Phenomena in French normal and impaired language acquisition and their implications for hypotheses on language development

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Abstract

This paper examines the spontaneous productions of 3 normal and 11 French children with SLI, focussing on infinitives, subject and complement clitics, and determiners. The 3 normal children (1.8–2.10) appear to show roughly concomitant use of infinitives and omission of determiners or pronominal clitics. However, determiner omission and the use of infinitives are different in some respects. Moreover, complement clitics appear much later than subject clitics or determiners. For the SLI children (3.10–7.10), opposite patterns in the development of infinitives and determiners could be established, and complement clitics rarely occur even if determiners are used correctly and infinitives are no longer produced.

The data from French SLI thus indicate that infinitive use does not necessarily coincide with determiner omission or the absence of complement clitics. Under the assumption that SLI children show parallel but delayed development, these findings imply that theories of development should not assume too close a link between these phenomena.

1. Theoretical background

1.1. Introduction[1]

Starting from the cross-linguistic observation of roughly concomitant phases of infinitive use and subject drop in language development, several competence-based approaches have been advanced. It was suggested for the null subject

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phase that there was an early parameter mis-setting (Hyams 1986), or it was assumed that the general absence of functional categories could explain infinitives and null subjects (Radford 1990). Because data from many languages indicate that they cannot be maintained, these suggestions will not be further discussed. Instead, the focus will be on what has become known as the truncation theory and on the idea that tense is missing or underspecified in infinitival structures. The view that child grammar is as economical as possible and allows to truncate unnecessary structure was proposed and developed by Rizzi (1994 and 2000). The hypothesis that the absence of tense (or agreement) in early grammar is responsible for both infinitives and null subjects has been proposed by Wexler (1994) and was recently developed into the Unique Checking Constraint (see Wexler 1998). Variants of this approach were introduced by Hyams (1996) and developed by Hoekstra and Hyams (1996), by Schaeffer (1997) or Avrutin (1999), who attempt to link these phenomena to a failure of discourse anchorage in the temporal and the nominal domains.

In the following (Section 1.2.) I will discuss these theories in more detail, and then introduce the children and the method of data taking (Section 2). I will discuss the phenomenon of infinitives and null subjects in child French (see Section 3) and match the theories against these and more detailed data on subject omission (Section 4). Other areas of language development will also be considered, notably the delay in the acquisition of object clitics observed for French (Section 5), and the development of determiners (Section 6).

Under the assumption that impaired language development in the area of syntax is delayed development but follows the same paths as unimpaired language acquisition (see Rice and Wexler 1995), the data on normally developing children will furthermore be compared with data from French language impaired children, especially with respect to the acquisition of complement clitics and determiners. The results obtained for impaired children seem to indicate that the phenomena of infinitive use and determiner as well as complement clitic omission are not closely related in development.

1.2.   *Three theories of development*

1.2.1.   Truncation.   In the original formulation of the truncation option, Rizzi (1994) suggested that the Complementizer Phrase (CP), the interface

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which anchors the clause in discourse, was optional in child language and could be truncated. Inspired by data from adult registers allowing subject drop, Rizzi (1994) added the hypothesis that empty categories have to be licensed only if they can. This implies specifically that empty categories in the specifier of the root need not be formally licensed and will survive.

More recently, Rizzi (2000) has suggested that two competing principles are responsible for the early grammar, the principle of *structural economy* quoted in (1) and the principle of *categorial uniformity* given in (2).

(1)   *Structural economy*:
        Use the minimum of structure consistent with well-formedness con-straints.

(2)   *Categorial uniformity*:
        Assume a unique canonical structural realization for a given semantic type.

In this framework, the CP can be considered optional as long as the child has not realized that declarative main clauses, being of the same semantic type as embedded clauses, must involve the CP. Truncation on the clausal level is the consequence of this optionality. Therefore infinitives will surface when struc-ture up to and including the Tense Phrase (TP) is truncated. In the remain-ing structure, an empty category in the specifier of the root will survive, so null subjects can occur with infinitives. Null subjects can also occur with finite constructions if the child has projected as far as TP or the Agreement Phrase (AgrP), but has truncated the CP. Moreover, as null subjects are restricted to the specifier of the root, certain structures will not allow null subjects. These are especially constituent questions with a fronted wh-element and subordi-nate clauses with a complementizer. In such structures the null subject must be formally licensed and this is not possible in non-pro-drop languages.

Although these two principles account for truncation on the clausal level and specifically concern the semantic type of proposition and the category CP, they are formulated in such a way as to allow speculation on other semantic types and syntactic categories. Of particular interest is the nominal domain (Rizzi 2000: 289). The idea is that the canonical semantic type of a DP is "argument", so that by categorial uniformity the child should categorize as a DP whatever s/he has semantically classified as an argument. As long as this categorization is not made, the DP-layer is optional and full DPs will alternate with bare NPs.

As to determiner omission in French, it is clear that "categorial uniformity" for DPs will be reached fast in a language where determiners are practically obligatory (see Chierchia et al. 2001). The child will quickly realize that bare nouns cannot be used as arguments and so will adjust the syntactic categoriza-tion of the semantic type "argument" to DP, not NP. Depending on this catego-rization of arguments as DPs, a categorization of the determiner as the head of

the DP will follow immediately. Therefore determiners cannot be omitted for long in French. However, no close developmental parallel to the use of infinitives or null subjects is predicted as "categorial uniformity" may be acquired at different times in the nominal and the verbal domain and may depend on language specific properties in each case.

Unfortunately, predictions on complement clitics are not as clear cut as those concerning the CP or the DP. However, it can be speculated that complement clitics will be particularly difficult to acquire as the principle of categorial uniformity will be hard to implement in this case. Independently from the syntactic analysis of complement clitics as moved (Belletti 1999, Kayne 1974) or base-inserted elements (Borer 1984, Sportiche 1996), the clitic has the properties of an argument on the interpretative level, and so the child will tend to categorize it as a full DP. Yet the clitic is placed in one of the functional positions of the verbal field and does not behave like a DP. The child has to resolve the problem that what behaves overtly like a functional head has argument status on the semantic level. Therefore "categorial uniformity" will be misleading in the case of complement clitics, and the competition will be won by "structural economy" for a long time. How exactly this can be implemented would go beyond the scope of this paper. It appears, however, that it is not so much "structural economy" on the level of DP itself which is concerned as such economy would lead the child to prefer the clitic to the full DP. It is more likely that the child opts for omitting the clitic and inserting *pro* in argument position, an option which is given by French grammar in special cases. In this case the child would adhere to categorial uniformity by employing a DP argument and yet be as economical as possible in using a lower projection and a non-overt element.

1.2.2. Optional tense, the Agreement or Tense Omission Model and the Unique Checking Constraint.   When Wexler (1994) described the use of infinitives, he emphasized their optionality and suggested that grammatical tense marking might be missing in the child grammar. Given the assumptions of the time, this would give the child the possibility to either use an infinitive or a finite form. Null subjects, analyzed as PRO, were predicted to occur in the structures with missing tense.

The Agreement or Tense Omission Model (ATOM) introduced by Schütze and Wexler (1996) focused on the use of infinitives, null subjects and the case distribution of overt subjects. Detailed investigation of the latter area led these authors to postulate that not only tense might be missing, but alternatively the agreement projection could be left out by the child. Again, null subjects were predicted to occur only if tense was omitted. Recently Wexler (1998) introduced the *Unique Checking Constraint* (UCC) quoted in (3).

(3)   *Unique Checking Constraint:*
        The D-feature (determiner feature) of DP can only check against one
        functional category.

This derives ATOM because the categories Tense (Tns) or Agreement (Agr) may be omitted by the child in order to obey the UCC. So with the UCC operative in child language, optional infinitives are predicted by the omission of Tense or Agreement. Null subjects will occur in [-Tns] environments as they are PRO, the usual empty category occurring in infinitival structures. Finite null subjects are of a different nature and are assimilated to topic-drop or are derived in another manner, which we will discuss in Section 4.

Because object clitics involve a D-chain of more than one link under a movement and a base-insertion approach, the UCC predicts the omission of object clitics (see Wexler in press for particulars). Under a movement approach the clitic first moves as a DP to at least the Participle Agreement Phrase and then cliticizes to the verb and moves like a head (see Belletti 1999). Under a base-insertion approach, a relation has to be established between the clitic and a *pro* in argument position, also involving several links in a D-chain. Hence infinitives should occur and complement clitics should be omitted as long as the UCC is operative. However, the UCC does not necessarily predict determiner omission at the same time unless specific assumptions are made about the D-feature in early grammar.

1.2.3.   Underspecification of tense and discourse anchorage.   Starting from the idea that functional elements connect syntax to discourse, Hyams (1996) assumed an underspecified referential index in the tense chain which was responsible for the use of infinitives and for null subjects, which are PRO due to this underspecification of tense. A similar underspecification of a referentiality feature was assumed in the nominal domain and a parallel development was predicted for determiners and pronouns. This idea was sharpened by Hoekstra and Hyams (1996), who postulate that the number feature in both the inflectional/verbal and the determiner/nominal domain is underspecified. This predicts a parallel development in infinitive use, determiner omission and "difficulties" with pronouns.

As an alternative to the number feature, the specificity feature has been assumed to be underspecified in both domains as suggested by Schaeffer (1997). This predicts a parallel development in infinitives, determiner omission and object clitics in Dutch.

Assuming a problem in the syntax-discourse interface concerning the D (determiner) and Tns (tense) features, Avrutin (1999) exploits the ideas of file card-semantics in that D connects the NP with an individual file card and Tns introduces an event file card. The hypothesis is that in adult speech file cards

can, under exceptional circumstances, be introduced "extra-syntactically" (via a presupposition) and that children "overuse" this possibility in both domains. Therefore determiners should be used frequently only when finite constructions predominate.

It emerges from the three hypotheses discussed here that there are two basic approaches to null subjects. The truncation approach focuses on the privileged position in the specifier of the root which is available as long as truncation is possible. This predicts a roughly concomitant occurrence of null subjects (in finite and non-finite constructions) and infinitives. The two other approaches, in assuming a PRO null subject, postulate a direct relation to infinitives and a priori do not predict null subjects in finite constructions. The data presented in the following sections will show that truncation covers more data than the other approaches and has the advantage of not deriving developmental relations in the verbal and the nominal domain.

2.   Method

The French data I report on have been collected in the framework of the Interfaculty Project "Langage et Communication – acquisition et pathologie" at the universities of Geneva and Lausanne. I will use especially the longitudinal corpora of spontaneous productions of 3 normally developing, monolingual children and of 11 monolingual children with specific language impairment (SLI).

The three unimpaired children considered in depth are Augustin, who was recorded 10 times between the ages of 2;0,2 and 2;9,30 at his home in Neuchâtel, Marie, who was recorded 17 times between the ages of 1;8,26 and 2;6,10, and Louis, who was recorded 12 times between the ages of 1;9,26 and 2;3, 29. Both Marie and Louis were recorded at their homes in Geneva. More information about these children can be found in Hamann et al. (1996) or Rasetti (2000). In addition, data from the literature will be considered concerning the monolingual children Daniel and Nathalie from the Lightbown corpus and Philippe (occasionally also Grégoire) from the Childes corpus, see Lightbown (1977) and MacWhinney (1991).

The 11 language impaired children were clinically diagnosed as SLI by their speech therapists and by a neuropediatrician according to the exclusive criteria specified in Leonard (1998). The age range of these 11 children is 3.10-7.11. Six of these children, being under five years of age or five years old at the beginning of recording, were younger than the children usually discussed in the literature on French SLI (see Jakubowicz et al. 1998). The children were recorded roughly every three months at their homes. I will focus on the first recordings of these children. Special consideration will be given to the longi-
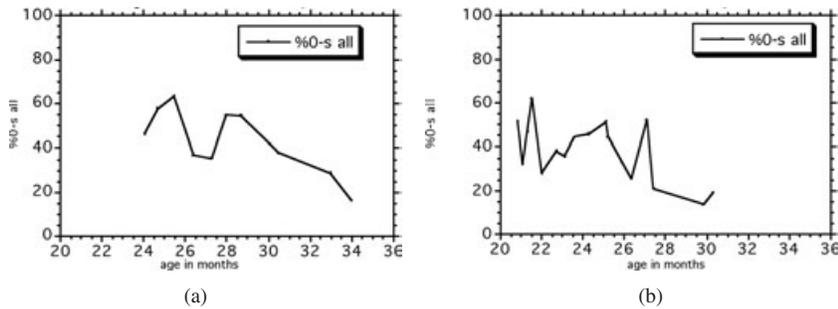
Figure 1. Augustin's use of null subjects (a), Marie's use of null subjects (b)

tudinal data of two of the younger SLI children from this group, Rafaelle and Loris. At the time of this study, there were 4 transcribed recordings for Rafaelle at the ages of 3;10, 4;1, 4;4 and 4;8, and 5 transcribed recordings for Loris at the ages of 4;7, 4;10, 5;0, 5;3 and 5;6. See Cronel-Ohayon (in preparation) for more details on these SLI children.

Augustin's productions were transcribed in Emacs, and the other children were transcribed in CHAT. Analyses were performed by hand-coding, by the machine tools provided by the Unix system or by CLAN (see MacWhinney 1991) and more recently by the syntactic parser developed in Geneva by Wehrli and his group.

3.   Infinitives and null subjects in early French

3.1.   Null subjects

Research has shown that there is a clear phase of null subject use in child French during the third year of life. Figures 1a, b illustrate the use of null subjects in all sorts of verbal environments (except imperatives, subject questions and subject relatives) of Augustin and Marie. Peaks of null subject use are high: 60 % and 50 % of verbal utterances, respectively.

The examples in (4) show typical null subject use in the speech of Marie and Augustin. Null subjects occur in finite contexts, (4a, b), and with infinitives, (4c).

(4)   a.   *est   par   terre*   Marie 1;9
                  is   on   earth
                  'it is on the floor'

    b.   *a   tout tout tout mangé*   Augustin 2;0
          has   all   all   all   eaten
          'he has eaten everything'
    c.   *oter   tout ça*   Augustin 2;0
          empty (inf) all   that
          'I am emptying all that'

3.2. Infinitives

If the null subject phase is uncontroversial in the literature on the acquisition of French (Hamann et al. 1996, Pierce 1992, Phillips 1995, Plunkett 2001, Rasetti 2000), the picture is not quite as clear for the use of infinitives. These have been claimed to occur much less frequently than in other languages and thus have been considered not to be a characteristic of French child speech. Jakubowicz et al. (1998) found only about 10 % infinitives in an experiment on elicited production with young French children. Moreover, averaging over the third year only gives 10.8 % infinitives in Augustin's spontaneous production of verbal utterances (see Hamann et al. 1996). A closer look at the development of French children shows, however, that infinitives occur at peaks of 30–45 %, so that infinitive use in French cannot be neglected.

    Table 1 gives the means and the peaks of infinitive use (calculated from all verbal utterances) for the three children from the Genevan corpus, the children Daniel and Nathalie from the Lightbown corpus and Philippe from the Childes data base. For these counts only infinitives were considered. So here and in the following, I use the term 'infinitive' if only infinitives are considered and the term 'non-finite' if both infinitives and bare participles are included in the count. The decision as to the status as infinitive or past participle for verbs of the *-er* group was made on the basis of the context or the situation. For all these counts, the same morphological criteria were used, and detailed analyses for each of these children can be found in Rasetti (2000) and Rasetti (2002).

    From the data in Table 1, it can be concluded that there is a phase of infinitive use in the language development of French children, although this may be less pronounced and shorter than the phase described for Germanic languages, see Clahsen (1991), Hamann and Plunkett (1998), Platzack (1990), Radford (1990), Weissenborn (1990), and Wijnen (1997). It has to be noted that the peaks do not always occur at the beginning of recording, which is most noticeable in Marie's corpus. The same observation has been made by Hamann and Plunkett (1998) for Danish, which shows that the approach originally suggested by Radford (1990), namely the total absence of functional categories in a first phase of syntactic development, cannot explain the data. A comparison of the development of null subjects for Augustin and Marie as shown in

Table 1. Percentage of infinitives in verbal clauses in six normally developing French children

Child	Age	No of rec	Peak	at	Mean
Augustin	2.0–2.10	10	40	2.1.	15
Marie	1.8–2.3	12	30	2.1.	18
Louis	1.9.–2.4.	12	40	1.10	13
Daniel	1.8–1.11	5	45	1.9	14
Nathalie	1.9–2.3	7	40	2.0	20
Philippe	2.1.–2.7	12	30	2.2.	14

Figures 1a, b and their use of infinitives shown in Table 1, indicates that null subjects are used more frequently and occur at high frequencies longer than infinitives. Occasional infinitives occur, however, up to the end of recording in the speech of all the children under investigation.

4. The problem of finite null subjects

4.1. *The relation of null subjects and infinitives*

As to a direct relation of null subjects and infinitives predicted by the theories introduced in 1.2.2 and 1.2.3, it has been observed that in some languages null subjects occur more with infinitives than with finite constructions, see especially Phillips (1995). This is true for French, but null subjects in finite constructions are well attested and occur quite frequently as is shown in the examples under (5) and in Table 2.

(5)　　　　[+finite]　　　　　　　　　　[infinitive]

　　a.　*est　tout　(pe)ti(t)*　a.′　*oter　　la　　coquille*
　　　　is　　all　　small　　　　　take off　the　　shell
　　　　'it is very small'　　　　　　'I am taking off the shell'

　　b.　*veux　jouer　dinettes*　b.′　*donner　　n'ta　　[kitE]*
　　　　want　play　playkitchen　　give(inf)　that　　Christelle
　　　　'I want to play with the　　'I am giving that to Christelle'
　　　　playkitchen'

　　c.　*met　a　patte* là　c.′　*oter　　　poubelles*
　　　　puts　the　paw　there　　empty(inf)　trash
　　　　'he is putting his pay there'　'I am emptying the trash'

From Table 2 and Figure 2, which shows an extended period of finite null subjects in Marie's speech, it can be concluded that theories of development

Table 2. French null subjects in finite contexts and with infinitives

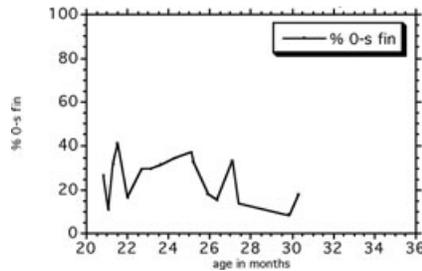|	Finite verb		Infinitive		Total
	Total	% 0-s	Total	% 0-s	
Rasetti 2000					
Daniel	191:408	46.8	189:227	83.3	635
Nathalie	92:303	30.4	52:69	75.4	372
Philippe	322:1397	23.0	225:246	91.5	1643
Hamann et al. 1996, Rasetti 2000, Rasetti 2002 for Louis					
Marie	154:560	27.5	120:134	89.5	694
Louis	213:871	24.5	130:134	97.0	1005
Augustin	157:586	26.8	66:70	94.3	656

Figure 2. Marie's use of finite null subjects

do not only have to explain the occurrence of infinitives, of null subjects, and the nature of their relation to each other, but that the mere occurrence of null subjects in finite contexts has to be accounted for.

It has been discussed in Section 1.2 that finite null subjects are predicted by truncation but not by the other accounts without additional assumptions. For some time the prevailing idea was that such finite null subjects are of a completely different nature and have to be assimilated to topic-drop, see Sano and Hyams (1994), Schütze and Wexler (1996).

However, it could be shown for several languages (see Haegeman 1996 for Dutch) that the use of finite null subjects and the use of infinitives are developmentally related. The data obtained for French shown in Figures 3a, b were first discussed by Rasetti (1996), who concluded in favor of a loose developmental relation – even though the profiles may show some differences. Support for such a developmental relation in a language comparable to French comes
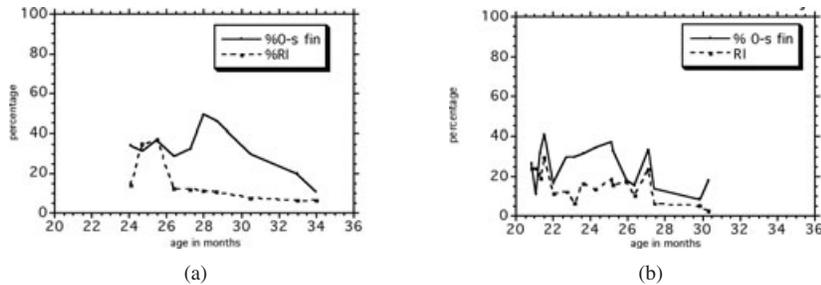
Figure 3. Augustin's use of infinitives and finite null subjects (a); Marie's use of infinitives and finite null subjects (b)

from Hamann and Plunkett (1998)'s study on Danish.[2] These authors showed that the use of infinitives and of finite null subjects is not only loosely related but strongly correlated in Danish. Such a correlation is not expected if finite null subjects are due to topic-drop and are thus independent of infinitive use.

Especially the data on Danish were subsequently discussed in Wexler (2000) who proposed an alternative treatment of finite null subjects in the spirit of a suggestion made by Hoekstra and Hyams (1996). These authors had pointed out that French children generally produce only singular finite verb forms in the phase under discussion. Such forms arguably lack the number feature, are therefore underspecified and license a null subject. So Wexler (2000) suggested a morphological analysis of Danish verb forms which implies that so called finite forms in early child Danish are in fact not specified for tense and are thus what I call "disguised non-finite forms". Transferring this to French and extending the idea from Hoekstra and Hyams (1996), we could say that only singular forms occur in early child French. These might be stem forms and could be analysed as [+Agr, −Tns]. Under this analysis they license PRO. Let us name the UCC hypothesis with this additional assumption about "disguised non-finite forms" (in some languages) the UCC+.[3]

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2. See Hamann and Plunkett (1998) for evidence that Danish, unlike other Germanic languages, is not a general topic-drop language and patterns with French as to the rate of adult subject omissions.

3. I leave to the reader the consideration of the old argument bearing on the early knowledge of finiteness derived from the distribution of finite and non-finite verbs with respect to the negative element *pas*. It is not quite clear what can be concluded from this distribution if forms hitherto analyzed as finite now become 'non-finite'.

Table 3. Distribution of null subjects with respect to verb form in French

	% null subjects on finite lexical verbs	% null subjects on copulas/auxiliaries
Augustin	22.2	34.1
Daniel	52.8	13.6
Nathalie	31.4	19.2
French total	34.2	25.9

4.2.   Null subjects in copula constructions and other special contexts

An important observation is due to Plunkett and Strömqvist (1991) and Sano and Hyams (1994) who described an asymmetry as to the occurrence of null subjects with lexical verbs and with auxiliaries or copulas. This can be explained by the assumption that copulas and auxiliaries are base inserted in Tns, so they necessarily carry the tense feature and cannot license PRO. By the same logic it follows that finite auxiliaries and copulas cannot be analyzed as "disguised non-finite forms". So null subjects are not expected in these contexts under the UCC+.

If one includes the occurrence of infinitives in the calculations, the asymmetry will indeed be very sharp as auxiliaries and copulas do not occur in the infinitive, due again to their inherent tense specification. Restricting the analysis to finite verbs has equally shown, however, that in English, Danish and French this asymmetry persists to a certain degree, see Hamann and Plunkett (1998) and Hamann (2002). Table 3 gives the analysis for three French children. It is interesting to note that even if we find an asymmetry, subject omission from auxiliary constructions is possible (see also examples (4a,b)), and some children (Augustin) even drop more subjects from auxiliaries and copulas than from finite lexical verbs.[4]

An examination of negative contexts where the auxiliary/copula or the finite lexical verb is found to the left of the negative element *pas*, therefore occupies the same position and presumably cannot be analyzed as a disguised non-finite form, shows that in both contexts, subjects may be omitted. We consider mainly Philippe's productions here because he provides examples for a variety of verb

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4. It has been shown that Danish children can also have a high rate of null subjects in copula constructions in some of their recordings. We find rates of 25 % or 31 % in some of Anne's recordings, and 37 % or even 50 % in some of Jens's recordings. See Hamann (2002) for a detailed discussion.

types. The examples in (6), (7), (8) and (9) show that finite main verbs, auxiliaries, copulas, and modals uniformly occur to the left of *pas* and may still occur without a subject.

(6)   a.   *trouve   pas*   Phil 2;2,3 mv
              find   not
              '(I) don't find it'

       b.   *donne   pas   des   bleues*   Phil 2;2,10 mv
              gives   not   (of)   bruises
              '(it) doesn't make bruises'

(7)   a.   *non,   a   pas   le   hoquet*   Phil 2;3,14 mv/aux
              no,   has   not   the   hiccup
              'no, (he) doesn't have the hiccups'

       b.   *a   pas   fait   la   bouche   du   monsieur*   Phil 2;7 aux
              has   not   made   the   mouth   of the   gentleman
              's/he has not drawn the gentleman's mouth'

(8)   *est   pas   mort*   Phil 2;1,6 cop
        'is   not   dead'
        's/he is not dead'

(9)   *veux   pas*   Phil 2;3,7 mod
        want   not
        '(I) don't want to/it'

Considering the fact that French is not a topic-drop language, it is remarkable that subject drop in auxiliary/copula structures can be as high as 34.1 % and is on the average about 26 %. This is unexpected if one does not want to assume that even auxiliaries and copulas might be disguised non-finite forms. Also, there is evidence that a misclassification of auxiliaries or the copula is not at the bottom of the problem. Though it is the case that Augustin for a long time only uses the forms *est* and *a* without using the full inflectional paradigm, there is evidence that even after some of these distinctions (*ai* for the first person singular of *avoir,*) and even after a plural form is acquired, this plural form can still occur without a subject. The same is true for Philippe, who has the *a/ai* distinction and the plural *sont* much earlier than Augustin, see (10).

(10)   a.   *i(l)   sont   ou   les   …   les   ciseaux?*
              they   are   where   the   …   the   scissors
              'where are the scissors'
              sont   là.   Aug 2;9,2
              are   there
              'there they are'

b.   *sont   pas   tous*   Phil 2;3,14
      are   not   all
      'these are not all'

Currently under investigation is another context where null subjects are not expected under the UCC+, the context of past tense forms that carry the [+Tns] specification. As (7b) indicates, such contexts admit null subjects – given that the present perfect carries a positively specified tense feature on the auxiliary. However, reliable numerical analyses of past tenses, specifically the simple past, the present perfect and the past perfect are not yet completed for French. An investigation of child null subject use on Danish simple past forms suggests that null subjects are possible in these environments (see Hamann 2002: 349).

4.3.   Constituent questions in French

The truncation approach and the UCC+ make quite opposite predictions in another structural environment that will be examined in the following. This is the environment of constituent questions, more precisely finite questions with a fronted Wh-element.

The truncation approach quite clearly predicts that infinitives should not occur in such structures because the CP is activated and receives the Wh-element. Therefore, due to the selectional properties of projections, no lower projections can be truncated. As to null subjects, the fact that the Wh-element occupies the specifier of the root in such structures clearly prohibits the occurrence of null subjects. The UCC+, on the other hand, predicts the occurrence of infinitives as nothing prohibits the omission of Agr or Tns in an otherwise complete structure. It likewise predicts the occurrence of null subjects if early finite verbs are to be analyzed as "disguised non-finite forms". (11) gives a summary of the predictions and the results of the data analyses for French as carried out by Crisma (1992), Hamann (2000 and 2002) and Levow (1995).

(11)   *Predictions*

	infinitives in constituent questions	null subjects in finite fronted constituent questions
UCC+	+	+
Truncation	–	–
Results	–	–

Crisma (1992) discusses Philippe in the age range of 2;1,19–2;3,21 where he still produces null subjects; Levow (1995) additionally considers Grégoire

(1;8–2;3), Daniel (1;8–1;11) and Nathalie (1;9–2;3), Hamann (2000) introduces counts on Augustin (2;0,2–2;9,30) and Marie (1;8,26–2;3,3), whereas Hamann (2002) reviews the data of all of these children. The remarkable fact for French is that in the total of 166 fronted Wh-questions produced by these 6 children no root infinitive is found at all. Hence the minus mark in the respective column in (11) is a clear and uncontroversial result for French. This may be surprising as Roeper and Rohrbacher (2000) report on a substantial number of non-finite constituent questions in English (which can also show a null subject). The explanation for this difference may be sought in the differences of verb morphology in English and French, particularly the fact that infinitives in English are bare stems and that auxiliaries may be missing in English questions whereas they are always present in French. Note that in finite fronted Wh-questions practically no null subjects have been found by Roeper and Rohrbacher (2000), a fact which leads Rizzi (2000) to postulate two kinds of null subjects in child language, PRO and the null subject licensed by truncation.

The claim that there is no occurrence of null subjects in finite fronted Wh-questions is, of course, an idealization. In fact, there are 5 null subjects in the 166 questions produced by the 6 children which amounts to 3 % and could be interpreted as performance errors. This interpretation suggests itself for Grégoire who produces two of these null subjects: *où est* – 'where is' and *quoi fait* – 'what does', where the latter has gone 'wrong' anyway in that he tries to front 'quoi', an interrogative pronoun which can only be used in-situ. The remaining 3 null subjects are found in Augustin's 8 fronted Wh-questions. However, these all involve *pourquoi*, which has been analyzed as base-generated by Rizzi (1990). They are thus of a different type and may be left aside (see Hamann 2000). Hence the minus mark in the relevant column in (11), even if it is an idealization, is well motivated nonetheless.

One problem concerning these clear-cut results has been pointed out by Phillips (1995). This is the fact that questions tend to employ auxiliaries or copulas and thus an asymmetry concerning declaratives and questions is expected due to the asymmetry discussed in 4.2. Note, however, that finite Wh-in-situ questions, which also tend to use auxiliaries and copulas, admit null subjects to about 22 % in the productions of Marie and Augustin. Moreover, it was shown in 4.2. that auxiliaries and copulas admit subject omission, even if to a lesser degree than main verbs, so that we might expect a null subject rate in finite fronted Wh-questions corresponding to the overall rate of subject omission on auxiliaries and copulas (26 %, see Table 3). This is clearly not the result we obtain.[5]

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5. See Plunkett (1999, 2001) for a different view and some different results concerning null subjects in French constituent questions.

With respect to the phenomena of infinitive use, subject omission and especially subject omission in finite contexts, truncation seems to cover more of the French data than the UCC account. The rest of the paper will try to consolidate this finding also with respect to other accounts.

5.   The delay of complement clitics

5.1.   *The development of unimpaired children and children with SLI*

In the following more phenomena of French language development will be investigated with respect to the theories introduced in Section 1.2. As the data on normally developing children remain equivocal in some instances, data of French children with specific language impairment will also be considered for this purpose. Note that the younger SLI children's development in the areas discussed so far much resemble the data presented for the normal children (see Hamann et al. in press), thus establishing general trends of development, but not contributing any new aspects to the arguments.

The comparison with the development of SLI children suggests itself nonetheless as it has been assumed that these children show a parallel but delayed development with respect to unimpaired children. This view was discussed by Rice and Wexler (1995) and finds corroboration for French in the study of Hamann et al. (in press) with respect to the use of non-finite verb forms, general subject omission, subject omission in finite contexts and subject clitics. Rice and Wexler (1995) and Wexler (in press) suggest in fact that SLI children show a prolonged or extended optional infinitive phase that is considered to be a phenotype of English SLI and is explained by these authors' current analysis of infinitive use, specifically by the UCC hypothesis. Under this view, data from SLI children provide direct evidence for or against the UCC. However, even if the UCC is not adopted, the assumption of a parallel but delayed development allows us to interpret the developmental profiles of SLI children as a slow motion close-up of details that could be masked by the speed of normal development.

Moreover, even if the development of unimpaired and of SLI children does not follow exactly the same paths, it is expected that phenomena which are developmentally related due to a shared property of early syntax or the early interface will be impaired to more or less the same degree. In the present context this expectation particularly concerns the assumptions that infinitives and determiner or pronoun omission are both due to the underspecification of a specific feature or to the overuse of a special interface condition. It also concerns the assumption that the use of infinitives and the omission of complement clitics are both derived from a specific constraint of the developing grammar, the

UCC. In contrast, phenomena that are not related by an underlying common principle are expected to show selective impairment.

As a first area of interest, the so called "delay of object clitics" is investigated. This phenomenon has received much attention in the last decade and has been observed for unimpaired (Friedemann 1992, Hamann et al. 1996, Jakubowicz et al. 1996) as well as for SLI children (Hamann et al in press, Jakubowicz et al. 1998), for bilinguals (Hulk 1997, Hulk and Müller 2000, Kaiser 1994) or early L2 acquisition (Belletti and Hamann in press, White 1996). It is especially interesting as it has been suggested that it might be directly related to the use of infinitives by the UCC, see Section 1.2. and Wexler (in press).

5.2.   *The phenomenon*

During the development of Augustin's pronominal system subject clitics appeared systematically from the second birthday whereas complement clitics appeared at least 6 months later, which observation lead to the term "delay" of complement clitics discussed by Hamann et al. (1996).[6] The phenomenon was also discussed by Jakubowicz et al. (1997) who found the same "delay" in French children with an MLU less than 3.5 in a cross-sectional study of elicited production.

It has also been noted that complement omissions are frequent during the third year of life, but that the rate of omissions and of lexical objects gradually decreases in favor of the use of object clitics, as shown in Table 4 for Augustin. Augustin's productions at 2;6,16, at 2;9,2 and at 2;9,30 in Table 4 are an indication of this development, which has also been described by Jakubowicz et al. (1996) and is discussed more fully in Hamann (2002).

5.3.   *Infinitives and the delay of object clitics*

We now turn to an analysis of the data on infinitive use and the omission or avoidance of complement clitics. It is in this area that data on normally devel-

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6. Recall that French has a paradigm of strong pronouns *(moi,toi, lui, …)* which is complemented by a paradigm of weak and clitic pronouns. Subject clitics are *je, tu, il, elle, on, nous, vous, ils, elles* and complement clitics are *me, te, le, la, nous, vous, les* with the reflexive third person singular clitic *se*. There is a controversy as to the analysis of subject clitics as true heads or weak pronouns, whereas complement clitics are uniformly analyzed as heads. Following Cardinaletti and Starke (2000), Friedemann (1995), Laenzlinger and Shlonsky (1997) and much recent literature, I take French subject clitics to be weak pronouns filling an XP position in syntax (see also Kayne 1974, Rizzi and Roberts 1989, Haverkort and Weissenborn 2000). For a different view see Roberge (1990), Kaiser (1994), Hulk (1997) and Jakubowicz et al. (1998).

Table 4. The use of object clitics in comparison with lexical objects and object omissions in the Augustin-corpus

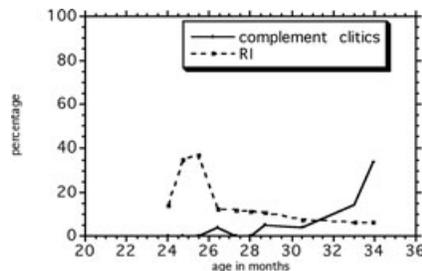| Age	comp. contexts	null objects	%	object clitics	%	lexical objects	%
2;0,2	12	4	33.3	0	0	8	66.6
2;0,23	20	5	25	0	0	15	75
2;1,15	10	4	40	0	0	6	60
2;2,13	19	5	26.3	1	3.8	13	69.9
2;3,10	23	9	39.1	0	0	14	60.9
2;4,1	20	5	25	0	0	15	75
2;4,22	21	4	19.0	1	5.0	16	76
2;6,16	50	10	20	2	3.9	38	76.1
2;9,2	69	10	14.4	10	14.3	49	71.3
2;9,30	65	14	21.5	22	33.9	29	44.7
Total	309	70	22.6	36	11.6	203	65.7

Figure 4. Augustin's use of complement clitics and infinitives

oping children remain unclear as to a link of these two phenomena, but that data on SLI children may give an indication that too close a link should not be postulated.

Figure 4 shows the rates of Augustin's use of infinitives and complement clitics at each recording. It can be observed that complement clitics appear to come in when the use of infinitives begins to decline. However, Augustin's use of infinitives remains practically stable (around the 10 % mark) from the age of 2;2 till the end of recording whereas his use of complement clitics shows a noticeable increase only between the age of 2;6 and the age of 2;9 and afterwards increases even more sharply. The data therefore are equivocal as to the existence of a direct link between the two phenomena.

Table 5. The use of subject and complement clitics in the speech of adults from the Augustin corpus, of Augustin and of the younger and older group of SLI children

	Adults	%	Aug 2.0–2.9	%	Aug 2.10	%	SLI 3.10–5.0	%	SLI 5.7–7.11	%
s-clitics	2.332	76.4	179	92.7	99	81.8	333	91.7	681	92.5
o-clitics	791	23.6	14	7.3	22	18.2	30	8.3	55	7.5
Total	3.051		193		121		363		736	

The data on French children with SLI are clearer in this respect. Jakubowicz et al. (1998) showed that in elicited production, infinitives are not characteristic for 13 French children with SLI between the ages of 5;7 and 13;1, whereas omissions of complement clitics are: these SLI children did not produce non-finite forms but frequently omitted complement clitics.

In a study on the spontaneous productions in the first recordings of the 11 SLI children described in Section 2, Hamann et al. (in press) report that the 6 younger children with SLI used non-finite forms. All of them had more than 5 % non-finite forms and 2 of them had rates as high as 70 %. The results on the older children of the group corroborate the findings of Jakubowicz et al. (1998), all of these children used less than 5 % non-finite forms. Moreover, 9 of the children have high rates of clitic subjects (between 78 % and 96 %), and only the two children with the high rates of non-finite forms tend more to subject omission than to the use of a subject clitic.

In both groups, the use of complement clitics remains rather limited. The younger group omits complements in 16 % of obligatory contexts and produces only 18 % complement clitics which is a much lower rate than Augustin's at the age of roughly 2;10. The older group has fewer omissions (8 %), but still produces complement clitics only in 23 % of the obligatory contexts and appears to replace omissions by lexical material. Moreover, a comparison of the rate of subject and complement clitics used by adults, by Augustin, and by the two groups of SLI children given in Table 5 shows the stagnation in the use of complement clitics by SLI children very clearly. Note that the older SLI children are still comparable to Augustin between the ages of 2;0 and 2;9, although they do not use non-finite forms any more. This is clearly seen also in some individual cases, as that of Noëlle, who has 22.5 % complement omissions but no non-finite forms (0.3 %) at the age of 6;9. See Hamann et al. (in press) for more details.

The data presented in this section clearly indicate that a strong reluctance to use complement clitics persists in the SLI population well beyond the root infinitive phase. So the predictions of the UCC are too strong in this respect,

and it can be concluded that the development of complement clitics should not be too closely related to other developmental phenomena. This will emerge even more clearly from the data and discussion in Section 6.

6.   Determiner omission

The other phenomenon which has been associated with the infinitive phase is the omission of determiners. Especially the approaches of Hoekstra and Hyams (1996) or of Avrutin (1999) discussed in Section 1.2.3. predict a close parallel in the development of these two phenomena. As in the case of non-finite forms and complement clitics, data from unimpaired children remain equivocal and will be supplemented by data from impaired children. In a second step, the development of determiners and complement clitics will also be compared with each other. This is interesting because the paradigms partially overlap (*le* 'him/the(m)', *la* 'her/the(f)') and because both are usually analyzed as D-heads.

6.1.   *Determiner omission and non-finite utterances*

Figure 5 shows the development of non-finite utterances and determiner omission in the normally developing child Marie. Note that this count was made on the basis of all non-finite utterances, including bare participles, so that the percentages here are slightly higher than those given in Table 1 with the consequence that Marie has the highest rate of non-finite utterances in the beginning of recording (which does not hold for her use of root infinitives). Determiner omission was calculated with respect to obligatory contexts.

It can be observed in Figure 5 that from a certain point, approximately from the age of 2.2., non-finite utterances and determiner omissions develop in the same fashion in Marie's speech. Before that age the two curves show differences. The same observations can be made for Louis with the difference that Louis starts with 100 % determiner omissions and has a parallel development of non-finite utterances and determiner omissions from the second birthday (see Hamann et al. 2002).

As with complement clitics and infinitives, the data on unimpaired children do not allow a decision as to whether there is indeed a close parallel between the two phenomena or whether the initial differences are significant enough to argue against such a general parallel.

Regarding French children with SLI, Jakubowicz et al. (1998) showed with an experiment eliciting isolated DPs that practically no determiners were omitted by their group of children aged between 5;7 and 13;1. A slightly different picture emerged from an analysis of the spontaneous productions of the
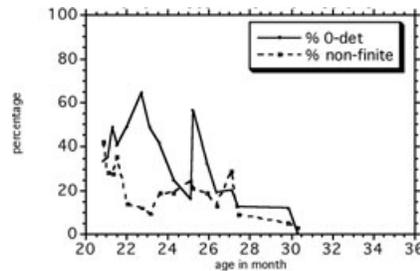
Figure 5. Marie's determiner omissions and non-finite utterances

younger group of children described in Section 2. In this group of 6 young SLI children (3;10–5;0) determiner omission occurred on isolated DPs at a rate of 11 % and at a rate of 18 % on DPs which occurred as parts of syntactic phrases (clauses or prepositional phrases). So those children who occasionally used non-finite structures (see Section 5.3) also occasionally omitted determiners. In the older children determiner omission was as rare as the use of infinitives, corroborating Jakubowicz et al. (1998)'s findings. So far the data seem to argue for a parallel development of these two phenomena.

In the group of younger children Hamann et al. (2002) found a remarkable dissociation, however. Rafaelle, one of the children with 70 % of non-finite utterances, only had 15.2 % determiner omissions in her first recording and showed a fast subsequent drop of this phenomenon to a rate of 5.2 % at the age of 4;1. Her rate of non-finite structures declines in the following months but remains substantial for a certain time (44 % at 4;1) and practically disappears only one year later. In contrast to this, Loris has a low rate of non-finite structures at the age of 4;7 (13.3 %) but a substantial rate of determiner omissions (41.6 %). His rate of non-finite structures has dropped to 3.9 % already in the next recording at the age of 4;9, whereas determiner omissions still occur at a rate of 35.3 % at the age of 5;0.

By analyzing the use of auxiliaries and copulas in the speech of Loris and Rafaelle, Hamann et al. (2002) excluded that the observed dissociation of determiner omission and the use of non-finite structures might be due to a selective deficit in either bound or free morphology. They conclusively demonstrated that Rafaelle's problems are centered on the verbal domain, whereas Loris's problems concern the nominal, not the verbal domain.

These results therefore show that there may be a dissociation in the development of the verbal and the nominal domain even though both children arrive at the target structures in the end (with a considerable delay with respect to their unimpaired peers). So this dissociation seems problematic for accounts

of development which postulate a close relationship between the verbal and nominal functional domains.

6.2.   *Determiner omission and the omission of complement clitics*

Especially discourse oriented accounts (see Avrutin 1999, Hyams 1996, Schaeffer 1997) tend to predict a parallel in the acquisition of determiners, which reflects the acquisition of the proper anchoring procedure for DPs, and the acquisition of pronouns. In particular, definite DPs and pronouns should follow the same paths as both are anchored to a salient element in the previous discourse. Schaeffer (1997) therefore specifically predicts that determiners and object clitics in Dutch should develop in a parallel fashion. Because of the fact that subjects are often omitted in the phase under discussion, these predictions are seldom extended to subject pronouns. A look at subject clitics at the end of Section 6 will prove instructive, however, so that this area should not be a priori excluded from the considerations.

In French acquisition, the omission of determiners and of complement clitics clearly does not show the same profile. As has been remarked in the literature the acquisition of determiners by monolingual French children, even if children start with total omission, is very fast and is, in fact, faster than in Germanic languages (see Chierchia et al. 2001). This is in sharp contrast with the "delay" of complement clitics described above. If we look at Augustin, we note that at the age of 2;6,16 he only uses 3.9 % complement clitics, but already has 90 % overt determiners (including placeholders in this calculation). The fast acquisition of determiners has been variously explained by the overwhelming evidence the French child finds in the data (which is an argument of a statistical nature) or, on a more theoretical level, by the fact that the determiner parameter is easy to fix in French as there are few exceptions to the rule that every DP (including mass nouns and plurals) needs a determiner (see Chierchia et al. 2001).

Looking at the development of correct determiner use (excluding placeholders) and the use of complement clitics may not allow a direct comparison even if the rates we calculate are restricted to determiner contexts and complement contexts respectively: Determiners are obligatory in every instance, whereas the use of complement clitics depends on discourse.[7] The development of both

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7. For this calculation, placeholders were not considered because they were not included in the counts for complement clitics. In the latter context it mostly cannot be decided if a syllabic placeholder acts as auxiliary, as subject clitic or as object clitic. Therefore placeholders were omitted from the counts of complement clitics and subsequently from the count of determiners.
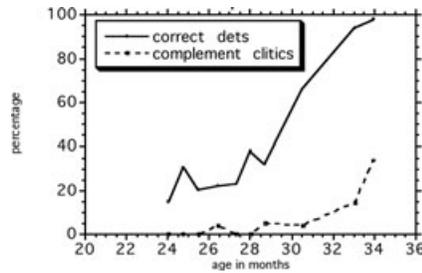
Figure 6. Augustin's use of correct determiners and complement clitics

phenomena is indicative enough, however, as shown in Figure 6 for Augustin.

Especially the differences in the development of the two phenomena have to be noted. Determiners are used correctly (around 20 %) from the beginning, whereas there are no complements clitics at all in a first phase. Augustin's use of correct determiners then dramatically accelerates at the age of 2;4,22 whereas his use of complement clitics increases only at the age of 2;6,16. Note also that this increase is not as steep as that of determiners.

Before we turn to the development of SLI children, let us point out that the development of determiners is reminiscent of the development of subject clitics. Table 6 compares Augustin's development of subject clitics, determiners and complement clitics. It is striking that up to the age of 2;3,10, determiner use and the use of subject clitics seems to be about equal, though after that age determiner use develops faster than the use of subject clitics.

As to French children with SLI, it has already been discussed (see Section 5.3. and 6.1.) that determiner omission is rare, especially in older children, whereas high rates of complement clitic omissions persist in spontaneous and elicited production (see Chillier et al. 2001, Hamann et al. in press, and Jakubowicz et al. 1998). Moreover, the development of complement clitics and determiners is clearly not the same for Rafaelle. She has 84.8% overt determiners at the age of 3;10 and no overt complement clitic at the same time. Looking at omissions, she has a high rate of clitic omission in her first recording (47.1 % clitic omission compared to 15.2 % determiner omission) and at the age of 4;8 she produces only 10 % overt complement clitics in her spontaneous speech compared to about 97 % correct uses of determiners (and finite verbal forms). Loris shows the opposite picture again: he has less omissions of complement clitics (21.1 %) than determiner omissions (41.1 %) in his first recording, (see Hamann et al. 2002).

Adding the observation that subject clitics are usually mastered by French children with SLI (82–96 %), the results on the development of SLI children

Table 6. Occurrences of subject clitics, determiners and object clitics in relevant utterances in the Augustin-corpus

Age (y;m,d)	% subject clitics in verbal utterances	% correct determiners in relevant contexts	% complement clitics in relevant utterances
2;0,2	29.8	14.7	0
2;0,23	13.3	30.4	0
2;1,15	18.2	20.3	0
2;2,13	29.1	22.0	3.8
2;3,10	26.6	22.8	0
2;4,1	16.1	38.0	0
2;4,22	20.4	38.0	5.0
2;6,16	21.6	66.1	3.9
2;9,2	45.7	93.9	14.3
2;9,30	63.4	98.0	33.9

much resemble those for unimpaired children. There is a certain similarity in the development of subject clitics and determiners, but no such similarity in the use of determiners and complement clitics.

7.   Discussion and conclusion

Several phenomena were investigated in this study on the acquisition of French: the use of null subjects and infinitives, the use of pronominal clitics and the use of determiners in child speech. Special attention was given to the similarity or difference of profiles in development. In some instances, not only data from normal development, but also data from the language acquisition of children with SLI were consulted.

It was found that French shows a strong and prolonged phase of null subject use which roughly coincides with the use of infinitives, although high rates of infinitives occur only during a short period of time in the speech of French children. An investigation of specific contexts of subject omission showed that finite null subjects, though rarer than null subjects on infinitives, are found at a substantial rate. Recall from Table 2 that the average is 26.8 % for Augustin, 27.5 % for Marie, 24.5 % for Louis, 23.0 % for Philippe, which gives a mean of 25.5 % for these children. (For the Canadian children, who have higher uses of infinitives, the averages of finite null subjects are even higher). Moreover, null subjects occur with auxiliaries and copular verbs (25.9 % on average), although they occur more often with finite lexical verbs (34.2 % on average). A subse-

quent examination of finite constituent questions with fronted Wh-elements showed that null subjects are extremely rare (3 %) in this context.

Measuring the three main theories introduced in Section 1.2 against this first group of findings, it was shown that only truncation can deal directly with the occurrence of finite null subjects and their rareness in finite fronted constituent questions. Theories assuming underspecification or lack of tense, have to postulate a special kind of null subject for finite contexts or have to assume that verbal forms hitherto analyzed as finite are in fact "disguised non-finite forms". The latter assumption is problematic in view of the results about the non-occurrence of null subjects in finite fronted constituent questions. This conclusion is enforced by the finding that null subjects can occur with auxiliaries and copular verbs. This implies that even if auxiliaries and copulas are the predominant verb forms in questions and null subjects are less frequent on these forms, still about 26 % null subjects in finite fronted constituent questions are expected. Such a percentage is not found, however. The reanalysis of finite forms as "non-finite" therefore cannot explain the data, and a theory that concentrates on the positional constraints on null subjects seems to cover more of the developmental facts.

Extending the investigation to the use of complement (and subject) clitics and the relation of clitic development to the use of infinitives showed that in normal language development complement clitics are delayed with respect to subject clitics and that complement clitics seem to appear when infinitives begin to decline. A close relation between the use of infinitives and complement clitics cannot be established, however, because in the corpus of Augustin infinitive use remains stable at a low rate (10 %) for a long time whereas complement clitics start to develop fast only in the last recordings. A comparison with SLI children showed that there is no link between the use of non-finite forms and complement clitics. Older SLI children use infinitives and other non-finite forms very rarely (<5 %) but still show high rates of clitic omission or at least stagnate in their use of overt complement clitics. As to subject clitics, they appear early in normal development and also seem unproblematic for SLI children.

We can conclude that the much discussed phenomenon of the "delay" of complement clitics in French acquisition should not be too closely linked to the use of infinitives or non-finite forms. This is problematic for some discourse oriented approaches, but especially for the UCC which explicitly derives such a link.

The last area examined in detail was the acquisition of determiners. Special attention was given to a comparison of determiner omission and the use of non-finite forms and to a comparison of determiner and complement clitic use. As for the relation of complement clitics and non-finite forms, the analysis of data from normal language development could not decide the issue of a theoretical

link between these two phenomena. In Marie's language development the two profiles look very much alike from the age of 2;2 but are different before this point. Data from SLI, especially the examination of Rafaelle and Loris, show a dissociation of the nominal and the verbal domain. Rafaelle has a high rate of non-finite structures and a much lower rate of determiner drop while Loris shows the opposite, a high rate of determiner drop and a much lower rate of non-finite structures.

As to the comparison of the use of determiners and complement clitics, both clearly show a different development in unimpaired as well as SLI children. Determiners are used by both groups at high rates when the use of complement clitics is still extremely low as shown by the normally developing child Augustin, and by Rafaelle, a child with SLI. Subject clitics, on the other hand, seem to develop in parallel to determiners in a first phase in normal language development, whereas from a certain point, determiner use accelerates much faster than the use of subject clitics. Both, subject clitics and determiners, seem to be unproblematic for SLI children.

The finding that the nominal and the verbal functional domain may be dissociated in SLI seems to cause problems especially for theories which derive determiner omission and non-finite forms by the assumption that a specific feature common to both domains may be underspecified. This conclusion holds even if SLI is not "parallel" development but proves to be deviant from unimpaired acquisition. If an impairment is observed in one domain and this is due to a difficulty with one particular feature, it follows directly that this difficulty must also lead to problems in the other domain. The dissociation also shows that discourse based theories must make additional assumptions in order to explain that grammatical discourse anchorage may be achieved fast in one domain but may take some time till it is fully established in the other. If there is only one mechanism driving the child to accept "extra-grammatical" anchorage and this mechanism is wholly located in the interface, it may be difficult to introduce such assumptions. If, however, special syntactic properties of certain functional elements can influence this mechanism, it could be argued that the interface condition may become target-like at different times for the nominal and the verbal domain (see Hamann 2002 for a discussion of similar problems). Note also that the introduction of a special anchoring mechanism for clitics as compared to full DPs (see Baauw, Avrutin and Philip 2002) may explain the "delay" of complement clitics with respect to determiner use. It cannot explain why the use of subject clitics and determiners looks so much alike in a first phase – unless complement clitics and subject clitics are quite different in their syntax. This has indeed been suggested by much recent theoretical work (see Belletti 1999, Cardinaletti and Starke 2000) and was also assumed by Hamann et al. (1996) in their discussion of the "delay of complement clitics". Under this view, complement clitics are genuine heads whereas subject clitics are less

deficient and have DP status, even if they lack a layer of structure present in full DPs.

Although a synthesis of this discussion must necessarily remain unsatisfactory in many respects, especially in view of the fact that the nature of complement clitics is very controversial, I will nevertheless attempt an explanation of the developmental data. Let us assume a theory in the spirit of truncation with the two principles of *structural economy* and *categorial uniformity* in competition with each other. As such a theory does not a priori postulate a link in the development of the verbal and the nominal functional domains it appears to be a reasonable choice. With the additional assumption about the licensing of empty categories described in Section 1.2.1., most of the specific phenomena of null subject use in child French are explained. It even follows that more null subjects will occur with infinitives than with finite verbs because a PRO null subject will always be licensed in untensed environments. As to the other asymmetries, it may follow from the nature of auxiliaries that special licensing conditions are required (Rizzi 2000).

The theory also predicts that as long as categorial uniformity has not been reached for clauses, truncation on the clause level can occur. This explains the cross-linguistic observation that infinitives, null subjects, and even finite null subjects are closely related. Truncation in the nominal domain does not simply depend on a general option to cut off (internal) structure, but is available only as long as categorial uniformity on the nominal level has not been reached. This, as has been argued by Chierchia et al. (2001), is the case only during a very short phase in French, where bare NPs can serve as arguments in child speech. Categorial uniformity, due to the clear evidence for the setting of the French determiner parameter, is reached very fast with a categorization of arguments as DPs, and omissions of determiners are not licensed after that.

With the additional condition that categorial uniformity must be reached before any interface condition can come into play, the idea of proper discourse anchorage can be reintegrated. As soon as different nominal elements are recognized as structurally alike, they will be submitted to the same anchoring mechanisms. As soon as clausal uniformity is reached, and this need not be simultaneous, propositions must be properly anchored which implies that their temporal index must be specified. Under this view, the initially similar profile of subject clitics is explained if they are to be treated as DPs. As long as categorial uniformity is not acquired for arguments, bare nouns can be used and subject clitics can be omitted without violating anchoring conditions. The fact that the development of subject clitics is not quite as straightforward and fast as that of lexical DPs also finds an easy explanation because the possibility to omit subjects additionally depends on the verbal domain and the truncation option available there.

Complement clitics will be fragile as long as their categorial status is unclear.[8] This may be for a long time as conflicting evidence has to be weighed: There is the semantic argument status of the clitic warring with the evidence of it's position in a slot for a verbal functional head. As placement errors are very rare in normal development, it can be concluded that the affinity to the verbal functional structure is acquired early. On the other hand, the principle of categorial uniformity may lead the child to assume that the clitic, being an argument, should be a full DP. As long as this conflict is not resolved, the child may opt for a *pro* in argument position and for omitting the clitic. It is possible that only the acquisition of other clitics that are not arguments of the same straightforward sort can resolve this dilemma. So the acquisition of *y-* 'there' and *en-* 'of that' or even the evidence of clusters like *Il ne le prend pas-* 'he does not take it' normally absent from spoken French, may be decisive for the correct categorization of complement clitics. Note that the correct classification depends neither on categorial uniformity for clauses alone, nor on the uniform categorization of DPs. It does depend on the acquisition and subsequent categorisation of a paradigm of possible fillers for a specific slot in the verbal functional domain, so that difficulties in the verbal domain may exacerbate the problem as was argued in Hamann et al. (2002).

Even if this synthesis remains sketchy and leaves many questions unanswered it may serve as a starting point for further research. In any case, it can be concluded from this study that some phenomena of language acquisition are not as closely related as has been hitherto assumed. As a consequence some approaches to development are too strong in their predictions, whereas an "economy" driven approach, as, e.g., the truncation approach in its recent form, is supple enough to accommodate the main phenomena discussed here as well as their loose relations to each other. It will also have emerged that the delay of complement clitics, observed not only in unimpaired acquisition but also in SLI and in bilingual or early L2 acquisition, when seen in relation to other developmental phenomena, deserves special attention and will remain one of the challenges of future investigations.

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8. See Jakubowicz et al. (1998) for a similar idea about a difficulty with complement clitics. They argue that these clitics are especially difficult because they are inserted in a 'non-canonical argument position' which adds to their computational complexity.

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