# Copula Omission in early Child French 

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#### Abstract

In language acquisition research, the omission of the copula verb as a case of functional element dropping has repeatedly been attested in Western European languages, but not often thoroughly analyzed. This study investigates the omission of the French copula être in monolingual L1-acquisition by integrating three different viewpoints: first, the Truncation Hypothesis advanced by Luigi Rizzi in order to account for Root-Infinitive clauses is adopted as a model for the syntactic structure of Copula Omissions. Second, the reported syntactic and semantic restrictions regulating Copula Omission, notably the copula predicate's semantic type, are discussed in the light of Maienborn's (2003) study on the copula's logic form. It is argued that the frequently cited distinction between stage-level and individual-level predicates is in fact based pragmatically rather than semantically or syntactically. Lastly, the productive use of Left and Right Dislocation in spoken French is analyzed regarding its repercussions on the French information structure, pragmatical discourse considerations, as well as its prosody. It is proposed that dislocation contexts favor French Copula Omission in child speech because of their impact on the salience of fragmentary utterances. This hypothesis is tested in comparison to the correlation with predicate type by analyzing the CHILDES recordings of three monolingual French children. The results show that French Copula Omission correlates with dislocation as well as with predicate type in a significant way. This confirms that children exploit pragmatical economy considerations when producing fragmentary structures, which may explain why child speech omissions often prove optional.


Keywords: copula; corpus study; French L1-acquisition; interface phenomenon; Universal Grammar

## Contents

1. Introduction ..... 2
2. Root Infinitives and Copula Omission ..... 4
2.1. Root Infinitives in Child Speech ..... 4
2.2. Copula Omission in Child Speech ..... 10
2.3. Summary ..... 17
3. Properties of French Syntax ..... 18
3.1. The French Copula: Morphology and Acquisition of être ..... 18
3.2. Dislocation and Topics ..... 19
3.3. Summary ..... 24
4. A Unified Model of Copula Omission in early Child French ..... 25
5. A Corpus Study of French Copula Omission ..... 27
5.1. The Data ..... 28
5.2. Syntactic Analysis ..... 31
5.3. Prosodic Analysis ..... 37
6. Conclusion ..... 43
References ..... 45
Appendix ..... 47
A. Excluded Clefts ..... 47
B. Copula Omissions ..... 51
C. Prosodic Analysis ..... 59

## 1. Introduction

Within scientific natural language investigation, the domain of child language acquisition has always been a particular point of interest for linguistic research, in one way or another. This is certainly due to its empirical basis being an in vivo example of language creation, at least on the level of speech community individuals. The generative capacity of language, among other features, has led to the question of how children can abstract what they perceive in natural speech in order to become competent native speakers in any given idiom. Regarding this problem, the theory of Universal Grammar (UG) underlying an according model of Generative Syntax, promoted and elaborated by Noam Chomsky (1965, 1977, 1981, 1995), has become an especially useful and popular tool for linguistic research. Originally supported by sophisticated reflections on classical philosophers' remarks on the nativist features of language (Chomsky
1956), UG today provides the framework for abundant research papers. ${ }^{1}$ Interestingly enough, however, recent work in the line of language acquisition seems to deviate from some theoretical and methodological standards postulated by Chomsky (Hardie 2016, Kempson 2016). In particular, the progress of Computational Linguistics keeps facilitating the linguistic work with concrete acquisition data. This is appealing for generative research because acquisition studies cannot solely rely on speaker judgements. ${ }^{2}$ Corpus studies are being used for empirical as well as rationalist work, and they can prove helpful for exploring how UG might be organized internally. At the same time, it is difficult, if not impossible, to distinguish syntactically motivated patterns in child speech from simple cognitive deficiency effects, which means that conclusions about the nature of UG must be reached very carefully. Still, the observation of systematic patterns during the steps of first language acquisition suggests that an internal language 'program' exists from birth.

A very typical pattern in child speech across languages and individuals is in this regard the dropping, or omission, of functional elements. It has been observed that children drop subjects in non-pro-drop languages, inflectional features in inflection-marked languages, determiners, auxiliaries etc. One omission phenomenon in particular is the omission of the respective copula verb as in (1), which has been attested for several European languages, like German, English, French or Italian (Becker 2002, Witzmann \& Müller 2007, Franchi 2006, among others).
(1) I in the kitchen.
(Becker 2002: 37)

Around the two-word stage, children produce bare combinations of subject and predicate alongside target-like copular phrases. Copula Omission (CO) thus appears as an optional syntactic feature in early child speech. Since detailed studies on this feature have mainly focused on English (see the work of M. Becker), I want to investigate in the present paper the structural features of Copula Omission in early Child French. For this, I am going to consider the syntactic models advanced for Root Infinitives (RI), a related phenomenon on lexical verbs arising around the same acquisition period (Chapter 2.1), and for Copula Omission (Chapter 2.2), including a discussion on the nature and impact of copular predicates in general. Then, I am going to provide necessary reflections on the particularities of French syntax, seeing that these may motivate observable deviations from the known data of other languages. This section features the inflectional paradigm of the French copula être (Chapter 3.1) as well as the productive construction of XP-dislocation in spoken French (Chapter 3.2). Afterwards, I will propose an integrative model of early Child French Copula Omission (Chapter 4) the implications of which I am going to test using the acquisition data of three monolingual French children taken from the CHILDES database (Chapter 5.1). The corpus study will be divided into a syntactic (Chapter 5.2) as well as a prosodic analysis (Chapter 5.3). Lastly, I am going to discuss the results of this study and draw final conclusions (Chapter 6).

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## 2. Root Infinitives and Copula Omission

The omission of functional material in child speech has been attested cross-linguistically for decades (e.g. Becker 2004: 157), including French (Rasetti 2003: 2). Early in the process of language acquisition, both the dropping of lexical elements like determiners, subjects (in non-prodrop languages), objects or even lexical verbs, and the dropping of grammatical morphemes such as inflectional affixes are commonly observable (Becker 2004: 157). Building on the work in Rizzi (1993/94) in particular, multiple studies from the 2000s have subsequently focused on the phenomenon of inflectional morpheme omission that gives rise to uninflected verbal structures in matrix clauses of inflectional languages as in (2), referred to as Root Infinitives.
(2) Mommy not go.
(Hoekstra \& Hyams 1998: 85)
Generative studies like Rasetti (2003), Rizzi (2005), DeCat (2006) etc. inspect RI features in various (European) languages like English, French, Italian, Dutch, German and so on. At the same time, some studies (like Witzmann \& Müller 2007 for bilingual French-German, Franchi 2006 and Caprin \& Guasti 2006 for Italian, Becker 2002, 2004 for English) have tried to explain the phenomenon of Copula Omission observed systematically in the respective corpora at around the same age/acquisition period during which RIs are produced. These studies all have in common that they reference, albeit to various degrees, the Truncation Hypothesis, explained below, developed by Rizzi (1993/94) in order to account for RI structures as well as COs. Under the approach of Becker or Franchi, for instance, COs and RIs share the same underlying syntactic principles. Since COs have consequently been described with reference to the RI discussion, I will approach the features and syntax of COs in Child French by first introducing the well observed phenomenon of Root Infinitives. Then, I am going to discuss whether Copula Omission can be analyzed as a subfield of Root Infinitive structures or not. Finally, I will determine to what extent the type of predication may or may not influence the omission of the copula.

### 2.1. Root Infinitives in Child Speech

Around the age of two, children acquiring inflectional languages typically produce phrases like (3a) where a matrix clause that requires a finite verb in adult speech appears non-finite because the main verb is not inflected (Rizzi 1993/94: 371). The given examples are part of the CHILDES corpus analyzed in Chapter 5. Any examples uttered by children in the used corpus will be cited in the same format, where the according age is given in (years;months). The examples are identified by their assigned utterance numbers. For details on the observed children, see Chapter 5.1. The transcription corresponds to the conventional CHAT format, transcription symbols are used as follows: 'xxx' stands for uninterpretable utterances, 'yyy' for uninterpretable utterances which have been coded phonetically. In these examples, I have not included the phonetic transcriptions of these instances; 'a@p' represents phonetically consistent placeholders where 'a' stands for the respective phonetic pro-form, '@f' indicates a form
specifically used in the child's family, '@i' indicates an interjection. Parentheses '()' stand for missing parts of otherwise recognizable words, '(.)' for a pause, '+' indicates interruptions, trailing off and picking up utterances likewise, '[/]' indicates a repetition by the speaker, '[//]' the retracing of an utterance including syntactic change and '[///]' a full reformulation, with angled brackets '<>' indicating the replaced material; '[<]' and ' [>]' indicate overlap with other speakers, ' $\&=$ ' represents specific noise like laughing etc. Finally, brackets ' $[=$ ! ]' may provide contextual information.

Uninflected forms as in (3a), known as Root Infinitives, arise as soon as children produce two-word utterances, i.e. at the beginning of overt syntactic combination, and they are produced alongside 'correct' adult-like structures such as (3b).

> a. la@p venir maman ?
> PRO come
> "Is mommy coming?"
> b. Christophe il vient Christophe. Christophe he comes Christophe
> "Christophe is coming."
(Antoine, 2;6, uttrn. $=38881$ )
(Antoine, 2;4, uttrn. $=31969$ )
During this phase, the production of verbal utterances overall increases notably. Rasetti (2003: 19-20) reports a doubling of verbal production between the age of two and around three years. Among these utterances, RIs are produced to various extents, depending on the acquired language, and tend to disappear gradually (ibid.: 54, Rizzi 1993/94, Hoekstra \& Hyams 1998). The cross-linguistically varying production rates of RIs as examined e.g. in Kupisch and Rinke (2008), measured in comparison to all verbal utterances at a given period, have been linked to the varying complexity of the inflectional paradigm of the studied languages: in idioms where inflectional affixes are rather numerous and diverse like Italian, Spanish or Hebrew, RIs seem to appear sporadically and they do not constitute a consistent phenomenon of child speech in these languages. This behavior is in contrast with productions in languages like German or French where the inflectional paradigm is not as rich: while Italian simple present inflection for instance varies in person and number, spoken French simple present inflection of the main verb group only differs for second-person plural, see Chapter 3.1. Here, RIs are systematically attested to a certain degree. For instance, Rasetti reports an RI rate of $11 \%$ overall in her French corpus (Rasetti 2003: 50). This has led researchers to define major language groups regarding their inflectional system, with German and French being intermediate RI languages, Italian or Hebrew non-RI languages and languages like English or Swedish, where inflection is especially poor, being definite RI languages (ibid.: 56). ${ }^{3}$ This correlation is mainly explained by the fact that especially Null Subject (NS) languages like Italian or Spanish must license dropped subjects with inflectional morphemes that are distinguishable, whereas overt subjects in French etc. allow for their predicates' inflection to be largely identical. Thus, children

[^1]acquiring NS-languages can be expected to learn the necessity of verb raising to the inflectional domain much faster than learners of, say, German or French, because they are confronted with more positive evidence, i.e. distinct inflectional affixes. RIs are then expected to be unsystematic in languages where Null Subjects are recovered by rich inflectional morphology (ibid.: 59). ${ }^{4}$ As for the behavior of Root Infinitives, the main features found across RI languages are
i) their virtual absence in main wh-interrogative clauses, as opposed to declarative clauses (Rizzi 1993/94: 376).
ii) the absence of RI forms of functional verbs like copulas or auxiliaries (ibid.: 380).

Thus, children produce phrases like (4a, c), but not like (4b, d):
(4)
> manger \# maman
> eat $_{\text {INF }}$ mommy
> b. *où manger maman ?
> where eat ${ }_{\text {INF }}$ mommy
> c. là mamie courir [/] (.) là mamie courir !
> there mommy run ${ }_{\text {INF }}$ there mommy run INF
> "Mommy's running over there!"

(Rasetti 2003: 64)
(Antoine, 2;1, uttrn. = 17995)
d. *là mamie être !
there mommy be ${ }_{\text {INF }}$
In addition, a semantic constraint on RIs has also been attested, observed in some RI languages, according to which RIs are linked to an eventivity notion of the verb (Rasetti 2003: 63, Hoekstra \& Hyams 1998: 89-90). That may be why stative verbs like to sit, to stand etc., but also auxiliaries, are not produced as RIs in the languages under discussion. ${ }^{5}$

In order to explain the existence and the common properties of functional omissions such as RIs, different theories have been advanced in the generative framework, mainly competencebased or performance-based approaches. Performance-based theories generally assume either that functional omission is motivated by economic principles, so that RIs for instance are expected to be more frequent in complex structures, or that they are the result of processing limitations due to the child's restricted cognitive capacities (Rasetti 2003: 7-8). Both approaches could explain the gradual disappearing of RIs by taking into consideration the general development of child cognition. However, Becker (2004) discusses a Performance approach to Null Subjects in non-pro-drop languages and to English Copula Omission and concludes that

[^2]there is no significant correlation between the observed phenomena and clausal complexity, which rules out processing limitations or economic principles as motivations for these phenomena. It is therefore questionable whether a performance-based model can account for the systematicity of RI production, let alone Copula Omission.

The different grammar-based models situating the cause of RIs within the child's Generative Grammar are essentially divided into two bigger groups that differ in their approach to the Universal Grammar concept established by Chomsky (1965, 1977, 1981, 1995), one assuming a Full Competence model, the other postulating UG-Maturation. Both directions are presented in Rizzi (1993/94) and Rasetti (2003), among others. I will summarize both positions with regard to Root Infinitives below in reference to the overview provided by Rasetti and Rizzi. A general overview on proposed explanatory theories and corresponding studies can be found in Kupisch and Rinke (2008: 88).

When addressing the phenomena of child speech under a UG approach, one question that immediately arises is whether the observed deviations from the target adult language are caused by an immature or incomplete UG or not. The widely known observation that the basic word ordering of native languages is respected consistently and from the onset of child speech suggests, among other examples, that at least some major UG parameters are generally fixed very early on (Rizzi 1993/94: 373). So why is child speech so deviant from its adult counterpart?

Full Competence models assume that UG itself is always fully operative, so language maturational effects are explained through the gradual development of other acquisition domains such as the lexicon. These approaches may also include performance or processing limitations as factors constraining child language output. Regarding parameter setting, it has been proposed that some parameters may be fixed incorrectly very early, so that they must be corrected later. This would explain why child language features structures that are typical for different languages the child has never been exposed to, like Null Subjects in Child French.

Maturational approaches, however, propose that an early UG may be somewhat underspecified with respect to some principles, essentially not being fully operative yet, but possibly programmed to develop over time. Consequently, the child grammar differs from the adult grammar and gradually matures, a concept which relies partially on the notion of biologically encoded growth of organisms affecting the state of UG (Rasetti 2003: 5-6).

When it comes to the analysis of material dropping, competence-based models may rely on parametrical operations or extra-grammatical constraints, since the child grammar is taken to be adult-like. Maturational models, however, may postulate the initial inactivity of certain UG principles that become active over time. In this context, maturational approaches need to be cautious regarding to what extent UG principles are inactive. Otherwise, any deviation could be explained by some kind of maturation (ibid.: 7).

A prominent theory on Root Infinitives in child speech is the Truncation Hypothesis developed by Rizzi (1993/94), originally under a maturational approach; it has later been extended in Rizzi (2005) in order to account for adult speech phenomena as well, taking into consideration cartographical assumptions about the clausal periphery and basically substituting principle inoperativeness by parametrical operations.

The basic assumption of Rizzi is that children, unlike adults, may be capable of generating the root of a clause, i.e. its highest head, below CP at varying nodes: while ForceP is generally assumed to be the root of any clausal type at the left periphery in cartographical studies ${ }^{6}$, principal-based (Rizzi 1993/94) or parametrical (Rizzi 2005) mechanisms might allow child speech to generate the root e.g. in the IP- or even the VP-field (Rizzi 1993/94: 378). Under this approach, child speech gives rise to truncated structures where the CP-field is not active. This Truncation Hypothesis has been advanced in order to explain several phenomena in child speech as well as in adult language: notably, Rizzi (1993/94) explains that Null Subjects in non-pro-drop languages like Child French are typically absent in interrogatives, as seen in (5b):
(5)
a. _ est perdu $x x x$ celui-là
is lost that one
"(It) is lost, that one."
(Rizzi 1993/94: 377)
b. où il est le fil ? where it is the string "Where is the string?"

Rizzi takes this fact and others as evidence for a root-binding criterion applying to these so-called Root Null Subjects. He shows that Subject Omissions by children acquiring English, French etc. are different in nature from true pro-drop Null arguments (Rizzi 2005: 82). Unlike true Null Subjects in languages like Italian, the NS position in Child French etc. is limited to the specifier of the root. That is because root-spec is the only clausal position that is not identified clause-internally by a c-commanding identifier (Rizzi 1993/94: 378). For instance, French children omit subjects in $w h$-in situ questions where CP is not activated by a $w h$ particle, but unlike Italian children, they do not omit them in embedded clauses (Rizzi 2005: 81). If licit argument omissions are taken to be justified by the argument's recoverability in the discourse context, then root-spec seems to be the only possible position where the argument can be identified discourse-internally rather than clause-internally. Since the root must be CP in adult French due to its parametric values concerning clausal structure (ibid.: 94-95), the canonical subject position in spec-IP is always identified clause-internally, hence the impossibility of Root Null Subjects. ${ }^{7}$ However, if children may set the root lower, e.g. to IP, then the canonical subject could be omitted until the CP-field is fully active. By shifting the perspective from UG principles to parameters, Rizzi assumes the existence of such truncated structures in adult languages as well, where different parametrizations might allow varying degrees of freedom in the setting of the root. This model might explain argument dropping

[^3]in non-pro-drop languages like Topic Drop or others, and it is favorable under a maturational approach as well because principle inoperativeness should not be assumed thoughtlessly.

By now, it can be seen that the Truncation Hypothesis provides a useful model for functional element omissions, and this also holds true for Root Infinitives: if Child French provides enough freedom regarding the setting of the root, children may opt for a root below TP (tense) or AgrSP (subject-verb agreement), maybe VP, and thus produce truncated verbal expressions that are untensed and appear infinitival (Rizzi 1993/94: 379). Since tense inflection is not projected in the syntactic clause anymore, tense binding is not violated, and matrix clauses may be non-finite. Given that this truncation is optional, adult-like forms appear alongside RIs until the root setting parameter is fixed and RIs disappear (ibid.: 380).

The Truncation approach has been adopted in cartographical research to account for several phenomena, but other theories still postulate different operations as RI explanation. Research on Child French and Child Italian in particular, e.g. Bottari, Cipriani and Chilosi (1993/94), has led to observations of systematic pro-forms in front of RIs in child utterances resembling a schwa ' $e$ ' or other vowels. This has been seen as an indication that RIs are in reality modalinfinitive structures where the inflected modal is represented by the observed pro-form. It has been argued that in most utterance contexts, children aged between two and three years express desires, wishes, commands etc. which are typically supported by modal verbs. Thus, the observed RIs would be target-like infinitives governed by a tensed clause in an adult-like fashion, the modal possibly being substituted for reasons of economy, performance limitations or because modal structures are not productive yet. Extensive evidence for this theory has been put forward by Rasetti (2003: 96-118) who shows that the disappearance of RI structures lines up with the emergence of complete modal structures, rather than with the developing dominance of clause finiteness. At the same time, she adopts the Truncation approach in order to account for the missing modal in phrases like (6a-d).
(6) a. O@u pousser.
push $_{\text {INF }}$
(Rasetti 2003: 101)
b. e@u passer.
pass $_{\text {INF }}$
c. e@u chercher les moutons.
search $_{\text {INF }}$ the sheep
d. e@u prendre ma moto. take $_{\text {INF }}$ my motorcycle

According to her view, modal verbs are represented in the same clause as that of the associated main verb, and its position is above the main verb, maybe in a functional projection that generally represents modality. Therefore, as long as children are not able to fully process modal-infinitive structures yet, they may opt for a truncation of the clause above the infiniti-
val projection, cutting higher functional nodes such as that of the modal. The observed placeholder may then be the remaining realization of a functional notion such as finiteness (ibid.: 116-118). While this theory reanalyzes the underlying structure of RIs, it preserves truncation as a legitimate syntactic operation, so under a root parameter assumption, the aforementioned findings on Root Null Subjects and possibly other phenomena are still plausible.

Let us now return to the initially stated characteristics of RIs that hold across languages and see how truncation may explain them. Firstly, wh-interrogative clauses seem to prohibit RI realizations. ${ }^{8}$ A point that has not yet been addressed here but that is shared by all the considered truncation approaches is the view that every projection below the chosen root must be realized, i.e. truncation cuts are not arbitrary, which is true for any syntactic operation. That is why an overt element setting the root in the CP-field forces the whole rest of the clause to be realized. Once a $w h$-element occupies the spec-CP position, the IP-field regulating tense and agreement features forces the verb to rise to IP, thus appearing finite. Under the modalinfinitive approach, this assumption still holds true, but is not needed to explain the absence of $w h$-interrogative RIs: on one hand, $w h$-interrogatives can be assumed to mainly represent a request of information that does not overtly involve the speaker's wishes or desires, so modal expressions should only arise to a lesser extent in this clause type overall; on the other hand, this effect is heightened by the general lack of mastery of modal-infinitive structures at the RI-stage. Since a wh-element in CP would enforce an overt inflected modal, the observed performance restriction on modals may simply inhibit a combination of modal expressions and $w h$-interrogative clauses.

Secondly, it has been stated that RIs of functional verbs like auxiliaries have not been observed. Rather, omissions of these elements are reported. This is expected by a truncation approach, because auxiliaries, like modal verbs for infinitives, are usually taken to be projected above the participle in a functional domain. Now, if children set the root of the clause directly above the participle, possibly in the VP-field, the whole functional projection of the auxiliary as well as any inflectional features would get lost through truncation, the remaining element being a bare participle. This explanation can be used for other functional elements as well, notably the copula verb. I will therefore explore in the following Chapter whether a truncation approach can account for Copula Omission phenomena, to what extent this option has already been investigated and which extra-syntactical factors must be considered when addressing the copula.

### 2.2. Copula Omission in Child Speech

Among the recurring symptoms of the RI-stage, Copula Omission has been attested as a case of functional verb omission, mainly for English (Becker 2002, 2004), Italian (Franchi 2006, Caprin \& Guasti 2006) and French (Rasetti 2003, Witzmann \& Müller 2007 for bilingual FrenchGerman). While RIs and COs differ in overt syntactic structure, their behavior shows a pattern

[^4]in several ways: both appear during the same stage, disappear over time and almost never arise in (moved) wh-interrogatives (Franchi 2006, Witzmann \& Müller 2007). ${ }^{9}$ Also, both seem to be absent in some languages, CO for example in Spanish (Liceras, Fuertes \& Fuente 2012), which might be due to the existence of two Spanish copula verbs. Therefore, studies on Root Infinitives often include Copula Omissions in their considerations, e.g. Rasetti (2003) or Kupisch and Rinke (2008). However, when it comes to proposals on the grammatical nature of CO, the small number of studies focusing on this phenomenon in one particular language make it difficult to establish cross-linguistic traits. In that way, an analysis of the distribution of CO across a greater variety of languages on a larger scale would be desirable. For now, I will focus on the common lines between the known generative CO studies. Mainly, I will address the current syntactic model of copular structures. Then, I am going to include considerations on the nature and status of predicate XPs bound by the copula.

As for their clause-internal structure, copular phrases are generally assumed to differ from lexical verbal predications. This is due to the semantic nature of the copula which has traditionally been described as semantically empty for a long time, with its realization being due to finiteness constraints (Maienborn 2003: 19). Semantic studies like Maienborn (2003) show that there is more to the logic form (LF) of copulas, but other than lexical verbs, they belong to the class of functional elements and are not predicates themselves. Rather, they connect a subject referent with an associate predicate like a DP, an AP, PPs etc., as in (7):
(7) Luca is [ ${ }_{D P}$ a good swimmer] / [AP very handsome] / [ $P_{P}$ in the garden].

Now what is the syntactic hierarchy between subject, copula and predicate? Typically, in verb raising inflectional languages, verbs raise from a right-peripheral VP-field to the IP-field where they pick up inflectional features in finite sentences. However, because of the purely functional nature of the copula, copula verbs have been analyzed as phonetical realizations of functional heads in the clausal structure, thus not being generated in any VP. They are rather seen as the overt head of a functional projection somewhere over a base clause, titled Small Clause (SC), that contains both the subject and its predicate. For instance, this is supported by the grammatical nature of XP-predications without overt copulas (OC), e.g. in Hebrew or Russian (Witzmann \& Müller 2007: 91-92). Therefore, a phrase like (8a) might be analyzed as in (8b), where the subject raises out of SC past the copula:
(8) a. Mary is my best friend.
b. [ IP $\left[_{\text {spec }}\right.$ Mary $\left._{i}\right]\left[I_{I}\left[{ }_{I}\right.\right.$ is] [sC $t_{i}-m y$ best friend $\left.\left.]\right]\right]$
c. John is a man.
(Becker 2002: 39)
d. $\left[\right.$ IP $\left[_{\text {spec }} \not\right.$ fohn $]\left[{ }_{I^{\prime}}\left[{ }_{I}\right.\right.$ is] [sC t, a man $\left.\left.]\right]\right]$

[^5]Maienborn (2003) shows that there are several proposals as to which head might be expressed by the copula, such as $\mathrm{T}^{0}, \mathrm{Agr}^{0}$, among others. Alternatively, the copula has also been analyzed as a raising verb which selects an SC complement (Bowers 2000: 303-304). By assuming a clausal structure that relies on the SC approach, it is possible to describe COs with the Truncation Hypothesis put forward by Rizzi (1993/94): since the predicated subject is assumed to be positioned inside an SC complement, a truncation just above SC, i.e. below the functional projection of the copula verb, would lead to a verbless predication in a matrix clause. In other words, the copula is omitted by truncation. The resulting structures in Child French, for example, then resemble the grammatical predications in adult Hebrew or Russian. Assuming languages differ parametrically in the variety of possible clause roots in the line of Rizzi (2005), Copula Omissions, much like RIs, can be seen as motivated choices in a child grammar where this root setting parameter is not fixed yet.

As for auxiliaries as representatives of functional verbs, they, too, seem to be omitted during the RI-stage and like for the copula, RIs of auxiliaries do not arise. This is expected under a Truncation approach because aspectual auxiliaries as in (9a) are taken to be projected in TP while the associate participle remains in VP (Rizzi 1993/94: 380-381). It has been shown that TP and other IP-subarrays appear to be typical targets of truncation, a bare participle is the result of a truncated auxiliary structure ${ }^{10}$ :
(9) a. Il est parti, papa.

He is left, dad
"Dad has left."
b. [CP [IP $\left[_{\text {spec }} I l_{i}\right]\left[{ }_{T P}\right.$ est $\left[v P\left[{ }_{\text {spec }} t_{i}\right]\left[V\right.\right.$ parti ]]]], [DP papa $\left.\left.{ }_{i}\right]\right]$
c. parti papa.
left dad
(Antoine, 2;2, utrn. $=24934$ )
d. $\left[{ }_{C P}\left[{ }_{V P}\left[{ }_{\text {spec }} t_{i}\right]\left[{ }_{V}\right.\right.\right.$ parti $\left.]\right]\left[{ }_{D P}\right.$ papa $\left.\left._{i}\right]\right]$

Seeing that these omissions, too, coexist with adult-like auxiliary structures, it can generally be assumed that children apply truncation of functional domains in specific contexts. However, their motivation regarding economy and performance is not exactly clear. Why do children truncate certain structures in a given moment, but produce the same structures in an adult-like fashion in other situations at the same acquisition stage? Interestingly, the case of Copula Omission might give a hint in this direction, because its occurrence seems to depend on the nature of the associate predicate, which is what I will present in the following.

Based on Carlson (1977), who originally worked on nominal plurality, studies of XP-predications usually distinguish two main classes of predicates that can be selected by the copula across languages; those are stage-level predicates (SLP) on one side and individual-level predicates (ILP) on the other. The basis for this distinction is the fact that XP-predicates very frequently

[^6]reference properties that are either permanent in nature, such as DPs or qualities like size, height, color etc., or temporary in nature, such as locatives expressed as PPs or shifting qualities like temperature, mood etc. (Becker 2002: 40-41). There have been many instances of reported syntactic phenomena where these classes of predicates are distinguishable, two of the most cited ones being their behavior as perception verb complements (PVC, 10a-b) and their copula selection in Spanish/Portuguese (10c-d):
(10) a. I saw fohn in the garden.
(Becker 2002: 43)
b. *I saw fohn a teacher.
c. Juan es/*está un hombre.

Juan is-ser/*estar a man
"Juan is a man."
(Becker 2002: 46)
d. Fuan está/*es en la casa.

Juan is-estar/*ser in the house
"Juan is at home."

As can be seen, perception verbs typically only allow SLPs as complements and in some languages like Spanish or Portuguese, there are two copula forms (ser/estar) that differ in the type of predicate they appear to select. While this feature could be explained by an additional inherent copula-selection criterion on syntactic grounds, the first phenomenon seems to suggest an actual semantic difference between the two predicate types.

When it comes to the acquisition of copular structures, children, too, seem to be sensitive for these distinct classes. In Misha Becker's $(2002,2004)$ studies on English Copula Omission, there is a clear mismatch between SLP and ILP utterances: when combined with nominal XPs that are seen as ILPs, the copula is overt at a very high rate. But, when combined with locatives, i.e. SLPs, it is instead omitted at a high rate (Becker 2002: 49; Becker 2004: 159). Thus, children seem to consider the type of predication they are processing. Interestingly, Witzmann and Müller (2007) confirm this finding for the German utterances of German-French bilingual children, but not for their French utterances in the same period. This might indicate that the relationship between truncation processes and predicate type varies across languages.

In order to explain the indicated phenomena within the context of a continuous stage-level (SL) / individual-level (IL) discussion, research has proposed models on different linguistic levels. Originally, Carlson (1977: 77-78) postulates an actual semantic marking of SL/IL features. This difference has later been projected onto the syntactic structure of predicates: Becker (2002: 42-44) proposes a syntactic difference in structure, where SLPs contain an aspectual projection AspP, but ILPs do not. Based on the observation that ILPs, unlike SLPs, cannot be PVCs, she argues that SLPs must contain aspectual information. That is because verbal complements of perception verbs do always contain aspectual information, as in (11):
(11)
a. I saw Bill drown.
(Becker 2002: 43)
b. I saw Bill drowning.

Subsequently, Becker presents a syntactic model according to which the temporal anchoring required in usually finite phrases is sufficiently met by the aspectual information in SLPs in child speech. And since the copula does not contain any lexical information, it is legitimately omitted in temporary predications (Becker 2004: 160). However, there are some problems involved when a semantic and/or syntactic representation of different predicate types is considered. For once, predicated properties are not always perfectly amenable to one of the two classes. This mostly concerns AP-predicates. At the same time, even typically permanent or temporary qualities may occur in contexts or combinations of the other type. Consider for example (12a) where a localization describes a permanent truth, or (12b) in a context where it is known that Mary very frequently changes hair color:
a. France is in Europe.
b. Today, Mary was blond.

Moreover, APs which might be seen as clear SLPs or ILPs still can occur in environments which have been claimed to ban their appearance, or they might be banned in usually licit structures, as in (13a-b):

> a. *Angela sah den Kanzler anwesend. Angela saw the ${ }_{\text {Acc }}$ chancellor present
> *"Angela saw the chancellor present."
(Maienborn 2003: 71)
b. *Luise sah den Mond sichtbar.

Luise saw the ${ }_{\text {ACC }}$ moon visible
*"Luise saw the moon visible."

In these phrases, a clear SLP is not allowed as perception verb complement. In fact, Maienborn (2003) demonstrates in detail that by considering specific discourse contexts, the usual distinctive SL/IL-criteria can be avoided altogether. Thus, she explains that the distinction of SL- and IL-predicates based on the considered phenomena is in reality due to pragmatical effects. She explicitly states that the SL/IL-distinction is a "pragmatical phenomenon" (ibid.: 221). Considering the status of PVCs, she proposes a differentiating analysis where the XP in a structure perception verb $+D P+X P$ is seen as secondary descriptive complement of $D P$. Predicates are therefore on a different descriptive level than infinitives as PVCs because they are not part of the perception itself. Instead, they specify the time during which the DP is perceived. Maienborn shows that this specification is the result of a pragmatical temporality effect according to which XP-predicates are preferably interpreted in a temporal manner
(Maienborn 2003: 71-75). Thus, a phrase like (14a) corresponds to the structure in (14c), and not to the illicit structure in (14b). At the same time, the temporality effect explains why (14d), with the meaning of (14e), is legitimate in the context given for (12b) and why the examples in (13) are not. Usually, the secondary complement is interpreted temporally, so adjectives like present are seen as specifier of the time of the perception. This, however, clashes with the semantic restriction of perception verbs because one can never perceive anything not present. On the other hand, a temporal reading of adjectives like blond as in (14d) can be justified in context.
(14) a. I saw Mary in the kitchen.
b. * I saw Mary be/being in the kitchen.
c. I saw Mary when she was in the kitchen.
d. I saw Mary blond (and not brunette).
e. I saw Mary when she was blond.

These examples show that the selection and interpretation of PVCs are independent from any SLP/ILP-distinction and are based on pragmatical effects instead (ibid.: 75). Similarly, it is shown that the distinction between copulas like ser/estar in Spanish or Portuguese is not based on a semantic classification of XP-predicates, but on different implicatures encoded within the LF of the copula: Maienborn contradicts studies like Becker (2002) that claim an aspectual difference between the two forms, connected with the (wrongly) postulated aspectual information in SLPs. She explains that both copula forms express aspect as in (15a-b) and that both can be freely combined with permanent, temporary or other properties (15c):
a. Carol era ${ }_{\mathrm{IPFV}} /$ fue $_{\mathrm{PFV}}$ guapa.

Carol was-ser [+IPFv]/[+PFv] pretty.
"Carol was pretty."
(Maienborn 2003: 164)
b. Carol estubo $\mathrm{I}_{\mathrm{IPFV}}$ / estava $\mathrm{P}_{\mathrm{PFV}}$ guapa.

Carol was-estar [+IPFV]/[+PFV] pretty.
"Carol was being pretty."
c. Facinta es/está solteira.

Jacinta is-ser/estar single.
"Jacinta is single."
(ibid.: 140)
In order to explain the actual difference between ser and estar, Maienborn introduces the topic situation s* which describes the situation for which any expressed predication is affirmed to be true. In a phrase like (16a), $s^{*}$ may remain somewhat unspecified, so that several possible situations are imaginable where the predication of 'being rich' is true. Mary might have been rich up to a certain point in her life, or, if she's not alive anymore, she might have been rich until she died. This already shows that the interpretation of a generic, implied topic situation $s^{*}$ falls
into the domain of the hearer's inference. At the same time, modifiers like phrasal adverbials can specify this implied situation to varying degrees. In (16b), the localization implies that the predication of being rich only holds true for the situation $s_{i}$ of Mary's stay in Paris. The phrase does not contain any information about the truth value of the predication for the time before or after the stay.
a. Mary was rich.
b. Mary was rich in Paris. $\quad\left(\mathrm{s}^{*}=\mathrm{s}_{\mathrm{i}}\right)$

The relationship between the discourse situation, the topic situation and the predication is then structured by the syntactically encoded tense and aspect: the tense of a clause defines the topic situation with respect to the time of the statement. For instance, in (16a-b), the past tense expresses that the topic situation asserting a predication chronologically precedes the utterance itself. On the other hand, the aspect of the clause defines the topic situation with respect to the predication. ${ }^{11}$ In French, for instance, aspect can be expressed overtly:
a. A Paris, Marie était $t_{\mathrm{IPFV}}$ belle.

In Paris, Marie was beautiful
"In Paris, Marie was beautiful."
b. À Paris, Marie a été ${ }_{\mathrm{PFV}}$ belle.

In Paris, Marie has been beautiful
"In Paris, Marie has been beautiful."
An imperfective phrase like (17a) expresses that the time specified by the topic situation $s^{*}$ lies completely within the time of the predication, so Marie was not only being beautiful while she was in Paris, but possibly before and/or afterwards, too. In a perfective phrase like (17b), it is implied that the time of the predication lies completely within the topic situation $\mathrm{s}^{*}$, so at best, Marie was being beautiful for as long as she stayed in Paris, but neither before nor afterwards (ibid.: 158-160). So, what is the actual difference between the two copulas in Spanish? According to Maienborn, they differ in the information they presuppose: while ser might reference a generic or specific topic situation $\mathrm{s}^{*} / \mathrm{s}_{\mathrm{i}}$, estar always presupposes a specific situation $s^{*}=s_{i}$ the predication can be combined with. The impression of an SLP selection of estar is then the result of a temporal interpretation motivated by pragmatical economy considerations (ibid.: 166-174). I will not go into more detail regarding the argumentation of Maienborn at this point. Suffice to say that the impression of an SL/IL-distinction appears to be the result of pragmatical interpretation effects. It is thus not syntactically represented in any way, be it by aspectual anchoring as Becker (2002) proposes or otherwise.

If the distinction between SLPs and ILPs is given up, then how can child speech Copula Omissions be explained? Unlike Spanish or Portuguese, there is only one copula verb in French which, in the line of Maienborn, references a stative argument and a potentially specifiable topic situation argument in its logic form. In other words, it expresses that a subject referent assumes a state within a given (usually temporal) context. Since syntactic constraints on

[^7]CO are overridden by the possibility of truncation, the observed phenomena should relate to the logical structure of the copula. It has been shown that children omit the copula more frequently not just in combination with SLPs, but rather in contexts where the predication allows conceivable alternative situations. This is typically the case for locative XPs, because localizations of moving/movable entities vary temporally, but almost never for nominals as they are usually used for general identification. Therefore, studies which examine locatives as accessible SLP-representatives may wrongly assert a correlation between SLPs and CO, seeing that the conception of 'alternative situations' should not be semantically based within any given predicate. ${ }^{12}$ Thus, it might be stated that the omission of the copula (at least in English) correlates with the specification of the topic situation, $\mathrm{s}^{*}=s_{i}$. An explanation for this might be that the children rely on the hearer's recovering of the lost specification thanks to the obvious dynamic nature of localizations. With respect to French, however, I will argue below that this correlation may be overridden by differing pragmatical considerations that are more impactful in syntactic means, before analyzing whether the data of early Child French confirms such an interface-sensitive approach.

### 2.3. Summary

Root Infinitives have been presented as a cross-linguistic phenomenon of child language with recoverable syntactic features such as a wh-interrogative constraint. The presence of such non-finite matrix clauses has been explained by maturational as well as competence models, partially including performance considerations. The Truncation Hypothesis first advanced by Rizzi (1993/94), actualized under the assumption of an unfixed Root Setting parameter, describes RIs as truncated structures with a clausal root beneath IP. Among other phenomena, this approach also explains the existence of Copula Omissions in combination with the Small Clause theory on copular syntax: by truncating the clause above SC, a predicate with a potential Root Null Subject is derived. Since the truncation of inflectional features on lexical verbs may be inhibited by rich inflectional paradigms as in Italian, RI rates vary across languages. As the copula is taken to be a functional element in and of itself, it may not be subject to this constraint, which would explain the occurrence of COs in Italian, for instance. Alternative analyses of RIs as rudimentary modal-infinitive structures are amenable to the Truncation approach as well, a stance taken by Rasetti (2003). Regarding the issue of when or why truncation is triggered/preferred, children seem to be sensitive for the active topic situation of copula phrases that specifies the respective world for which a predication is asserted. By referring to the analysis of Maienborn (2003), I have shown that classic SL/IL-approaches are misguided as to how their original findings are syntactically or semantically represented. I take SL/ILphenomena to be caused by pragmatical interpretation effects which leaves the differentiation of XP-predicates at the level of their actual conceptual contents. Thus, the observed difference in the treatment of XP-predicates in child language seems to me to be a matter of context sensitivity. I will therefore try to propose an integrative model of Copula Omission for Child French by taking into account the information structural specificities of spoken French first,

[^8]in order to account for the syntactic differences between English and French.

## 3. Properties of French Syntax

Since I want to examine data of early Child French, I will present some considerations on French syntax in this Chapter that are going to contribute to a model of French Copula Omission, mainly the degree of mastery over the copula inflection of children at the two-word stage, as well as the impact of information structure on overt syntax, a fact highlighted by DeCat (2000, 2006, 2007, 2009) with regard to the frequent structure of French XP-dislocations.

### 3.1. The French Copula: Morphology and Acquisition of être

Compared to the rudimentary inflection in English, the French inflectional paradigm is more pronounced. Regular verbs are essentially grouped into three classes determined by the corresponding infinitive. They show agreement in person, number, tense, mode and aspect, at least in the past tense. However, as Table 1 below shows, the present tense inflection of all three major groups is relatively undifferentiated. Mostly, only the plural form differs between persons. Additionally, the expression of first-person plural 'we' can be covered by the collective pronoun on which requires third-person singular inflection. Therefore, at the onset of word combination, children can mostly rely on the undifferentiated singular form for most expressions, alongside infinitives and participles, even covering third person plural forms of the first inflection group. Compared to this image, the inflection of the copula être seems more diverse even in the simple present, see Table 2: except for second- and third-person singular, every person is inflected individually. Yet again, the first-person plural is partially replaced by the frequent on-construction.

Table 1: The simple present inflectional paradigm of French regular verbs

| Person | Number | Pronoun | er-group | ir-group |  | re/oir-group |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | parler | dormir | finir | rendre | voir |
| 1 | Singular | je | /paR1/ | /doR/ | /fini/ | /Rã/ | /vwa/ |
| 2 |  | $t u$ | /paR1/ | /doR/ | /fini/ | /Rã/ | /vwa/ |
| 3 |  | il/elle | /paR1/ | /doR/ | /fini/ | /Rã/ | /vwa/ |
| 1 | Plural | nous | /paRlõ/ | /doRmõ/ | /finisũ/ | /Rãd̃̃/ | /vwajõ/ |
| 1 |  | on | /paRl/ | /doR/ | /fini/ | /Rã/ | /vwa/ |
| 2 |  | vous | /paRle/ | /doRme/ | /finise/ | /Rãde/ | /vwaje/ |
| 3 |  | ils/elles | /paR1/ | /doRm/ | /finis/ | /Rãd/ | /vwa/ |

This might already indicate that the most frequent form, est, is acquired the fastest. In fact, in her study on French children, Rasetti (2003: 30-43) states that around one third of all observed tensed clauses contain the copula and that plural subjects occur rarely within these phrases. So, essentially, the children acquired the plural forms later than the singular

Table 2: The simple present inflectional paradigm of the French copula être

| Person | Number |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Singul |  | Plural |  |
| 1 | je | suis /sui/ | nous | sommes/som/ |
| 1 |  |  | on | est /e/ |
| 2 |  | es /e/ | vous | êtes /عt/ |
| 3 | il/elle | est/e/ | ils/elles | sont /sõ/ |

ones, an observation amenable to the acquisition of lexical verbs. This makes sense because the most frequent copular form covers two of three singular persons, but only one plural person. The third-person plural form sont in particular appears to be acquired later on, and Rasetti notes that children tend to overgeneralize the singular form so that they use it instead of sont. ${ }^{13}$ On the other hand, when they used first-person singular suis or the plural sont, it was always used correctly, which underlines the observed direction of acquisition. Rasetti proposes that children might utilize the homophone form as default structure even in contexts where an unacquired deviant form is expected. Based on these observations, I will assume that an early mastery of an overgeneralized standard inflection of être provides a sufficient account for most phrasal instances of the copula in early Child French. That is because errors are rare and mostly concern the expression of plurality, and because deviant structures like suis or êtes seem to appear rarely, yet correctly. Therefore, one may expect the parallel acquisition of inflection not to influence the structure or occurrence of copular sentences in and of itself too heavily, given the frequency of this clausal type at the considered period. Regarding my own analysis, I am going to address potential plurality issues individually, should they arise.

### 3.2. Dislocation and Topics

In their study of Copula Omission in the case of bilingual German-French children, Witzmann and Müller (2007: 86) observe that in the German as well as in the French data, the locative/deictic pronouns ça/là, ici or hier/da, das ('that'/'there', 'here') consistently appear to the left of the subject in phrases where the copula has been omitted. However, they do not provide any syntactic explanation for this, rather arguing for a subject-like use of these pronouns by children. At the same time, the left position of XP-predicates can be explained by productive features of both target languages: the German V2-feature allows predicates to occupy the position in front of the inflected verb, even when inflection clearly designates another DP as subject. In adult French, XP-elements can be dislocated to a clause periphery, a property that

[^9]is particularly productive compared to other languages. Both are shown in (18):
(18) a. Das bin ich.
that ${ }_{\text {NOM }}$ am $\mathrm{I}_{\text {NOM }}$
"That's me."
b. Ça, c'est moi.
that, that's me
"That's me."
While corresponding studies on English (Becker 2002, 2004) or Italian (Franchi 2006, Caprin \& Guasti 2006) do not mention results of this kind, the French data thus hints at a productive use of dislocation in CO contexts. I will explore this possibility by first presenting the work of Cécile DeCat (2000, 2006, 2009, among others) who has studied the syntax and acquisition of French dislocation under a generative approach in great detail.

French dislocation is productive at both clausal peripheries, the most commonly examined type of it is the clitic left- or right-dislocation (DeCat 2009: 98) where the moved constituent is resumed in its original position by an apparent resumptive clitic, like $c^{\prime}$ in (18b). There have been different approaches to retrace the syntactic structure of dislocations. Mainly, one line of research has led to the postulation that subject clitics in spoken French are not true arguments but rather inflection markers (Rizzi, 1986 [as cited in DeCat (2009:10)]). Then, the dislocated element would truly be in the canonical subject position. DeCat (2009: 720) explores the various problems this theory encounters and in line with her work, I will reject this assumption. ${ }^{14}$ Secondly, generativists have proposed a movement analysis where the dislocated element is moved from its canonical position. However, DeCat shows that the resumptive element does not meet the actual resumptive conditions, and in ambiguous sentences like (19), native speakers do not interpret the moved XP in its resumptive position; rather, they search for a fitting referent in context (ibid.: 121-124).
(19) $\left[U n\right.$ de ses $_{x / * i}$ disciples $_{j}$, [chaque maître] ${ }_{i} l_{j} \quad$ a renvoyé. one of his disciples every chief himhas dismissed "Every chief has dismissed one of *his/their disciples."
(DeCat 2009: 122)
Therefore, hearers would assume there to be a third party the possessive pronoun refers to and which is not mentioned in the phrase. This, among other reasons like insensitivity to syntactic islands and illicit parasitic gaps, leads DeCat to propose an original analysis of French dislocation under an adjunction approach (ibid.: 111-134). This includes both Left and Right

[^10](ii) L' amie de mon mari, je l’ ai invitée aussi.

The friend of my husband, I him have invited as well
"I've invited my husband's friend as well."

Dislocation (LD/RD, respectively), since they do not display notable syntactic discrepancies. ${ }^{15}$ The apparent resumptive is described as a true pronoun, so movement of the dislocated XP is excluded. Another reason for this is that children successfully use dislocation already when the CP-field is not observably active yet. CP should thus not be implemented in dislocated structures (ibid.: 196, DeCat 2000: 246). Instead, the XP is adjoined at the edge of a Discourse Projection that features Tense. This is because of the obligatory interpretation of dislocated XPs as topics in spoken French (DeCat 2009: 21). In fact, DeCat proposes to describe spoken French as discourse-configurational language, which means that overt syntactic properties correspond directly to information structural roles (ibid.: 94). Dislocation is taken to designate clausal topics. Thus, in general, sentences without a clausal topic should not be marked by dislocation. This leads us to the need for a satisfactory definition of topics. In this regard, DeCat expands the classical notion of aboutness, i.e. the topic of a phrase being what the phrase is about, and of old information, by focusing on the context: any spoken proposition is seen as restricted to a specific domain and as informative. So, while the most informative part is labeled as focus, the topic constitutes the knowledge presumed by both speaker and hearer (ibid.: 65-68). Therefore, in a given context, shared background knowledge about a salient referent may trigger its use as (dislocated) clausal topic, even though the referent appears as new information in the discourse, as in (20):
(20) A "Je pense souvent au film L'enfance d'un chef."

I think often about.the film L'enfance d'un chef
"I often think about the film L'enfance d'un chef."

B "Oui. C' était un beau personnage, hein, la femme." yes. that was a beautiful character, huh, the woman
"Yeah. That woman was a nice character, right?"

Additionally, while every sentence is bound to a topic, not every topic has to appear inside the clause. Thetic judgements in particular are sentences that contain only new information, their topic is usually the implicit question they provide an answer to. Therefore, thetic judgements presumably do not contain dislocated topics, see (21b):

[^11](21)
a. A "Ò̀ est Pablo?" - B "Pablo, il est malade."
where is Pablo Pablo, he is ill
"Where's Pablo? - Pablo, he's ill."
b. A "Qu' est-ce qu' il y a ?" - B "Pablo est malade." what is it that it there has Pablo is ill
"What's going on? - Pablo is ill."
In this example, (21a) constitutes a categorial judgement including a dislocated topic (ibid.: 96). As for the syntactic representation of Discourse Projections, they are taken to arise in root- or root-like environments (ibid.: 158). That is why dislocated elements can appear above the edge of the resumptive clause, as in (22); the XP latches onto the DisP of the higher clause:
(22) Le lait ${ }_{i}$, [il vaut mieux avoir [un frigo [pour conserver $c ̧ a_{i}$ en été.]]] the milk, it is_worth better have ${ }_{\text {INF }}$ a fridge for conserve $_{\text {INF }}$ that in summer "(As for) The milk, it's best to have a fridge in order to conserve it in the summer."

Under an adjunction analysis, the resumptive is then not seen as syntactically related to the XP, rather there's a coreference on discourse grounds, akin to anaphoric chains (ibid.: 155). DeCat argues that Discourse Projections are able to bind the dislocated topic with the clausal predication and the context. She describes dislocation even as "prototypical realization of 'topic+predication' structures" (DeCat 2009: 150), which is interesting because this would mean that French copular phrases which predicate a clausal topic should always carry a dislocated subject. Since the study of Witzmann and Müller (2007) indicates that French Copula Omission does not depend on the nature of the predicate, I will argue in Chapter 4 that dislocation may in fact be a stronger criterion for French children acquiring copular structures. This is also based on the observation of DeCat (2006) that French Root Infinitives, which have been described using the same model as for Copula Omission, do not contain heavy subjects. Therefore, the acquisition process of French dislocation needs to be examined first. ${ }^{16}$

In fact, DeCat (2009: 173-176) enumerates several typical criteria which can be used to identify true dislocations. I will resume them here below:
i) the presence of resumptives (clitic or non-clitic) alongside overt subjects ${ }^{17}$; in her study, DeCat also treats recurring embryonic ' $e$ ' forms as full pronouns.
ii) deviant word ordering like postverbal subjects or material between the supposed XP and the subject
iii) a contextually favored topic reading of the XP
iv) prosodic marking

[^12]Regarding the last point, naturalistic recordings suggest that French Left and Right Dislocations are discernable by different prosodic traits: right dislocated XPs appear destressed after an intonation peak, have smaller amplitudes than the preceding phrase and are about five semitones lower in pitch. This has been confirmed in child speech recordings as well (ibid.: 176). In general, right dislocated XPs resemble copies of the preceding intonation (ibid.: 34-36). Left dislocated elements, on the other hand, are distinguished from so-called heavy subjects by intonation groups: an intonation group is separated from the rest of the phrase if the pitch of its last syllable dominates the following one. So, if the XP's intonation group is not separate, it constitutes a heavy subject. But since heavy subjects can also appear separately, further criteria are needed. LD is then additionally indicated by a pitch rise of over three semitones on the last syllable, a temporal lengthening of this syllable, and by a general high-low contour on it and the following two syllables, but the two latter criteria are somewhat less reliable (ibid.: 51-57). These factors seem to hold true with some restrictions concerning monosyllabic XPs and the masking effect of high or low emphasis on pitch and intonation variety which includes contrastive or emphatic phrases (ibid.: 57-61). These kinds of utterances are generally prosodically marked similarly to left dislocated structures, thus prosody alone does not constitute a sufficient indication of dislocation in such cases.

Keeping this in mind alongside the other criteria, DeCat confirms that children use dislocation as soon as they start combining words (ibid.: App. B.6, DeCat 2000: 242). In her study on the acquisition of dislocation, DeCat (2000: 244-248) distinguishes three phases of acquisition before the age of 2;6, mainly based on the production in constraining wh-interrogatives: in the first phase, dislocation in verbal utterances overall is very rare and does not appear in wh-interrogatives. At this stage, dislocation does not seem to be acquired yet. The second stage is marked by the appearance of RDs in $w h$-interrogatives. Dislocation overall becomes more productive and seems to be involved in an active acquisition process. The third stage, lastly, is indicated by the presence of LDs in $w h$-contexts. Dislocations appear frequently and productively and double dislocations as in (23) are observed.
> ça, c'est moi, là.
> that that's me, there
> "That's me over there."

(DeCat 2000: 244)
The onset given for the two observed children is at $1 ; 11$ for stage two and $2 ; 0 / 2 ; 2$, respectively, for stage three (ibid.: 250, fn. 7). Overall, Right and Left Dislocations can be assumed to be acquired early on. For our analysis, however, this means it must be considered that dislocation may not be fully acquired yet in very early CO contexts before $2 ; 5$. I will return to this problem when assessing the chosen child speech corpus below (Chapter 5). What's interesting is that children use dislocations even when the produced sentence structure is not target-like, for example in RI contexts:
(24) le camion, o mettre là
the lorry put ${ }_{\mathrm{INF}}$ there

DeCat argues that by using dislocations, children exploit a fragment strategy where the essential sentence nucleus appears fragmentary while a satellite, the dislocated element in this case, conveys what the topic of the nucleus is. Adults use fragments as well, and in a similar fashion, children may exploit this strategy which relies heavily on the hearer's inference in order to communicate efficiently despite processing restrictions (ibid. 2009: 202-203). On the other hand, this might indicate that syntactic omissions the likes of which are frequently observed in child speech are favored in dislocation contexts, given that dislocation is an early on acquired means of legitimating fragmentary utterances. This theory is further driven by the observation of DeCat (2006) that French RI productions do not seem to license canonical subjects. She examines the low rate of apparently overt RI subjects of three children in the RI stage and argues that almost all of these structures can be explained as cases of dislocation with a missing resumptive. Her motivation for this are prosodic analyses as well as a recurring topic reading of the apparent subject (ibid.: 65-66). The prosodic properties of dislocation have essentially been stated above. As for the topic reading, it is justified not only by an already introduced referent, but also by an immediately clear but new reference and an implicit comparison of a referent within a set of contrastive referents (ibid.: 66-67). This corresponds to the finding that topics are not per se 'old information'. Her results lead DeCat to propose that, if RI-contexts do in fact ban overt subjects, children are able to produce dislocated subjects because these appear in a higher clause and are independent from the (missing) resumptive under an adjunction approach (ibid.: 71).

### 3.3. Summary

The present inflection of French lexical verbs corresponds to the uniformity frequently attested for RI languages. While the copula être as a functional irregular verb appears more deviant, its present inflection also shows signs of homophony. It seems that in the process of acquisition, children exploit a standard phonological form in order to express plurality while plural inflection is not acquired yet. Unambiguous inflections are used rarely, but correctly. Since the ambiguous form is favored by the general discourse contexts, children use the copula correctly most of the time. It is essentially well produced at the onset of word combination, yet it may appear overgeneralized with plural subjects. Regarding spoken French, it has been shown that dislocation is a productive process encoding identifiable referents as topics. Children acquire dislocation quite early by going through three gradual phases during which Right Dislocation and later Left Dislocation are established. So, children also produce incomplete structures with dislocated XPs, like in RI-contexts. Given the incomplete structure of child utterances, prosodic properties and topic readings provide help with identifying dislocated elements. That is because children already use phonetical and discourse information in an adult-like manner even before the overt activation of the CP-field. Dislocation is thus an interface phenomenon (see DeCat 2009: 214-216), the structure of which can be represented as an XP-adjunction to the highest clausal projection. The use of dislocation in incomplete or restricted sentences seems to allow the child to communicate efficiently by providing the fragmentary information in the sentence nucleus with a satellite topic it can refer to. This strategy might prove use-
ful for establishing a satisfactory, explanatory theory of French Copula Omissions, which is what I will demonstrate in the following Chapter by implementing the syntactic core notions examined so far.

## 4. A Unified Model of Copula Omission in early Child French

As has been stated initially, Copula Omissions, like Root Infinitives, are examples of the facultative dropping of functional material in early child speech. This means that children may choose to omit structures they are able to produce, at least in some contexts. On the other hand, it could just as well be argued that they choose not to omit them at any time even though they seem to be able to, be it because of parametrical deviations or because of principle inoperativeness. From this perspective, the child's pragmatical sensitivity might be a reasonable factor constraining the omissibility of functional elements: in order to communicate successfully, the speaker must assert that the information conveyed by a given utterance can be recovered by the hearer through inference. Since children are somewhat sensitive to pragmatical principles from a very early age, it seems plausible that pragmatical restrictions prevent them, like adults, from speaking in fragments constantly. At the same time, this means that children, too, try to speak efficiently whenever possible. These considerations would then constitute a balancing act between efficient material dropping and hearer considerations. This is in fact supported by the cited findings on RIs and COs, i.e. considerations of predication and dislocation.

It has been established that Becker $(2002,2004)$ reports a visibly higher rate of COs with SL-predications (typically locatives) than with IL-predications (typically nominals). At the same time, I have argued based on Maienborn (2003) that the traditional SL/IL-distinction is not based syntactically or semantically, but essentially a product of pragmatical interpretation effects. Thus, locatives, for instance, are not conceptually temporary, but receive a default interpretation as temporary due to discourse economy principles. This means that English children do not make Copula Omission dependent on predicate types, but rather on the hearer's interpretation thereof. The same goes for dislocation in spoken French: by using adult-like dislocation, the adjoined XP receives a topic reading while the actual clause conveys the main information regarding this topic. This corresponds to a pragmatical efficiency strategy which appears to be exploited in French RIs: according to DeCat (2006), French RI sentences never contain a canonical overt subject; in the few reported cases, she demonstrates that the apparent subject can be analyzed as dislocated XP in a topic context. This would mean that dislocation constitutes an operation in spoken French that favors structural simplifications of the main clause, given that its effect on the clauses' information structure makes the inference task of the hearer easier by specification of topic and comment (the remaining nucleus). ${ }^{18}$

Given that COs can be explained through Truncation just like RIs, I want to advance a similar, pragmatically based approach to French Copula Omission. Since the bilingual study of Witzmann and Müller (2007) indicates that predicate type, or rather, the predicate reading, is

[^13]not a primary factor influencing the rate of Copula Omission in early Child French, I argue that spoken French as a possible discourse configurational language (see DeCat 2009) provides more efficient structural cues for the child, those essentially being the pragmatical marking of dislocated XPs. This would basically mean that Copula Omission, although endangering efficient communication, is justified in cases of dislocated 'topic + nucleus' structures, because they preserve the relevant information, that is the association between subject and predicate, otherwise encoded by the LF of the copula, in the scope of a topic recoverable for the hearer, i.e. a salient referent. The same may hold true for Root Infinitives. Then, the preference for dislocation over predicate considerations is further justified by the fact that virtually all examined RI subjects have proven to be dislocated with a missing resumptive ${ }^{19}$, while the distinction based on predication in the English data is not as clear-cut, especially with adjectival predicates.
This model, in line with the observation of Witzmann and Müller (2007) that French locative and deictic pronouns appear at the left of the subject in their data, leads me to assume that Child French Copula Omission correlates with an XP-dislocation to the degree that dislocation has already been successfully acquired. In the sense that identifiable topics are obligatorily dislocated, the copula should then not be omitted in thetic sentences etc. Syntactically, the cooccurrence of both phenomena is amenable to a combination of Rizzi's (1993/94, 2005) Truncation Hypothesis and DeCat's $(2000,2006,2009)$ adjunction analysis:

Since the dislocated XP and its apparent resumptive are taken to be syntactically independent from each other, I assume the base structure to be a SC containing the resumptive pronoun in subject position and its predicate, positioned beneath the functional copula verb. When generating the phrase, the copula as well as the upper functional clausal domain are truncated, i.e. the actual clause root is set lower, possibly to VP or SC. This is because of the unset Root Parameter introduced by Rizzi (1993/94). At this stage, a dropping of the resumptive should equally be possible since it is not c-commanded by any other projection anymore. This would correspond to a Root Null subject. The specified XP is then adjoined to the new root, it being the highest remaining node. The result would be a dislocation in a verbless utterance, which is exactly what DeCat herself already considers regarding RI contexts: she evokes the possibility of an XP-adjunction to truncated structures because she takes the adjunction process to take place at the highest remaining projection (DeCat 2000: 249). In that sense, I want to confirm DeCat's prediction with respect to copular structures. The proposed adjunction structure is given for the CO examples (25a-b) in Figure 1.

[^14]

Figure 1: SC-adjunction for Left Dislocation (left) and Right Dislocation (right)
a. le bleu là.
the blue there
"the blue one (is) there."
(Madeleine, 1;11, uttrn. = 14983)
b. là Antoine.
there Antoine
"There (is) Antoine."
(Antoine, 2;9, uttrn. $=45496$ )
This theory leads me to state two consecutive hypotheses regarding the distribution of French Copula Omissions:
i) Copula Omission in early Child French is largely independent from predicate choice; at most, it should have a very limited impact on respective omission rates.
ii) Copula Omission in early Child French should largely correlate with XP-dislocation of topics, an operation taken to favor material dropping. This correlation should significantly exceed the rate of dislocations in Overt Copula contexts and it should prove more significant for a unified characterization of French Copula Omission than correlations with certain predicate types.

The first point is essential for the second and it is motivated by the findings stated above. It has yet to be established whether the results of the study on bilingual German-French children hold true for monolingual French children as well, which is why the lack of influence of predicate choice cannot be taken for granted. The second point then resumes the presented theory. In the following chapter, I will test these hypotheses by examining a corpus containing recordings of three monolingual French children around the period between two and three years.

## 5. A Corpus Study of French Copula Omission

In the following, I am going to present the data analyzed for the present study alongside the procedure adopted before turning to the syntactic as well as prosodic results in bare numbers. At the same time, I will discuss these findings with respect to our main hypotheses.

### 5.1. The Data

In order to work with a set of comparable recordings, I am analyzing the speech data of three children who were part of the same research project; the recordings stem from the project Acquisition du langage et Grammaticalisation conducted by Aliyah Morgenstern and Christoph Parisse from 2005 to 2008 and are taken from the open-access CHILDES databank. ${ }^{20}$ Unlike most modern text-based corpora, CHILDES is a collection of multimodal corpora where a textual annotation is connected with the original speaker's audio or video footage. ${ }^{21}$ The recordings took place in Paris and treat the monolingual acquisition of Parisian standard spoken French. The corresponding children were recorded during the early acquisition period between the age of one and three years, which is essential for the study of Copula Omission as well. Also, the available video footage allows for information recovery from the utterances' context, which has been an integral part of the corpus building project. ${ }^{22}$ Among the recorded children, I have considered the transcribed recordings of Anaé, Antoine and Madeleine within the age period between around one year and a half and about three years. I have discarded all initial recordings up to the first recording that shows evidence of Copula Omission alongside realized copulas. This concerns only very early recordings at the age below two years. The age period of the considered recordings ranges from 1;4 to $3 ; 1$ for Anaé, from 2;1 to $3 ; 2$ for Antoine, and from $1 ; 9$ to $3 ; 0$ for Madeleine, respectively. Compared to both girls, Antoine displays a slower pace of acquisition overall, which is directly reflected by the later appearance of Copula Omissions in the context of word combination. All the children were recorded regularly about once every month, with some exceptions: Antoine was recorded twice every month from $2 ; 1$ to $2 ; 4$, and even three times at the age of $2 ; 0$; additionally, he was not recorded at the age of $2 ; 10$ and $3 ; 2$, respectively. Anaé was not recorded at the age of $2 ; 7$ and $3 ; 0$, but two times at the age of $2 ; 0$. Due to technical issues regarding the extraction of the recording's transcription, the recording of Anaé at the age of $1 ; 10$ could not be analyzed either. Finally, Madeleine was not recorded at the age of 2;0.

In order to investigate the realization of the copula être, the transcripts of the recordings considered were used to extract any sentence with an overt subject that requires an overt copula in the adult language, with each sentence being assigned an utterance number. This process mostly relies on manual checking, since I am looking for occurrences of a missing element. Within this process, some issues like erroneous annotation, asynchrony with the linked video data or phonetical transcription of recoverable morphemes were also resolved manually.

Sentences with a Null Subject were not considered, because a possible combination of Copula Omission with Null Subjects leads to bare predicate structures that are hardly distinguishable from adult-like ellipses. Therefore, all calculations are based on Overt Subject-contexts

[^15]where COs are clearly identifiable. In general, I have excluded any direct repetitions of adults or of the speaker themselves where the relevant information structure does not change in a significant way, see (26a). This includes ongoing repetitions of a given structure within one consistent situation, e.g. during a game. I have also excluded fixed expressions, see (26b), recited lyrics (like singing), see (26c), unintelligible and unrecoverable utterances, adult-like ellipses, auxiliary use of être and clefts.

# a. Observer: c'est Dumbo. <br> that's Dumbo 

"That's Dumbo."

## Child: c'est Dumbo. <br> that's Dumbo

"That's Dumbo."
(Antoine 2;11, uttrn. $=48022$ )
b. bateau sur l' eau.
ship on the water
"Ship on the water."
(Anaé, 1;11, uttrn. $=6683$ )
c. où es-tu ?
where are you
"Where are you?"
(Madeleine, 2;6, uttrn. $=24741$ )
Regarding ellipses, I have decided based on the immediate discourse context in dubious cases. As for the auxiliary function of the copula, French passives and composed tenses for certain verbs are built by using an auxiliary être. Such instances have not been included in the study because the auxiliary use constitutes a different grammatical function distinguished from the copular use. In fact, the study of Caprin and Guasti (2006) reports not only that the patterns of copula and auxiliary omission of Italian children differ from each other, but also that omissions in ambiguous cases like verbal passives, which are built similarly in both Italian and French, pattern with Auxiliary Omission rather than Copula Omission. Since it is highly possible that French children are able to distinguish between the copula and auxiliary function as well, seeing that this functional system is somewhat similar to Italian, I have decided not to consider auxiliary use of être at all. The advantage of this is also a more precise focus on the actual copular use. Regarding clefts, I have decided to exclude them from the analysis for three reasons: firstly, they constitute a fixed syntactic construction where the copula is basically formalized into c'est ...; secondly, clefts are an operation that influences information structure, just like dislocations do. Therefore, clefts are very likely to distort the study's outcome by preventing use of dislocation. And finally, clefts prove to be a structure that is not directly acquired at the onset of word combination, where COs typically arise. In order to back these points up, I have examined the distribution and correlation with CO and dislocation structures


Figure 2: Cleft Production among Copular Sentences over time
of any encountered cleft sentences. The frequency of cleft structures for each child over time, with regard to all found copular sentences at the same age, is given in Figure 2. Out of all clefts ( 93 instances in total, see Appendix A), only one is combined with a dislocated XP, see (27), and none correlate with a CO.
(27) ça c'est pas la même forme qui va là.
that that's not the same form that goes there
"That's not the same form that goes there."
(Madeleine, 2;5, uttrn. $=22022$ )
At the same time, Figure 2 suggests that clefts emerge gradually during the second half of the second year: while Antoine almost never uses clefts at all until the age of $3 ; 2$, the girls' use of clefts overall increases gradually until the age of about 2;9, even if Madeleine displays a lower frequency around this age. All these findings are reason to believe that cleft sentences may just as well be excluded from the data used for this study. Applying a stricter approach, I have not tried to differentiate between clefts that express a true predication and clefts that do not, at the risk of discarding some potentially relevant data.

The remaining copular sentences have been counted and divided into groups regarding:
i) the realization of the copula (overt copula vs. CO),
ii) the semantic/pragmatic predicate type (locatives vs. nominals), and
iii) the information structure (dislocation vs. canonical position).

In instances where two different copular structures are used in one sentence, both structures have been counted individually. For example, in (28), the first copula has been discarded because it appears in a cleft structure. The two following instances in the subordinate clauses were then accounted for individually, i.e. two instances were counted and classified separately.
(28) c'est un chameau qui était le doudou de papa quand il était petit. that's a camel that was the cuddly toy of dad when he was little That's a camel that was dad's cuddly toy when he was little.
(Madeleine, 2;7, uttrn. $=25799$ )
In the following chapter, I will present the numeric results of the remaining valid instances accordingly and discuss them regarding the advanced hypotheses.

### 5.2. Syntactic Analysis

Overall, 1562 valid instances of copular structures were counted, where Anaé has produced 524 of them, Antoine 345 and Madeleine 693. Among these productions, the omission rates of the copula are given for each child over the entire age span in Table 3.

Table 3: Copula Omission over all Copular Environments (with Overt Subject)

| Child | Age Span | CO + S / C+S | Omission Rate [\%] |
| :--- | ---: | ---: | ---: |
| Anaé | $1 ; 4-3 ; 1$ | $32 / 524$ | 6.11 |
| Antoine | $2 ; 1-3 ; 2$ | $43 / 345$ | 12.46 |
| Madeleine | $1 ; 9-3 ; 0$ | $39 / 693$ | 5.63 |
|  |  | Average | 8.07 |

Omissions concern mainly third-person singular subjects, but they occurred along plural and first- or second-person forms as well. Some examples for counted Copula Omissions are given in (29). The average omission rate over all children is $8.07 \%$, where Antoine omits the copula about twice as much as Anaé or Madeleine, even though he has produced only half the amount of copular structures. This corresponds more or less to the expectation of a lower omission rate, compared to English, for instance. However, the fact that the average over three children does not surpass $10 \%$ is of concern for the general relevancy of this phenomenon. Still, for now, I will analyze the present omission data as is. The low omission rate has also been attested for French by Kupisch and Rinke (2008: 101-102) who connect the consistent copula realization with the high productivity of the French presentative 'c'est + predicate'. Since utterances containing this fixation appear frequently, especially early on as is the case for the children analyzed here, the overall rate of overt copulas is higher than expected.
a. xxx Anaé chez mamie.

Anaé with mommy
"Anaé (is) at mommy's."
(Anaé, 2;2, uttrn. = 11923)
b. i@ppaslà Nicolas. not there Nicolas
"Nicolas (is) not here."
(Antoine, 2;1, uttrn. $=20351$ )
c. très [/]> très bon les gâteaux <de Noël>. very very good the cakes of Christmas "The Christmas cakes (are) very very good."
(Madeleine, 2;8, uttrn. $=27818$ )
The development of the Omission Rate over time is given for each child in Tables 4 and 5 in absolute numbers and in Tables 6 and 7 in percentages, where NV stands for 'No Value', i.e. no recording was found.
It is important to note that the amount of valid data may vary significantly between recordings; while the total number of copular contexts always ranges between twenty and 80 for Madeleine, for example, the initial recordings of Anaé and Antoine may provide only a couple of valid sentences. The relative omission rates of each child are also plotted in Figures 3, 4 and 5 , respectively.

Like for the global omission rates, the CO development of both girls, too, is rather similar, while the data of Antoine differs somewhat. However, all children show an initially high omission rate that falls towards zero over time. From the age of $2 ; 8$ onward, omission rates do not exceed $10 \%$ for any child anymore. The overall curve of omission rates is constantly falling, though interrupted by individual peaks. In fact, all three children display a temporarily higher omission rate around the age of 2;7, represented by the according peaks of the graphs. This peak is the highest for Antoine, who omits over $10 \%$ of expected copulas at this stage. A smaller peak seems to appear around the age of $3 ; 0$. These overlaps should not be too significant, however, since the acquisition steps are measured in age and not in utterance length.

Regarding the results for Anaé and Madeleine, Figures 3 and 5 show comparably high omission rates for the first two or three recordings before omission rates fall to a constant level below $10 \%$. However, the high rates for Anaé result from very small samples: three instances at the age of $1 ; 4$, one at $1 ; 6$, three again at $1 ; 7$ and six at $1 ; 9$. Therefore, the representativeness of these points is very questionable. Still, it lines up with the pattern in Madeleine's data. The development of Antoine's omission rate is somewhat different, even though the global tendency is the same for all children: Antoine produces his first COs several months later than the girls, which may be caused by a delay of the two-word stage in his acquisition process. ${ }^{23}$

[^16]Table 4: Development of Copula Omission between 1;4 and 2;3 (absolute numbers)

| Age [a;mon] <br> Child | $\mathrm{CO} / \mathrm{C}$ | $1 ; 4$ | $1 ; 6$ | $1 ; 7$ | $1 ; 9$ | $1 ; 10$ | $1 ; 11$ | $2 ; 0$ | $2 ; 1$ | $2 ; 2$ | $2 ; 3$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Anaé |  | $1 / 3$ | $1 / 1$ | $0 / 3$ | $0 / 6$ | NV | $1 / 10$ | $3 / 58$ | $6 / 42$ | $5 / 51$ | $1 / 36$ |
| Antoine | NV | NV | NV | NV | NV | NV | NV | $3 / 5$ | $9 / 15$ | $9 / 19$ |  |
| Madeleine | NV | NV | NV | $4 / 12$ | $8 / 27$ | $10 / 22$ | NV | $2 / 39$ | $4 / 76$ | $1 / 38$ |  |

Table 5: Development of Copula Omission between 2;4 and 3;2 (absolute numbers)

| Age [a;mon] <br> Child | $\mathrm{CO} / \mathrm{C}$ | $2 ; 4$ | $2 ; 5$ | $2 ; 6$ | $2 ; 7$ | $2 ; 8$ | $2 ; 9$ | $2 ; 10$ | $2 ; 11$ | $3 ; 0$ | $3 ; 1$ | $3 ; 2$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Anaé |  | $1 / 32$ | $1 / 76$ | $3 / 44$ | NV | $3 / 28$ | $1 / 19$ | $1 / 27$ | $3 / 51$ | NV | $1 / 37$ | NV |
| Antoine | $4 / 10$ | $3 / 15$ | $4 / 39$ | $4 / 26$ | $1 / 33$ | $1 / 46$ | NV | $2 / 63$ | $3 / 40$ | NV | $0 / 34$ |  |
| Madeleine | $2 / 72$ | $1 / 57$ | $0 / 23$ | $4 / 52$ | $1 / 43$ | $1 / 55$ | $0 / 38$ | $0 / 77$ | $1 / 62$ | NV | NV |  |

Table 6: Development of Copula Omission between 1;4 and 2;3 (percentages)

| Age [a;mon] | $1 ; 4$ | $1 ; 6$ | $1 ; 7$ | $1 ; 9$ | $1 ; 10$ | $1 ; 11$ | $2 ; 0$ | $2 ; 1$ | $2 ; 2$ | $2 ; 3$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Child |  |  |  |  |  |  |  |  |  |  |
| Anaé | 33.33 | 100.00 | 0 | 0 | NV | 10 | 5.17 | 14.29 | 9.80 | 2.78 |
| Antoine | NV | NV | NV | NV | NV | NV | NV | 60.00 | 60.00 | 47.37 |
| Madeleine | NV | NV | NV | 33.33 | 29.63 | 45.46 | NV | 5.13 | 5.26 | 2.63 |

Table 7: Development of Copula Omission between 2;4 and 3;2 (percentages)

| Age [a;mon] <br> Child | $2 ; 4$ | $2 ; 5$ | $2 ; 6$ | $2 ; 7$ | $2 ; 8$ | $2 ; 9$ | $2 ; 10$ | $2 ; 11$ | $3 ; 0$ | $3 ; 1$ | $3 ; 2$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Anaé | 3.13 | 1.32 | 6.82 | NV | 10.71 | 5.26 | 3.70 | 5.89 | NV | 2.70 | NV |
| Antoine | 40.00 | 20.00 | 10.26 | 15.39 | 3.03 | 2.17 | NV | 3.18 | 7.50 | NV | 0 |
| Madeleine | 2.78 | 1.75 | 0 | 7.69 | 2.33 | 1.82 | 0 | 0 | 1.61 | NV | NV |



Figure 3: Copula Omission Rates of Anaé $(1 ; 4-3 ; 1)$


Figure 4: Copula Omission Rates of Antoine (2;1-3;2)

## Madeleine



Figure 5: Copula Omission Rates of Madeleine (1;9-3;0)

At the same time, he produces the most omissions in absolute and relative numbers: his first relevant data points show several omission rates over $30 \%$ which is reached by neither of the girls. A big difference is also the gradual decrease of omission, the CO rate does not fall under $10 \%$ until the age of $2 ; 8$, whereas there is a sudden decrease of about $40 \%$ for Madeleine and of $100 \%$ for Anaé after the first and high omission rates. Antoine is the only child with omission rates of about $60 \%$, except for Anaé who omits all expected copulas at $1 ; 6$, but again, this corresponds to only one valid instance at that age, which happens to be an omission. Therefore, Antoine is the only child for which Copula Omission is a constant and relevant phenomenon during the third year of acquisition. For Anaé and Madeleine, Copula Omission is also a constant phenomenon, and their patterns seem to line up with each other. It is however less relevant, and their omission rates stay around $5 \%$ most of the time.

In order to check whether the findings of Witzmann and Müller (2007) regarding predicate type hold true for monolingual French children as well, the extracted sentences were then classified according to predicate type. ${ }^{24}$ Similarly to their study and to the work of Becker (2002, 2004), I have differentiated three groups of predicates: locatives representing stagelevel predicates, nominals representing individual-level predicates, and adjectival and other, not distinguishable predicates. The correlation between CO and predicate type has then been calculated by measuring up the instances of COs with a given predicate type against all instances of that predicate type, which corresponds to the method applied by Witzmann and Müller (2007) and Becker $(2002,2004)$. I have however also included AP predicates and differing cases as a third group to cover all instances of omission. Table 8 thus contains the overall omission rate of all ILP, SLP and other instances for each child in absolute numbers, i.e. the number of omissions over the total number of predicate instances, as well as in relative

[^17]numbers, given in parentheses.

Table 8: Copula Omission Rates according to Predicate Type

| Child | CO/ILP + S (in \%) | CO/SLP + S (in \%) | CO/AP \& other + S (in \%) |
| :--- | ---: | ---: | ---: |
| Anaé | $13 / 257(5.06)$ | $10 / 125(8)$ | $19 / 138(13.77)$ |
| Antoine | $8 / 143(5.59)$ | $16 / 64(25)$ | $9 / 142(6.34)$ |
| Madeleine | $8 / 241(3.32)$ | $23 / 233(9.87)$ | $8 / 219(3.65)$ |
| Average [\%] | 4.66 | 14.29 | 7.92 |

The results show about the same correlation for each child: the omission rates among copula instances associated with a locative predicate are visibly higher than the rates associated with nominal predicates. In this regard, the data of Antoine displays the biggest discrepancy, where the copula was relatively omitted almost five times as often in SL-contexts as in IL-contexts. On average, it was omitted about thrice as much in SL-contexts as in IL-contexts. Additionally, the omission rate for SL-contexts exceeds the average omission rate determined initially for each child, and the omission rate for IL-contexts is lower than the general average for each child as well. At the same time, the results for the third, adjectival group, are similar to the SL-group in that the according omission rates are also higher than those for the individuallevel group. The difference is however less pronounced and minimal in the case of Madeleine, so overall the average omission rate of this group is situated between the two others. Still, for Anaé, this group shows the highest rate of Copula Omission, and it even doubles her general omission rate of $6.11 \%$. Overall, stage-level contexts and, to a lesser extent, contexts that are neither stage- nor individual-level, correlate with Copula Omission in that they exceed the average omission rate, while IL-contexts appear less favorable for CO since their omission rate lies below the global average. This is confirmed by the results of a $\chi^{2}$-test performed on every child's data: when comparing the predicate type frequency between CO- and OCinstances, Antoine, $\chi^{2}(2, N=345)=15.62, p<.001$, as well as Madeleine, $\chi^{2}(2, N=693)=$ $11.93, p=.003$, show a significant difference at chosen $\alpha=.01$. Only the data of Anaé, $\chi^{2}(2, N$ $=524)=1.29, p=.525$, does not suggest a correlation with CO, just like the qualitative analysis has shown. The results seem to confirm Becker's $(2002,2004)$ proposal and contrast with the findings of Witzmann and Müller (2007) on bilingual French children. This might suggest that Copula Omission patterns in Child French are influenceable by a second mother language, but it seems strange that German as L1-language, showing itself a correlation along the lines of Becker, should distort the very same correlation in the bilingual French data. Additionally, the difference between predicate types is not as obvious as in the English data, and the significance of this difference for French Copula Omission could not be established for all three of the examined children. Another problem with these results is that a significant proportion of omissions appears with predicates that are neither locative nor nominal. It might therefore be plausible to link the found correlation to the conceptual particularity of locatives instead of a semantically based SLP-class, as suggested above. It is therefore still useful to compare the found correlation with the distribution of dislocation in the present data.

Lastly, the correlation of Copula Omission with the production of dislocated structures has thus been analyzed. For this, all valid sentences have been classified as either carrying a dislocated XP, usually the subject, or as canonical, i.e. carrying a heavy subject. The production rate of dislocations for overt copula, that is, adult-like structures, has then been compared to the dislocation rate of all CO instances, because dislocation is taken to be acquired early on in an adult-like fashion. In order to decide whether a sentence contains dislocation, I have used two criteria proposed by DeCat (2009), see above Chapter 3.2:

Dislocation is present when
i) a subject and a discernable resumptive appear alongside each other.
ii) the word ordering clearly suggests a dislocation structure.

The second criterion was especially needed for CO structures as well as for overt copula sentences where a potential resumptive might have been omitted. These criteria have been sufficient for accounting for most of the analyzed data. Especially word ordering could already account for most found dislocations, which can be explained by the fact that Right Dislocation, for which word ordering is deviant, is acquired before Left Dislocation. In fact, most of the found dislocations are instances of RD which implies that dislocation is already subject to the acquisition process in the line of DeCat's findings. However, a considerable amount of CO sentences, as well as individual instances of an overt copula, could not be decided on by just these criteria. This concerned mostly potential RDs in interrogative clauses and LDs with a missing resumptive, where the word ordering of both possible underlying structures is similar. In order to to come to a decision regarding these dubious cases, 46 in total, a prosodic analysis along the lines of DeCat (2009) is therefore advanced in the following chapter, completing the syntactic evidence. However, since the respective audio data could not be easily extracted from the CHILDES database, the corresponding phrases have been recorded by playing them from one media device to another, using the phonetics program Praat. ${ }^{25}$ Therefore, the quality of the generated corresponding audio files cannot be seen as optimal. I will account for this problem by presenting a 'conservative' analysis that does not rely on these recordings alongside the prosodic data.

### 5.3. Prosodic Analysis

The relevant prosodic criteria proposed by DeCat (2009), see also Chapter 3.2, are restated below.

For Clitic Right Dislocation, the XP appears:
i) destressed in pitch after an intonation peak,
ii) with smaller amplitudes in intensity,
iii) about five semitones lower in pitch than the preceding element,

[^18]iv) in general, as a copy of the preceding intonation.

For Clitic Left Dislocation, the XP appears:
i) in a separate intonation group,
ii) with a rise of over three semitones on its last syllable,
iii) lengthened in time on its last syllable or
iv) with a general high-low contour that concerns also the two following syllables.

I have taken into account all the criteria for Right Dislocation, and mainly the first two criteria for Left Dislocation, because the temporal lengthening and high-low contour are less reliable. Figures 6 and 7 show the exemplary dislocation analysis of the recorded sentences using Praat, where pitch is marked with speckles in semitones per 100 Hz and intensity with a solid line in dB .

Figure 6 shows the prosody of a $w h$-interrogative uttered without a copula by Madeleine at the age of $2 ; 1$. The XP in question is le lait, which might be a canonical subject in an interrogative inversion or a right-dislocated NP in an in-situ interrogative with missing resumptive, see (30):
(30)
a. Ò̀ est le lait? where is the milk
"Where is the milk?"
b. Il est où, le lait? he is where, the milk "Where is it, the milk?"

Looking at the recorded prosody, it can be seen that the pitch falls about four to five semitones after the interrogative pronoun, and the determiner is clearly destressed in intensity. This suggests a Right Dislocation, however the amplitudes on the NP rise again after the determiner and even exceed the first pronoun's intensity. I have analyzed this sentence as carrying RD nonetheless, because the rise in intensity, as well as the simultaneous rise in pitch, mirror the prosody on the interrogative pronoun and can be seen as a copy of the main clause's interrogative intonation, indicated in the text grid by the question mark. In an inverted interrogative, the pronoun should not carry an interrogative intonation. Since right-dislocated elements are taken to copy the preceding intonation, I have assumed Right Dislocation in this instance.

Figure 7, on the other hand, shows the prosody of a potential LD uttered by Anaé at the age of $1 ; 4$, which is the earliest stage recorded. Clearly, an overall difference in quality between both diagrams can be seen; Figure 7 displays a largely varying and interrupted pitch curve and a less constant intensity graph. This is supposedly due to noise overlapping with the child speech at this moment, as well as the problem of audio extraction. Still, I have tried to differentiate between the canonical heavy subject and a LD with missing resumptive, see (31):


Figure 6: Prosody of a Copula Omission with Right Dislocation (Madeleine, 2;1, uttrn. $=16196$ )
a. (Le) bébé est là. (the) baby is there "(The) baby is there."
b. (Le) bébé, il est là.
(the) baby it is there
"(The) baby, it's there."
While the NP in question shows a rise in pitch of about ten semitones, it is not a separate intonation group because the following syllable dominates it in pitch. However, this utterance is marked by an additional emphasis on là, which is also indicated by the intensity rise on that syllable. Reflecting DeCat's (2009) considerations on emphatic and flat sentences, I have analyzed this instance as left-dislocated, because the last syllable of the NP shows a temporal lengthening compared to the other syllables as well as a high-low development of pitch on that syllable.

Lastly, I will present an example of Copula Omission with a heavy subject, see Figure 8.
Again, a Left Dislocation would be possible, see (32):
(32) a. Tchoupi est ici.

Tchoupi is here
"Tchoupi is here."
b. Tchoupi, il est ici.

Tchoupi he is here
"Tchoupi, he's here."


Figure 7: Prosody of a Copula Omission with Left Dislocation (Anaé, 1;4, uttrn. = 581)


Figure 8: Prosody of a Copula Omission with heavy subject (Antoine, 2;2, uttrn. $=27097$ )

Table 9: Dislocation Rates according to Copula Realization

| Child | Dislocated CO/CO <br> (in \%) | Dislocated OC/OC <br> (in \%) | Discarded prosody <br> (CO\|OC) |
| :--- | ---: | ---: | ---: |
| Anaé | $23 / 31(74.19)$ | $210 / 492(42.69)$ | $(1 \mid 0)$ |
| Antoine | $33 / 42(78.57)$ | $111 / 302(36.76)$ | $(1 \mid 0)$ |
| Madeleine | $28 / 38(73.68)$ | $246 / 653(37.67)$ | $(1 \mid 1)$ |
| Average $[\%]$ | 75.48 | 39.04 |  |

However, the NP's intonation group lies only slightly above that of the locative, and there is no visible rise on its last syllable. At the same time, there is no visible high-low contour, and the syllable in question is not lengthened, but short. Therefore, this NP has been analyzed as heavy subject. These three examples should be representative for how the prosody of dubious cases has been analyzed. The diagrams of the prosody for all sentences analyzed are given in Appendix C. Four of these instances could however not be analyzed prosodically overall, either because of excessive or missing emphasis, or because of too much interfering noise. These exceptions have subsequently not been included in the calculations below.

The results of the dislocation analysis are given in Table 9 for each child regarding the dislocation rate among Copula Omissions as well as among Overt Copula structures. The third column indicates for each child how many phrases had to be excluded from the analysis and whether these phrases were instances of Copula Omission or of an Overt Copula.

Table 9 shows that the average dislocation rate for reliable cases, i.e. for Overt Copula instances, is more than one third, which corresponds to the findings of DeCat for Child French (DeCat 2009: 242). If dislocation was insignificant for the production of Copula Omissions, similar rates would be expected to emerge from the omission data. However, among cases of Copula Omission, the rate of dislocation is about $75 \%$ for each child, which means that by far most instances of Copula Omission, more than three out of four, noted in this study appeared in dislocation contexts. Along these lines, the $\chi^{2}$-test of each child's data shows a significant difference between CO- and OC-contexts: at chosen $\alpha=.01$, Anaé, $\chi^{2}(1, N=523)=11.72, p=$ .001, Antoine, $\chi^{2}(1, N=344)=26.49, p<.001$, as well as Madeleine, $\chi^{2}(1, N=691)=19.46, p<$ .001, display a strong correlation between CO and dislocation compared to regular copula use. Since, as reported, the quality of the recordings used for prosodic analysis could not be guaranteed, I have additionally calculated the dislocation rates of the most conservative approach, which is to define all prosodically analyzed instances as non-dislocated. The corresponding lowered dislocation rates are given for each child in Table 10.

Table 10: Dislocation Rate among Copula Omissions (without prosodic analysis)

| Child | Dislocated CO/CO (in \%) |
| :--- | ---: |
| Anaé | $18 / 32(56.25)$ |
| Antoine | $28 / 43(65.12)$ |
| Madeleine | $19 / 39(48.72)$ |
| Average [\%] | 56.70 |

Table 11: Predicate Type distribution among Copula Omissions

| Child | CO+ILP/CO (in \%) | CO+SLP/CO (in \%) |
| :--- | ---: | ---: |
| Anaé | $13 / 32(40.63)$ | $10 / 32(31.25)$ |
| Antoine | $8 / 43(18.6)$ | $16 / 43(37.21)$ |
| Madeleine | $8 / 39(20.51)$ | $23 / 39(58.97)$ |
| Average [\%] | 26.58 | 42.48 |

Remarkably, the resulting average rate of dislocation among instances of Copula Omission is still about $20 \%$ higher than the average rate for overt copulas. Even compared to the distribution of omissions according to predicate type over all omissions, this correlation is more significant. The distribution of predicate types (disregarding the third group) is given in Table 11.

It can be seen that the overall difference between SLP- and ILP-instances is only about $15 \%$, and predicates were stage-level in about $40 \%$ of all cases of omission, whereas generally more than one out of two omissions carried a dislocation under the conservative approach. Thus, even if the prosodic analysis is disregarded, dislocation seems to be a better indicator for French Copula Omission than predicate type. Returning to the prosodically inclusive results, dislocation might be considered not only as a determining factor, but even as a structural restriction on Copula Omission, considering the high rate of $75 \%$ and the typical variance of speech data. In fact, by far most of the non-dislocated CO-structures were analyzed as such by prosodic analysis, which, as discussed, may be unreliable in this case. Only Madeleine has produced several omissions where the subject is the relative pronoun of an embedded clause, as in (33), so that dislocation has not been considered from the beginning. Additionally, dislocation rates might be lower because of the ongoing process of LD-acquisition Thus, it might be that the actual dislocation rate among COs is even higher than $75 \%$. Such a statement could not be possible for the predicate distinction, where the stage level 'only' determines less than $50 \%$ of all noted omissions. Similarly, the statistical testing of the results shows that the correlation with dislocation is visibly more significant than the predicate type correlation, displaying $p$-values that are lower by several powers.
a. un <gros jeu qui> [>] dans mon étagère.
a big game that in my shelf
"A big game that (is) on my shelf."
(Madeleine, 2;7, uttrn. $=25500$ )
b. quelque chose qui dans ma valise.
something that in my suitcase
"Something that (is) in my suitcase."
(Madeleine, 2;9, uttrn. $=29575$ )
Overall, spoken French dislocation as a syntactic operation on the information structure has proven to be a reliable factor for the analysis of early Child French Copula Omission. In the analyzed data, basically all dislocated XPs in CO-structures were assigned a topic interpretation. Even though Copula Omission is generally a much less relevant phenomenon in French than in English, it has shown systematic patterns across individual differences. It should be noted that throughout this analysis, all three children have mostly produced comparable results regarding omission development, predicate type association as well as dislocation rates. This suggests that French Copula Omission, despite appearing rather scarcely, is genuinely restricted by pragmatic as well as syntactic, and even prosodic considerations and that it constitutes a virtual interface phenomenon. Along these lines, it might therefore be useful reconsidering established predication theories from a broader perspective.

In the last chapter, I am finally going to resume the initial viewpoint, the theoretical aspects investigated, as well as the reported results regarding the stated hypotheses and what they mean for the model of Copula Omission.

## 6. Conclusion

Copula Omission is a child speech phenomenon observed in several European languages during the two-word stage, characteristic for several functional omission features like Root Infinitives. It has been shown that the assumption of a Truncation approach originated by Luigi Rizzi provides a UG-based explanation for Copula Omission as well as Root Infinitives. Based on the delayed setting of a Root Parameter, the free choice in setting a clause's root allows the children to generate truncated structures beneath CP or even IP. Seeing that the copula verb is commonly analyzed as a direct realization of a functional head over a Small Clause complement containing the subject and its associate predicate, a truncation process would be able to produce bare subject-predicate structures, where the subject might be omitted additionally. Albeit studied less extensively than Root Infinitives, Copula Omission has been argued to be constricted by the semantic and/or syntactic nature of the respective sentence predicate, according to Misha Becker's $(2002,2004)$ studies on Child English and the study of Witzmann and Müller (2007) on bilingual Child German. However, I have shown referencing the work of Claudia Maienborn (2003) on the copula's logic form that the widespread notion of a stage-level/individual-level distinction regarding predicates is neither syntactically nor semantically based. Rather, the observable structural differences between both classes concerning mainly
well-formedness is the result of the hearer's implicit pragmatical interpretation of the according predication. This is mainly due to an interpretational temporality effect which is caused by the inference of a situational topic projected on the LF of the copula. Thus, the noted preference for Copula Omission in apparent SLP-contexts should be accounted for on a pragmatical level as well. This might concern possible considerations of the child regarding the necessity of providing information that is recoverable and sufficient for the hearer. Since the cited study on bilingual French children has not shown a relevant correlation between omission and predicate, I have subsequently argued that in French, a discourse configurational language, as Cécile DeCat (2009) tentatively proposes, other operations on the syntactic information structure of the phrase, namely the very productive dislocation of XP-elements, might be a more satisfying cue for French children. That is because DeCat (2009) shows dislocated XPs to consistently receive a topic reading in spoken Adult as well as in Child French. This stance is backed up by the observation of DeCat and of the present study, that monolingual French children produce dislocations at an adult rate very early on, from the beginning of word combination, as well as by the fact that French Root Infinitives, too, apparently only allow dislocated subjects, and by the suggestion that children are sensitive to contextual information as soon as they produce speech. I have therefore advanced two hypotheses on Child French Copula Omission before testing both using a corpus of monolingual French acquisition data: first, I have assumed that there would not be any significant correlation between French Copula Omissions and different predicate types, mainly locatives and nominals. Second, I have proposed that there should be a significant correlation between Copula Omission and XP-dislocation exceeding the observable dislocation rate in instances of a realized copula. For the analysis of this theory, I have considered the CHILDES recordings of three monolingual children between the second and third year of acquisition. The respective Copula Omission rates vary between five and twelve percent, which confirms that Copula Omission is a consistent, but rare acquisition phenomenon in French. Omissions tend to appear at a high rate during a short period at the beginning of the two-word stage before falling to a constant low. The results on SLP- versus ILP-contexts favor a rejection of my first hypothesis, since there appears to be a relevant favoring of omissions in SLP-contexts. This correlation is however less clear than for English (Becker 2002: 49-50), and such a consideration also disregards a significant amount of omissions associated with differing predicate types. At the same time, a comparison between the children's dislocation rate in Overt Copula-contexts and the dislocation rate among Copula Omissions, backed up by a partial prosodic analysis, has shown that there is a largely significant correlation between Copula Omission and dislocation. This criterion regards basically all found omissions and exceeds the correlation with predicate classes visibly, even when rejecting the prosodically more ambiguous data.

These findings suggest that functional omissions available to children in general can be restricted quite consistently by necessary considerations of pragmatical informativeness principles, linked to syntactic information structure in the case of French. This confirms that Copula Omission, like other Root Infinitive phenomena, is systematic and regularized by constraints of varying linguistic domains. It also emphasizes the necessity to consider the special structural properties of the individual languages investigated, which is certainly relevant for
comparative studies. This thesis has tried to account for monolingual French acquisition, for which Copula Omission does not seem to have been analyzed in detail up to this point. Still, regarding this and other early child speech phenomena, broader analyses across languages are just as desirable for the development of Generative research.

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## Appendix

The following sections contain the data used for the corpus study of Chapter 5. The cleft sentences excluded beforehand are given in Appendix A. The found instances of Copula Omission after exclusion of repetitions etc. are given in Appendix B. The diagrams generated in Praat and used to analyze prosody are given in Appendix C.

## A. Excluded Clefts

In this section, all clefts encountered during the analyses that have been excluded from the results are given in tables for each child individually and in chronological order. The sentences correspond to the original transcription, where pro-forms are marked by @p, unrecoverable sounds by $x x x$ and recoverable non-lexemic sounds by $y y y$, see also Chapter 2.1 ; however, in sentences highlighted by a *, a phonetically transcribed utterance has been analyzed as full morpheme or lexeme, usually because it is very close, if not identical, to the target phonology. This may concern the copula realization, for instance, where transcriptions like se@p (phon.: [se]) have been analyzed as the according c'est. Sentences marked with ** have been recovered as clefts despite incomplete structures, for example phrases where the necessary conjunction has been omitted. The cleft-internal copula is highlighted for each sentence. Overall, 93 cleft productions have been counted, from which Anaé has produced 28, Antoine 15 and Madeleine 50.

Table A.1: Clefts produced by Anaé $(1 ; 4-3 ; 1)$

| Index | Age <br> [a;mon] | Utterance | Utterance <br> Number |
| :--- | ---: | :--- | ---: |
| (A.1) | $2 ; 0$ | **'est toi a@p vas là ! | 7506 |
| (A.2) | $2 ; 0$ | c'est le yyy qui va là . |  |
| (A.3) | $2 ; 2$ | et <ça c'est yyy> [//] le xxx ça «c'est [/]> c'est | 11202 |
|  |  | qui qui monte ? |  |

Table A.1: Clefts produced by Anaé $(1 ; 4-3 ; 1)$

| Index | Age <br> [a;mon] | Utterance | Utterance <br> Number |
| :--- | ---: | :--- | ---: |
| (A.13) | $2 ; 6$ | non c'est moi qui mets mes chaussons . | 18168 |
| (A.14) | $2 ; 6$ | c'est moi qui mets mon pyjama tout seule . | 18977 |
| (A.15) | $2 ; 6$ | oui c'est maman qui l'a acheté . | 19111 |
| (A.16) | $2 ; 8$ | c'est p(e)tit cochon qui met <dans [//]> ses | 19800 |
|  |  | doigts dans le «nez \&=sourit. |  |
| (A.17) | $2 ; 8$ | +< oh c'est qui qui a dessiné sur la coccinelle | 20266 |
|  |  | xxx . |  |
| (A.18) | $2 ; 9$ | attends c'est moi qui la fais . | 21373 |
| (A.19) | $2 ; 9$ | non c'est moi qui l'enlève . | 21599 |
| (A.20) | $2 ; 9$ | non c'est moi qui ouvre . | 21693 |
| (A.21) | $2 ; 9$ | c'est toi qui l'as achetée . | 22156 |
| (A.22) | $2 ; 10$ | c'est moi qui va mettre ça hein . | 22443 |
| (A.23) | $2 ; 10$ | +< après c'est à moi qui mélange . | 22688 |
| (A.24) | $2 ; 10$ | c'est moi qui va l'ouvrir . | 23100 |
| (A.25) | $2 ; 11$ | oh regarde ce-qui fait dans les bras de papa | 24219 |
|  |  | c'est Anaé qui fait ukulélé avec papa . |  |
| (A.26) | $2 ; 11$ | parce que c'est les petits enfants qui met ses | 24775 |
| (A.27) | $2 ; 11$ | doigts dedans . |  |
| (A.28) | $3 ; 1$ | c'est Agathe qui me l'a donnée . | 25388 |

Table A.2: Clefts produced by Antoine (2;1-3;2)

| Index | $\begin{array}{r} \text { Age } \\ {[\mathrm{a} ; \mathrm{mon}]} \end{array}$ | Utterance | Utterance Number |
| :---: | :---: | :---: | :---: |
| (A.29) | 2;7 | **Tchoupi pas d'accord <non c'est moi m'habille tout seul> [=! discours rapporté]! | 41024 |
| (A.30) | 2;7 | *xxx <non c'est moi i@p fait> [=! discours rapporté]. | 41028 |
| (A.31) | 2;7 | **a mis chaussures à l'envers Tchoupi dit <non c'est moi le fait> [=! discours rapporté]. | 41087 |
| (A.32) | 2;7 | **'c'est moi débarrasse mon verre xxx Tchoupi | 41113 |
| (A.33) | 2;7 | *non c'est moi i@p donne . | 41218 |
| (A.34) | 2;7 | **c'est moi ouvrir . | 41911 |
| (A.35) | 3;2 | <c'est moi qui a yyy> [/] xxx c'est moi qui l'ai fait xxx yyy exprès pour toi . | 50893 |

Table A．2：Clefts produced by Antoine（2；1－3；2）

| Index | Age <br> ［a；mon］ | Utterance | Utterance <br> Number |
| :--- | ---: | :--- | ---: |
| （A．36） | $3 ; 2$ | $+<$ ah c＇est Tonton＿Christophe qui a fait ça ． | 51048 |
| （A．37） | $3 ; 2$ | non c＇est moi qui fais ． | 51052 |
| （A．38） | $3 ; 2$ | non c＇est moi qui enlève＜la［／］＞la peau ． | 51072 |
| （A．39） | $3 ; 2$ | $+<$ c＇est moi qui fais avec mon couteau ． | 51122 |
| （A．40） | $3 ; 2$ | non c＇est moi qui fais ． | 51137 |
| （A．41） | $3 ; 2$ | euh c＇est moi qui fait ． | 51165 |
| （A．42） | $3 ; 2$ | non c＇est moi qui le coupe ． | 51319 |
| （A．43） | $3 ; 2$ | ＜non c＇est moi qui fais＞［＝！crie］． | 51322 |

Table A．3：Clefts produced by Madeleine（1；9－3；0）

| Index | $\begin{array}{r} \text { Age } \\ {[\mathrm{a} ; \mathrm{mon}]} \end{array}$ | Utterance | Utterance Number |
| :---: | :---: | :---: | :---: |
| （A．44） | 2；1 | （．）c＇est moi qui range ． | 16697 |
| （A．45） | 2；1 | c＇est moi qui a posé | 17123 |
| （A．46） | 2；1 | c＇est maman qui descend la poussette de moi ． | 17414 |
| （A．47） | 2；2 | ＜c＇est［／］＞＜c＇est le bébé＞［／／／］c＇est mon bébé à moi＜qui［／］＞＜qui［／］＞qu（i）a fait pipi ． | 18785 |
| （A．48） | 2；3 | c＇est qui qui rigole？ | 19044 |
| （A．49） | 2；3 | （．）c＇est＜qui［／］〉＜qui［／］〉＜qui［／］（．）〉 qui fait ça ？ | 19066 |
| （A．50） | 2；3 | c＇est qui qu（i）est sur l＇ar（bre）？ | 19129 |
| （A．51） | 2；3 | non＜c＇est pas＞［／／］c＇est toi qui dis pas ！ | 19523 |
| （A．52） | 2；3 | c＇est moi qui dis | 19525 |
| （A．53） | 2；3 | c＇est pas toi qui fait！ | 20333 |
| （A．54） | 2；4 | c＇est papa qui m＇a donné | 20690 |
| （A．55） | 2；4 | ＜c＇est［／］＞c＇est celle－là qu（i）est pas gentille ． | 21027 |
| （A．56） | 2；4 | c＇est moi qui vas faire le ri？． | 21462 |
| （A．57） | 2；4 | c＇est elle qu＇est triste | 21870 |
| （A．58） | 2；5 | ça c＇est pas la même forme qui va là ． | 22022 |
| （A．59） | 2；5 | c＇est moi quila＠p les girafes ． | 22522 |
| （A．60） | 2；5 | ＊c＇est là que z＠p ai tombée | 23466 |
| （A．61） | 2；5 | c＇est que moi qui joue！ | 23622 |
| （A．62） | 2；5 | ＜c＇est moi＞［＜］〈qui［／］〉 qui sais jouer aux dominos． | 23636 |
| （A．63） | 2；5 | c＇est moi qui as le tigre． | 23731 |
| （A．64） | 2；6 | c＇est Marie qui m＇a donné mon doudou ． | 24005 |

Table A.3: Clefts produced by Madeleine (1;9-3;0)

| Index | Age <br> [a;mon] |  |  |
| :--- | ---: | :--- | ---: |
| Utterance | Utterance <br> Number |  |  |
| (A.65) | $2 ; 6$ | c'est maman qui avait passé par-là . | 24892 |
| (A.66) | $2 ; 6$ | c'est moi qui a gagné ! | 24908 |
| (A.67) | $2 ; 6$ | c'est des poires hum des fruits d' automne que | 25359 |
|  |  | ?p avais mangés . |  |

Table A．3：Clefts produced by Madeleine（1；9－3；0）

| Index | Age <br> ［a；mon］ | Utterance | Utterance <br> Number |
| :--- | ---: | :--- | ---: |
| （A．90） | $3 ; 0$ | mais c＇est moi qui vais choisir et je vais vous <br> dire！ | 33282 |
| （A．91） | $3 ; 0$ | ＜parce que c＇est que＞［＜］les papas qui ont des <br> vestes． | 33304 |
| （A．92） | $3 ; 0$ | non c＇est pas comme ça 〈qu＇e（lle）［／］〉＜qu＇elle <br> est＞［＞］sur la photo | 34323 |
| （A．93） | $3 ; 0$ | non c＇est moi＜qui［／］〉＜qui［／］〉 qui fais le <br> méd（e）cin． | 34714 |

While Madeleine produces the most clefts from an early age，she also uses this construction the most correctly and in variation：where Anaé and Antoine only produce clefts that highlight the original subject，Madeleine＇s use of clefts is more creative，using locatives，objects or PPs， as in（A． $94 \mathrm{a}-\mathrm{c}$ ）．
> a．c＇est là que z＠pai tombée．
> that＇s there that have ${ }_{1 s \mathrm{~g}}$ fallen
> ＂That＇s where I fell．＂

（Madeleine，2；5，uttrn．$=23466$ ）
b．c＇est des poires hum des fruits d＇automne que ？p avais mangés．
that＇s DET pears DET fruits of autumn that $\operatorname{had}_{\mathrm{SG}}$ eaten ＂It＇s some pears hum some autumn fruits that ？p have eaten．＂
（Madeleine，2；6，uttrn．$=25359$ ）
c．〈c＇est［／］＞c＇est en jaune que je vais faire le \＆ch． that＇s that＇s in yellow that I go $\mathrm{do}_{\mathrm{INF}}$ the
＂It＇s，it＇s in yellow that I will make the \＆ch．＂
（Madeleine，2；7，uttrn．$=26417$ ）

## B．Copula Omissions

In this section，all found and validated instances of an omitted copula are given for each child individually and in chronological order．This includes cases，where a potential pro－form like se＠p was estimated as too deviant or too weak to account for the copula．The tables below specify for each child and each phrase the associated predicate type，i．e．SLP for locatives， ILP for nominals and Other for all other predicates．It is also specified whether the phrases XP，usually the subject，has been analyzed as dislocated or not．Dislocation has been asserted whenever subject and resumptive appear in the same sentence，also when the position，i．e．the word ordering of the sentence，indicates dislocation，and in dubious cases，a prosodic analysis has been advanced，see Appendix C．Dislocation has been dismissed on prosodic grounds as
well, except for cases where the subject is a relative pronoun, as in (B.1), or in cases where the copula is not the mein verb or where the predicate is an indefinite nominal. In these cases, dislocation is rather unlikely and has not been considered. This omission type has occurred several times in the data of Madeleine. Individual omissions had to be excluded from prosodic analysis because of interfering noise or lacking audio quality, which concerns also sentences that proved to be too flat or too emphatic.
(B.1) un <gros jeu qui> [>] dans mon étagère.
a big game that in my shelf
"A big game that (is) on my shelf."
(Madeleine, 2;7, uttrn. $=25500$ )

Table B.1: Copula Omissions produced by Anaé (1;4-3;1)

| Index | Age [a;mon] | Utterance | Predicate | XP | Utterance Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (B.2) | 1;4 | 〈bébé (.)> là | SLP | Dislocated: prosody | 581 |
| (B.3) | 1;6 | quoi ça. | ILP | Dislocated: position | 1348 |
| (B.4) | 1;11 | oh se@p quoi da? | ILP | Dislocated: resumptive | 5993 |
| (B.5) | 2;0 | un poisson là comme ça ! | ILP | Dislocated: position | 7334 |
| (B.6) | 2;0 | la fée le poupée | ILP | Dislocated: prosody | 7347 |
| (B.7) | 2;0 | le tapis moi. | SLP | Dislocated: position | 8304 |
| (B.8) | 2;1 | pour <moi (.) ¢ça | Other | Dislocated: position | 9612 |
| (B.9) | 2;1 | sa@p à moi ça | Other | Dislocated: position | 9888 |
| (B.10) | 2;1 | bébé ça | ILP | Dislocated: position | 10044 |
| (B.11) | 2;1 | tété@f à Kirikou là | SLP | Dislocated: prosody | 10504 |
| (B.12) | 2;1 | les yyy les sale les yyy à Kirikou. | Other | Dislocated: position | 10535 |
| (B.13) | 2;1 | yyy petite là | Other | Excluded: <br> audio <br> quality | 10770 |
| (B.14) | 2;2 | yyy yyy Popi ça. | ILP | Dislocated: position | 11138 |

Table B.1: Copula Omissions produced by Anaé $(1 ; 4-3 ; 1)$

| Index | Age [a;mon] | Utterance | Predicate | XP | Utterance Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (B.15) | 2;2 | c'est bébé li@p yyy lourd bébé. | Other | Dislocated: position | 11422 |
| (B.16) | 2;2 | yyyle@p méchant se@p les bébés yyy yyy dodo. | Other | Dislocated: position | 11789 |
| (B.17) | 2;2 | xxx Anaé chez mamie | SLP | Canonic: prosody | 11923 |
| (B.18) | 2;2 | e@p Dora là | SLP | Canonic: prosody | 11958 |
| (B.19) | 2;3 | des fois Anaé sur le cheval . | SLP | Dislocated: prosody | 13233 |
| (B.20) | 2;4 | et ça Babouche? | ILP | Dislocated: prosody | 15444 |
| (B.21) | 2;5 | où le singe ? | SLP | Dislocated: position | 17063 |
| (B.22) | 2;6 | y@p feu là . | SLP | Canonic: prosody | 18294 |
| (B.23) | 2;6 | où la purée? | SLP | Dislocated: position | 18535 |
| (B.24) | 2;6 | z@p a pas la@p pas un pyjama lapin là . | ILP | Dislocated: position | 19224 |
| (B.25) | 2;8 | +< oh <la [/]> la momie ici . | SLP | Canonic: prosody | 19978 |
| (B.26) | 2;8 | <ça quoi> [/] c'est quoi? | ILP | Canonic: prosody | 20333 |
| (B.27) | 2;8 | un bébé «que [/]> que yyy un panda. | ILP | Canonic: position | 20555 |
| (B.28) | 2;9 | <ça [/]>ça yyy de père+noël | ILP | Canonic: prosody | 22119 |
| (B.29) | 2;10 | comme ça sa gorge . | ILP | Dislocated: position | 23444 |
| (B.30) | 2;11 | et les bébés ça | ILP | Dislocated: position | 24208 |
| (B.31) | 2;11 | et celle-là petite et ça petite aussi. | Other | Canonic: prosody | 24820 |
| (B.32) | 2;11 | bleu aussi là . | Other | Dislocated: position | 25222 |
| (B.33) | 3;1 | pour Anouk ça? | Other | Dislocated: position | 26788 |

Table B．2：Copula Omissions produced by Antoine（2；1－3；2）

| Index | Age［a；mon］ | Utterance | Predicate | XP | Utterance Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| （B．34） | 2；1 | i＠p pas là Nicolas ． | SLP | Dislocated： position | 20351 |
| （B．35） | 2；1 | méchant l＇mur | Other | Dislocated： position | 20626 |
| （B．36） | 2；1 | a＠p voiture＜e＠p garage＞ ［／］e＠p garage． | SLP | Dislocated： prosody | 21983 |
| （B．37） | 2；2 | ＜à moi＞［／］à moi chocolat ． | Other | Dislocated： position | 26074 |
| （B．38） | 2；2 | 〈moi［／］〉 à moi ça． | Other | Dislocated： position | 26131 |
| （B．39） | 2；2 | Tchoupi ici | SLP | Canonic： prosody | 27097 |
| （B．40） | 2；2 | ＜ouh＠i［＝！crie］〉i＠p trop froide a＠p mer！ | Other | Dislocated： position | 27143 |
| （B．41） | 2；2 | un livre là！ | SLP | Canonic： prosody | 27575 |
| （B．42） | 2；2 | si là－bas voiture | SLP | Dislocated： position | 28192 |
| （B．43） | 2；2 | à moi cuillère ！ | Other | Dislocated： position | 28518 |
| （B．44） | 2；2 | non moi ça！ | Other | Dislocated： position | 28671 |
| （B．45） | 2；2 | ta＠p moi ça！ | Other | Dislocated： position | 28813 |
| （B．46） | 2；3 | la＠p moi ça！ | ILP | Dislocated： position | 29142 |
| （B．47） | 2；3 | ＜sable pas bon＞［＝！fronce les sourcils］［＝！signe non de la tête］． | Other | Canonic： prosody | 29164 |
| （B．48） | 2；3 | «sable［／］［＝！signe non de la tête］＞pas bon sable ． | Other | Dislocated： position | 29169 |
| （B．49） | 2；3 | là les avions là－bas ． | SLP | Dislocated： resump－ tive | 29357 |
| （B．50） | 2；3 | là－haut les avions！ | SLP | Dislocated： position | 29462 |
| （B．51） | 2；3 | fort Tchoupi ！ | Other | Dislocated： position | 30058 |

Table B.2: Copula Omissions produced by Antoine $(2 ; 1-3 ; 2)$

| Index | Age [a;mon] | Utterance | Predicate | XP | Utterance Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (B.52) | 2;3 | $\varepsilon @ p$ balcon les rideaux | SLP | Dislocated: | 31344 |
|  |  |  |  | position |  |
| (B.53) | 2;3 | là la poche | SLP | Dislocated: | 32480 |
|  |  |  |  | position |  |
| (B.54) | 2;3 | moto e@p pas voiture moto | ILP | Dislocated: | 33043 |
|  |  |  |  | position |  |
| (B.55) | 2;4 | un avion l'ciel ! | SLP | Dislocated: | 33541 |
|  |  |  |  | prosody |  |
| (B.56) | 2;4 | pleine la bouche! | Other | Dislocated: | 34165 |
|  |  |  |  | position |  |
| (B.57) | 2;4 | là Nané ça . | SLP | Dislocated: | 34452 |
|  |  |  |  | position |  |
| (B.58) | 2;4 | où la tétine? | SLP | Dislocated: | 36534 |
|  |  |  |  | prosody |  |
| (B.59) | 2;5 | +< quoi ça ? | ILP | Dislocated: | 37961 |
|  |  |  |  | position |  |
| (B.60) | 2;5 | ça là pas gwa . | SLP | Canonic: | 38505 |
|  |  |  |  | prosody |  |
| (B.61) | 2;5 | <ع@p pâtes> [//] ع@p e@p | ILP | Dislocated: | 38843 |
|  |  | pâtes ça. |  | position |  |
| (B.62) | 2;6 | ça tout petite | Other | Canonic: | 39344 |
|  |  |  |  | prosody |  |
| (B.63) | 2;6 | un rond ça ! | ILP | Dislocated: | 39709 |
|  |  |  |  | position |  |
| (B.64) | 2;6 | pas de l'herbe ça ! | ILP | Dislocated: | 39922 |
|  |  |  |  | position |  |
| (B.65) | 2;6 | ça des jaunes! | Other | Dislocated: prosody | 40310 |
|  |  |  |  |  |  |
| (B.66) | 2;7 | xxx papa pas content ohlàlà mis partout xxx . | Other | Excluded: audio quality | 41036 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| (B.67) | 2;7 | Tchoupi pas d'accord <non | Other | Canonic: prosody | 41078 |
|  |  | c'est moi m'habille tout seul> [=! discours rapporté] |  |  |  |
|  |  | ! |  |  |  |
| (B.68) | 2;7 | xxx tout seul papa pas content! | Other | Dislocated: prosody | 41098 |
|  |  |  |  |  |  |
| (B.69) | 2;7 | le baptême de Jeanne ça . | ILP | Dislocated: | 41915 |
|  |  |  |  | position |  |

Table B.2: Copula Omissions produced by Antoine (2;1-3;2)

| Index | Age [a;mon] | Utterance | Predicate | XP | Utterance Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (B.70) | 2;8 | ouais là il fort! | Other | Dislocated: resumptive | 44160 |
| (B.71) | 2;9 | là Antoine . | SLP | Dislocated: position | 45496 |
| (B.72) | 2;11 | le loup là . | SLP | Canonic: prosody | 48250 |
| (B.73) | 2;11 | yyy gros le loup. | Other | Dislocated: position | 48479 |
| (B.74) | 3;0 | <tout ça> [/] tout ça ça route | ILP | Dislocated: resumptive | 49488 |
| (B.75) | 3;0 | le poisson ici. | SLP | Canonic: prosody | 49866 |
| (B.76) | 3;0 | elle est 〈yyy [///]〉 elle en_train se reposer . | Other | Canonic: <br> position | 20351 |

Table B.3: Copula Omissions produced by Madeleine (1;9-3;0)

| Index | Age [a ;mon] | Utterance | Predicate | XP | Utterance Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (B.77) | 1;9 | un@p chaton là | SLP | Dislocated: position | 11494 |
| (B.78) | 1;9 | euh là monsieur | SLP | Dislocated: position | 11766 |
| (B.79) | 1;9 | Nanette a@p cuisine . | SLP | Dislocated: prosody | 11926 |
| (B.80) | 1;9 | <là [<]> ə@p sucre . | SLP | Dislocated: position | 12333 |
| (B.81) | 1;10 | <toutes douces> [/] toutes douces les oreilles. | Other | Dislocated: position | 12897 |
| (B.82) | 1;10 | ?@p chaud <le [/]> le pull? | Other | Dislocated: position | 12958 |
| (B.83) | 1;10 | deux ça. | Other | Dislocated: position | 13050 |
| (B.84) | 1;10 | le café ça ! | ILP | Dislocated: position | 13331 |

Table B.3: Copula Omissions produced by Madeleine (1;9-3;0)

| Index | Age [a;mon] | Utterance | Predicate | XP | Utterance Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (B.85) | 1;10 | ?@p bleue là | SLP | Excluded: <br> audio <br> quality | 13361 |
| (B.86) | 1;10 | jaune ça! | Other | Dislocated: position | 13412 |
| (B.87) | 1;10 | yyy <bleu ça> [/] bleu ça | Other | Dislocated: position | 13456 |
| (B.88) | 1;10 | le nez yyy nez ça ! | ILP | Dislocated: position | 14555 |
| (B.89) | 1;11 | ma chambre yyy belle . | Other | Dislocated: prosody | 14639 |
| (B.90) | 1;11 | ã@p le@p canapé vert là | SLP | Canonic: prosody | 14688 |
| (B.91) | 1;11 | dans le@p canapé vert moi | SLP | Dislocated: position | 14692 |
| (B.92) | 1;11 | quoi ça ? | ILP | Dislocated: position | 14766 |
| (B.93) | 1;11 | l'ogre yyy sa maison là -bas | SLP | Canonic: prosody | 14810 |
| (B.94) | 1;11 | quoi ça ? | ILP | Dislocated: position | 14893 |
| (B.95) | 1;11 | le cheval bleu <là [>] . | SLP | Dislocated: prosody | 14974 |
| (B.96) | 1;11 | le bleu là | SLP | Dislocated: prosody | 14983 |
| (B.97) | 1;11 | la bouche pour Madeleine $\varepsilon @ p$ là . | SLP | Canonic: prosody | 15543 |
| (B.98) | 1;11 | mes brocolis moi les brocolis . | ILP | Dislocated: position | 15914 |
| (B.99) | 2;1 | où le@p lait? | SLP | Dislocated: prosody | 16196 |
| (B.100) | 2;1 | +<<la@p noeud> [/] <la@p noeud ici> [//] ici la@p noeud. | SLP | Dislocated: position | 16283 |
| (B.101) | 2;2 | d?@p fleurs ça ! | ILP | Dislocated: position | 17562 |
| (B.102) | 2;2 | ça où ça ? | SLP | Dislocated: position | 17844 |

Table B．3：Copula Omissions produced by Madeleine（1；9－3；0）

| Index | Age［a ；mon］ | Utterance | Predicate | XP | Utterance Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| （B．103） | 2；2 | les lego où？ | SLP | Dislocated： prosody | 18254 |
| （B．104） | 2；2 | ça yyy＜un［／］＞un \＆ta＜une ［／］〉 〈une［／］＞une cafetière． | ILP | Canonic： prosody | 18533 |
| （B．105） | 2；3 | hum＜a＠p［／］＞a＠p roue là ． | ILP | Dislocated： prosody | 19998 |
| （B．106） | 2；4 | xxx où «mon［／］〉 mon verre ？ | SLP | Dislocated： prosody | 21272 |
| （B．107） | 2；4 | là la porte qu＇est pas cassée | SLP | Dislocated： position | 21533 |
| （B．108） | 2；5 | euh 〈le［／／］〉 celle＜qui dans＞［／／］hum＜qui［／］〉 qui là－bas + ．．．＜qui dans ma cham（bre）＞［／／／］qui en＿d（e）ssous de mon tiroir ＜de la＞［／／］de mon lit euh $+\ldots$ | SLP | Canonic： position | 22033 |
| （B．109） | 2；7 | un＜gros jeu qui＞［＞］dans mon étagère ． | SLP | Canonic： <br> position | 25500 |
| （B．110） | 2；7 | + ，＜parce que sinon＞［＞］il va pas joli si on met pas de rouge． | Other | Canonic： infinitive | 26033 |
| （B．111） | 2；7 | et après 〈hum［／］＞hum je fi－ nis＜et［／］＞＜et c＇est＞［／／／］et toi derrière et moi devant． | SLP | Dislocated： prosody | 26123 |
| （B．112） | 2；7 | ＜un un film de de＞［／／／］ un film qui dans l＇étagère qu＇est ici． | SLP | Canonic： position | 27009 |
| （B．113） | 2；8 | ＜très［／］＞très bon les gâteaux＜de Noà «l＞［＞］． | Other | Dislocated： position | 27818 |
| （B．114） | 2；9 | quelque chose qui dans ma valise． | SLP | Canonic： position | 29575 |
| （B．115） | 3；0 | $+<\langle t(u)[/]\rangle\langle t(u)[/]\rangle t(u)$ as vu le beau gilet quelqu＇un derrière ． | SLP | Canonic： <br> indefi－ <br> nite | 33883 |

## C. Prosodic Analysis

In this section, I will present the prosodic analysis of ambiguous sentences meant to determine whether an XP appears dislocated or not. The recording and analysis of the audio has been performed using the phonetics program Praat, see Chapter 5.1. For this, pitch in semitones per 100 Hz and intensity in dB of every recorded sentence have been plotted against the speech time in seconds in a corresponding figure containing the transcription of the sentence. These figures are given below for each child. Overall, 42 sentences have been analyzed this way, from which Anaé has produced thirteen, Antoine fourteen and Madeleine fifteen. The criteria for Left and Right Dislocation have been considered, namely:

For left dislocated XPs:
i) a separate intonation group,
ii) a rise of over three semitones on the last syllable,
iii) a lengthening in time on the last syllable,
iv) a general high-low contour that concerns also the two following syllables

Criteria iii) and iv) were regarded as secondary and only mattered in cases where one of the first two conditions was not sufficiently met.

For right dislocated XPs:
i) destress in pitch after an intonation peak,
ii) smaller amplitudes in intensity,
iii) a fall of about five semitones after the preceding element,
iv) in general, the copying of the preceding intonation

Based on these points, dislocation has been assumed or rejected. Madeleine's utterance (B.89) has been considered as well because there is some unidentifiable material between the XP and the adjective. The according figures are given for each child in chronological order.


Figure C.1: Dislocation Prosody of a Copula Omission (Anaé, 1;4, uttrn. $=581$ )


Figure C.2: Dislocation Prosody of a Copula Omission (Anaé, 2;0, uttrn. = 7347)


Figure C.3: Dislocation Prosody of a Copula Omission (Anaé, 2;1, uttrn. $=10504$ )


Figure C.4: Canonical Prosody of a Copula Omission (Anaé, 2;2, uttrn. $=11923$ )


Figure C.5: Canonical Prosody of a Copula Omission (Anaé, 2;2, uttrn. $=11958$ )


Figure C.6: Dislocation Prosody of a Copula Omission (Anaé, 2;3, uttrn. $=13233$ )


Figure C.7: Canonical Prosody of a copular sentence (Anaé, 2;3, uttrn. $=13754$ )


Figure C.8: Dislocation Prosody of a Copula Omission (Anaé, 2;4, uttrn. $=15444$ )


Figure C.9: Canonical Prosody of a Copula Omission (Anaé, 2;6, uttrn. $=18294$ )


Figure C.10: Canonical Prosody of a Copula Omission (Anaé, 2;8, uttrn. $=19978$ )


Figure C.11: Canonical Prosody of a copular sentence (Anaé, $2 ; 8$, uttrn. $=20333$ )


Figure C.12: Canonical Prosody of a Copula Omission (Anaé, 2;9, uttrn. $=22119$ )


Figure C.13: Canonical Prosody of a Copula Omission (Anaé, 2;11, uttrn. $=24820$ )


Figure C.14: Dislocation Prosody of a Copula Omission (Antoine, 2;1, uttrn. $=21983$ )


Figure C.15: Canonical Prosody of a Copula Omission (Antoine, 2;2, uttrn. $=27097$ )


Figure C.16: Canonical Prosody of a Copula Omission (Antoine, 2;2, uttrn. $=27575$ )


Figure C.17: Canonical Prosody of a Copula Omission (Antoine 2;3, uttrn. $=29164$ )


Figure C.18: Dislocation Prosody of a Copula Omission (Antoine, 2;4, uttrn. $=33541$ )


Figure C.19: Dislocation Prosody of a Copula Omission (Antoine, 2;4, uttrn. $=36534$ )


Figure C.20: Canonical Prosody of a Copula Omission (Antoine, 2;5, uttrn. $=38505$ )


Figure C.21: Canonical Prosody of a Copula Omission (Antoine, 2;6, uttrn. $=39344$ )


Figure C.22: Dislocation Prosody of a Copula Omission (Antoine, 2;6, uttrn. $=40310$ )


Figure C.23: Canonical Prosody of a Copula Omission (Antoine, 2;7, uttrn. $=41078$ )


Figure C.24: Dislocation Prosody of a Copula Omission (Antoine, 2;7, uttrn. $=41098$ )


Figure C.25: Canonical Prosody of a Copula Omission (Antoine, 2;11, uttrn. $=48250$ )


Figure C.26: Canonical Prosody of a Copula Omission (Antoine, 3;0, uttrn. $=49866$ )


Figure C.27: Canonical Prosody of a copular sentence (Antoine, 3;0, uttrn. $=50478$ )


Figure C.28: Dislocation Prosody of a Copula Omission (Madeleine, 1;9, uttr. $=11926$ )


Figure C.29: Dislocation Prosody of a Copula Omission (Madeleine, 1;11, uttrn. $=14639$ )


Figure C.30: Canonical Prosody of a Copula Omission (Madeleine, 1;11, uttrn. $=14688$ )


Figure C.31: Canonical Prosody of a Copula Omission (Madeleine, 1;11, uttrn. $=14810$ )


Figure C.32: Dislocation Prosody of a Copula Omission (Madeleine, 1;11, uttrn. $=14974$ )


Figure C.33: Dislocation Prosody of a Copula Omission (Madeleine, 1;11, uttrn. $=14983$ )


Figure C.34: Canonical Prosody of a Copula Omission (Madeleine, 1;11, uttrn. $=15543$ )


Figure C.35: Dislocation Prosody of a Copula Omission (Madeleine, 2;1, uttr. = 16196)


Figure C.36: Dislocation Prosody of a Copula Omission (Madeleine, 2;2, uttr. $=18254$ )


Figure C.37: Canonical Prosody of a Copula Omission (Madeleine, 2;2, uttrn. $=18533$ )


Figure C.38: Dislocation Prosody of a Copula Omission (Madeleine, 2;3, uttr. $=19998$ )


Figure C.39: Dislocation Prosody of a Copula Omission (Madeleine, 2;4, uttr. $=21272$ )


Figure C.40: Dislocation Prosody of a Copula Omission (Madeleine, 2;7, uttr. $=26123$ )


Figure C.41: Canonical Prosody of a copular sentence (Madeleine, 2;9, uttr. = 29093)


Figure C.42: Dislocation Prosody of a copular sentence (Madeleine, 2;11, uttrn. $=31850$ )


[^0]:    ${ }^{1}$ It will be interesting to see in the near future how this dominant spread will perform with respect to the more recent usage-based approach.
    ${ }^{2}$ Which, by the way, have proven to be somewhat unreliable, see Lemnitzer and Zinsmeister (2015: 27).

[^1]:    ${ }^{3}$ See also Hoekstra and Hyams (1998: 88) for an overview on RI rates of several languages. They also address the issue that English may be seen as not carrying any infinitival morphology at all.

[^2]:    ${ }^{4}$ This correlation is however not universal. In Japanese for example, RIs tend not to arise systematically even though Japanese Null Subjects are not recovered by verb inflection. Thus, the richness of the inflectional paradigm alone cannot be an indication of the RI status of any given language.
    ${ }^{5}$ Note that if RIs and Copula (or Auxiliary) Omission are amenable to the same syntactic explanation, then the Eventivity Constraint cannot be a deciding factor regarding RI phenomena anymore, given that omissions would correspond to a kind of alternative RI for functional/stative verbs.

[^3]:    ${ }^{6}$ See for instance Cinque and Rizzi $(2010,2016)$.
    ${ }^{7}$ At this point, it is important to keep in mind that Rizzi talks about Root Null Subjects legitimated or constrained by different root-setting options, and not pro-drop languages' Null arguments. In fact, Rizzi does not really address the nature of the relationship between the usual pro-drop parameter and a possible root-choice parameter along the lines of Rizzi (2005). This point is of interest because it might explore the possibility of a coexistence of both types of Null arguments, e.g. in Child Italian.

[^4]:    ${ }^{8}$ In the case of French, Strik (2007) observes in fact that children from the age of three do not struggle with building interrogatives with a moved $w h$-pronoun, even if a partial preference for less complex in situ-questions is initially attested. This leads me to assume that children in the third year of acquisition are at least able to produce moved wh-interrogatives.

[^5]:    ${ }^{9}$ In fact, all of the apparent moved $w h$-interrogatives containing a CO in the data analyzed in Chapter 5 below could be analyzed as actual right dislocations performed on in situ-questions, see Appendix B. Franchi (2006 : 152 ) additionally asserts that in the analyzed Italian data, omissions of auxiliary 'have' or 'be', too, do not occur in $w h$-interrogatives. This seems to hint at a true syntactic constraint on functional elements in child speech, which makes a uniform explanatory model like the Truncation Hypothesis very desirable.

[^6]:    ${ }^{10}$ Note that research on early auxiliary use in French is always somewhat problematic, because the bare participle of the main inflection group of French -er verbs does not differ phonologically from their infinitive, both are marked with /e/.

[^7]:    ${ }^{11}$ Hence, aspect does not contain information about the statement itself.

[^8]:    ${ }^{12}$ In this sense, it would be desirable to reexamine the proposed correlations with regard to non-locative SLPs.

[^9]:    ${ }^{13}$ In fact, this occurs in adult French presentatives too, as in:
    (i) C'est mes nouvelles chaussures. that's my new shoes
    "Those are my new shoes."

[^10]:    ${ }^{14}$ For example, dislocated phrases do not need to be the clausal subject. Objects as well as embedded clauses' XPs, among others, may be dislocated as well:

[^11]:    ${ }^{15}$ The notion of Right Dislocation is rather problematic for the concurring cartographical approach promoted by Luigi Rizzi because the clausal fine structure it tries to specify is taken to be divided into a lower lexical and a higher functional zone. Under a movement analysis, the right periphery should not contain any functional heads like a possible left-peripheral TopP that could attract the dislocated phrase. Thus, solutions like a right-branching TopP in the upper CP-field are proposed. DeCat rejects a movement analysis altogether and therefore does not rely on the existence of Topic Phrases (DeCat 2007: 518-519). On the cartographical work, see Cinque and Rizzi $(2010,2016)$.

[^12]:    ${ }^{16}$ Obviously, dislocation will not influence early Copula Omission if children at the RI stage have not acquired the dislocation structure yet.
    ${ }^{17}$ At the same time, children frequently omit the resumptive early on (DeCat 2000: 243).

[^13]:    ${ }^{18}$ Similarly, the interaction/interface between syntactic and pragmatical operations can be analyzed by different research initiatives, regarding varying syntactic problems that may be linked to language-specific information structures. Examples for such studies on German have recently been presented in Müller (2019).

[^14]:    ${ }^{19}$ This indicates that the canonical subject is generally omitted in French Root Infinitives.

[^15]:    ${ }^{20}$ Child Language Data Exchange System, https://phonbank.talkbank.org/access/French/Paris.html (23.06.2019: 13.42h).
    ${ }^{21}$ In fact, typical overviews of modern corpus linguistics barely treat multimodal corpora in detail, see e.g. Lemnitzer and Zinsmeister (2015), Sasaki and Witt (2004), Perkuhn, Keibel and Kupietz (2012), but see Draxler (2008) on spoken language corpora.
    ${ }^{22}$ See Morgenstern and Parisse (2007).

[^16]:    ${ }^{23}$ As mentioned before, since I am considering the age of the children and not their mean length of utterances (MLU), differences between children regarding age steps are not exactly relevant. As we have seen, Antoine's language acquisition is generally delayed.

[^17]:    ${ }^{24}$ The question on which level this distinction takes place, semantics or pragmatics, is not relevant for this analysis. For discussion, see Chapter 2.2.

[^18]:    ${ }^{25}$ http://www.fon.hum.uva.nl/praat/(24.06.2019, 16.33 h ).

