutch (like German) allows for the initial constituent in a V2 structure to be non overt. This non-overt constituent is a discourse topic, subject (21b) or non subject (22b). Crucially, the non-overt constituent must be initial (21c) and (22c).

- (21) a. Ik heb hem al gezien.  
I have him already seen  
b. [-] Heb hem al gezien.  
[-] have him already seen c. \* Ik heb [-] al gezien.  
I have already seen

<sup>8</sup> There is a subject/object asymmetry concerning the distribution of weak pronouns/clitics in first position. While subject weak pronouns may occupy the first position (18b), object weak pronouns/clitics cannot occur in first position. The following data are from Weerman 1989: 62, see also Travis 1984).

- (i) a. 'k heb 'm 't gisteren nog verteld  
I have him it yesterday still told  
b. ze zullen 'r toch niet laten vallen  
they will her yet not let fall  
(ii) a. \* 'm heeft Jan 't gisteren nog verteld  
him has Jan it yesterday still told  
b. \* ze zullen wij toch niet laten vallen  
them will we yet not let fall

With Weerman (1989: 62) we 'consider all or some of these weak pronouns as syntactic clitics that need to appear in special syntactic positions'. Note in passing that, according to Weerman (1962) the following sentences are grammatical:

- (iii) a. 't zou-je je dan toch verteld moeten hebben  
it would-he you then yet told must have  
b. 't hebben we 'm gisteren nog verteld!  
it have we him yesterday yet told

For Weerman the grammaticality of (iii) is due to the fact that the weak object pronoun 't is not a clitic. I do not share Weerman's judgements of the sentences in (iii), which I consider ungrammatical.

- (22) a. Hem/dat heb ik al gezien.  
Him/that have I already seen  
b. [-] Heb ik al gezien.  
have I already seen  
c. \* Hem/dat heb [-] al gezien.

The non-overt initial constituent is usually analysed as a non-overt operator which is identified by a discourse antecedent. We may propose that the relevant non-overt topic operator is an antecedentless variant of the non-overt operator associated with *easy to please* constructions or with relative clauses (Koster 1978). Following (12b), we might propose that the antecedentless null operator will be legitimate in a position where no antecedent position is available: i.e. in the highest specifier of the clause. Note that the null discourse operator is not universally available. Specifically, it is not a property shared by all V2 languages: Dutch and German allow it, but Flemish dialects of Dutch do not.

- (23) a. \* Een-t a gezien.  
have it already seen  
b. \* Een-k a gezien.  
have I already seen

In standard Dutch only topics may be non-overt. Quasi-arguments or expletives may not be non-overt.

- (21) d. \* Regende de hele dag.  
rained the whole day  
e. \* Waren veel mensen.  
were many people

Danish is more liberal than Dutch or German. Danish allows both non-overt discourse topics and non-overt quasi-arguments as shown in (24) (Rizzi class lectures 1996).<sup>9</sup> I briefly return to these data in section 3.3.5.

- (24) a. (Han)sov meget igår  
He slept a lot yesterday  
b. (Det)så jeg igår  
that saw I yesterday  
c. (Det)regnede meget igår  
it rained a lot yesterday

If we assume that there is a unique CP projection, whose specifier may be construed as an A or an A'-position (Rizzi 1991 for arguments), then we might expect that as soon as a null element is licit in that position, both null topics as well as non-referential null subjects will be licit. This prediction is not borne out. German and Dutch have null subjects with topic reading, but they lack non-referential null subjects. Flemish dialects lack both null topics and non-referential null subjects.

### 3.2. THE ARTICULATED STRUCTURE OF THE LEFT PERIPHERY (RIZZI FORTHCOMING)

#### 3.2.1. The problem

There is a strong tendency in the generative literature to relate the V2 phenomenon to a property of the CP system (Weerman 1989, Den Besten 1983, Branigan 1995, Schwartz and Vikner 1996; etc. but see Zwart 1993 for a different view). It is sometimes assumed that CP is a single unique projection, with one head and one specifier. In a V2 structure the finite verb moves to C° and the initial constituent occupies its specifier. The unicity of the first constituent follows if CP adjunction is barred. In these analyses, [Spec,CP] in a V2 language cannot be uniquely identified as an A'-position. When the first constituent in a V2 sentence is a weak pronoun (18b), and when it is a quasi-argument (18c), or an expletive (18d), [Spec,CP] will be construed as an A-position. Rizzi (1991) offers an analysis of the ambivalent status of [Spec,CP], proposing that [Spec,CP] will be construed as an A-position when it contains a constituent which has an agreement relation with the *phi* features of the finite verb under C.

Recently (cf. Culicover 1991, Müller and Sternefeld 1993, Nakajima 1996, Rizzi forthcoming), however, a lot of empirical evidence has accumulated to show that just as the IP layer must be decomposed into a number of

hierarchically organized functional projections, the CP layer has to be decomposed into discrete functional projections. Based on data such as those in (4) and parallel data in French and Italian, Rizzi (forthcoming) elaborates a richly articulated structure for the CP system, comprising an array of functional projections, including ForceP, Fin(ite)P, Top(ic)P, Foc(us)P.

The question arises how to re-interpret the V2 phenomenon in terms of such an articulated CP. One option is to assume, in the spirit of Platzack's CONFL hypothesis (1983), that the CP projections are collapsed into one in a V2 language and that a unique C node groups all the features associated with the functional projections in a more articulated system (cf. Giorgi and Pianesi 1994). Alternatively, one maintains that the CP of a V2 language instantiates all the relevant functional projections, and one postulates that for some reason or other, the various projections in articulated CP structure cannot be fully manifested by overt material. I will pursue the latter view in this paper.

#### 3.2.2. The split CP

When we consider the role of the C node and its projection in the grammar, it appears that they fulfil a number of functions. This is clearest when we consider the embedded C, which encodes the illocutionary force of the clause and whose form depends on the finite or non-finite nature of the IP which it introduces. English *that*, for instance, typically introduces a finite declarative complement, while *if* introduces a finite interrogative complement. In order to account for this dual role of the CP system, Rizzi proposes that what is usually represented as a single projection 'CP' in fact should be decomposed in terms of at least two discrete projections: ForceP and Fin(iteness)P, reflecting illocutionary force and (non-)finiteness respectively. This applies both to root clauses and to embedded clauses.

As will become clear in section 3.2.4, Rizzi assumes that Fin° can host AGR features and thus that the specifier of FinP may be construed as an A-position.

In addition to ForceP and FinP, the left periphery of the clause may contain projections hosting one or more topicalized constituents (TopP) and one focalized constituent (FocP). On the basis of a detailed examination of preposing data in Italian, French and English, Rizzi proposes that the left periphery of the clause may contain the following projections:



TopP is the projection whose specifier hosts the topicalized projection; the specifier of FocusP hosts focalized constituents and also preposed wh-constituents.

For reasons of space, I cannot spell out the details of Rizzi's analysis. In what follows I summarize without discussion the relevant points of his analysis of topicalization, as it will be important for the discussion of V2 below.

#### 3.2.3. Topicalization and head-movement

Rizzi (forthcoming) argues against an IP-adjunction analysis of adjuncts and proposes that a preposed adjunct is adjoined to the projection TopP. Top° does not attract the finite auxiliary in English and the finite verb cannot move through Top° even on its way to a higher functional head (see Rizzi for details). In this way, SAI in the conditional clause is licit in (26b) and is illicit in (26d). SAI is excluded in (26d) because of the blocking effect of the intervening head Top° associated with *tomorrow*.

- (26) a. If you should see John tomorrow, tell him I want to see him.  
b. Should you see John tomorrow, tell him I want to see him.  
c. If [TopP tomorrow [Top°]] you should see John, tell him I want to see him.  
d. \* Should [TopP tomorrow [Top°]] you see John, tell him I want to see him.

#### 3.2.4. Topicalization and null operators

Rizzi (forthcoming) follows Chomsky (1977), Koster (1978) and Cinque (1991), in assuming that English argument topicalization (27a) involves a null operator mediating between a clause internal empty category and a preposed topic in the specifier of the TopicPhrase (27b). The null operator analysis is in line with the absence of WCO in (27c) (Lasnik and Stowell 1991):

<sup>9</sup> The same situation holds in some Swiss German dialects (Eric Haeberli, p.c.).

- (27) a. Your book, I bought.  
 b. [ForceP [TopP Your book<sub>i</sub> [+TOP] [TOP [+TOP]] [FinP OP<sub>i</sub> [IP I bought t<sub>i</sub> ]]]]  
 c. John, I got his parents to invite.

Topicalized constituents are submitted to the Topic Criterion. The preposed topicalized constituent carries the feature [+top], which matches the same feature on the head of Top. Preposed *wh*-phrases do not implicate the null operator: they establish a direct link with the non-overt position. *Wh*-preposing leads to WCO violations (cf.(11)).

In Rizzi's approach the null operator strategy is also not required for adjunct preposing in English. This adjunct/argument asymmetry allows him to account for the contrast in (28a) where a preposed adjunct circumvents a potential *that* trace violation while the topicalized argument in (28b) does not have such effect:

- (28) a. This is a student who I think that next week will buy your book.  
 b. \* This is a student who I think that your book will buy next week.

Since, by assumption, the preposed adjunct in (28a) does not require the presence of the null operator in [Spec,FinP], this position can be used to continue the A-chain of the subject. Recall that Fin<sup>o</sup> may contain AGR features. If these are activated by spec-head agreement with a constituent carrying *phi* features, the specifier of FinP will be construed as an A-position. When the subject moves via [Spec,FinP], it activates the AGR features on Fin<sup>o</sup>. The agreeing Fin<sub>AGR</sub> head governs the trace in the canonical subject position. Subsequently, Rizzi proposes, Fin<sub>AGR</sub> itself incorporates to Top and Top, invested with the agreeing Fin<sup>o</sup>, governs the intermediate trace of the subject in [Spec,FinP].

- (29) a. this is a student ... (with i = j)  
 ... who I think that [TopP next year [TopP [Fin<sub>AGR<sub>i</sub></sub>+TOP] [FinP t<sub>j</sub> [Fin t<sub>i</sub>] [IP t<sub>j</sub> will buy your book ]]]]

Rizzi assumes that Fin-to-Top movement as such is licit, but that Fin-to-Top-to-Focus movement must be banned. Fin can move to Top, but it may not transit through it (cf. (27)).

When an argument is topicalized, the presence of the non-quantificational null operator in [Spec,FinP] prevents the subject from moving via [Spec,FinP], and the A-chain of the subject cannot be continued. The agreement features on Fin<sup>o</sup> cannot be activated, and (29b) is ungrammatical: the subject trace is not properly head-governed.

- (29) b. \* this is a student ...  
 ... who I think that [TopP your book [TopP [FinP OP [IP t will buy next year ]]]]

I cannot do justice to the details of and the arguments for Rizzi's analysis here, as that would take me too far afield. The interested reader is referred to Rizzi (forthcoming), see also Haegeman (1995b).

### 3.3. V2 AND THE SPLIT CP

In this section, I provide a partial analysis of V2 in the light of Rizzi's articulated CP. The discussion will concentrate on points which will be relevant for the acquisition data in (1), notably I focus on root clauses only. Dutch V3 data such as (20) already suggest that more than one single position for a maximal projection must be available to the left of the preposed finite verb and that an analysis which assumes that the CP layer is uniformly restricted to one head and one maximal projection cannot be empirically adequate. In my account, I explore the hypothesis that the articulated CP-structure is fully available in the V2 languages but that other constraints delimit the number of overt constituents in the CP domain.

#### 3.3.1. The nature of V2 and CP

Following a tradition started by Den Besten (1983), I assume that the key to the V2 phenomenon resides in the nature of the C-projection. Assuming Rizzi's split CP, I propose that the V2 effect is a function of two elements: (i) the nature of Fin<sup>o</sup>, the lowest head in the C system which encodes finiteness features, and (ii) a generalized null operator strategy for topicalization.

I propose that a finite root Fin<sup>o</sup> attracts the finite verb (see Weerman 1989, Branigan 1995, Holmberg and Platzack 1988, etc. for similar ideas). The attraction can be stated in Minimalist terms of strong vs. weak features (Finite Fin<sup>o</sup> has a strong V-feature). Alternatively, one might propose that when a functional head attracts the verb, this means that the functional head is an affix, in which case failure of head movement leads to a violation of the stray affix filter (cf. Lasnik 1981, Pollock 1993, Roberts 1996). Moreover, as the highest V-related head in the structure, I propose that Fin<sup>o</sup> also has a strong specifier feature, i.e. the Extended Projection Principle applies to

Fin<sup>o</sup> and Fin<sup>o</sup> requires a specifier.<sup>10</sup><sup>11</sup> Unlike AgrS, which requires a DP type specifier, I tentatively propose that the specifier of Fin<sup>o</sup> may be any category.<sup>12</sup> In root clauses the finite verb moves to Fin<sup>o</sup>. One maximal projection will move to (and sometimes through) the specifier of FinP to satisfy the EPP associated with finite Fin<sup>o</sup>. The relevant maximal projection may, for instance, be a subject, a topicalized constituent, or a *wh* constituent (but see 3.3.3. and 3.3.4. for a more careful analysis)<sup>13</sup>:

- (30) a. Ze komt morgen.  
 she comes tomorrow  
 b. Marie heb ik niet gezien.  
 Marie have I not seen  
 c. Wie heb je gezien?  
 who have you seen

I will discuss the three types in the following sections.

I assume that ForceP has to be projected (a variant of Rizzi's maxim that the root is CP (13) adapted to the split CP). The abstract ForceP will play a role in our account of early null subjects.

#### 3.3.2. Subject initial V2

Subject initial V2 clauses in which the subject does not carry the feature [+TOP], or, [+WH] have the structure (31):



Fin<sup>o</sup> is occupied by the inflected verb which carries agreement features. If no constituent is topicalized or *wh*-moved, the subject will move to [Spec,FinP] to satisfy the EPP on Fin<sup>o</sup>. Its specifier is the subject, which, by hypothesis, carries matching agreement features. Recall that Rizzi (1991) assumes that A-positions are specifier positions containing a constituent which can be construed as agreeing with the head in terms of *phi* features. According to this definition, [Spec,Fin] in (31) will be construed as an A position. Rizzi (forthcoming) assumes that Fin<sup>o</sup> may host AGR features which are activated when the subject moves to [Spec,Fin], §3.2.4. The fact that [Spec,FinP] can host weak pronoun subjects (31a), expletive and quasi argument subjects (31b) is unproblematic.

<sup>10</sup> This is in line with Platzack's (1983) intuition that in V2 languages C has INFL properties. The EPP requirement on Fin<sup>o</sup> cannot be argued to hold for embedded clauses:

(i) Ik denk dat Jan dit boek leuk vindt  
 I think that Jan this book nice finds

(ii) \* Ik denk dit boek dat Jan leuk vindt

In embedded clauses, I assume that the insertion of the complementizer *dat* in Fin<sup>o</sup> cancels EPP effect. If the EPP effect is related to the highest V-related head in the structure, then the fact that it is not operative in embedded clauses could be related to the nominal (rather than verbal) nature of *dat*.

<sup>11</sup> Weerman (1989) also relates the V2 phenomenon to the finiteness properties of C. In turn, he relates the finiteness of the clause to Mood features. In these terms one might consider that Fin contains Mood which may associate with AGR. Pursuing this line it might indeed be reasons of space I will not pursue this line here. Observe though that I assume that AgrFinP dominates FinP, while Shlonsky's AgrCP is dominated by CP.

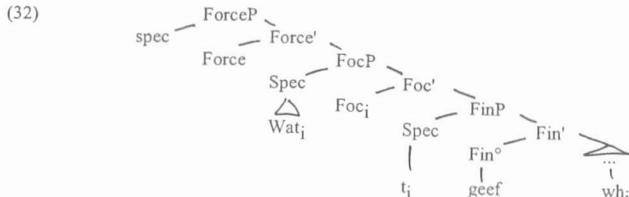
<sup>12</sup> This proposal departs from Chomsky's (1995) formulation of the EPP, which is crucially related to the D-feature of Tense. The nature of the EPP requirement on Fin remains at the moment to be investigated.

<sup>13</sup> It is not clear to me whether stressed preposed constituents as *Marie* in (i) are to be taken as focalized constituents in the technical sense (Rizzi forthcoming, Puskas 1992, forthcoming) which occupy the specifier of FocP (cf. 3.3.3.) or whether they are merely emphasized topics. This point is not really relevant for the analysis.

(i) MARIE heb ik niet gezien.  
 MARIE have I not seen

### 3.3.3. Wh-questions

Following Rizzi (forthcoming) I assume that *wh*-preposing targets FocP (see also Aboh 1993, Puskas 1992). The [+WH] feature is base generated on T° in root clauses.<sup>14</sup> At first sight, one might expect that the inflected verb moves from Fin° to Foc° in order to create a specifier head relation with the focalized constituent in [Spec,FocP]. But on closer consideration Fin-to-Foc-movement is not really needed (hence, by economy considerations, presumably won't take place). Assume that the finite verb carries the [+WH] head feature and is in Fin°. The *wh*-operator moves through [Spec,FinP], where it satisfies the EPP on Fin° and where I assume that it coindexes with Fin°. Then the *wh*-operator moves to the specifier of FocusP, coindexing with Foc°. By virtue of the shared specifier (the *wh*-phrase or its trace) Foc° and Fin° form a representational head chain, and the *wh*-criterion is satisfied by virtue of the chain<sup>15</sup>.



(33a) is ungrammatical. The finite verb *koopt*, with the *wh*-feature, does not have a specifier head relation with the preposed *wh*-phrase in [Spec,FocP]. Similarly, in (33b) the topicalized adjunct might be taken to occupy SpecTopP (see section 3.3.4.), in which case the finite verb at best is in Top°, or, more likely, it is in Fin°. In any event, it will not have a specifier head relation with *wat* in [Spec,FocP].<sup>16</sup>

- (33) a. \* Wat Jan koopt morgen?  
what Jan buys tomorrow
- b. \* Wat morgen koopt Jan?  
what tomorrow buys Jan

### 3.3.4. Topicalization as V3

Consider now examples where the V2 effect is achieved by topicalization. For discussion see also Weerman (1989: 48 ff). Observe that object topicalization does not give rise to WCO:

- (34) Hans hebben zijn ouders niet uitgenodigd.  
Hans have his parents not invited

Pursuing the distinction between two types of A'-bound traces (Lasnik and Stowell 1991), I assume that the empty category associated with a preposed topic is connected to the preposed topic by a null operator. Such null operators typically do not give rise to WCO. For Dutch topicalization, the null operator hypothesis was first proposed by Koster (1978). In support for his analysis, Koster (1978) signals that the preposed topic can often be resumed by what is referred to as a *d*-pronoun or *d*-word, which he takes to be the overt realization of the operator

<sup>14</sup> That *wh*-movement targets the [Spec,FocP] is argued for in Rizzi (forthcoming) on the basis of the incompatibility of focalization and *wh*-movement in Italian root clauses. As pointed out by Kleantzes Grohmann (p.c.), if the [+WH] feature is base generated on T°, this will also account for the fact that RJs lack *wh*-preposing.

<sup>15</sup> A variant analysis (suggested by E. Aboh, p.c.), whose consequences I intend to examine in future work, is to assume that the *wh*-criterion is satisfied at the level of FinP, i.e. that neither the finite verb nor the *wh*-phrase move higher. The viability of this hypothesis depends on whether one can dissociate *wh*-from FocP.

<sup>16</sup> The analysis also predicts that the sentences in (i) are ungrammatical in V2 languages:

- (i) a. \* An wien geeft morgen Valère dienen Boek?  
to whom gives tomorrow Valère that book?
- b. Wem gibt morgen der Mann das Buch?  
whom gives tomorrow the man the book

This prediction is borne out for West Flemish (ia). However, German (ib) is grammatical, as signalled by Kleantzes Grohmann (p.c.) and discussed extensively in Haeberli (1995). I do not assume that these data are counter-evidence to my proposal. Following Haeberli (1995) and contrary to Grohmann (1996), I assume that in (ib) the subject *der Mann* ('the man') does not occupy the highest position of the clause. For reasons of space I cannot dwell on this point here. I return to the issue briefly in note 19.

(Koster 1978, Zwart 1993, 1996: 148 ff for some constraints on the *d*-pronouns), as seen in (35).

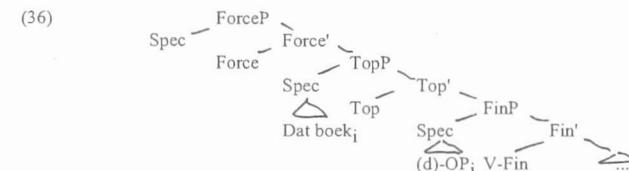
- (35) a. Dat boek (dat) krijg je morgen.  
that book that get you tomorrow
- b. Jan (die) ken ik.  
Jan that know I
- c. Morgen (dan) komt hij terug.  
tomorrow, then comes he back
- d. In den Haag (daar) woont een graaf  
in the Hague there lives a count. (Koster 1978).

Adverb preposing is not compatible with *d*-pronouns in standard Dutch (cf. Koster 1978: 207):

- e. \* Bijgevolg die moet dat verwijderd worden  
as a result d-pronoun must that removed be

But the *d*-pronoun would be grammatical in the East Flemish dialect of Dutch (see also Zwart 1996: 250, n. 11 and the references cited there).

Let us integrate Koster's analysis into Rizzi's split CP account, proposing the following structure for topicalization in Dutch:



Recall that topicalized constituents are submitted to the Topic Criterion, i.e. a specifier head requirement between the topicalized XP and a head carrying the topic feature. The topic feature is not V-related: it does not reside in the IP system but is base generated in Top°. The topic feature does not trigger V-to-Top° movement. Following Rizzi's analysis for English topicalization, I assume that the null OP or its overt D-variant occupies [Spec,FinP]. Postulating a generalized overt or null operator in [Spec,FinP] will capture the unicity of topics in Dutch (and other Germanic V2 languages). Assuming that Fin° can only licence one such null operator (an assumption independently made by Rizzi (forthcoming)), and that in Dutch all topics require a null operator in [Spec,FinP], multiple topics are generally excluded. As before, the finite verb moves to Fin° and the EPP requirement on Fin will be satisfied by the null operator in Spec FinP.<sup>17</sup>

The ungrammaticality of multiple topics in (37a) follows. In (37b) [Spec,FinP] is occupied by the subject *ze*, blocking the null operator in [Spec,FinP].<sup>18 19</sup>

<sup>17</sup> I postulate that while English preposed adjuncts do not require a null operator, their parallels in the V2 languages do. Obviously, one would like this distinction to be derived from some other property of the languages in question, but at this point I have no principled account. Possibly the mediation by the operator is enforced because Fin° is V-related. Rizzi (forthcoming) discusses instances such as (i):

(i) Tom why on earth did you invite?

This example is problematic for his analysis of topicalization as the preposed topic is not adjacent to [Spec,FinP]. Rizzi assumes that in such cases a null operator may be generated higher in the structure. Given the unicity of the preposed constituent in Dutch I assume that the null operator in Dutch is confined to [Spec,FinP].

<sup>18</sup> We will see in sections 6.5.2. and 6.5.2. that there are dialects of Dutch and German with instantiation of examples like (37b).

<sup>19</sup> Following Rizzi (cf. section 3.2.3.) I assume that the finite verb does not move to (or through) Top°. Hence in (ia), which is grammatical in German (Grohmann, p.c.) *morgen*, the adverb preceding the subject, cannot be analysed as occupying a topic projection in the CP domain, (ia). The WF counterpart of (ia) is ungrammatical:

(i) a. Dieses Buch kauft [pp proj; morgen Hans]  
= that book buys tomorrow Jan

b. \* Dienen boek goa morgen Valère kaufen.  
= that book goes tomorrow Valère buy

I assume, with Haeberli (1995) and against Grohmann (1996), that in (ia) *morgen* occupies an IP-internal position and that the subject remains in a lower position and is chain-connected to a non-overt expletive in the highest A position. Such non-overt expletives being unavailable in West Flemish. See Haeberli (1995) for detailed arguments. See also note 16.

- (37) a. \* Morgen dat boek koopt ze.  
tomorrow that book buys she  
b. \* Dat boek ze koopt morgen.  
that book she buys tomorrow

### 3.3.5. A note on the licensing of the non-overt specifier of the root

The null discourse topics in Dutch and German (and presumably also in Portuguese) are null operators of the familiar kind which have attained the specifier of the root, i.e. the specifier of ForceP. I cannot offer a full analysis at this point. On a speculative note, let us assume that languages which have the null discourse operator strategy license the movement of the null operator to [Spec,Force]. Possibly, this is related to the option that Force may carry topic features.

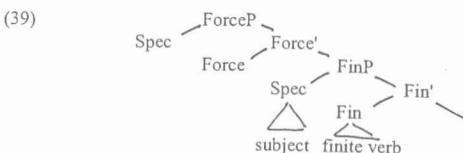
In addition to the null discourse topic (38a), Danish has zero quasi arguments (38b). The idea that such quasi arguments undergo topic-movement, triggered by a topic feature, is implausible: overt quasi arguments do not topicalize (cf. Cardinaletti 1992). As a first approximation, let us assume that in Danish the head Force may have AGR features.<sup>20</sup>

- (38) a. Så jeg igår  
[-] saw I yesterday  
b. Regnede meget igår  
[-] rained a lot yesterday

## 4. DUTCH EARLY NULL SUBJECTS ARE DIFFERENT FROM ADULT NULL SUBJECTS

### 4.1. ADULT NULL SUBJECTS AS NULL TOPICS

I have outlined an analysis of V2 against the background of a split CP. Assuming that the adult root clause must have the full CP projection instantiated, and assuming the analysis above for subject-initial V2, leads me to say that in a subject-initial V2 clause the subject occupies [Spec,FinP] and the finite verb is in Fin<sup>0</sup>. FinP is dominated by an abstract ForceP:



In (39) the subject does not occupy the specifier of the root. The simple insertion of an empty category in [Spec,FinP] will lead to ungrammaticality, the sentence violates the identification condition on empty categories (12a). Thus, V2 does not imply that the initial null subject is automatically available (*pace* Rizzi 1994). This is empirically desirable as many Flemish dialects of Dutch are genuine V2 languages and lack null subjects. In German and Dutch the null topic operator is licensed in the specifier of ForceP, giving rise to null subjects and null objects in initial position.

On the basis of the outline above, let us now return to the acquisition data to be examined here: the null subject in the early grammar of Dutch.

### 4.2. Early Dutch: null subjects in finite clauses: distribution

This part of the paper is based on the following material from the Childe corpus (Mac. Whinney and Snow 1985):

<sup>20</sup> The question arises as to what determines the presence/absence of AGR features on Force. Possibly the AGR features on Force are due to Fin<sup>0</sup> to Force<sup>0</sup> movement.

It is conceivable that contrary to the discussion in the text, the adult NSD does not depend on truncation but is also to be related to the association of AGR to Force. However, a glance at the syntax of the relevant registers suggests that they do involve clausal truncation. I will return to this issue in independent work.

Thomas:	from 2 years 3 months to 2 years 11 months
Hein:	from 2 years 4 months to 3 years 1 month
Niek:	from 2 years 8 months to 3 years 10 months

The material is supplemented with five 45 minute recordings of a Flemish girl, Ielke. The recordings took place during the period from 1 year 10 months to 2 years 3 months. For a discussion of the corpus see Appendix 2.

### 4.2.1. Two types of null subjects in early Dutch

(40) provides some examples of null subjects in Dutch and Flemish early production.

- |                               |                                     |
|-------------------------------|-------------------------------------|
| (40) a. [-] heb 't zo koud    | (Hein 2;9, 1532)                    |
| have it so cold               |                                     |
| 'I am so cold.'               |                                     |
| b. [-] is e pijn taan         | (Ielke 1;11)                        |
| is e pain done                |                                     |
| 'He has hurt himself'         |                                     |
| c. dropje wil [-] niet        | (Thomas 2;4, cf. Schaeffer 1993:17) |
| liquorice want not            |                                     |
| 'I don't want any liquorice.' |                                     |

The question arises how the early grammar relates to the adult grammar. With respect to the post-verbal null subject in (40c) the child grammar differs from the adult grammar: examples such as (40c) are ungrammatical in adult Dutch. With respect to the initial null subject (40a, 40b), though, it would be conceivable that these are simply instantiations of the adult null subject, i.e. that no special properties of the child grammar are at stake. I will show in this section that the early Dutch initial null subject is not to be assimilated fully to the adult null subject.

The distribution of the early null subjects in finite clauses is given in table 1. Column A gives the total of sentences considered; B gives totals of subjects in first position; C gives totals of initial overt subjects; D gives the totals of initial non-overt subjects; E gives the totals of post-verbal subjects; F gives the totals of overt such cases and column G those of non-overt cases.

Table 1. Null subjects in finite root clauses of early Dutch: initial vs post-verbal<sup>21</sup>

	A	B	C	D	E	F	G
Child	Total fin. S	Initial SU	Initial overt	Initial null	post-V SU	post-V overt	post-V null
Thom	3712	2330	1761	569	1319	1250	69
Hein	3322	1920	1477	443	1325	1275	50
Niek	4070	2148	1653	495	1859	1780	79
Ielke	276	191	127	74	63	61	2

The overall percentages of initial null subjects (column D above) and post-verbal null subjects (column G above) are given in table 2. See also note 3 for embedded null subjects.

<sup>21</sup> The following types of finite sentences have not been classified according to the type of null subject.

Structures where a subject and another argument are missing, as in (ia). Such structures are ambiguous between an analysis in which the initial non-overt element is a subject (ib), or one in which the non-subject is topicalized and the non-overt subject is post-verbal (iib).

- (i) a. zit op.  
sit on
- b. ec<sub>i</sub> zit [ec<sub>j</sub>] t<sub>i</sub> [pp t<sub>j</sub> op]  
ik zit daar op
- c. OP<sub>j</sub> zit ec<sub>i</sub> t<sub>i</sub> [pp t<sub>j</sub> op]  
daar zit ik op

Among the examples with post-verbal null subject, I also have not included instances of existential sentences with a non-overt expletive. These are grammatical in adult Dutch, unlike the early post-verbal null subjects we are concerned with here.

- (ii) a. Gisteren waren (er) daar veel toeristen  
yesterday where (there) there many tourists 'There were many tourists there yesterday.'
- b. Ik denk dat (er) daar gisteren veel toeristen waren  
I think that (there) there yesterday many tourists were 'I think that there were many tourists there yesterday.'

These exclusions explain the discrepancies between column A and the totals of columns B and E.

Table 2: percentages of root null subjects in finite clauses: initial and post-verbal

	initial null	postverbal
Thom	24.4	5.2%
Hein	23.1	3.7%
Niek	23%	4.2%
Ielke	36.7%	3.1%

Given the quantitative differences between the occurrences of two types of null subjects I conclude it is justified to treat them separately. This conclusion is reinforced when we consider the overt realization of subjects, specifically weak pronoun/clitic subjects.<sup>22</sup> As seen in Table 3, initial subject weak pronouns/clitics are much rarer than their non-overt counterparts, but post-verbal weak pronoun/clitic subjects are more frequent.<sup>23</sup> Assuming some version of the Avoid Pronoun principle, it seems that the initial null subject is more economical than the initial null clitic, while the post-verbal null subject is more marked, hence less economical than the post-verbal clitic.

Table 3: subject weak pronouns/clitics in root clauses

Child	initial Su clitic/WP	initial null Su	non-initial Su clitic/WP	non-initial null Su
Thomas.	61	569	582	69
Hein	72	443	420	50
Niek	1	495	530	79

In the adult Dutch grammar, null subjects also occur in the initial position of the root clause. I examined the distribution of null subjects by the adults interacting with the Dutch children studied in this paper. For each child I have considered the first file:

Table 4: distribution of null subject in adults interacting with the child

child/age	initial su	overt initial	null initial	%null initial
Thomas 2;3	154	150	4	2.5%
Hein 2;4	218	202	16	7.3%
Niek 2;8	50	40	10	20%

Observe that the frequency of initial null subjects varies depending on the adults, reaching a high figure in Niek, but remaining low with the person interacting with Thomas. These figures can be compared to the adults' use of non-overt non subject topics:

Table 5: distribution of null topic in Dutch adults

child/age	initial su	overt initial	null initial	%null initial
Thomas 2;3	70	60	10	14.2%
Hein 2;4	142	121	21	14.7%
Niek 2;8	29	19	10	33%

Of course, these figures are restricted in value. They suggest, though, that the adult use of the null subject is never as widespread as that of children. Also, regardless of the frequency with which the interacting adults use null subjects, the children start off with a high percentage of null subjects.

One might be tempted to equate the early Dutch initial null subject with the adult null discourse topics, a proposal often made in the literature (de Haan and Tuijnman 1988, Weverink 1990, Verrills and Weissenborn 1992 among others). In this view, the decrease of the early null subjects would be due to the gradual mastery of the appropriate use of the null topic. In other words, the development is one of pragmatic constraints rather than being due to a shift in the grammar. In the next sections I consider three arguments against this proposal.

#### 4.2.2. Early null quasi arguments

A first objection against the null topic analysis of the early null Dutch subject is that these null subjects may have

<sup>22</sup> I am not distinguishing between weak pronouns and clitics at this point. The distinction is not relevant for this point. See Cardinaletti and Starke (1993) for a principled distinction.

<sup>23</sup> I have not yet examined the distribution of clitics in the Ielke corpus.

a quasi-argument interpretation, an option not available in standard Dutch. Both overt and non-overt quasi-argument subjects are found in the child corpus. (41) gives some examples, table 6 provides the figures for the three Dutch children and for the Flemish child.

- (41) a. 't regent. (Hein 2;7)  
it rains  
b. gaat weer regenen. (Niek 3;7)  
goes again rain  
c. is donker (Ielke 2.2.)  
is dark  
d. sneeuwt (Ielke 2.3.)  
snows

Table 6: quasi-arguments in initial position (finite root clauses only)

	total	+initial overt	+initial non-overt
Thomas	8	2	6
Hein	7	4	3
Niek	4	1	3
Ielke	3	0	3
Total	22	7	15

Though the figures are low, the initial early null subject may be a quasi-argument for all four children. This constitutes an important challenge for the view which assimilates the early null subject to the adult null subject.

#### 4.2.3. No adult null subject in Flemish

We have seen that null subjects appear in the early grammar of Ielke, whose (Flemish) target language lacks null topics. The initial subjects are non-overt in 36.7% of the cases, i.e. 1 out of 3. Some examples are given in (42). As seen above, Ielke also uses non-overt quasi-arguments.

- (42) a. kan nie (Ielke 1;10)  
can not  
b. is e pijn taan (Ielke 1;11)  
is e pain done = 'has hurt himself'

Even if we were to equate the early Dutch null subject with its adult counterpart, this assumption cannot be extended to apply to the early Flemish null subject and an independent explanation is needed. See also §4.2.6.

#### 4.2.4. Initial null subjects and the development of RIs

Given the availability of null quasi-arguments in the early grammar, one might be tempted to interpret the early Dutch initial null subjects as reflecting a grammar of the Danish variety (see (38) in section 3.3.5.), allowing both null topics and null quasi-arguments. Adopting an analysis along the lines outlined above, this would mean that in the early grammar Force may beat topic features and AGR features. Such an approach would imply a return to the parameter mis-setting analysis (cf. Hyams 1986), but rather than attributing the null subject to a mis-setting of the pro drop parameter, one would attribute ultimately to some parametrized property of Force<sup>o</sup>. One might call this the Force parameter.

Assuming a mis-setting of the Force parameter, the null subject in the Dutch child grammar is not related to the RI phenomenon. However, a dissociation between initial null subjects and RI in Dutch is problematic: the decrease of initial null subjects is parallel to that of RIs. The relevant graphs are given in appendix 3.

I have analysed the French RI phenomenon in section 1.3.6. in terms of the truncation analysis (Rizzi 1995). In Haegeman (1995a) I develop a truncation analysis for Dutch RIs, as illustrated in (43). For reasons of space, I merely summarize the arguments here.

- (43) Boot hard vallen. (Hein 2;4)  
boat hard fall

<sup>24</sup> Similarly, one might attribute null subjects in finite clauses in French and in English to the Force parameter. However, as we have seen, Pierce (1989) found that initial null subjects and RI develop in parallel over time, an unexpected result in terms of the Force-parametrization approach.

Table 7 provides some information on the distribution of the RI phenomenon in Dutch:

Table 7: Dutch RI

Hein	verbal utt	RI	% RI
2;4	385	89	23.12%
2;5	304	101	33.22%
2;6	741	133	17.95%
2;7	364	81	22.25%
2;8	532	80	15.04%
2;9	468	65	13.89%
2;10	525	64	12.19%
2;11	418	69	16.51%
3;0	355	15	4.23%
3;1	397	24	6.05%
total	4489	721	16.06%

Thomas	verbal utt	RI	% RI
2;3	138	77	55.80%
2;4	566	252	44.52%
2;5	617	173	28.04%
2;6	103	21	20.39%
2;7	1169	168	14.37%
2;8	697	97	13.92%
2;9	512	69	13.48%
2;10	1051	68	6.47%
2;11	359	23	6.41%
total	5212	948	18.19%

Niek	verbal utt	RI	% RI
2;8	45	36	80.00%
2;9	77	57	74.03%
2;10	68	39	57.35%
2;11	123	80	65.04%
3;0	253	86	33.99%
3;1	736	190	25.82%
3;2	63	14	22.22%
3;3	0	0	0.00%
3;4	977	90	9.21%
3;5	173	14	8.09%
3;6	1721	89	5.17%
3;7	112	1	0.89%
3;8	544	14	2.57%
3;9	723	32	4.43%
3;10	626	21	3.35%
Total	6241	763	12.23%

Ielke	verbal utt	RI	% RI
1.10	70	54	77.14
1.11	82	49	59.76
2.0			
2.1	132	77	58.33
2.2	103	45	43.69
2.3	179	65	36.31
Total	566	290	51.23

Table 8 schematically summarizes Haegeman's (1995a) arguments for the truncation analysis of RIs and is based on Rizzi's analysis (1995). For each level of projection (CP, AgrSP etc) I provide the surface evidence. For instance: postulating the projection level CP is corroborated by overt evidence of *wh*-movement. Whereas early finite clauses provide the surface evidence for the projection CP, AgrSP, and TP, early RIs lack evidence for these projections. *Wh*-movement does not occur in RIs; weak pronoun/clitic subjects, typically associated with AgrSP, are unavailable. Also, and significantly, object weak pronouns/clitics, which are assumed to adjoin to a high functional projection are unavailable in RIs, though they are instantiated in finite clauses. Finally, perfective auxiliaries are available in finite clauses, but unavailable in RIs. Assuming that perfective auxiliaries require licensing by T (Guasti 1993), their absence in RIs follows from Rizzi's truncation approach in which TP is argued to be missing in RIs. For full discussion of these points see Haegeman (1995a, 1996)

Table 8: Dutch RI (Rizzi 1995, Haegeman 1995a)

Evidence:	WH-movement	Subject WP/cl	object WP/clitic	auxiliary
Child finite cl	+	+	+	+
Child RI	-	-	-	-

## 4.2.5. Summary

In this section I have examined to what extent the initial early Dutch null subject can be equated to its adult counterpart, the null topic operator in the specifier of the root. Even if we cannot exclude that the child does use the adult null topic strategy, this analysis cannot be generalized to all instances of initial null subjects. (i) The early Dutch data contain null quasi-arguments, an option unavailable to the adult. (ii) The early Flemish null subject cannot be equated to the adult null subject counterpart, as the latter is simply unavailable. (iii) In an account in which the early Dutch null subject is fully equated to the adult null subject, the parallel decrease of initial null subjects and RIs is not expected. Observe, though, that this does not exclude that some of the early Dutch null subjects are indeed null topics (see 4.2.6.). Recall also that since the adult language lacks the post-verbal referential null subject, the post-verbal null subject in the child grammar must be related to some specific property of the early grammar. In section 5 I discuss the nature of the initial null subject in early Dutch, and in section 6 I turn to the post-verbal null subject.

## 4.2.6. A note on null subjects in Ielke

The data gathered from Ielke are relatively restricted (see Appendix 2), but they allow for some observations. What seems to me interesting is the strong parallelism between the Ielke data and the data for the Dutch children. In Table 9 I provide the total figures for the distribution of RI in the four children (cf. table 8 for details). The overall figure for Ielke is higher than that for the Dutch children, which is as expected as she is the youngest child of the four.

Table 9: overall figures for RIs

Hein	4489	721	16.06%
Thomas	5212	948	18.19%
Niek	6241	763	12.23%
Ielke	566	290	51.23

Table 10 repeats the information of Table 1 and provides the overall figures for initial null subjects:

Table 10: initial null subjects

Thom	24.4%
Hein	23.1%
Niek	23%
Ielke	36.7%

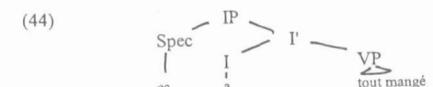
Ielke's higher rate of RIs (table 9) corresponds to a higher rate of null subjects in Ielke (table 10). This is in line with the observation that the two phenomena apparently develop in parallel: a decrease in RIs in the Dutch children corresponds to a decrease in truncation; conversely a higher rate of RI leads one to expect a higher rate of initial null subjects.

The percentage of null subject in Ielke is quite remarkably similar to that of the Dutch children, when we consider the period around which they produce the same rate of RIs, i.e. some 50 percent. Thomas produces 55.8 % RIs at the age of 2,3 at which point we find 36.67% of initial null subjects; Niek produces 57.35% RIs at the age of 2,10, at which point we find 33.33 % initial null subjects.

## 5. INITIAL NULL SUBJECTS IN EARLY DUTCH FINITE CLAUSES: TRUNCATION

## 5.1. CP TRUNCATION AND NULL SUBJECTS IN FRENCH

Following Rizzi (1994) I assume that early null subjects in French finite clauses are empty categories in the IP, where higher projections of the CP layer are omitted. They are licit because there is no higher specifier of the IP, where higher projections of the CP layer are omitted. Thus the licensing of the null subjects depends on clausal truncation.



Rizzi's (1995) theory of truncation and RIs was written in terms of the unique CP projection. Given the articulated CP, the question arises if truncation may affect only part of the CP layer, omitting, for instance, ForceP, though not TopP and FinP. There are empirical arguments in favour of partial CP truncation. In Haegeman (1995b) I discuss instances of what would appear to be non-initial null subjects in the early grammar and in the abbreviated registers (45a). Preposed adjuncts, though not preposed arguments, allow for the A-chain of the subject to be extended in order to bypass the topicalized adjunct and avoid a potential ECP violation. In examples such as (45a), ForceP is omitted, but TopP is projected. For reasons of space I cannot develop this point here. (45b) is a partial and informal representation. See also section 6.4.

- (45) a. Avant veux chocolat (Pierce 1989)  
before want chocolate  
b. [ec [TopP avant [FinP t [IP t veux chocolat]]]

### 5.2. EARLY DUTCH NULL SUBJECTS AND TRUNCATION

Based on the parallel decrease of finite sentences with initial null subjects in early Dutch and RIs, it is tempting to also link the early Dutch and Flemish initial null subject in finite clauses to the option of structural truncation.<sup>25</sup> Such an approach means postulating a difference between the child grammar and the adult grammar. The data of the Flemish child Ielke firmly support this hypothesis. If, as I assume, V2 always concerns the FinP level, then early Dutch sentences with initial null subject are to be analysed minimally as FinPs, Fin<sup>o</sup> hosting the finite verb and its specifier hosting the null subject. Pursuing the truncation approach, I propose that in the child grammar ForceP can be omitted

<sup>25</sup> The same parallelism has been shown for early null subjects by Hamann and Plunkett (1996). As mentioned in the text, adult Danish has both null topics and null quasi arguments. Again, though, the parallel development of initial null subjects and RIs demonstrated by Hamann and Plunkett (1996) suggests that the initial null subject is not simply to be equated to the adult phenomenon.

<sup>26</sup> Contrary to Rohrbacher and Vainikka (1994), I do not assume that there is a reordering of the head-complement order. The head-initial structure concerns the projection of FinP and does not bear on the head-complement ordering in the IP domain.

Though I adopt Rizzi's articulated CP, this is mainly because it provides a way to examine the nature of the post-verbal null subject (see section 6). Rizzi's precise formulation of the articulated CP-structure is not crucial for the analysis of the initial null subject. What is minimally required for the analysis to work is that in the adult subject-initial V2 clauses the projection whose head hosts the finite verb is dominated by at least one abstract projection. In my account the abstract ForceP dominates FinP. Such an approach could also be implemented in Zwart's (1991, 1993, 1996) approach to V2, where the verb in subject initial V2 sentences is in AgrS and the subject is its specifier. It would suffice to assume that in subject initial V2-sentences too, an abstract CP layer is projected. Similarly, Shlonsky's (1992, 1994) proposal that all initial subjects in V2 clauses involve AgrCP will be compatible with the data if we assume an abstract ForceP dominating this projection. In an earlier version of this paper published as Haegeman (1995a) I provided an analysis of the data in terms of Zwart's (1991, 1993, 1996) framework.

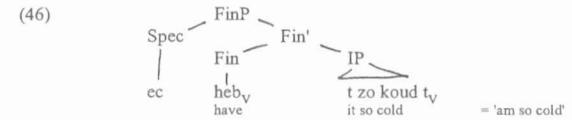
<sup>27</sup> It could be argued that truncation will also allow the null topic operator to survive in the specifier of TopP:



A number of predictions follow that would be worth investigating. (i) Unlike its adult counterpart in which null topics are not allowed, we expect that the grammar of early Flemish also may have null topics. In the adult grammar of Flemish ForceP cannot be truncated (by assumption) and Force cannot licence the null operator in its specifier. The null operator is not licensed in a lower specifier because of (12b). In the early Flemish grammar truncation of ForceP would mean that null topics are available. (ii) If early Flemish null topics are licensed by virtue of ForceP truncation we expect that they decrease in parallel with early null subjects. Unfortunately, the Ielke data are too limited to provide the basis for this analysis. (iii) If some of the Dutch early null topics are licensed by ForceP truncation, we expect a parallel decrease of early null topics and RIs. The null topic licensed in the truncated structure (i) ought to disappear when truncation is no longer available.

If truncation may give rise to null topics by the availability of the specifier of TopP as the specifier of the root, and if the abbreviated registers also allow ForceP truncation (Haegeman 1995b), then one might also expect that null topics are available in the abbreviated registers of languages which do not have null objects. The data is complex. On the one hand, diaries would not seem to warrant the analysis in (i): typically the null subject is available in such registers and the null object is not. On the other hand, null objects are found in recipe contexts or in other instructions (Haegeman 1988), where null subjects are also available:

- (ii) a. Bake for half an hour in a slow oven  
Open this side  
b. Serves four.  
Once opened, will keep for 3 days in a refrigerator.



### 6. POST-VERBAL NULL SUBJECTS IN EARLY DUTCH

#### 6.1. THE DATA

Early German post-verbal null subjects have received attention in the literature (Hamann 1992, 1994, Duffield 1993). For Dutch, there is some discussion in Schaeffer (1993) and in Bol (1995). The examples in (47) are given by Schaeffer:

- (47) a. dropje wil [ec] niet  
liquorice want not (Thomas 2;4; Schaeffer: 1993: 17)  
b. nu gaan [ec] allemaal lopen  
now go all walk (Thomas 2;6) Schaeffer : 1993: 18)  
c. anders wordt [ec] heel moe  
otherwise becomes very tired (Thomas 2;7; Schaeffer 1993: 18)

The tables below give a survey of null subjects in first position of finite sentences and null subjects in post-verbal position in Dutch.

Table 11b: Initial and post-verbal null subject Niek and Ielke

Niek age	initial null su	post-V null su
2;8	83.33%	0.00%
2;9	84.62%	0.00%
2;10	33.33%	0.00%
2;11	66.67%	0.00%
3;0	24.11%	25.00%
3;1	23.22%	10.71%
3;2	29.73%	11.27%
3;3		
3;4	21.37%	3.70%
3;5	13.25%	6.25%
3;6	42.07%	4.04%
3;7	41.82%	9.52%
3;8	16.54%	4.35%
3;9	5.58%	2.97%
3;10	5.58%	3.31%
total	23.04%	4.25%

Ielke age	initial null su	post-V null su
1.1	44.44%	14.29%
1.11	40.91%	0.00%
2		
2.1	58.06%	0.00%
2.2	42.22%	9.09%
2.3	24.73%	0.00%
total	36.82%	3.17%

One question that remains open here is what is the Force parameter, i.e. the property responsible for the null discourse operator. Depending on the answer to this question, (i) above might not suffice to licence the null discourse operator. I leave the issue for future research.

Table 11a. Initial and post-verbal null subjects Thomas and Hein

Thomas age	initial null su	post-V null su
2;3	36.67%	13.33%
2;4	40.36%	09.72%
2;5	39.02%	11.40%
2;6	28.85%	05.40%
2;7	20.87%	04.33%
2;8	23.49%	09.87%
2;9	39.69%	02.22%
2;10	13.66%	02.56%
2;11	12.90%	04.16%
total	24.42%	05.23%

Hein age	initial null su	post-V null su
2;4	43.29%	3.67%
2;5	32.22%	4.23%
2;6	17.44%	4.95%
2;7	28.37%	1.96%
2;8	19.12%	4.32%
2;9	27.27%	2.10%
2;10	26.36%	3.59%
2;11	19.79%	5.37%
3;00	10.19%	2.61%
3;01	15.79%	4.00%
total	23.13%	3.77%

### 6.2. RESTRICTED PRO DROP?

Based on a study of two German speaking children, Elena (3;1.-3;4) and Christian (3;3-3;7), Hamann observes that the post-verbal null subject typically occurs with preposing of topics, while the phenomenon is non-existent with *wh*-preposing:

Though there are no null-subjects in *wh*-questions ... and only some in embedded clauses, ... 11-17% of all null subject declarative constructions involve post-verbal null subjects' (Hamann 1994: 79)

Hamann's findings are confirmed for Dutch and for Flemish. To deal with the asymmetry between topic-initial sentences and *wh*-initial sentences, Hamann (1992, 1994) proposes that the post-verbal null subject be interpreted as an occurrence of *pro* in [Spec,IP] (see also Schaeffer 1993 for a pro drop analysis of post-verbal null subjects in the finite verb moves to Foc in *Wh* phrases, it remains in a lower position with topicalization).<sup>28</sup> My account of the V2 phenomenon in section 3.3 does not allow this kind of distinction since I assume that the finite verb remains in Fin<sup>0</sup> both with preposed topics and with preposed *wh*-phrases. However, even if we were to assume that with *wh*-preposing the Dutch and German finite V<sup>0</sup> moves to Foc<sup>0</sup>, then it would remain unclear why pro-licensing should be banned in this context. The parallel situation in Italian is clearly grammatical:

- (48) [FocP Che cosa [hai<sub>V</sub> [FinP t<sub>V</sub> [ IP pro t<sub>V</sub> fatto]]]  
what have pro done = "What have you done?"

If the post-verbal null subject instantiates a restricted pro drop phenomenon,<sup>29</sup> the question arises how the Dutch child de-learns this. Hamann proposes that what will trigger the resetting of the (restricted) pro drop is the distribution of expletive/quasi-argument *es*, illustrated in (49) and (50):

- (49) a. \* (Es) wurde getanzt  
it was danced  
b. dass (\*es) getanzt wurde  
(50) a. \* (Es) kommen noch drei Studenten  
there come still three students  
b. dass (\*es) noch drei Studenten kommen  
that there still three students come

<sup>28</sup> I adapt Hamann's analysis to Rizzi's Split CP account. She uses the CP structure in Müller and Sternefeld (1992).

<sup>29</sup> A further problem for the pro drop analysis will emerge later in the discussion. We will provide evidence that post-verbal null subjects in Dutch decrease in parallel with the decrease of RI. This suggests that the post-verbal null subject is a function of clausal truncation and is unexpected under a pro drop analysis.

Hamann (1992, 1994) argues that the children who produce post-verbal null subjects are past the RI stage, from which we might conclude that the phenomenon is unrelated to truncation. However, notice that RIs depend on TP truncation while I will argue that the post-verbal null subject depends on partial CP truncation. One may well find a situation where (partial) CP truncation subsists when TP truncation is not licit. This situation probably arises in the abbreviated spoken and written registers allowing null subjects. In those too, RIs do not occur.

I do not want to go into her analysis in detail here (see Hamann's own work for discussion). However the fact that Ielke, a Flemish child, also produces the post-verbal null subject, as illustrated in (51), is perhaps problematic for the delearning proposed by Hamann. In the corresponding Flemish adult grammar the existential expletive *er* and impersonal *het* are always overt, regardless of their positions.

- (51) Ielke (1;11) Oo ke mag - eens  
also may once

### 6.3. THE POST-VERBAL NULL SUBJECT IN DUTCH. DISTRIBUTION

The contrast observed by Hamann (1992, 1994) between topic-initial V2 clauses and *wh*-initial V2 clauses is reduplicated in Dutch. As can be seen from tables 12, post-verbal null subjects with preposed topics are relatively frequent for the three Dutch children, while post-verbal null subjects in sentences with *wh* preposing are very rare.

Table 12a: Survey: Null subjects Thomas and Hein

Thomas age	initial null su	post-V NS with topic	post-V with wh	Hein age	initial null subject	post-verbal with topic	post-verbal with wh
2;3	36.67%	66.67%	0.00%	2;4	43.29%	9.68%	25.00%
2;4	40.36%	31.58%	16.67%	2;5	32.22%	10.71%	0.00%
2;5	39.02%	28.57%	16.67%	2;6	17.44%	12.70%	8.33%
2;6	28.85%	16.67%	4.00%	2;7	28.37%	6.67%	0.00%
2;7	20.87%	17.39%	1.45%	2;8	19.12%	15.56%	0.00%
2;8	23.49%	32.56%	6.25%	2;9	27.27%	5.45%	0.00%
2;9	39.69%	9.38%	2.13%	2;10	26.36%	8.00%	0.00%
2;10	13.66%	8.82%	0.79%	2;11	19.79%	12.12%	0.00%
2;11	12.90%	9.38%	0.00%	3;0	10.19%	7.32%	0.00%
total	24.42%	17.82%	2.48%	3;1	15.79%	10.20%	0.00%
				total	23.13%	9.94%	1.30%

Table 12b: Survey null subjects Niek

Niek age	initial null su	post-V with topic	post-V with wh
2;8	83.33%	0.00%	0.00%
2;9	84.62%	0.00%	0.00%
2;10	33.33%	0.00%	0.00%
2;11	66.67%	100.00%	0.00%
3;0	24.11%	23.08%	0.00%
3;01	23.22%	28.00%	12.50%
3;2	29.73%	0.00%	0.00%
3;3			
3;4	21.37%	15.05%	0.00%
3;5	13.25%	14.29%	0.00%
3;6	42.07%	12.42%	1.47%
3;7	41.82%	20.00%	0.00%
3;8	16.54%	9.33%	3.57%
3;9	5.58%	5.67%	0.89%
3;10	5.58%	7.00%	1.67%
total	14.97%	11.28%	1.23%

The examples of the null subject with *wh*-proposing are given in (52):

- (52) a. Post-verbal null subjects with *wh* preposing for Thomas.  
2;4 hoe laat is

2;5	how late is hoe laat is
2;6	how late is wat doet will [?] nu
2;8	what does wants now wat krijgen now
2;8	what get now
2;8	what zullen nou doen
2;9	what will now do?
2;9	hee dit - wat is voor kleur (unclear case) he, this - what is & wo for colour
2;9	wat is ~ voor voor kleur (immediately after previous example) what is for for colour
2;10	wat zijn van kleur what are of colour
b.	Post-verbal null subjects with <i>wh</i> preposing for Nick
3;1	&hu &tIN vrachtauto maken hoe ging vrachtauto maken how was going to make truck
3;8.	waar neem de grote spons nou mee where take the big sponge now with
3;9	Waarom is alleen komen why is alone come
c.	Post-verbal null subjects with <i>wh</i> preposing for Hein
2;4	waarom doe dat niet why do that not
2;6	Waarom blijf daar why stay there

For Ielke the data are highly restricted but they confirm Hamann's findings. Ielke produces in total 63 sentences with non-initial subject, 2 of which have a non-overt subject. These concern sentences with topicalization. I give the raw figures in table 12d.

Table 12d: Topicalization and post-verbal subjects in Ielke

Ielke age	preposed topic	topic with null su
1.10	1	1
1.11	0	0
2.0		
2.1	4	0
2.2	1	1
2.3	9	0
total	15	2

That a post-verbal null subject in the early production may have a quasi-argumental reading, as shown in (53a), indicates that a null topic analysis is implausible. The argument extends to German post-verbal null subjects (53b) (for another argument against the null topic analysis see also Hamann 1992, 1994: 78).

## (53) Quasi-argument post-verbal null subjects

- a. Dutch:
- Hein 2;5 Hoe laat is  
how late is
- Hein 2;6 donker is daar  
dark is there
- Hein 2;6 daar is donker  
there is dark

Hein 3;0	buiten is donker outside is dark
Niek 3;6	zo gaat ook regenen so goes also rain
Niek 3;6	zo gaat regenen so goes rain
Niek 3;7	zo gaat ook regenen so goes also rain
Thomas 2;4	hoe laat is
Thomas 2;11	buiten wordt donker outside gets dark
b.	German (Hamann 1992: 34)
Christian 3.5.16	Jez is hier ganz dunkel, ne now is here quite dark, isn't it
Elena 3.1.12	Dann klingelt then rings

Table 13 gives the distribution of overt vs non-overt post-verbal quasi-argument subjects for the Dutch children. The figures are too restricted to draw firm conclusions, but there is a clear trend with the three children to allow for null non-initial subject quasi-arguments. There are no cases of verbs with quasi-arguments and post-verbal subjects in Ielke.

Table 13: quasi-arguments in the acquisition data (root clauses only)

	total	-initial overt	-initial non-overt	unclear
Thomas	6	3	2	1
Hein	8	4	4	0
Niek	4	1	3	0
Total	18	8	9	1

## 6.4. EXTENDING THE A-CHAIN?

One option to analyse the post-verbal null subjects in Dutch is to treat them by analogy with the non-initial null subject in French and in English discussed in Haegeman (1995b, forthcoming). Recall from the discussion of section 5.1. that for the analysis of what appears to be a non-initial null subject (54a) I proposed the representation in (54b), whose crucial property, for our present purposes, is that the A-chain of the subject is extended via [Spec,FinP] (see Haegeman 1995b for full details).

- (54) a. Avant vieux chocolat (Pierce 1989)  
before want chocolate
- b. [ec<sub>i</sub> [TopP avant [FinP t<sub>i</sub> [IP t<sub>i</sub> vieux chocolat]]]]]

The A-chain of the subject can be extended across the topic just in case the latter is an adjunct.<sup>30</sup> The contrast between sentences such as (54), in which a null subject co-occurs with a preposed adjunct and which are attested in the early grammar, and instances in which a null subject co-occurs with a preposed object, which are extremely rare in early French, is taken to be parallel to that between (55a) and (55b) (see Rizzi forthcoming; Haegeman 1995b, forthcoming).

- (55) a. Voici un homme qui l'année prochaine achètera ton livre.  
here is a man who next year will buy your book
- b. \* Voici un homme qui ton livre l'achètera l'année prochaine.  
here is a man who your book it will buy next year.

However, an analysis in terms of extending the A-chain is problematic for the post-verbal null subject in Dutch,

<sup>30</sup> Following Rizzi's discussion of subject extraction in topicalization structures, the bypassing device which allows the extension of the A-chain across the preposed constituent depends on the availability of an AGR-projection associated with TopP. For reasons of space I cannot discuss this in full here. See Rizzi (forthcoming), Haegeman (1995b, forthcoming).

both for theoretical and empirical reasons. Given my generalized null operator analysis for topicalization structures, the extension of the subject A-chain via [Spec,FinP] is by definition unavailable both for null arguments and for null adjuncts, since the null operator associated with the preposed topic will occupy [Spec,FinP]. Moreover, the distribution of the non-initial null subject in English and in French differs from that in early Dutch. The English and French null subject is incompatible with argument preposing (Haegeman 1995b, forthcoming). Post-verbal null subjects in early Dutch are compatible with argument preposing (56a) as well as with adjunct-preposing (56b):

- (56) a. dropje wil [-] niet  
liquorice want not (Thomas 2;4, Schaeffer: 1993: 17)  
b. anders wordt [-] heel moe  
otherwise become very tired (Thomas 2;6, Schaeffer : 1993: 18)

For the three Dutch children the relative proportion of argument preposing with initial topics is as follows. For Ielke the two instances of post-verbal null subjects concern preposed adjuncts.

Table 14

Name	post-V null su with topic	topic = argumental	topic = adjunct
Niek	73	22	51
Thomas	62	15	47
Hein	44	7	37
Ielke	2	0	2
Total	181	44	137

In the Simona data discussed by Verrips and Weissenborn (1992: 300-301), 12 out of 14 instances of post-verbal null subjects follow a preposed argument. On the basis of the contrast I conclude that the analysis proposed for early French non-initial null subjects cannot be applied to the early Dutch post-verbal null subject.

### 6.5. Adult analogues: Verb third

#### 6.5.1. Summary of the discussion

In an attempt to account for the occurrence of post-verbal null subjects I will explore an account in which post-verbal null subjects in early Dutch are analysed as being bound by a preverbal null subject, as schematized in (57).

- (57) a. dropje [ec] wil [ec] niet

If the preverbal subject were overt in (57a), this would instantiate a superficial V3 structure. Two variants of such a V3 structure are considered, both ungrammatical in the adult grammar of standard Dutch and German, but instantiated in some of the dialects. In (57b) the preverbal subject is a maximal projection, in (57c) it is a clitic.

- (57) b. \* Dropje ik<sub>i</sub> wil t<sub>i</sub> niet  
c. \* Dropje 'k<sub>i</sub> wil t<sub>i</sub> niet

I will conclude that structures with a post-verbal null subject in the child grammar correspond most closely to V3 structures such as those in (57c) where the preverbal clitic subject is non-overt.

### 6.5.2 V3 with full preverbal subjects

#### 6.5.2.1. The data

Though the Flemish dialects of Dutch are in general genuine V2 dialects, a cursory inspection of some of the data reveals the occurrence of patterns in which more than one overt constituent precedes the verb. I will discuss one case here.

De Pauw (1973) studies the Buggenhout dialect on the basis of a corpus of recorded material. Among the 586 matrix declaratives with preposing identified in her corpus, 15 lack subject verb inversion, giving rise to V3. Examples are given in (58). These examples all have the sequence adjunct-subject-finite verb; the subject may be realized as a weak pronoun/clitic, or as a full pronoun:<sup>31</sup>

<sup>31</sup> (i) is an example in which a V3 structure contains a full DP subject:

- (58) De Pauw, G. (1973) *Syntactische Kenmerken van het Dialect van Buggenhout Opstal*, 586 matrix declaratives: 15 without inversion (pp 34-38)

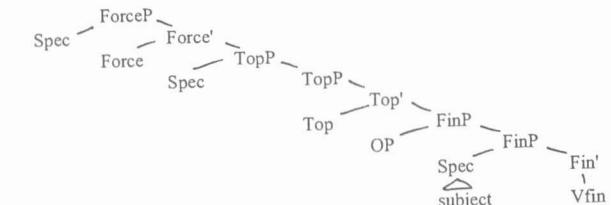
- (i) WP/clitic
  - a. **de winter daarna**, **k** wier vaneir afgedankt  
the winter after, I was again licensed
  - b. **Awel, as ne mens jong is**, **ge** komt toch van alles tegen'e  
well when a man young is, you meet all sorts of things
- (ii) clitic + doubling pronoun
  - c. **Maar daarachter**, **me** pakken wijlen e geweer mee  
but afterwards, we took a gun with
- (iii) pronoun
  - d. **Maar alle kerken as die begosten te schieten**, **wijle** ginken daar een enneke  
but each time when that began to shoot, we went there a bit

In De Pauw's material all preposed constituents in the V3 clauses are PPs. There are no preposed objects and there are no preposed wh-phrases. One line worth pursuing might be that in these cases there is no null operator in [Spec,FinP] and that the second position subject occupies [Spec,FinP]:

- (59) [Force P [TopP adjunct [Top<sup>o</sup>] [FinP subject [Fin<sup>o</sup> verb] [IP...]]]]

In this view, the dialect would differ from the standard language in that the latter always requires the null operator in structures of topicalization. The observed restriction to adjuncts may then be due to the fact that preposed arguments cannot survive without a null operator in [Spec,FinP]. The Buggenhout dialect would thus be more like English. A drawback of this proposal is that it comes as an unexpected result that, in the non V2 sentences, only one constituent precedes the subject. Just as is the case in English, one might also have expected multiple topicalization, V4, etc. The data available are very restricted, so it is perhaps impossible to arrive at safe conclusions, but at least no cases of multiple topics are reported on. An alternative would be to propose the preposed adjunct does require the non-overt operator to link it to an IP-internal position, but that for adjuncts, though not for arguments, the null operator may be FinP-adjoined. If the EPP requirement on Fin<sup>o</sup> is strictly satisfied in [Spec,Fin<sup>o</sup>], then the overt subject will move to the specifier of FinP to satisfy the EPP requirement. The fact that the pre-subject constituent is an adjunct would follow from the not unnatural assumption that preposed arguments occupy the specifier of TopP and that they still must be linked to their base position by a null operator in the specifier of FinP. FinP adjunction would be ruled out.

- (60) V3 : Adjunct - Subject - V<sub>fin</sub>



The unicity of the pre-subject constituent in De Pauw's data follows from the assumption of unicity of the null operator. The absence in De Pauw's data of V3 sentences in which a preposed wh phrase is followed by a subject and the finite verb follows from our analysis. The sequence wh-phrase-subject-finite verb would lead to a violation of the wh criterion as there would be no local specifier-head relation between the preposed wh-phrase and a head (chain) carrying the wh feature.

An final alternative approach would be one in which the preposed adjunct directly adjoins to FinP, while the

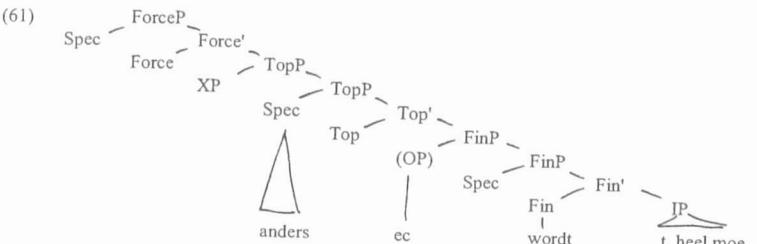
- (i) **Waar dat de iet(s) kapotgeschote was**, d'erste sektie moest er altijd naartoe  
where that there something shot was, the first section must there always to

This case differs from the text-examples in that it exemplifies a clitic-left dislocation structure, in which the preposed constituent is picked up by a clitic (here *er*).

subject occupies [Spec,FinP]. Here too most of the observed restrictions follow. That only adjuncts adjoin to FinP would not be an unnatural proposal (in fact Rizzi proposes it as an alternative analysis (his note 26)). That there are no *wh* phrases in this position would follow if one disallows satisfaction of the *wh*-criterion by adjunction, again a step which is not too unnatural.<sup>32</sup> However, once again the unicity of the FinP adjoined adjunct can not be made to follow, it seems to me.

#### 6.5.2.2. The early Dutch post-verbal null subject

Based on the analysis of the Flemish V3 structures in 6.5.2.1. we might propose that the post-verbal null subject in the early Dutch grammar is bound by an abstract antecedent in [Spec,FinP], with the null topic operator either absent, or FinP-adjoined.



But this account is problematic both for theoretical and for empirical reasons.

Even by the modified version of the ECP (12a), the empty category in [Spec,FinP] will have to be chain-connected to an antecedent, and even if ForceP is truncated - an option which we retain from the discussion of the preverbal null subject - the preposed adjunct remains a potential binder. It is indeed the identification clause of the ECP (12a) which will correctly rule out non-overt subjects in De Pauw's V3 structures.

The empirical problem concerns the nature of the preposed constituent. In the dialect data provided by De Pauw V3 structures are only found with adjunct preposing. In my account of De Pauw's V3 structures, I provide a principled explanation for this restriction in terms of the role of the null operator. But, as mentioned already, the post-verbal null subject in the early Dutch grammar contrasts with De Pauw's data in that it also co-occurs with argument preposing. Weakening the role of the null operator, or its position, in cases of adjunct preposing receives independent empirical support as shown in Rizzi (forthcoming) and Haegeman (1995b, forthcoming), but no such weakening is at first sight motivated in the case of argument preposing.

#### 6.5.3 V3 with clitic preverbal subjects

##### 6.5.3.1. Old High German (Tomaselli 1995)

Tomaselli (1995) signals the Old High German (OHG) V3 pattern in (62). Again a topicalized constituent and the subject precede the finite verb, in that order:

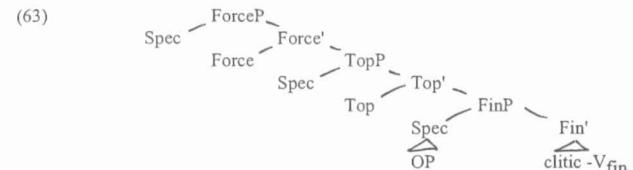
- (62) Tomaselli, A (1995) Cases of V-3 in Old High German  
*Isidor's Schrift contra Iudeus*

- a. dhasz ich chichundida  
that he showed
  - b. erino portun ich firchnussu  
iron doors I shatter
  - c. Dhes Martyrunga endi dodh uuir findernes mit urchundin  
his martyrdom and death we demonstrate with evidence
- (Braune-Ebbinghaus 1979: 19, 135, Tomaselli p. 2)  
(Lenerz 1985: 106)  
(Lippert 1974: 52)

As was the case in the first type of V3 described above, the initial constituent in OHG is never a *wh*-phrase. There are two observed differences between Tomaselli's V3 patterns and De Pauw's V3 data: (i) In the Old High German (OHG) data, the topicalized constituent may be either an argument (as shown above) or an adjunct; in the Buggenhout data the preposed constituent is always an adjunct. (ii) In the OHG data, the subject is realized as a weak pronoun or a clitic pronoun; in the Buggenhout data it may also be a full pronoun. Tomaselli (1995),

<sup>32</sup> In order to accommodate instances of multiple *wh*-movement, which may involve adjunction, a weaker restriction is sufficient: it might be enough to say that the first constituent which satisfies the *wh*-criterion must enter into a strict specifier head relation with the *wh* head. Thanks to MarAriel Friedemann for bringing this point to my attention.

following van Kemenade's (1987) account of similar Old English data, analyses the preverbal subject as a clitic. To integrate Tomaselli's (1995) and Van Kemenade's (1987) analysis into the split CP approach to V2 adopted here I propose that in these V3 data, the preposed topic is related to the empty position in the comment by a null operator in [Spec,FinP]. The generalized null operator analysis accounts for the unicity of the topic. Given the presence of the null operator in [Spec,FinP] the subject cannot occupy that position. Inspired by Tomaselli (1995) and Van Kemenade (1987) I assume that the subject in the OHG V3 construction is a clitic incorporated to Fin° (cf. also Pintzuk (1996) and Kroch and Taylor (1993) on similar data in the history of English).



Tomaselli (1995) follows van Kemenade (1987) in assuming that the impossibility of cliticization of the subject with a preposed *wh*-phrase is due to the intervention of the clitic in the satisfaction of the *wh* criterion. I will also follow this account: cliticization onto the finite verb would as it were 'mask' the *wh* feature associated with T°.

- (64) [clitic [T° verb +wh]]

Observe that this blocking effect of the clitic does not arise with respect to the satisfaction of topic criterion. The topic criterion is satisfied in TopP; I assume that the [+TOP] feature is base-generated on Top°. The topicalized constituent is base-generated in [Spec,TopP]. The null operator in [Spec,FinP] is not there to satisfy the Top criterion; rather, it serves to mediate between the base-generated initial topic and the empty position in the comment.

#### 6.5.3.2. Germanic clitics vs French clitics and the *wh*-criterion

A question might arise<sup>33</sup> as to why the French clitic *le* ('him') in the subject-verb inversion pattern in (65) does not have a same blocking effect on the satisfaction of the *wh*-criterion:

- (65) Quand le verras-tu encore?  
when him will-see you again

The difference between the French case and the OHG discussed by Tomaselli (1995) (and the Old English data discussed by Van Kemenade (1987)) resides in the cliticization site. In what follows we briefly consider cliticization in French, showing that the site of cliticization in French is lower than T°. For reasons of space this account has to be kept succinct.

The distribution of floating quantifiers in French can give us an indication as to the site of cliticization. Consider:

- (66) a. *Les filles* ont décidé de ne pas toutes acheter tous les livres.  
the girls have decided of *ne* not all buy all the books
- b. \* *Les filles* ont décidé de toutes ne pas acheter tous les livres.  
the girls have decided of all *ne* not buy all the books

In (66a) the floating quantifier *toutes* ('all'), associated with the subject *les filles* ('the girls'), follows the negation marker *pas*. Following Sportiche (1988) I assume that the floating quantifier is stranded in an A-position by the movement of the NP with which it is construed. I suggest that *toutes* in (66a) occupies the specifier of TP. I assume, along the lines of Chomsky (1995), that the structural nominative is licensed in [Spec,TP]. As shown by (66b) the floating quantifier cannot precede the specifier of NegP (*pas*). Neither can it precede the head of NegP, *ne*, which we assume has moved to AgrS.

On the basis of the examples (67), we conclude that the object clitic can be found in a position lower than the landing site of the floating quantifier associated with the subject, i.e. lower than [Spec,TP].

<sup>33</sup> I thank Friedemann for bringing this point to my attention.

- (67) *Les filles* ont décidé de ne pas toutes les acheter.  
the girls have decided of *ne* not all them buy

Let us try to determine the cliticization site of *les*. At first sight examples as those in (68) suggest that the cliticization site is  $T^\circ$ ; after incorporating to  $T^\circ$  the clitic + verb complex can then move to  $AgrS$ :

- (68) a. Les filles ne les achètent pas toutes.  
the girls *ne* them buy not all  
b. Ne les avoir pas toutes achetées était une erreur  
*ne* them have not all bought was an error

But the data in (69) present a problem for this proposal:

- (69) *Les filles ont décidé de toutes tous les acheter.*  
the girls have decided of all all them buy = "The girls have decided to buy them all."

If the quantifier *toutes*, associated with the subject, is in [Spec,TP] in (69b), then the quantifier *tous* associated with the object must occupy the specifier position of yet a lower projection. This means that the cliticization site in French must be lower than T°.

If we assume that the French clitic attaches to the verb below  $T^\circ$ , and if we continue to assume that the [+WH]-feature is base-generated in  $T^\circ$ , then the clitic will associate with  $V^\circ$  before the verb adjoins to  $T^\circ$  and the clitic will not mask the [+ WH] feature.

In contrast, in the OHG data discussed above, it is assumed that the subject clitic incorporates to Fin<sup>o</sup>, i.e. it cliticizes to the verbal head after the latter has incorporated to T<sup>o</sup>.

#### 6.5.3.3. Other cases of V3 in Germanic

It is conceivable that other instances of V3 reported in the literature may be analysed in the way described for OHG. The analysis would be applicable in those cases in which the subject is restricted to a clitic. The following instances of Flemish V3 signalled by Hoekstra (1993) and Zwart (1993) might be analysed this way.

- (70) a. Bijgevolg er kwamen geene inschrijvingen (WF)  
           XP       subj    Vfin  
         as a result there came no inscriptions

b. Bleke viezen me zieni fele gimeer uliern (French Flemish)  
       XP          subj    Vfin  
         pale calves we see-not many anymore here. (Hoekstra 1993)

c. In t begun me gaan rekan missen (West Flemish)  
       at the beginning we go all the time miss  
         'In the beginning we will be wrong all the time' (Zwart 1996: 255)

#### 6.5.3.4. Post-verbal null subjects in the early grammar

### 6.5.3.4.1 Null subjects as null clitics

Inspired by the OHG V3 patterns, we might propose that sentences with post-verbal null subjects in early Dutch be assigned the structure in (71). The post-verbal null subject is bound by a null clitic on Fin<sup>0</sup>. Concretely, I assume that in cliticization structures, the D<sup>0</sup> head is extracted from the null subject DP in [Spec,IP].



This analysis is close to Hamann's pro drop analysis discussed in section 6.2: one might in fact argue that the null clitic on  $\text{Fin}^\circ$  identifies pro in [Spec,IP]. My analysis implies the incompatibility with *wh*-movement as the clitic on  $\text{Fin}^\circ$  masks the *WH* feature associated with  $V^\circ$  in  $\text{Fin}^\circ$  and hence blocks the satisfaction of the *wh*-criterion. The null clitic analysis seems to receive some support from the following observation in Bol (1995):

It appears that the finite verb is always found in the second position of the sentence, directly after the topic. ... it is clear that in almost two out of three cases the subject which is left out is the personal pronoun *het* (*it* in English). In Dutch this pronoun is mainly pronounced as the clitic '*t*'. This clitic can be used without definite reference and is hard to perceive among the language input, as in *zo kan ook* ['so can also'], *nou is goed* ['now is good'] ... Perhaps it is in this direction that an explanation of the occurrence [sic] of these sentences should be sought. (1995: 120).

For further evidence of cliticization in the CP layer, I refer to Friedemann (1990) and Haegeman (in preparation).

#### 6.5.3.4.2. Null clitics in the early grammar

The question arises how to distinguish the early Dutch grammar from the adult Dutch grammar. Two questions arise: (i) Why is the null subject clitic construction unavailable in adult Dutch. (ii) If the null subject clitic is the non-overt counterpart of the adult OHG clitic subject described by Tomaselli why is its overt analogue unavailable in adult Dutch?

Observe that not only non-overt subject clitics are available in the child grammar. The Dutch data in (72) suggest that non-overt object clitics are available in early Dutch.

- (72) a. ik ga [ec] pakken.  
I go take  
b. je mag [ec] hebben. Thomas 2;7 (Schaeffer 1993)  
you may have

The null object in the Dutch middle field is certainly not to be ignored. The figures for the null objects in the middle field for the Thomas corpus are given in Table 14.

Table 14: Omission of objects in the Middle Field (Thomas)

Thomas age	null objects
2;3	0%
2;4	7%
2;5	8%
2;6	6%
2;7	13%
2;8	7%
2;9	9%
2;10	17%
2;11	19%

We might argue that the child grammar differs from the adult grammar in making non-overt clitics available. Non-overt clitics have also been argued for in Italian (McKee and Emiliani (see discussion in Schaeffer 1995)). For French, Müller *et al* (forthcoming) and Jakubowicz *et al* (1995) also signal a high proportion of object omissions in French.

However, the non-overt clitic analysis is not sufficient to account for the difference between the adult grammar and the early grammar. If we ascribe the post-verbal null subject phenomenon to a generalization of the non-overt clitic, this would lead one to expect that just as adult Dutch has the overt counterparts to the null clitic in the middle field, adult Dutch should have the overt counterpart to the null preverbal subject clitic:

- (73) a. \* dropje k-wil [ec] niet  
liquorice want not  
b. \* anders k- wordt [ec] heel moe  
otherwise become very tired

Apart from the V3 patterns signalled in the literature, (73) is ungrammatical. We could rule (73) out by virtue of Economy. Subject pronominals in Dutch are weak pronouns, with XP status which are licensed in the post-verbal

position as in (74) (presumably [Spec,AgrSP]). The incorporation of the clitic in (73) is redundant.<sup>34</sup>

- (74) a. dropje wil ik niet  
liquorice want I not  
b. anders wordt ik heel moe  
otherwise become I very tired

As before, the non-overt counterpart of the overt subject in [Spec,AgrSP], of course, is ungrammatical as it violates the identification condition (12a).

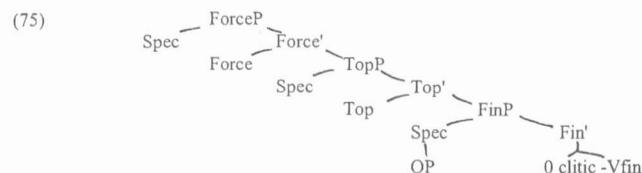
#### 6.5.3.4.3. Null subjects clitics and truncation

I assume that property distinguishing early Dutch from adult Dutch resides in the availability of the null clitic. Surprisingly, though, the graphs in Appendix 4 show that for the three Dutch children, the decrease of post-verbal null subjects with preposed topics in the early grammar develops in parallel with the decrease of RI. Nothing in what I have said so far leads us to expect that the post-verbal null subject would relate to RI.

Remember that I uphold Rizzi's truncation analysis for Dutch RI and that the parallel decrease of initial early null subjects with RI was one of the factors which led me to propose a truncation analysis also for the initial null subject. In keeping with this reasoning, I would like to speculate somewhat further on the parallel development of post-verbal null subjects and root infinitives.<sup>35</sup> As the reader will observe, my discussion is highly speculative and unfortunately remains open-ended.

I maintain the assumption that the child grammar, though not the adult grammar, allows truncation. In root clauses ForceP may be truncated. Let us now explore the idea that a null head, just like a null XP, is subject to an identification requirement (12b). A null head must either have an antecedent, or must be the highest head in the structure.

Let us now examine the representation of sentences with null subject clitics adjoined to Fin<sup>o</sup>. (75) is a first structure:



We can rule out structure (75) on the grounds that the null clitic on Fin<sup>o</sup> violates the identification clause (12b). The null subject clitic is c-commanded by two potential antecedents: Top<sup>o</sup> and Force<sup>o</sup>. In order to circumvent the potential ECP violation, the null clitic should be the highest null head in the structure. This means that either the higher heads should be absent (i.e. the projections should be truncated) or the clitic ought to undergo further movement, in a bypassing strategy not unlike that proposed for the non-initial null subjects in French and English (Haegeman 1995b).

Pursuing the bypassing strategy first, we might propose that the null clitic moves to Top<sup>o</sup>. If the clitic cannot excorporate, then the clitic and the verb must move jointly to Top<sup>o</sup>. But clitic-movement to Top<sup>o</sup> is insufficient to avoid a violation of the identification clause (12b). Force<sup>o</sup> remains available as a potential antecedent. I follow Rizzi (forthcoming) in assuming that Top<sup>o</sup>, not being V-related, does not allow the finite V<sup>o</sup> to transit through it. In the adult grammar, then, the null subject clitic cannot survive. Movement to Top<sup>o</sup> is insufficient and movement to Force<sup>o</sup> via Top<sup>o</sup> is blocked.

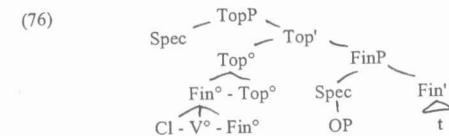
In the child grammar, however, truncation allows ForceP to be omitted, leading to a structure where the null clitic

<sup>34</sup> The V3 dialects like OHG would then have to facilitate cliticization to Fin<sup>o</sup>. It is not clear how this can be dealt with since the V3 pattern is not generalized and post-verbal subject pronouns also occur, and must appear with wh-preposing. I leave this topic for future reflection.

Alternatively, we have to assume that OHG has subject clitics and that Dutch has subject weak pronouns but not subject clitics in the sense of Cardinaletti and Starke (1992).

<sup>35</sup> As pointed out by Frank Wijnen (p.c.) the parallel decrease of RIs and post-verbal null subjects is perhaps less significant than in made out here. As he suggests, it is perhaps simply the effect of an overall parallelism in the decrease of a number of phenomena. Recall that in the case of the initial null subject, the parallel decrease was only one of three arguments to depart from the null topic analysis. In order to address this issue, it would be important to determine the nature of the null clitic in general more precisely.

can be the highest head:



One might object that cliticization to Top<sup>o</sup> will mask the [+TOP] feature and hinder the satisfaction of the Topic criterion. However, in the case of the *wh*-criterion the *wh* feature resides in T<sup>o</sup> and is carried onto Fin<sup>o</sup> by V<sup>o</sup>-movement through T<sup>o</sup>. The [+TOP] feature, on the other hand, is base-generated on Top<sup>o</sup>. I assume that [+TOP] will percolate to the complex of the clitic, the finite verb and Top<sup>o</sup>.

A problem for this analysis is that the joined clitic+ V movement has to cross the null operator in [Spec,FinP]. This would lead one to expect that the clitic+verb complex can also move past the overt d-pronoun, leading to structures such as:

- (77) a. (\*)dropje wil dat niet  
liquorice want that not

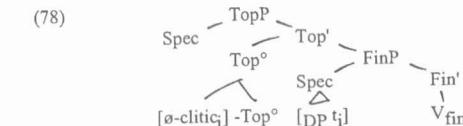
There are no cases, though, in which we ever find the finite verb moving past a d-pronoun with an overt subject:

- b. \* dropje wil dat ik niet  
liquorice want that I not

Structures such as (77) do not occur in the early Dutch corpus, which does contain 15 examples of topicalization with d-pronoun (Thomas: 1 example; Niek: 2 examples; Hein 12 examples). I will speculate on some possible solutions here.

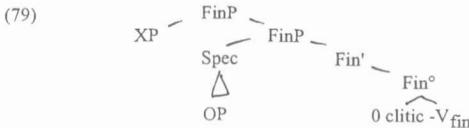
One possibility is to allow for excorporation of the null clitic. It is not clear if this strategy can be theoretically motivated or empirically supported. Certainly, in her discussion of OHG V3 structures, which we take to be the model for the post-verbal null subject patterns in Dutch, Tomaselli does not report on excorporation of the overt subject clitic.

A second option is that the null subject clitic on Fin<sup>o</sup> is licensed because the children have not yet acquired the null operator strategy for topicalization. Thus instead of structure (76) it might, for instance, be proposed that the null subject clitic first moves to [Spec,FinP], and then cliticizes onto Top:



This structure raises problems, though. First recall that though restricted, the topicalization with d-pronoun is available in the child grammar. In the Hein corpus, there were 12 examples of such structures. It is not obvious why the children should have mastered the overt d-pronoun strategy and not also have acquired its non-overt counterpart.

It might be proposed that the children basically use the clitic left dislocation strategy and that they postulate the null clitic in topicalization structures, i.e. that they adopt a Romance strategy to topicalization (cf. Rizzi forthcoming on the strategies for topicalization). It remains to be seen if this hypothesis finds empirical support. One would also have to address the question as to what will lead the child to postulate the null operator strategy. Possibly one might tie this in with the acquisition of relative clauses. Another problem raised by the conjecture in (78) is that the unicity of the preposed constituent, which in my account was made to follow from the generalized null operator strategy, is no longer to be accounted for. And yet the children using post-verbal null subjects have acquired the V2 constraint. Similar observations are made by Hamann (1992, 1994) for German. A final alternative analysis would be one in which the TopP is not projected and in which preposed constituents are adjoined to FinP.



If ForceP is again omitted, the null clitic will not be c-commanded by any higher head, thus satisfying the identification condition of the ECP (12b). By maintaining the null operator analysis, the unicity of the first constituent is predicted. However, it is not clear what the basis would be for postulating the adjunction structures in (79) and how the child would de-learn them and replace them with structures with TopP.

At this point I cannot offer any decisive analysis for the data. It seems clear that the post-verbal subject can be related to the null clitic phenomenon. Its apparent relation with truncation, though, still leaves some problems.

#### 6.5.3.4.4. Null clitics and truncation: for future research

The question arises whether the null object clitic is also dependent on truncation. Such a hypothesis would be consistent with the Italian data discussed in McKee and Emiliani (1992), in which the null clitic, just as its overt counterpart, is associated with the finite verb. The finite verb moves to AgrS in Italian. If AgrS has to become the highest functional head, we would have to postulate CP truncation for the finite clauses in Italian.<sup>36</sup> The discussion of null objects in French in Müller *et al* (forthcoming) suggests that there is a link between the absence of CP and the availability of null object clitics in French. I hope to return to this issue in future work.

#### 7. CONCLUSION AND SOME SPECULATIONS FOR FURTHER RESEARCH

In this paper I have discussed the early null subject in finite root clauses in Dutch. The paper makes use of a theory of V2 which adopts the articulated CP structure.

With respect to the initial null subject I disagree with most current proposals in which the null subject is analysed as a null topic and I show that at least some of the null subjects cannot be adult-like. Notably, this concerns the null quasi-arguments in standard Dutch and the null subjects in early Flemish. I propose that the initial null subject is a specifier in the root, here FinP. This analysis uses the truncation idea of Rizzi (1994): the child grammar (though not the adult counterpart) allows for truncation of ForceP.

I propose that the post-verbal empty categories in [Spec, IP] are bound by null subject clitics on Fin°. On a more speculative note I examine the hypothesis that these null subject clitics can only survive in an environment in which the higher potential heads have not been projected, and again the null subject depends on truncation. This will account for the observed parallel decrease of post-verbal null subjects and root infinitives in acquisition.

A number of questions remain to be examined in future work. These concern the distribution and analysis of null object clitics and their relation with truncation (Müller *et al* forthcoming). In Haegeman (in preparation) I intend to elaborate the hypothesis that wh-less questions, which have repeatedly been signalled in the literature (see Felix (1980), Weissenborn, Roeper and de Villiers (1991), Penner (1994), Tracy (1994) and Santelmann (1995)) are null clitics incorporated to Foc°. Similarly, I will argue that the occurrence in early Dutch of what seems like the clitic *i* as a substitute for a the full wh constituent *wat* in (72) taken from Thomas (2;10) may be interpreted in terms of cliticization in the CP layer<sup>37</sup>:

- (80) a. 't is dat voor kleur?  
't is that for colour  
b. t is dat?  
't is that  
c. 't heeft ie?  
't has he

<sup>36</sup> This conclusion is not in disagreement with the observed absence of RIs in Italian (Guasti 1994). RIs involve truncation of TP and the higher projections. What my analysis requires is truncation of CP.

<sup>37</sup> Cliticization of the overt or non-overt wh-constituent is not a such a novel proposal. Friedemann (1990) argues that French *que* in (i) cliticizes to C°.

(i) Qu'as tu fait?  
what have you done

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**APPENDIX 1 : QUANTITATIVE DATA****1. NIEK**

Table 1. Non-overt subjects in initial position

Niek	Initial Su	initial ø-su	% initial ø-su
2;8	6	5	83.33%
2;9	13	11	84.62%
2;10	3	1	33.33%
2;11	30	20	66.67%
3;0	112	27	24.11%
3;1	323	75	23.22%
3;2	37	11	29.73%
3;3			
3;4	351	75	21.37%
3;5	83	11	13.25%
3;6	397	167	42.07%
3;7	55	23	41.82%
3;8	254	42	16.54%
3;9	269	15	5.58%
3;10	215	12	5.58%
total	2148	495	14.97%

Table 2: Post-verbal subjects

	post-V	post-V ø-su	% post-V ø-su
2;8	0	0	0.00%
2;9	7	0	0.00%
2;10	7	0	0.00%
2;11	4	1	0.00%
3;0	28	3	25.00%
3;1	71	8	10.71%
3;2	4	0	11.27%
3;3			
3;4	378	14	3.70%
3;5	48	3	6.25%
3;6	520	21	4.04%
3;7	42	4	9.52%
3;8	184	8	4.35%
3;9	303	9	2.97%
3;10	242	8	3.31%
total	1859	79	4.25%

Table 3: Post-verbal subjects with initial topic

Niek	topic first	overt subjects	ø-su	% ø-su with top
2;8	0	0	0	0.00%
2;9	2	2	0	0.00%
2;10	0	0	0	0.00%
2;11	1	0	1	100.00%
3;0	13	10	3	23.08%
3;1	25	18	7	28.00%
3;2	3	3	0	0.00%
3;3				
3;4	93	79	14	15.05%
3;5	21	18	3	14.29%
3;6	153	134	19	12.42%
3;7	20	16	4	20.00%
3;8	75	68	7	9.33%
3;9	141	133	8	5.67%
3;10	100	93	7	7.00%
total	647	574	73	11.28%

Table 4: Post-verbal subject with initial *wh*

	wh questions	ø-su	overt subjects	% ø-su with wh
2;8	0	0	0	0.00%
2;9	0	0	0	0.00%
2;10	1	1	0	0.00%
2;11	1	1	0	0.00%
3;0	3	3	0	0.00%
3;1	8	7	1	12.50%
3;2	0	0	0	0.00%
3;3				
3;4	131	131	0	0.00%
3;5	3	3	0	0.00%
3;6	136	134	2	1.47%
3;7	4	4	0	0.00%
3;8	28	27	1	3.57%
3;9	112	111	1	0.89%
3;10	60	59	1	1.67%
total	487	481	6	1.23%

**2. THOMAS**

Table 1. Non-overt subjects in initial position

	Initial Su	initial ø-su	% initial ø-su
2;3	30	11	36.67%
2;4	166	67	40.36%
2;5	264	103	39.02%
2;6	52	15	28.85%
2;7	599	125	20.87%
2;8	332	78	23.49%
2;9	194	77	39.69%
2;10	476	65	13.66%
2;11	217	28	12.90%
total	2330	569	24.42%

Table 2: Post-verbal subjects

	post-V	post-V ø-su	% post-V ø-su
2;3	15	2	13.33%
2;4	72	7	09.72%
2;5	114	13	11.40%
2;6	37	2	05.40%
2;7	277	12	04.33%
2;8	162	16	09.87%
2;9	180	4	.02.22%
2;10	390	10	02.56%
2;11	72	3	04.16%
total	1319	69	05.23%

Table 3: Post-verbal subjects with initial topic

	topic first	overt subjects	ø-su	% ø-su with top
2;3	3	1	2	66.67%
2;4	19	13	6	31.58%
2;5	42	30	12	28.57%
2;6	6	5	1	16.67%
2;7	69	57	12	17.39%
2;8	43	29	14	32.56%
2;9	32	29	3	9.38%
2;10	102	93	9	8.82%
2;11	32	29	3	9.38%
total	348	286	62	17.82%

Table 4: Post-verbal subject with initial *wh*

	wh questions	ø-su	overt subjects	% ø-su with wh
2;3	0	0	0	0.00%
2;4	6	5	1	16.67%
2;5	6	5	1	16.67%
2;6	21	20	1	4.76%
2;7	70	69	0	0.00%
2;8	34	32	2	5.88%
2;9	47	45	2	4.26%
2;10	127	126	1	0.79%
2;11	10	10	0	0.00%
total	321	312	8	2.49%

**3. HEIN**

Table 1. Non-overt subjects in initial position

	Initial Su	initial φ-su	% initial φ-su
2;4	164	71	43.29%
2;5	90	29	32.22%
2;6	344	60	17.44%
2;7	141	40	28.37%
2;8	251	48	19.12%
2;9	209	57	27.27%
2;10	239	63	26.36%
2;11	192	38	19.79%
3;0	157	16	10.19%
3;1	133	21	15.79%
total	1920	443	23.07%

Table 3: Post-verbal subjects with initial topic

	topic first	overt subjects	φ-su	% φ-su with top
2;4	31	28	3	9.68%
2;5	28	25	3	10.71%
2;6	63	55	8	12.%
2;7	30	28	2	6.67%
2;8	45	38	7	15.56%
2;9	55	52	3	5.45%
2;10	75	69	6	8.00%
2;11	66	58	8	12.12%
3;0	41	38	3	7.32%
3;1	49	44	5	10.20%
total	483	435	48	9.94%

**4. IELKE**

Table 1. Non-overt subjects in initial position

	Initial Su	initial φ-su	% initial φ-su
1.1	9	4	44.44%
1.11	22	9	40.91%
2.0	0	0	0.00%
2.1	31	18	58.06%
2.2	45	19	42.22%
2.3	93	23	24.73%
total	201	74	36.82%

Table 2: Post-verbal subjects

	post-V	post-V φ-su	% post-V φ-su
2;4	109	4	3.67%
2;5	71	3	4.23%
2;6	182	9	4.95%
2;7	102	2	1.96%
2;8	162	7	4.32%
2;9	143	3	2.10%
2;10	167	6	3.59%
2;11	149	8	5.37%
3;0	115	3	2.61%
3;1	125	5	4.00%
total	1325	50	3.77%

Table 4: Post-verbal subject with initial wh

	wh questions	φ-su	overt subjects	% φ-su with wh
2;4	4	0	1	25.00%
2;5	0	0	0	0.00%
2;6	12	11	1	8.33%
2;7	8	8	0	0.00%
2;8	21	21	0	0.00%
2;9	6	6	0	0.00%
2;10	21	21	0	0.00%
2;11	35	35	0	0.00%
3;0	27	27	0	0.00%
3;1	20	20	0	0.00%
total	154	152	2	1.30%

Table 2: Post-verbal subjects

	post-V	post-V φ-su	% post-V φ-su
1.1	7	1	14.29%
1.11	9	0	0.00%
2.0	0	0	0.00%
2.1	22	0	0.00%
2.2	11	1	9.09%
2.3	14	0	0.00%
total	63	2	3.17%

**APPENDIX 2: THE IELKE DATA**

The data were collected on the basis of five 45 minute recordings. These recordings were spread over one month each. The recordings are dated by month; dates of individual recordings are not available. In most of the recordings there is relatively little interaction with adults. Usually, Ielke is playing by herself and is recorded. Occasionally, the mother asks some questions to encourage the child to talk. The total corpus comprises 1408 utterances. The recordings were transcribed by the mother and checked by Liliane Haegeman.

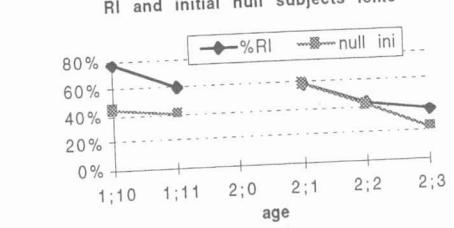
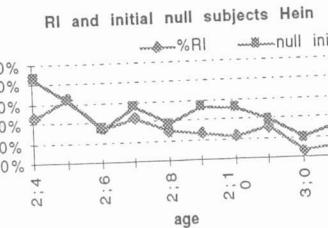
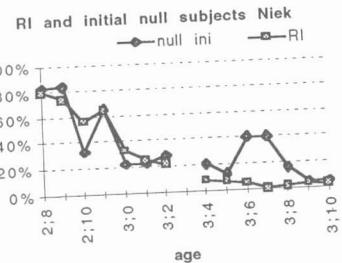
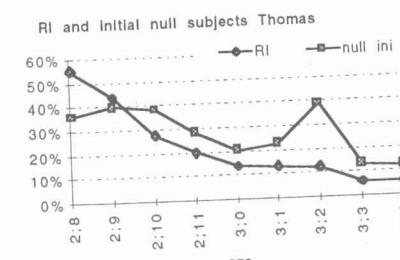
Table 1 below gives the data: in the first column we give the age of Ielke, in the second column the month of recording. The recording of November 1993 was erased due to some technical problem. In the third column I give the total number of transcribed utterances. Incomprehensible utterances have not been transcribed. In table 2 I give the raw figures for the occurrences of finite clauses and RIs. In total there are 276 finite clauses and 290 RIs. It is obvious that we are dealing with very low figures and that any conclusions which we may draw from these data must be handled with the utmost caution.

Table 1: Ielke corpus: recordings

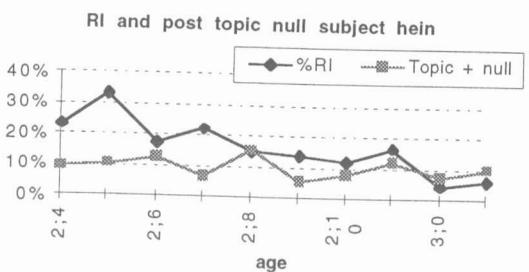
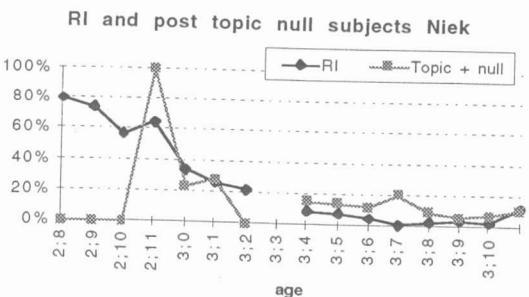
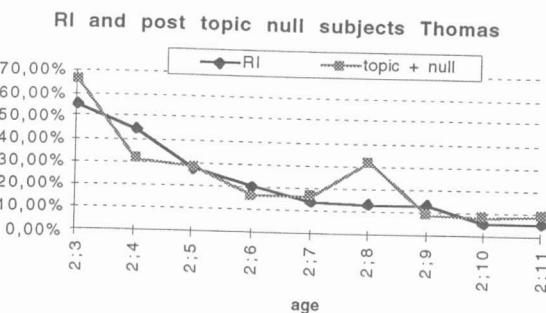
age	month of recording	total utterances
1.10	9.93	258
1.11	10.93	235
2.0		
2.1	12.93	347
2.2	1.94	271
2.3	2.94	297
total		276

Table 2: Ris and finite clauses in Ielke's corpus

age	RI	finite clauses
1.10	54	16
1.11	49	33
2.0	0	0
2.1	77	55
2.2	45	58
2.3	65	114
total	290	276

**APPENDIX 3. Graphs: initial non-overt subjects in early Dutch**

**APPENDIX 4. Graphs: post-verbal non-overt subjects in early Dutch**



**Higher sentence negation.  
The phenomenon of Neg-Raising**

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**Abstract**

Given the current theory of grammar, the traditional transformational rule of neg-raising cannot be easily accommodated. The hypothesis developed in this paper is the following: neg-raising can be interpreted as a cognitive phenomenon which arises while the human mind is processing the content of the sentence under the normal assumption of closed world. This linguistic phenomenon is compared with the working of the inference rule of negation as finite failure. A 'neg-raised sentence' conveys an epistemic attitude towards the proposition expressed by the subordinate clause. The hedge expressed by neg-raising sentences consists in making it clear that a certain conclusion is compatible with the current state of information, but cannot be proven. The parallelism allows us the possibility of understanding several aspects of the phenomenon, such as the different scoping of negation, the typology of verbs involved, the apparent optionality of the phenomenon and its sensitivity to intervening quantifiers/scope operators. Neg-raising appears to be a case where the human mind maximises the information while minimising or at least constraining the processing cost. The paper also contributes to the discussion on the thorny issue of negative information inasmuch as the negation as failure rule offers a practical solution to the prospective case of negative data overwhelming a system while the theoretical issue of the ontological status of negative 'facts' need not be tackled.

**1 Introduction**

The phenomenon of neg-raising exemplified by the near-synonymy between the two syntactic constructions in (1) consists of the lower clause understanding of certain higher clause negatives. In other words, the higher sentence negative reverses the polarity of the lower rather than of its own clause. The fact that (1b), which is the so-called neg-raised sentence, is often used 'in the place of' (1a) has prompted the idea that the two sentences are related in some way. The relation is usually expressed in terms of a syntactic transformation. It has been said that negation in (1b) has raised to the main clause from the lower position it occupies in (1a). As a result, (1b) has the two readings shown in (2).

- (1)     a. Daniel thinks that Louise will not come.
- b. Daniel does not think that Louise will come.
- (2)     a. It is not the case that Daniel believes that Louise will come.
- b. Daniel believes that it is not the case that Louise will come.

The original transformational rule was descriptive at best. Jespersen (1917) had already observed that the sentences in (1) have different negative force. (1b) conveys *Daniel's* greater degree of uncertainty about the negation of the state of affairs in the nested clause. From the logical point of view, the sentences induce different inferences. As noted in Horn (1978)'s review, the weakness is 'felt' and used in certain languages so that (1b) represents a more polite form of expressing the same content as in (1a). However, the weakness is often not 'felt', and (1b) is frequently used even when the stronger position is believed to hold.

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