

The semantic and aspectual properties of child L2 root infinitives*

Philippe Prévost

Introduction

One of the objectives of investigating child second language acquisition (SLA) is to find out to what extent it is similar to first language (L1) acquisition. Assuming that L1 acquisition is guided by principles of Universal Grammar (UG), it is often thought that second language (L2) acquisition by children is of the same nature, as it seems so easy for young learners to acquire a foreign language (Johnson and Newport, 1989; Bley-Vroman, 1990). However, the question of whether UG is accessible to L2 learners is debated mostly in the case of adults, who seem to struggle in the learning process. There exists little research on the exact nature of interlanguage grammars developed by children (see Hilles, 1991; Lakshmanan, 1991; Schwartz, 1992). It is this gap in the literature that the present paper wishes to address. The focus is on the nature of root infinitives (RIs) produced by children learning an L2, namely root declarative clauses whose main verb is either a past participle or an infinitive, whereas a finite form is required in the target language (such as *papa partir* 'daddy leave-INF' instead of *papa part* 'daddy is leaving'). Previous research suggests that there exists a period, starting in the early phases of acquisition, during which RIs are produced by child learners (Prévost, 2003; Prévost, 1997; Prévost & White, 1999). Evidence comes mainly from early L2 French and L2 German data. Research has crystallised over the issues of finiteness and the underlying structure of RIs. Are such clauses finite or nonfinite? Do they involve the projection of functional categories, and if so, what are the properties of these categories?

Two main hypotheses have been put forward to account for the RI phenomenon in child L2 acquisition: the Missing Surface Inflection Hypothesis (MSIH) and the Truncation Hypothesis (TH). According to the former, RIs, while superficially nonfinite, are in fact finite (Haznedar and

Schwartz, 1997). The infinitival ending is used as a substitute for finite markers, presumably due to mapping problems between syntax and morphology (Lardiere, 1998; 2000). Under this approach, apparently nonfinite forms appear in finite positions (such as Infl). On the TH, RIs are nonfinite. Functional categories, which are held to be part of initial grammars, are assumed not to be systematically projected (Prévost 1997; Prévost and White 1999). When only VP is projected, the resulting utterance is an RI; if at least Infl is projected, a finite clause will be produced. Evidence in favor of the TH has been found in early L2 French acquisition by Prévost (1997) and Prévost and White (1999): when main verbs bear an infinitival marker, they seem to possess nonfinite properties, contrary to what the MSIH predicts. Note that Belletti and Hamann (2000, this volume) did not find evidence for RIs in longitudinal spontaneous L2 French data from two children whose L1s were Italian and German respectively. It might be the case that these children are past the RI period.

In this paper, I present further arguments in favor of the TH related to the types of predicates (eventive vs noneventive) found in RIs and the modal interpretation of RIs. I argue that if RIs do not involve any functional category, they should only exhibit eventive predicates (which can be interpreted contextually) and their temporal interpretation should be free (in contrast to finite declaratives). I investigate these predictions in longitudinal data from two anglophone learners of French.

It is well known that RIs also occur in the early phases of L1 acquisition of several languages, including Dutch, French, and German (Friedeman 1993/1994; Poeppel and Wexler, 1993; Pierce 1992; Wexler, 1994; Wijnen, 1998). The question therefore arises as to whether RIs produced by L1 and child L2 learners are similar in nature. At first glance, it seems that RIs in child L1 and L2 French have several properties in common. First, when RIs occur, they are found along with finite clauses. In other words, it is not the case that in either child L1 or L2 French, children start by producing only nonfinite verb forms. In both learning contexts, finite and nonfinite forms are observed, with the incidence of RIs decreasing over time. Second, nonfinite verb forms seem to be truly nonfinite, in that they are found in nonfinite positions. For example,

infinitival verbs never precede negation; they always follow it. They are also never used with subject clitics; and if they are found with a subject pronoun, the pronoun is a so-called strong pronoun, such as *moi* 'me' or *toi* 'you', which presumably bears (non-nominative) default case.¹ In short, the occurrence of nonfinite forms in early child L1 and L2 French seems to be structurally determined.

Despite these similarities, further investigation is required in order to establish whether RIs are of the same nature in the two learning contexts. In particular, research in early L1 acquisition of languages which possess overt infinitival morphology reports a double correlation between finiteness and verb type, and between finiteness and modality. It seems that verbs expressing an event, such as *marcher* ('walk'), are likely to be found in the nonfinite form, in contrast to state verbs such as *être* ('be') or *rester* ('stay') which are always finite. This is observed, for instance, in L1 French (Ferdinand, 1996) and L1 Dutch (Wijnen, 1998); for an overview, see Hoekstra and Hyams (1998). These studies also report that the vast majority of RIs produced by children bear a modal interpretation, e.g. deontic or boulemaic, in contrast to finite declaratives which tend to receive a present or past temporal reading. Hence, an RI such as *papa partir* is likely to convey a boulemaic meaning (i.e. 'daddy wants to leave'), while *papa part* would be an observation that 'daddy is leaving'. Curiously, the existence of such correlations has not been examined in child SLA, except in L2 English where no relation between finiteness and verb-type is reported (Gavruseva, 2000). Note that no such relation is observed in L1 English either, which, according to Hoekstra and Hyams (1998), is due to the fact that English lacks overt infinitival morphology. Indeed, uninflected forms such as *I walk* are ambiguously finite or nonfinite in English. It is therefore necessary to investigate the relation between finiteness and modality/verb type in L2 acquisition of a language which possesses a phonetically distinct infinitival marker, such as French.

1. Semantic and aspectual properties of RIs in L1 acquisition

In L1 acquisition, it is widely reported that RIs produced by children involve event-denoting predicates and bear a modal interpretation. According to Vendler (1967), event-denoting predicates have internal time structure: they can either refer to a homogenous process going on for some time (even indefinitely) with no overt or inherent culmination point, such as *cry*, or denote an event with a culmination point after which the event no longer takes place. In the latter case, the process leading up to that point can either go on for some time, such as *burn out*, or it can be instantaneous, such as *find*. The three types of event-denoting predicates described above are usually referred to as activity, accomplishment and achievement verbs respectively. By contrast, non-eventive (or stative) verbs are not associated with any temporal structure. It is difficult to imagine a beginning or an end point to what it is they denote. In *John loves Mary*, the speaker does not focus on the time frame surrounding the feeling John has for Mary; rather, something is said about a property of John.² Non-eventive verbs include *be* and *have*, verbs describing an internal state, such as *want*, *know* and *love*, verbs expressing a capacity or a necessity, such as *can* and *must* and auxiliary verbs (e.g. auxiliary *have* and *be*).

Investigating longitudinal production data from four children learning L1 French, Ferdinand (1996) found a significant contingency between finiteness and predicate type in the initial stages of acquisition, with nonfinite verbs being overwhelmingly eventive.³ Indeed, verbs such as *couper* ('cut'), *faire* ('do'), *ouvrir* ('open'), and *donner* ('give') only appear as nonfinite verbs in the earliest files (in two of the children's corpora). In contrast, verbs such as *être* ('be') and *avoir* ('have') only appear in the finite form, as can be seen in (1).⁴ In addition, the verb *aller* ('go') is found exclusively in the nonfinite form when used as a main (event-denoting) verb (2a), and in the finite form when used as an inchoative auxiliary (2b). At the next stage, finite verbs are split between event-denoting and non-eventive predicates, but nonfinite verbs continue to be exclusively eventive.

- (1) a. est froid le camion (Philippe: 2;2;0)
is cold the truck

- b. a bobo fesse Nathalie (Nathalie: 2;0.1)
have-3S booboo bottom N.
- (2) a. moi aller dehors (Daniel: 1;10;2)
me go-INF outside
- b. manger on va manger (Daniel: 1;10;2)
est-INF we go:3S:INCHO eat-INF

Wijnen (1998) observed a similar correlation between finiteness and verb-type in early L1 Dutch. Out of 1883 RIs found in the production corpora of four children, 1790 (95%) were eventive.⁵ They all involved lexical verbs. In contrast, the 699 finite verbs found in the same corpus were evenly split between eventive and non-eventive. Importantly, these were all lexical finite verbs, as modals and the copula were left out of the statistics, which allows direct comparisons with the results in non-finite root declaratives. Also working on L1 Dutch, Jordens (1990) noticed that stative verbs only occurred in the finite form. Finally, it has been observed in bilingual French/German acquisition (Meisel 1985), as well as in L1 Dutch (DeHann, 1986), that in the early stages the only finite verbs are modals, auxiliaries and the copulas, namely non-eventive verbs.

The other correlation widely reported in L1 acquisition is that RIs tend to have a modal interpretation, in contrast to finite declaratives. Ferdinand (1996) argues that most of the RIs she observed in L1 French had a modal interpretation, although she does not give precise figures and explicit examples. Wijnen (1998) reports that 86% (1625/1883) of the RIs he found in L1 Dutch had a future/modal interpretation (as shown in (3)), compared to only 21/699 finite verbs (3%). The vast majority of finite lexical verbs were found to bear a present temporal interpretation (657/699).

- (3) a. Eerst kaartje kopen!
first ticket buy-INF
'We must first buy a ticket'
- b. Niekje buiten spelen

Niek outside play-INF
'Niek wants to play outside'

Modal reference of RIs has also been observed in L1 Swedish (Plunkett and Strömqvist, 1990) and L1 German (Ingram and Thompson, 1996).

In order to handle the distribution of verb-types in finite and nonfinite declaratives, Wijnen (1998) proposes that the temporal reference of nonfinite eventive verbs can be inferred deictically, in contrast to non-eventive predicates. As mentioned earlier, eventive verbs inherently refer to the time axis, since they denote the onset of an event, its duration, or its end point. Following Kratzer (1989) and Zwarts (1992), Wijnen proposes that eventive verbs select an event argument, which takes the form of an event variable ranging over possible events in the semantic representation. This variable is related to Tense, or in Higginbotham's (1985) terms, theta-bound by Tense. When Tense is part of the representation, the event argument is interpreted via binding to Tense. However, when T is absent from the representation, the event argument can be interpreted contextually, which in turn means that the relation between the event time and the utterance time is free (Wijnen, 1998: 388). In contrast, non-eventive predicates do not select an event argument. Therefore, the temporal reference of these verbs cannot be interpreted deictically. In other words, non-eventive verbs need Tense in order to be referentially bound. If the representation of RIs lacks Tense, it follows that these verbs cannot appear in such sentences. In addition to providing an account of the contingency between finiteness and verb-type in child L1 acquisition, this approach can also explain why adults RIs always exhibit eventive predicates, never noneventive ones, as illustrated by the following examples of French jussives.

- (4) a. Ne pas fumer!
NEG not smoke-INF
'no smoking'
- b. *Ne pas aimer!
NEG not love-INF
'no loving'

As for the fact that a large proportion of RIs receive a future/modal interpretation, several scholars point to the [irrealis] property of overt infinitival markers (Hyams, 2001; Wijnen, 1998). Another proposal is that RIs involve a null modal with aspectual properties (Boser et al, 1992; Ferdinand, 1996). The null element, which appears under Infl, would select a nonfinite predicate. Note that under this approach, all RIs are considered to be finite.

2. RIs in early child SLA

As in L1 acquisition, children learning a second language have been found to produce main declarative clauses with the main verb bearing an infinitival marker or no inflection at all. Studies on early L2 French and L2 German suggest that the nonfinite verbs of RIs have nonfinite properties. Longitudinal production data were examined from three English-speaking children, two of them learners of L2 French (Prévost, 1997; Prévost and White, 1999) and one learner of L2 German (Prévost, 2003). In each case, RIs were found to occur during a specific period starting in the earliest recording sessions and to decline sharply thereafter. There is evidence that the verb in RIs is within VP, which suggests that it is nonfinite. For instance, when used in negative contexts, infinitival verbs systematically appear after negation. This contrasts with inflected verbs, which are systematically positioned prior to negation. Moreover, infinitival verbs are almost never used with a clitic subject, in contrast to what is observed with inflected verbs. Such results support the Truncation Hypothesis according to which the occurrence of nonfinite forms is structurally determined. Under this approach, Rizzi's (1994) Root Principle, whereby root clauses are CPs, does not operate in initial child interlanguage grammars. This means that the root of main declarative clauses may vary: it can be CP, but also IP or VP. When only VP is projected, the resulting utterance is an RI; if at least Infl is projected, a finite clause will be produced. The results fail to confirm the alternative Missing Surface Inflection Hypothesis according to which morphological errors are due to mapping problems between syntax and

morphology, and not to the kind of structure being projected. Hence, under MSIH, infinitival main verbs should be found in finite positions, i.e. in CPs, above negation or accompanied by a clitic subjects, contrary to facts. Additional results reported by Prévost (2001) confirm that infinitival verbs and past participles are indeed nonfinite in child L2 French grammars: they are restricted to nonfinite positions such as following another verb (e.g. an auxiliary or a modal) or a preposition.

Although the findings seem to be straightforward, there remains one particular question which remain unexplored in L2 acquisition of French and German, i.e. the relationship between finiteness and verb-type/modality. If previous analyses of child L2 French data are correct, further support in favor of the TH should be obtained.

3. Predictions

The following predictions are based on the incidence of lexical verbs in finite and nonfinite declaratives. Non-lexical verbs (such as modals and the copula) will only be briefly discussed in the results section. Previous research reports that such verbs occur solely in the finite form in child L2 and French German (Prévost, 2003; Prévost, 1997; Prévost and White, 1999). However, there appears to be a potential confound introduced by non-lexical forms in the investigation of modality and verb-types in finite and nonfinite declaratives, given the fact that they are extremely frequent in the input and that they overwhelmingly occur in the finite form. Therefore, the most reliable data for isolating the purely semantic effect of eventiveness would be found in the comparison of eventive vs. non-eventive lexical main verbs. Such an approach is also adopted by Wijnen (1998) for child L1 Dutch. Note that the distinction between lexical and non-lexical verbs is not discussed by Ferdinand (1996) in child L1 French, as all the examples of non-eventive predicates she quotes in her study are non-lexical.

Under the TH, the underlying representation of RIs lacks functional categories, including

Tense. Therefore it is expected that only eventive predicates, and not noneventive ones, will appear in nonfinite declaratives. In contrast, non-eventive verbs should be restricted to finite declaratives. Note that according to this prediction all non-lexical verbs, which are non-eventive, should appear in the finite form. A further prediction is that the interpretation of RIs should be free: they should refer to present, past or future events. Moreover, there should be a contingency between finiteness and modality on the TH. Since RIs are considered to be nonfinite, we should observe a high incidence of future/modal interpretation in such a context, due to the [irrealis] property of the infinitival morphology.⁶

Under the MSIH, Tense is part of the representation of RIs. Hence, all verb types should be observed in such declaratives, including eventive and non-eventive predicates. Furthermore, there should be no contingency between modality and finiteness, since all verbs are considered to be equally finite. Hence, finite and nonfinite predicates should receive similar interpretations. Should predicates be found to bear a modal reading, the incidence of this interpretation should be similar in both finite and nonfinite declaratives.

Under the null auxiliary hypothesis (NAH), finite declaratives and RIs are equally finite and their structures involve functional categories. Following Boser et al (1992), I assume that null modal/auxiliaries need to be identified by the subject occupying the specifier of the root of the clause. It can take the form of a DP or a subject-wh word (such as *qui* 'who'). Hence, if (nominative) subject DPs and subject-questions are used, they should be found together with finite and nonfinite verbs (e.g. *qui partir?* 'who leave-INF'). In contrast, strong pronoun subjects, such as *moi* 'me' (which presumably bear non-nominative default case), should not occur in either context. Finally, the subject of RIs is expected to be systematically overt, as it needs to identify the null auxiliary. Thus, null subjects are not expected to be found in RIs. As for modality, the NAH clearly predicts that there should be a contingency between finiteness and modality, since RIs, but not finite declaratives, are held to involve a null modal.

4. The study

Spontaneous production data from two English-speaking children learning French, Greg and Kenny, were analysed (Lightbown 1977). First exposure to French occurred at age 4;9 for Kenny and age 4;5 for Greg. They were first interviewed when they were attending an immersion program at a kindergarten in Montreal (they had previously been enrolled in a bilingual nursery program). They then attended a regular French kindergarten. At the time of the first recording, Kenny was 5;4 and Greg was 5;8. Neither child spoke much during the first interview (which is not considered in the present study). They were then recorded, either separately or together, once a month on average for about 28 months. In all, Kenny was interviewed 20 times, and Greg 13 times. During each recording session, the interviewer and the child played games designed to elicit interaction. Each session followed the same format.

In previous research, Prévost (1997) and Prévost and White (1999) reported that both children produced RIs for roughly the first 18 months covered by the interviews. In addition, main infinitival verbs were argued to be always nonfinite (see section 2 above).

The present study is restricted to the first 18 months of acquisition. Only non-interrogative main clauses were considered. In order to decide about the modal and temporal reading of a root declarative, I looked at the discourse and situational context in which the sentence was produced. In so doing, I took into consideration the previous two or three interventions of the child and the interviewer, as well as their next two or three utterances. Situational comments, which occasionally appear in the transcriptions, were also taken into account. In some cases, the context was not helpful enough for me to reach a firm conclusion about modality or temporality. In the following tables, I report such cases in a column labeled *Doubt*. As for predicate-types, I considered the semantics of the verb, as well as its arguments and the tense of the clause. It is well-known that the same predicate can have different aspectual interpretations depending on its arguments. For instance, *lire* 'to read' refers to an activity in *je lisais* 'I was reading', but to an achievement in *j'ai lu le livre* 'I read the book'. In the present tense *il construit une maison* 'he's

Table 1 also reports the findings on finite lexical verbs. Only simple forms are considered, so as to allow for direct comparisons with RIs, since only simple lexical verbs are used in such sentences. What is striking with respect to finite simple predicates is that some of them are non-eventive (34%), in contrast to what is observed in RIs. In fact, Kenny's non-eventive predicates are restricted to finite declaratives, whereas his eventive verbs are evenly split between finite and non-finite contexts. Out of the 143 eventive predicates found in root declaratives, 70 (49%) appear in finite utterances and 73 (51%) are in RIs. It is important to point out that a variety of non-eventive predicates were used, such as *savoir* 'know' (month 2), *rester* 'stay' (month 5), *avoir* 'have' (month 7), and *connaître* 'know' (month 14). Examples of eventive and non-eventive finite verbs are given in (6) and (7). This first set of results confirms the predictions of the TH, according to which Tense is absent from the representation of RIs.

INSERT TABLE 1 ABOUT HERE

- | | | | | |
|-----|----|------------------|--------------------------------|------------------|
| (6) | a. | mon papa vient | maison | (Kenny, month 1) |
| | | my dad | come-1/2/3S home | |
| | b. | aide | papa après | (Kenny, month 1) |
| | | (I) help-1/2/3S | dad later | |
| (7) | a. | moi sais [: heu] | in anglais but pas de français | (Kenny, month 2) |
| | | me know-1/2/3S | in English but not any French | |
| | b. | elle a | six et ça | (Kenny, month 9) |
| | | she have-1/2/3S | six and this | |

It should be noted that finite lexical non-eventive predicates are observed quite early in Kenny's corpus. Although they are relatively few until month 4, their number increases thereafter, their ratio with respect to the total of lexical verbs fluctuating between 39% and 75% until month 18. It is therefore impossible to isolate a period during which finite declaratives only involve eventive predicates.

Similar tendencies are found in Greg's data. There too a significant contingency between finiteness and predicate-type obtains ($X^2 = 51.713$, $p < .0001$). Almost all of Greg's RIs contain event-denoting predicates (Table 2), with a large variety of verbs being observed, such as *jouer* 'play' and *mettre* 'put' at months 5 and 9.5, *aller* 'go' at month 9.5, and *colorer* 'colour', *écrire* 'write' and *manger* 'eat' at month 10. As with Kenny, only lexical verbs were found in Greg's RIs (see the examples in (8)). The only instance of a non-eventive predicate used in a RI is presented in (9).

- (8) a. moi jouer avec le train (Greg, month 5)
 me play-INF with the train
- b. juste le mettre comme ça (Greg, month 5)
 just it:ACC put-INF like this
- c. moi colorer ça (Greg, month 10)
 me colour-INF this
- d. moi couper là (Greg, month 14)
 me cut-INF there
- (9) (je/on) laisser comme ça ou comme ça (Greg, month 9.5)
 (I/one) let-INF like this or like this

INSERT TABLE 2 ABOUT HERE

When considering simple lexical finite predicates, we observe that they are almost evenly split between eventive and non-eventive verbs. This is illustrated in (10) and (11). In all, 78/134 (58.2%) eventive verbs produced by Greg occur in finite roots, in comparison to 99/100 (99%) non-eventive predicates. As with Kenny, the fact that non-eventive predicates almost never appear in RIs, even in the earliest stages, confirms the predictions of the TH. Note again that a variety of non-eventive predicates were produced, such as *laisser* 'leave' and *savoir* 'know' (month 5), *aimer* 'love' and *avoir* 'have' (month 9.5), *manquer* 'miss' (month 10), *rester* 'stay' (month 14),

connaître 'know' (month 15), and *penser* 'think' and *croire* 'believe' (month 18). Finally, there is no period during which either eventive or non-eventive lexical verbs are found exclusively in Greg's finite clauses.

- (10) a. on le laisse comme ça (Greg, month 5)
 we it:ACC leave-1/2/3S like this
- b. il manque une roue ici (Greg, month 10)
 it miss-1/2/3S a tire here
- c. moi j'ai deux fermes (Greg, month 11)
 me I have-1/2/3S two farms
- (11) a. le bébé y va là (Greg, month 5)
 the baby it go-1/2/3S there
- b. moi je joue avec une... (Greg, month 5)
 me I play-1/2/3S with a
- c. moi prends aussi (Greg, month 15)
 me take-1/2/3S too

To summarise, it was found that almost all RIs in the data display event-denoting predicates, in contrast to finite declaratives which contain non-eventive verbs. Indeed, such verbs are restricted to finite declaratives. This conforms to the predictions of the TH. Since non-eventive predicates need Tense in order to receive temporal reference, it was expected that they should not appear in RIs if functional categories are not projected. The observed contingency between finiteness and predicate-type is not predicted by the MSIH, according to which RIs are finite and involve Tense. The contingency is also similar to what is observed in child L1 French and Dutch, whereby event-denoting predicates are largely found in RIs, and non-eventive predicates appear in finite clauses.

5.2. Finiteness and modality

Recall that under the TH, the reference of RIs should be free, since T is absent from their representation. Moreover, since RIs are considered nonfinite, a large percentage should have a modal interpretation due to the [irrealis] property of the infinitival marker. This is not predicted by the MSIH, since finite declaratives and RIs are both considered to be finite. Table 3 reports the findings on the modal interpretation of Kenny's nonfinite and finite declaratives, while results on Greg's utterances are reported in Table 4. In Kenny's data, a strongly significant contingency is observed between finiteness and modality ($X^2 = 89.484$, $p < 0.0001$). As can be seen in Table 3, most of his RIs have a future/modal interpretation (which is often boulemaic), which is not the case for verbs appearing in finite declaratives. This is compatible with the TH, but not with the MSIH. Examples of RIs with a modal reading are given in (12).

(12) a. inchoative interpretation

Interviewer: on va mettre la maman aussi dans l' étable?

we go:1/2/3S:INCHO put-INF the mommy also in the stable

Kenny: oui serrer # le ferme (Kenny, month 3)

yes tight-INF the farm

b. deontic interpretation

Kenny: non pas pas défaire ça (Kenny, month 8)

no not not undo-INF this

Interviewer: tu veux pas que je l' défasse?

you want-1/2/3S not that I it:ACC undo-1/2/3S:SUBJ

c. boulemaic interpretation

Interviewer: ça saute hein ça des kangourous?

this jump-1/2/3S hmm this some kangaroos

Kenny: non jouer ça. (Kenny, month 8)

no play-INF this

Interviewer: tu veux pas jouer à ça?

you want-1/2/3S not play-INF at this

d. capacity interpretation

Interviewer: veux que je l' attache?
want-1/2/3S that I it:ACC tie+up-1/2/3S:SUBJ

Kenny: pour moi pas faire. (Kenny, month 11)
for me not do-INF

Interviewer: non tu peux pas hein?
no you can-1/2/3S not hmm

INSERT TABLE 3 ABOUT HERE

This said, it is not the case that all the RIs produced by Kenny have a modal interpretation: as many as 35% have a present or past reading, which essentially suggests that the interpretation of RIs is free. This is illustrated in (13). Importantly, no developmental trend can be observed in the interpretation of Kenny's RIs: both modal and non-modal readings are found from the outset.

(13) a. present

i. Interviewer: mais c'est quoi ça Kenny?
but it is what this K.

Kenny: une fille monter. (Kenny, month 1)
a girl climb-INF

Interviewer: c'est quelqu'un qui monte ici oui.
it is someone who climb-3S here yes

ii. Interviewer: ça c'est le garage.
that it is the garage

Kenny: moi jouer le train. (Kenny, month 10)
me play-INF the train

Interviewer: toi tu joues avec le train?
you you play-2S with the train

- Kenny: oui.
yes
- b. past
- i. Interviewer: oui y avait pas mangé ce matin?
yes he had not eaten this morning
- Kenny: non I didn't.
- Kenny: moi pas manger aujourd'hui. (Kenny, month 7)
me not eat-INF today
- ii. Kenny: tous les bébés gagner. (Kenny, month 8)
all the babies win-INF
- Interviewer: tous les bébés ont gagné?
all the babies have won
- Kenny: oui.
yes

The results on modality in finite root declaratives are opposed to those in RIs. Close to 90% (86/96) simple lexical verbs have a present or past interpretation (see examples in (14)). Such a distribution is found in almost all the files examined. Only 10/96 (10.4%) finite verbs have a modal/future reading (15).

(14) a. y tombe (Kenny, month 4)
it fall-1/2/3S (=is falling)

b. non, il pleut (Kenny, month 8)
no it rain-1/2/3S (=is raining)

(15) inchoative interpretation

Kenny: aide papa après (Kenny, month 1)
(I) help-1/2/3S dad later

Kenny: Daddy I'm gonna help after ok.

The findings on Greg are once again similar to what is observed in Kenny's data (Table 4).

First, there is a significant contingency between finiteness and modality ($X^2 = 143.261$, $p < 0.0001$). The majority of Greg's RIs have a modal interpretation ($37/48 = 77\%$), compared to only 6% ($11/177$) of his finite declaratives.

INSERT TABLE 4 ABOUT HERE

Again, the results go in the direction of a truncation account. Examples of modal interpretation of Greg's RIs are given below.

- (16) a. boulemaic interpretation
- i. Greg: moi je pas jouer avec ça. (Greg, month 5)
me I not play-INF with this
- Interviewer: tu veux pas jouer avec ça?
you want-2S not play-INF with this
- Greg: non pas maintenant.
no not now
- ii. Greg: moi écrire aussi. (Greg, month 10)
me write-INF too
- Interviewer: toi aussi tu veux écrire?
you too you want-2S write-INF
- Greg: oui.
yes
- b. deontic interpretation
- i. Interviewer: veux- tu que j'essaie?
want-2S you that I try-1S:SUBJ
- Greg: oh juste le mettre comme ça. (G, m 5)
oh just it:ACC put-INF like this
- ii. Greg: toi prendre. (Greg, month 14)

you take-INF

Interviewer: tu peux prendre la dent.

you can-2S take-INF the tooth

c. inchoative interpretation

Greg: moi chercher n'autre cheval. (Greg, month 11)

me look+for-INF another horse

Interviewer: oui si tu veux.

yes if you want-2S

Note that 23% (11/48) Greg's RIs have a (past or present) temporal reading (over 30% in half the files considered). Examples are given in (17). As with Kenny, a clear-cut developmental pattern is difficult to establish: although all 6 RIs produced by Greg at month 5 have a clear modal reading, the dominance of the modal interpretation is short-lived.

(17) a. present

Interviewer: qu'est-ce que tu fais là Greg?

what you do-2S here G.

Greg: enlever les dents. (Greg, month 14)

remove-INF the teeth

Interviewer: tu lui enlèves les dents?

you him remove-2S the teeth

b. past

i. Interviewer: oh y saute le singe.

oh it jump-3S the monkey

Greg: lancer. (Greg, month 15)

throw-INF

Interviewer: tu l'as lancé?

you it:ACC have-2S thrown

ii. Greg: trouver le auto. (Greg, month 18)

find-INF the car

Interviewer: t' as trouvé des autos?

you have-2S found some cars

Next, over 90% (166/177) simple lexical forms produced by Greg have a present or past interpretation, which is akin to Kenny's corpus. This overwhelming trend is observed in all files.

Examples are in (18). In (19), I give an example of a finite declarative with a modal interpretation.

(18) a. le monsieur va là (Greg, month 5)

the mister go-1/2/3S there

b. le lion mange les girafes (Greg, month 11)

the lion eat-1/2/3S the girafes

(19) Greg: moi je joue avec une l' autre (Greg, month 10)

me I play-1/2/3S with a the other

Interviewer: une auto?

a car

Comment: Greg takes out farm animals from a box

To summarise, most RIs have a modal reading, compared to just around 10% in the case of finite verbs predicates. The latter almost always receive a temporal interpretation. This conforms to the predictions of the TH which holds that RIs contain truly nonfinite verbs displaying the [irrealis] infinitival morphology. The results are not compatible with the MSIH according to which a difference between finite and nonfinite declaratives in terms of future/modal and present/past interpretation is not expected. These results are similar to what is reported in L1 Dutch (Wijnen, 1998).

5.3. DP and strong pronoun subjects in root declaratives

If RIs involve null modals, as suggested by Ferdinand (1996) for child L1 French, then similar subjects should occur in finite declaratives and in RIs (given that both clause types are considered

to involve functional categories). In particular, if DP subjects are used, they should be found in both clauses. In contrast, strong pronouns, which bear non-nominative case, should be excluded from both contexts. Finally, null subjects should be excluded from RIs since the null auxiliary needs to be identified by an overt subject. The distribution of subjects in finite and nonfinite declaratives produced by the two children is discussed in Prévost (1997) and Prévost and White (1999). The overall results are summarized in Table 5. As can be seen, they contradict the predictions of the NAH. First, there is a significant contingency between the incidence of DP subjects and clause type, such that DP subjects are severely restricted to finite declaratives (Kenny: $X^2 = 12.736$, $p=.0004$)⁷. Second, strong pronoun subjects are observed, contrary to what is expected, and their incidence is significantly greater in RIs than in finite root declaratives (Kenny: $X^2 = 73.311$, $p<.0001$; Greg: $X^2 = 32.874$, $p<.0001$). They account for 59.2% of the subjects found in Kenny's RIs, and for 25.9% in Greg's. Note that in Kenny's data, as much as 15% of finite declaratives (65/428) include a strong pronoun subject. However, almost half (31/65) of these cases involve only two forms, namely *moi est* ('me is') and *moi fais* ('me do'), which suggests that the incidence of such subject pronouns is not productive in finite contexts (White, 1996). Finally, the incidence of subjectless RIs is quite high in both corpora. They account for close to one third (39%) of Kenny's RIs, and over half (53.4%) of Greg's. Examples of DP subjects in finite declaratives and strong pronoun subjects in RIs are given in (20) and (21). Some subjectless RIs are given in (22).

INSERT TABLE 5 ABOUT HERE

- | | | | | |
|------|----|-----------------------|----------|------------------|
| (20) | a. | mon papa vient | maison | (Kenny, month 1) |
| | | my father come-1/2/3S | home | |
| | b. | le bébé va | là | (Greg, month 5) |
| | | the baby go-1/2/3S | there | |
| (21) | a. | toi aller | à Greg's | (Kenny, month 5) |

- you go-INF to Greg's
- b. moi jouer avec le train (Greg, month 9.5)
me play-INF with the train
- (22) a. jouer de hockey (Kenny, month 9.5)
play-INF of hockey
- b. manger les oreilles (Greg, month 10)
eat-INF the ears

With respect to development, DP subjects appear in the earliest interviews and are consistently used in finite declaratives by both children thereafter. Strong pronouns and null subjects are used as subjects of RIs almost as soon as root infinitives are produced and they occur in almost all interviews where RIs are found. These findings suggest that RIs do not involve null auxiliaries are that their underlying representation does not include functional categories, contrary to the NAH.

5.5. *Verb-forms in subject questions*

Another prediction of the null auxiliary analysis of RIs is that both finite and infinitival main verbs should be found in interrogatives questioning the subject. This is because the subject *wh*-word (*qui* in French) can act as an identifier of the null modal/auxiliary in such clauses. Only 25 *qui*-questions were identified in Kenny's and Greg's data, as shown in Table 6. Kenny produced 15 *qui*-questions (mostly in month 14 and after), while 10 were found in Greg's data (mostly at months 5 and 9.5). As illustrated in Table 14, almost none of these questions exhibit a nonfinite verb; examples are given in (23) and (24). The only instances of nonfinite *qui*-questions occurring in the data are given in (25). This further disconfirms the null modal approach for RIs in child SLA.

- (24) a. qui est là? (Kenny, month 7)
who is there

- b. qui a fait ça? (Kenny, month 10)
 who have-1/2/3S done this
- (25) a. qui va ici? (Greg, month 11)
 who go-1/2/3S here
- b. qui met ça là? (Greg, month 12)
 who put-1/2/3S this there
- (26) a. qui faire? (Kenny, month 14)
 who do-INF
- b. qui gagner ça? (Kenny, month 18)
 who win-INF this

6. Discussion and conclusion

In this paper, I looked at the types of verbs that occur in RIs produced by children learning L2 French, as well as the temporal and modal interpretation of such utterances. Two strong contingencies were observed: first, non-eventive predicates are restricted to finite declaratives, whereas eventive predicates can occur in either finite declaratives or in RIs. Second, the majority of RIs have a future/modal interpretation, against about 10% for finite declaratives. Instead, the overwhelming majority of finite declaratives receive a present or past reading. These results are compatible with the Truncation view which holds that RIs are VPs underlyingly, i.e. they do not involve functional categories. In particular, the absence of T in the structure of RIs prevents the occurrence of non-eventive predicates in such clauses since these verbs need T in order to receive a referential interpretation. Such is not the case of eventive predicates which do not need T in order to be interpreted. Rather, their interpretation can take place via discourse. In addition, the fact that infinitival verbs in RIs are truly nonfinite means that the infinitival marker is associated with the [+irrealis] feature, which explains why most RIs have a future/modal reading. The two

contingencies identified above are not compatible with the MSIH. First, if T was present in the underlying structure of RIs, as contended by this approach, then non-eventive predicates should also appear in such clauses, contrary to facts. Second, the MSHI holds that the infinitival marker in RIs is used as a substitute for finite markers. Hence, it is not associated with the [+irrealis] property. This in turn predicts that there should not be any difference between finite predicates and infinitival predicates (in RIs) as far as future/modal interpretation is concerned. This prediction is not met.

I also tested the null auxiliary approach to RIs according to which RIs involve a null auxiliary or modal in a functional projection. All the predictions based on this hypothesis were disconfirmed. In particular, there is a significant contingency between subject types and finiteness, such that DP-subjects and *qui*-subjects are restricted to finite contexts. This is not expected if finite and (apparently) nonfinite clauses involve functional categories. Moreover strong pronouns were found to appear to a large extent in RIs, which is unexpected given that these elements are associated with default (non-nominative) case. Finally, a large number of subjectless RIs were observed, which is unexpected under the NAH, since the null auxiliary must be identified by an overt subject.

All these results point to the same direction: the structure of RIs in early child French do not seem include functional categories. Instead, they have truly nonfinite properties, which grants support for the Truncation Hypothesis.

The properties of RIs in child L2 mirror the properties of RIs produced by children learning an L1 with overt infinitival morphology. In particular, it fits in well with data reported by Wijnen (1998) on L1 Dutch. In both cases, then, it can be argued that RIs lack functional categories. It should be reminded that the two children investigated in the present paper were beyond the RI period in their L1. Thus, it cannot be argued that we are dealing here with a context of bilingual acquisition; instead, the learning situation is a clear case of L2 acquisition. In her investigation of the early acquisition of L1 French, Ferdinand (1996) reports no initial overlap between finite and nonfinite verb types: finite verbs are all non-eventive, and main infinitival verbs

are all event-denoting. At the next stage (stage II), while finite verbs may be either eventive or non-eventive, all nonfinite verbs are still eventive. This is not what is observed in the L2 data that I investigated. (Note that her results also differ from what is reported by Wijnen (1998) for L1 Dutch.) In particular, eventive predicates were found to occur in finite root declaratives produced by Greg and Kenny, as well as in RIs. This pattern repeats itself in practically all the files examined. It could be argued that Greg and Kenny were already at a later stage of development when data collection began, one at which nonfinite predicates are solely eventive while finite main forms may either be eventive or non-eventive (which would correspond to Ferdinand's stage II in child L1 French). This could indeed be the case for Greg, whose first interview considered here took place 5 months after he started kindergarten. However, this does not seem to apply to Kenny, who was recorded less than a month after starting kindergarten. In contrast to Greg, whose data contain utterances exhibiting verbs at the onset, Kenny almost used no verbs during his very first recording sessions. In his case, then, the data collected seem to truly reflect the earliest stages of acquisition. The difference between what is reported in L1 and L2 child French might come from the L1 data themselves and the methodology used by Ferdinand. There does not seem to be any non-eventive lexical predicates in the data she looked at, contrary to what was observed here. This probably forced her to mix lexical (eventive) verbs and non-lexical verbs in her research, a strategy that I carefully avoided. In any case, her analysis partly rests on the assumption that RIs involve null auxiliaries or modals, which cannot be maintained in child L2 French, as we have seen. She also claims that the fact that non-eventive verbs do not appear in RIs stems from the incapacity, on the part of children, to relate (null) modals with state verbs. A similar idea is presented by Hoekstra and Hyams (1998) who argue that young children below 3 years of age do not have yet knowledge of epistemic modality. Since RIs are held to express modality, only event-denoting verbs can be found in such clauses. It seems reasonable to assume that children learning an L2 have knowledge of stative verbs and epistemic modality, and that they are able to use non-eventive verbs as complements of auxiliaries and modals. Kenny and Greg did not produce many modal verbs followed by another verb in root declaratives. Only 16 such sequences are found in

Kenny's corpus, while 29 occur in Greg's speech. In most cases, the verb following the modal is an eventive predicate, such as *jouer* 'play', *faire* 'do' and *donner* 'give'. This is illustrated in (27) and (28). Only 3 non-eventive verbs were found to follow a modal (29).

- (27) moi peux pas jouer à ça (Kenny, month 7)
 me can-1/2/3S not play-INF at this
- (28) a. moi vais mettre le hibou hmm brun (Greg, month 10)
 me go-1/2/3S put-INF the owl brown
- b. peut faire ça ou tourner là (Greg, month 16)
 (it) can-1/2/3S do-INF this or turn-INF there
- (29) a. dimanche tu vas être ici (Kenny, month 7)
 Sunday you go-1/2/3S be-INF here
- b. va laisser comme ça (Kenny, month 10)
 go-1/2/3S leave-INF like this
- c. je peux voir (Greg, month 16)
 I can-1/2/3S see-INF

Although the results seem to mirror Ferdinand's approach, it must be emphasised that meaning itself might play a role in the rare occurrence of non-eventive verbs as infinitives following modals, as pointed out by one anonymous reviewer. Indeed, how often, and in what circumstances, would anyone, especially a child, say *pouvoir être* 'can be' and *pouvoir penser* 'can think' in the context of an informal conversation? In the case at hand, the two children were recorded as they were playing various games, and the vast majority of their utterances consisted in describing ongoing actions. Note that this comment also applies to data obtained from children learning their L1.

Another difference between the child L2 results obtained here and Ferdinand's (1996) study has to do with the future/modal interpretation of RIs. Ferdinand reports no overlap between the interpretation of RIs and finite declaratives: all RIs have a modal interpretation (including bouletic, deontic and future readings), whereas finite root declaratives all bear a present/past

tense interpretation. The results of the present study differ to what is reported in L1 French since some RIs (from 23% to 35%) have a present and past interpretation. Indeed, the results suggest that the interpretation of child L2 RIs is free.

One final remark concerning Ferdinand (1996). She argues that RIs arise because specific tense values (e.g. [\pm present]) are initially underspecified in developing L1 grammars (although tense itself is assumed to be represented abstractly). In other words, the Tense category and its [\pm tense] features are held to be initially available, but specific tense values are not. Non-eventive predicates, which lack an internal temporal structure, 'can be [+tense] without being linked to a specific part of the time axis' (Ferdinand, 1996: 88), which explains why they appear in the finite form. In contrast, eventive predicates, which denote changes taking place in time, must be related to a specific moment in time. Since [\pm present] features are otherwise held to be initially unavailable in child grammars, it follows that eventive predicates cannot be [+tense]. Hence, these predicates will remain nonfinite and appear in RIs. Further detail of how this analysis may play itself out need not interest us at this point. The question one might want to ask is whether [\pm present] features are initially unavailable in child SLA as well. If this was indeed the case, then one should expect random use of tense marking in the early phases of SLA. Since, according to this view, finite inflectional markers are not related to any particular tense value, feature checking cannot take place. Hence, present markers may refer to past events and vice-versa. Alternatively, a default tensed form may be used for all tense forms. I leave this issue for further research.

The results obtained in this study makes interesting predictions as far as adult SLA is concerned. Previous research suggests that the RIs produced by adults are different in nature from those used by children (Prévost, 1997; Prévost and White, 1999). In particular, adult RIs were shown to involve functional categories and were best handled by the MSIH. If this analysis is correct, then the predictions made by this hypothesis on the relations between finiteness and modality on the one hand and between finiteness and predicate-type on the other hand should hold in the context of adult SLA (see section 4). In particular, since Tense is considered part of the representation of RIs both eventive and non-eventive predicates should be observed in such

declaratives. Moreover, there should be no contingency between modality and finiteness, since all verbs are considered to be equally finite. Hence, the incidence of present, past and future/modal readings should be similar with finite and nonfinite predicates.

* This research was supported by a grant from FCAR (# 00-NC-1992), to which I am grateful. I would like to thank Gustavo Beritognolo for his assistance with the coding of the data.

¹ See DeCat (this volume) for a different account of strong pronoun (apparent) subjects in child L1 French.

² Event-denoting predicates are often referred to as dynamic verbs, in contrast to stative verbs.

³ The children were Nathalie (age 1;9:3 - 2;3:2), Daniel (age 1;8:1 - 1;11:1), Grégoire (age 1;9:14) and Philippe (age 2;1:19 - 2;6:27). The data from Nathalie and Daniel were collected by Lightbown (1977). Grégoire's and Philippe's data are part of the CHILDES database (MacWhinney and Snow, 1985).

⁴ Examples from Pierce (1992).

⁵ The children whose production data were analysed were Josse (age 2;0:7-2;6:22), Matthijs (age 1;11:10-2;8:5), Niek (age 2;7 - 3;2:13) and Peter (age 1;9:6 - 2;1:26). These data are from the CHILDES database (MacWhinney and Snow, 1985).

⁶ It should be clear that this does not mean that RIs cannot refer to present or past events. As Rizzi points out in his original proposal, the interpretation of RIs should be free since the structure lacks T. All I am saying here is that one should observe a high incidence of future/modal interpretation in RIs, due to the [irrealis] property of the infinitival morphology.

⁷ A chi-square analysis could not be run on Greg's data because one of the cells is equal to zero (Greg did not produced any DP subjects in nonfinite clauses).

References

- Belletti, A. and Hamann, C. 2000. "*Ça on fait pas!* On the L2 acquisition of French by two young children with different source languages". In *Proceedings of the 24th annual Boston University conference on language development*, S.C. Howell, S.A. Fish and T. Keith-Lucas (eds.), 116-127. Somerville, MA: Cascadilla Press.
- Bley-Vroman, R. 1990. "The logical problem of foreign language learning". *Linguistic analysis* 20: 3-49.
- Boser, K., Lust, B., Santelmann, L., and Whitmann, J. 1992. "The syntax of CP and V2 in early child German (ECG): The Strong Continuity Hypothesis". In *Proceedings of North-Eastern Linguistic Society 23*, K. Broderick (ed.), 51-65. University of Massachusetts: Graduate Linguistic Student Association.
- de Haan, G. 1986. "A theory-bound approach to the acquisition of verb-placement in Dutch". In *Formal parameters in generative grammar 3*, G. de Haan and W. Zonneveld (eds.), 15-30. Utrecht: University of Utrecht.
- Eubank, L. 1993/1994. "On the transfer of parametric values in L2 development". *Second language research* 3: 182-208.
- Ferdinand, A. 1996. *The Development of functional categories: The acquisition of the subject in French*. The Hague: Holland Academic Graphics.
- Friedemann, M.-A. 1993/1994. "The underlying position of external arguments in French: A study in adult and child grammar". *Language acquisition* 3: 209-255.
- Gavrusseva, L. and Lardiere, D. 1996. "The emergence of extended phrase structure in child L2 acquisition". In *Proceedings of the 20th annual Boston University Conference on Language Development*, S. Stringfellow, D. Cahana-Amitay, E. Hughes, and A. Zukowski (eds.), 225-236. Somerville, MA: Cascadilla Press.
- Gavrusseva, E. 2000. "Aspect parameter in the guise of optional infinitives in child L2 acquisition". In *Proceedings of the 24th annual Boston University conference on language*

- development*, S.C. Howell, S.A. Fish and T. Keith-Lucas (eds.), 319-330. Somerville, MA: Cascadilla Press.
- Giorgi, A. and Pianesi, F. 1997. *Tense and aspect*. Oxford: Oxford University Press.
- Grondin, N. and White, L. 1996. "Functional categories in child L2 acquisition of French". *Language acquisition* 5.1: 1-34.
- Guasti, M.-T. 1993. *Causatives and perception verbs: A comparative study*. Torino: Rosenberg and Sallier.
- Guéron, J. and Hoekstra, T. 1989. "T-chains and the constituent structure of auxiliaries". In *Constituent structure*, A. Cardinaletti, G. Cinque and G. Guisti (eds.), 35-99. Dordrecht: Foris.
- Haznedar, B. and Schwartz, B. 1997. "Are there optional infinitives in child L2 acquisition?". In *Proceedings of the 21st annual Boston University Conference on Language Development*, E. Hughes, M. Hughes and A. Greenhill (eds.), 257-268. Somerville, MA: Cascadilla Press.
- Higginbotham, J. 1985. "On semantics". *Linguistic Inquiry* 16: 547-594.
- Hilles, S. 1991. "Access to Universal Grammar in second language acquisition". In *Point-counterpoint: Universal Grammar in second language*, L. Eubank (ed.), 305-338. Amsterdam: John Benjamins.
- Hoekstra, T. and Hyams, N. 1998. "Aspects of root infinitives". *Lingua [Special issue on Language acquisition: Knowledge representation and processing, A. Sorace (ed.)]* 106: 81-112.
- Hyams, N. 2001. "Now you hear it, now you don't: the nature of optionality in child grammars". In *Proceedings of the 25th annual Boston University Conference on Language Development*, A. Do, L. Domínguez and A. Johansen (eds.), 34-58. Somerville, MA: Cascadilla Press.
- Kratzer, A. 1989. "Stage-level and individual-level predicates". Unpublished MS. University of Massachusetts, Amherst.
- Ingram, D. and Thompson, W. 1996. "Early syntactic acquisition in German: evidence for the modal hypothesis". *Language* 72.1: 97-120.

- Johnson, J. and Newport, E. 1989. "Critical period effects in second language learning: the influence of maturational state on the acquisition of English as a second language". *Cognitive psychology* 21: 60-99.
- Jordens, P. 1990. "The acquisition of verb placement in Dutch and German". *Linguistics* 28: 1407-1448.
- Lakshmanan, U. 1991. "Morphological uniformity and null subjects in child language acquisition". In *Point-counterpoint: Universal Grammar in second language*, L. Eubank (ed.), 389-410. Amsterdam: John Benjamins.
- Lardiere, D. 1998. "Dissociating syntax from morphology in a divergent L2 end-state grammar". *Second language research* 14: 359-375.
- Lardiere, D. 2000. "Mapping syntactic features to forms in second language acquisition". In *Second language acquisition and linguistic theory*, J. Archibald (ed.), 102-129. Oxford: Blackwell.
- Lightbown, P. 1977. *Consistency and variation in the acquisition of French*. Doctoral dissertation. Columbia University.
- MacWhinney, B. and Snow, C. 1985. "The Child Language Data Exchange System". *Journal of child language* 12: 271-296.
- Meisel, J. 1997. "The acquisition of the syntax of negation in French and German: contrasting first and second language development". *Second language research* 13: 227-263.
- Meisel, J. 1985. "Les phases initiales du développement de notions temporelles, aspectuelles et de modes d'action". *Lingua* 66: 321-74.
- Paradis, J., Le Corre, M., and Genessee, F. 1998. "Tense and agreement in child L2 French". *Second Language Research* 14: 227-256.
- Pierce, A. 1992. *Language acquisition and syntactic theory*. Dordrecht: Kluwer.
- Plunkett, K. and Stromqvist, S. 1990. "The acquisition of Scandinavian languages". *Gothenburg papers in theoretical linguistics* 59.
- Poeppl, D. and Wexler, K. 1993. "The Full Competence Hypothesis of clause structure in early

- German". *Language* 69: 1-33.
- Prévost, P. 2003. "Truncation and missing inflection in child L2 German". *Studies in second language acquisition* 25: 65-98.
- Prévost, P. 2001. "La variabilité morphologique en français langue seconde". *Langue et linguistique* 27: 95-124.
- Prévost, P. 1997. *Truncation in second language acquisition*. Unpublished doctoral dissertation. McGill University.
- Prévost, P. and White, L. 1999. "Accounting for morphological variability in second language acquisition: Truncation or Missing Inflection?". In *The Acquisition of syntax*, M.-A. Friedemann and L. Rizzi (eds.), 202-235. London: Longman.
- Rizzi, L. 1994. "Early null subjects and root null subjects". In *Language acquisition studies in generative grammar*, T. Hoekstra and B. Schwartz (eds.), 151-176. Amsterdam: John Benjamins.
- Rizzi, L. 1993/1994. "Some notes on linguistic theory and language development: The case of root infinitives". *Language acquisition* 3: 371-393.
- Schwartz, B. 1992. "Testing between UG-based and problem-solving models in L2 acquisition: Developmental sequence data". *Language acquisition* 2: 1-19.
- Schwartz, B. and Sprouse, R. 1996. "L2 cognitive states and the Full Transfer/Full Access Model". *Second language research* 12: 40-72.
- Vainikka, A. and Young-Scholten, M. 1994. "Direct access to X'-theory: Evidence from Korean and Turkish adults learning German". In *Language acquisition studies in generative grammar*, T. Hoekstra and B. Schwartz (eds.), 256-316. Amsterdam: John Benjamins.
- Vainikka, A. and Young-Scholten, M. 1996. "Gradual development of L2 phrase structure". *Second language research* 12: 7-39.
- Vendler, Z. 1967. "Verbs and times". *Philosophical review* 36: 143-160.
- Wexler, K. 1994. "Optional infinitives, head-movement and the economy of derivations". In *Verb movement*, D. Lightfoot and N. Horstein (eds.), 305-350. Cambridge: Cambridge University

Press.

White, L. 1996. "Clitics in child L2 French". In *Generative approaches to first and second language acquisition*, H. Clahsen (ed.), 335-368. Amsterdam: John Benjamins.

Wijnen, F. 1998. "The temporal interpretation of Dutch children's root infinitivals: the effect of eventivity". *First language* 18: 379-402.

Zwarts, J. 1992. *X' syntax - X' semantics*. Unpublished doctoral dissertation. Utrecht University.

Wijnen, F. and Bol, G. 1993. "The escape from the optional infinitive stage". In *Language and cognition 3*, A. de Boer, J. de Jong and R. Landeweerd (eds.). Groningen: University of Groningen.

Table 1: Eventive and non-eventive lexical verbs in Kenny's finite and nonfinite declaratives

Month	Nonfinite declaratives						Finite declaratives					
	+Ev	-Ev	<i>doubt</i>	Total ^a	%+Ev	%-Ev	+Ev	-Ev	<i>doubt</i>	Total ^a	%+Ev	%-Ev
0.5	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	5	0	0	5	100	0
2	1	0	0	1	100	0	0	2	1	2	0	100
3	4	0	0	4	100	0	1	0	0	1	100	0
4	0	0	0	0	0	0	5	0	0	5	100	0
5	5	0	0	5	100	0	3	3	2	6	50	50
7	6	0	0	6	100	0	2	2	4	4	50	50
8	7	0	0	7	100	0	7	0	2	7	100	0
9	5	0	0	5	100	0	1	1	0	2	50	50
9.5	8	0	0	8	100	0	1	2	1	3	33.3	66.6
10	5	0	0	5	100	0	3	1	2	4	25	75
11	5	0	1	5	100	0	9	0	3	9	100	0
14	9	0	1	9	100	0	4	6	8	10	40	60
15	12	0	1	12	100	0	11	7	7	18	61.1	38.9
18	6	0	0	6	100	0	17	12	4	29	58.6	41.4
Total	73	0	3	73	100	0	69	36	34	106	66	34

^a based on non-doubtful instances

Table 2: Eventive and non-eventive lexical verbs in Greg's finite and nonfinite declaratives

Month	Nonfinite declaratives						Finite declaratives					
	+Ev	-Ev	<i>doubt</i>	Total ^a	%+Ev	%-Ev	+Ev	-Ev	<i>doubt</i>	Total ^a	%+Ev	%-Ev
5	7	0	0	7	100	0	7	2	1	9	77.8	22.2
9.5	2	1	0	3	66.6	33.3	5	5	0	10	50	50
10	13	0	0	13	100	0	2	4	0	6	33.3	66.6
11	2	0	0	2	100	0	2	8	2	10	20	80
14	12	0	1	12	100	0	26	24	9	50	52	48
15	13	0	0	13	100	0	16	27	14	43	37.2	62.8
18	7	0	0	7	100	0	20	29	10	49	40.8	59.2
Total	56	1	1	57	98.3	1.7	78	99	36	177	43.5	56.5

^a based on non-doubtful instances

Table 3: Interpretation of Kenny's simple lexical verbs

Month	Nonfinite declaratives						Finite declaratives					
	Past/	Future	<i>Doubt</i>	Total ^a	%P/P	%F/M	Past/	Future	<i>Doubt</i>	Total ^a	%P/P	%F/M
	Present	/Mod					Present	/Mod				
0.5	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	3	1	1	4	75	25
2	1	0	0	1	100	0	2	0	1	2	100	0
3	1	2	1	3	33.3	66.7	0	1	0	1	0	100
4	0	0	0	0	0	0	5	0	0	5	100	0
5	1	3	1	4	25	75	6	0	2	6	100	0
7	4	2	0	6	66.7	33.3	3	1	4	4	75	25
8	3	3	1	6	50	50	7	0	2	7	100	0
9	0	5	0	5	0	100	1	1	0	2	50	50
9.5	1	4	3	5	20	80	3	0	1	3	100	0
10	3	1	1	4	75	25	1	2	3	3	33.3	66.7
11	1	4	1	5	20	80	7	2	3	9	77.8	22.2
14	1	5	4	6	16.7	83.3	11	0	7	11	100	0
15	3	6	4	9	33.3	66.7	15	0	10	15	100	0
18	1	2	3	3	33.3	66.7	22	2	9	24	91.7	8.3
Total	20	37	19	57	35.1	64.9	86	10	43	96	89.6	10.4

^a based on non-doubtful instances

Table 4: Interpretation of Greg's finite root declaratives

Month	Nonfinite declaratives						Finite declaratives					
	Past/	Future	<i>Doubt</i>	Total ^a	%P/P	%F/M	Past/	Future	<i>Doubt</i>	Total ^a	%P/P	%F/M
	Present	/Mod					Present	/Mod				
5	0	6	1	6	0	100	8	0	2	8	100	0
9.5	1	2	0	3	33.3	66.7	10	0	0	10	100	0
10	2	10	1	12	16.7	83.3	5	1	0	6	83.3	16.7
11	1	1	0	2	50	50	9	1	2	10	90	10
14	1	9	3	10	10	90	49	4	6	53	92.5	7.5
15	3	7	3	10	30	70	35	2	20	37	94.6	5.4
18	3	2	2	5	60	40	50	3	6	53	94.3	5.7
Total	11	37	10	48	22.9	77.1	166	11	36	177	93.8	6.2

^a based on non-doubtful instances

Table 5: Subject types in finite and nonfinite root declaratives*

Learner	Finiteness	Total	DPs	Strong	Null
				declaratives	pronouns
Kenny	+finite	428	115 (26.9%)	65 (15.4%)	87 (20.3%)
	-finite	76	6 (7.9%)	45 (59.2%)	23 (30.3%)
Greg	+finite	591	99 (16.7%)	32 (5.4%)	59 (10%)
	-finite	58	0 (0%)	15 (25.9%)	31 (53.4%)

* Most subjects of RIs are null subjects; almost no clitic subjects were found in such utterances. For further discussion on RI subjects, see Prévost (1997) and Prévost and White (1999).

Table 6: Finiteness in subject *qui*-questions

Learners	Finiteness	Total <i>qui</i> -questions
Kenny	+finite	13
	-finite	2
Greg	+finite	10
	-finite	0