# FRENCH OBJECT CLITICS IN SEQUENTIAL VS. SIMULTANEOUS BILINGUAL ACQUISITION 

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#### Abstract

In this short exploratory study we investigate the production of French object clitics in sequential bilingual acquisition, and determine whether the observed patterns are similar to those in simultaneous bilingual acquisition. A picture elicitation task was used with 11 Anglophone children learning French (mean age $4 ; 09$ ) and 11 age-matched English-French simultaneous bilinguals, as well as 11 agedmatched monolingual French children. No errors in clitic placement were found in the sequential group, in line with previous results from older children. In both bilingual groups, the majority of responses were null objects (more than 60\%). It appeared that children with a later age of onset and shorter exposure to French did in fact perform similarly to bilingual children who acquired French from birth. The high number of object omissions suggests a quantitative effect when compared to monolingual Francophone children. We propose that this delay is due to the retention of a default null object representation.


Key words: first language acquisition, bilingualism, object clitics, French

## 1. Introduction

Age of onset (or age of first exposure) is proposed as a fundamental factor in distinguishing different acquisition types. The effects of age of onset on the linguistic characteristics of bilinguals can be observed much earlier, and are more complex, than previously thought (Meisel 2008, 2010, 2011; Montrul 2008; Abrahamsson \& Hyltenstam 2009 a.o.). Numerous studies suggest that first exposure to a second language (L2) after age four leads to differences compared to monolingual acquisition, making native competence unattainable afterwards (cf. Herschensohn 2000; Schwartz 2004; a. o.). For Meisel (2008, 2010, 2011), one can speak of child L2 acquisition if first exposure to the L2 occurs between age 4 and 7/8, whereas first exposure below age 3 corresponds to simultaneous bilingual acquisition. Meisel (2008) states that early first exposure to the L2 is a necessary but possibly not sufficient condition for native first language (L1) development. Therefore, for children first exposed to the L2 before the age of 3, potential differences with L1 acquisition are not excluded.

Does age of first exposure to the L2 affect all aspects of the grammar equally? There is some agreement that the effect varies across grammatical domains. Schwartz (2004) proposed the Do-
main-by-Age Model, according to which child L2 acquisition looks like L1 acquisition in the domain of (inflectional) morphology, but like adult L2 acquisition in the domain of syntax. Other studies, such as Blom (2008), showed that child L2 learners do not differ from monolingual children for syntactic phenomena, whereas differences appear in the morphological system, similar to those observed in adult L2 acquisition (see also Meisel 2011, and references therein). Meisel (2011) concludes that the data currently available do not provide conclusive evidence to predict which grammatical phenomena will resemble L1 acquisition and which phenomena will be different. Although more research is needed to determine which domains of the language are affected, it seems clear that young L2 learners acquire some types of grammatical knowledge later than monolingual children, if at all, and that they show a great range of variation (Meisel 2008, 2010, 2011). For bilingual children who are simultaneously exposed to two languages from birth, there is a consensus that they go through similar developmental stages as monolingual children acquiring the same languages, and they are able to attain native competence in each of their languages, given sufficient exposure. Interaction between the two languages occurs, but is restricted (cf. De Houwer 1990; Meisel 1989, 2011; Paradis \& Genesee 1996 a.o.). For example, one of the main hypotheses put forward in recent research is that interactions occur mainly at the interface between syntax and pragmatics (Müller \& Hulk 2001; Paradis \& Navarro 2003; Serratrice \& Sorace 2003).

We focus on sequential bilingual children who have been first exposed to French between the ages of 3 to 5 , and compare them to simultaneous bilinguals. We wish to explore the interactions between age of first exposure, length of exposure to the L2, and language production. We concentrate on the domain of object clitics in French, where omission is a common phenomenon in the earlier stages of development in both monolingual and bilingual acquisition (Pérez-Leroux, Pirvulescu \& Roberge 2008; Zesiger, Chillier-Zesiger, Arabatzi, Baranzini, Cronel-Ohayon, Franck, Frauenfelder, Hamann \& Rizzi 2010, a. o.). While previous studies compared L2 children to monolingual children or children with SLI, there is no study comparing child L2 learners to simultaneous bilingual children in this domain. We employ elicited production data of object clitics to compare Anglophone child L2 learners of French to a group of age-matched bilingual Eng-lish-French children exposed to French from birth, as well as to a monolingual French group. Our main goal is to compare two bilingual populations, sequential and simultaneous bilinguals. As we will show in the next section, previous results indicate that child L2 acquisition is different from monolingual acquisition in this domain, pointing towards an age of onset effect. However, it is crucial to start by comparing sequential and simultaneous bilingual acquisition in the same domain with the same language pairs. An additional goal is to examine if a different age of first exposure to French - lower than in previous studies - or a different length of exposure - shorter than in previous studies - would lead to different patterns in clitic production.

## 2. ObJect clitics across bilingual populations

Although clitic omission is pervasive in first language acquisition, no errors in the form or position of object clitics have been identified (Hamann, Rizzi \& Frauenfelder 1996; Jakubowicz, Nash, Rigaut \& Gérard 1998; Pérez-Leroux et al. (2008); Zesiger et al. 2010; etc.). For children learning French as an L2, previous studies report both object clitic omissions and some object clitic errors. The results vary according to the L1 and the age of onset of acquisition. For early ages, Belletti \& Hamann (2004) report a very low incidence of omissions, but do report errors with clitic placement
from a German child learning French (first exposure at 2;08; first recording at 4;0) and no omissions or errors from an Italian child learning French (first exposure at 2;04; first recording at 3;05). Meisel (2008) reports no use of object clitics by German children learning French after one year of exposure (first exposure around age 3;06, first recording around age 4;10); however, clitics are used almost uniformly by children with one more year of exposure to French. Prévost (2006), reanalyzing longitudinal production data from White (1996) for two Anglophone children learning French first exposed to French beginning at $5 ; 04$ and $5 ; 08$, reports a maximum of $33.3 \%$ and $24.3 \%$ illicit object omission. Sporadic placement errors are reported, with the clitic in post-verbal position. For Anglophone children aged 7 (age of first exposure around 4), Paradis (2004) reports that the most frequent non-clitic object type in object pronominalization contexts is object omission at around $60 \%$, with different types of errors: person and gender errors, and use of the wrong clitic. Grüter (2005) finds more than 50\% omissions for 6 year-old Anglophone children (age of first exposure around 5). Grüter (2006) finds about $30 \%$ of omissions for 7 year-old children.

In simultaneous bilingual acquisition of object clitics in French, children generally go through the same stages as monolingual children. However, some errors in clitic placement have been noted in French in Dutch-French (for instance je prends la for je la prends, Anouk 3;04; Hulk 2000) and Swedish-French children (Granfeldt \& Schlyter 2004), but not in German-French (Müller, Crysmann \& Kaiser 1996; Müller \& Hulk 2001) or English-French children (Paradis, Crago \& Genesee 2005/2006). In Anouk's data, $10 \%$ of the object clitics are incorrectly placed, and incorrect placement by Swedish-French bilinguals is rarer still. These different findings may have to do with the age at which the children were tested and methods of data collection but, overall, placement errors seem fairly limited. Moreover, object omission appears to be reported and more prevalent in bilingual than in monolingual children. For this, it has been proposed that influence from a topic-drop language, such as German or Dutch, may increase rates of object omission in a non-topic-drop language such as Italian or French (cf. Müller et al. 1996; Müller \& Hulk 2001).

However, children acquiring French in an Anglophone context also show higher rates of omission in French than children in monolingual settings (Pérez-Leroux, Pirvulescu \& Roberge 2009). Pirvulescu et al. (2012) report the same effect for bilingual French-English children: in French, bilinguals omit more clitics than monolinguals. Moreover, Pirvulescu et al. (2014) found that bilinguals in both their languages, French and English, have more omissions than monolinguals in the respective languages. Cross-linguistic influence is not a plausible explanation for these findings: neither language is a topic-drop language, and English is a language in which children exhibit low rates of omission in elicitation tasks, and abandon the object omission stage earlier than in French. French has been found not to influence the acquisition of English pronominals.

How has object omission been accounted for? To explain the extended object omission stage in French-English simultaneous bilinguals, one proposal advances a Default Retention Hypothesis, according to which an implicit non-referential null object VP construction is uniformly available across languages as an acquisition default, provided by UG (Pérez-Leroux et al. 2008, Pirvulescu et al. 2012, 2014). This construction is roughly similar to the English use of a null object in sentences such as John eats when he is stressed out or Mary danced all night, as represented in (1) below:
(1)

dance (from Pirvulescu et al. 2014, p. 500, based on Hale \& Keyser 2003)
The default representation serves as the starting point of development of other types of null object constructions in the target grammar, through exposure to input. The duration of the default stage correlates with the nature and types of null object constructions in the target grammar. Variability inherent to bilingual acquisition gives rise to higher retention of this default null object representation in both languages, resulting in domain specific patterns of bilingual delay (PérezLeroux et al. 2009, Pirvulescu et al. 2012, 2014).

Object omission has also been related to processing difficulties and computational complexity (Prévost 2006). The production of object clitics, which appear in a non-canonical position and need the projection of full-fledged representations, increases computational complexity, and therefore children tend to avoid them (see Jakubowicz, Nash, Rigaut \& Gérard 1998, for monolingual French). Object omission has also been described in terms of morpho-phonological issues. Grüter (2006) adopts the Missing Surface Inflection Hypothesis (Haznedar \& Schwartz 1997, Prévost \& White 2000. a.o.), and assumes that the underlying representations include the correct clitic syntax, but that the clitic itself is not phonetically realized. In Prévost's (2006) longitudinal data, the onset of productive use of object clitics, and consequent decline of null objects, is linked to the end of the root infinitive period at 20 months of exposure to French. Again, influence from English does not offer a plausible explanation for rates of null objects in French.

In sum, object clitic omissions appear in all learner populations in French. There is a clear indication that the bilingual situation prolongs omission stages in children. Placement errors and use of strong pronouns, errors which would be qualitatively distinct from monolingual children, are rare in bilingual acquisition. ${ }^{1}$

## 3. Hypotheses

This article aims to compare the production of French clitics in sequential and simultaneous bilingual children, in order to determine whether different rates of clitic production will result from a lower age of first exposure and a shorter length of exposure to French than found in previous studies. Recall that according to Meisel (2008, 2011, 2012), age of first exposure to an L2 before age 3 would correspond to simultaneous bilingual acquisition, while first exposure after age 4 would qualify as child L2 acquisition. Different scenarios can be envisaged. According to one scenario, a lower age of onset than in previous studies could result in a behavior similar to that of simultaneous bilingual children. The children investigated in this study are in the youngest range compared to previous studies, both from the point of view of age of onset and age at testing. If this

[^0]first scenario is correct, we should expect mostly quantitative differences with respect to monolingual acquisition; as we have seen, monolinguals exhibit omissions but no errors on clitics or clitics placement. This would therefore translate in higher rates of omissions in bilinguals/L2 children than in monolinguals. Another scenario would show sequential learners being not just quantitatively but also qualitatively different from both simultaneous bilinguals and monolinguals, similar to L2 learners. The following hypotheses can thus be formulated:

H0. No age of onset effect
Sequential bilingual acquisition will be similar to simultaneous bilingual acquisition and different from monolingual acquisition only in the rate of clitic omission.

## H1. Age of onset effect

Sequential bilingual acquisition will differ from simultaneous bilingual and monolingual acquisition, both in the rate of omissions and in placement errors and overuse of strong pronouns.

## 4. STUDY

### 4.1. Participants

Participants in the study were 11 Anglophone children who started learning French between 3;03 and 5;0. They were all living in Toronto and attended Francophone or French Immersion daycares. This sample of sequential bilingual children was matched by age to a simultaneous bilingual group from the same daycares ( $\mathrm{n}=11$ ), and to a group of monolingual French children from Montreal ( $\mathrm{n}=11$ ). The simultaneous bilingual children were exposed to French and English from birth and come from families where one (and sometimes both) parents speak French and the other parent English. Table 2 presents the age of the children at the time of study, and the age of first exposure and length of exposure to French in the case of the sequential bilinguals, and fluency ratings. The fluency rating is a composite score, based on the parental differential assessment of their child's fluency in French and in English. For each language, parents provided a rating on a 4 point scale, from 1 "not fluent", 2 "somewhat fluent", 3 "quite fluent", up to 4 "completely fluent". The bilingual fluency rating was calculated by subtracting the English rating from the French rating. Thus, a positive score implies French dominance, whereas a negative score implies English dominance ${ }^{2}$. A copy of the language questionnaire is provided in the Appendix.

[^1]
## Table 1

Means and standard deviations (SDs) for age at testing for all participants and at first exposure to French, and parental fluency rating for bilingual participants

|  | Age | Age of first <br> exposure | Length of ex- <br> posure | Fluency <br> Rating |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Sequential bi- | Mean (SD) | $4 ; 09(0.4)$ | $4 ; 0(0.7)$ | $0 ; 09(0.6)$ | $-2.37(0.5)$ |
| linguals | Range | $4 ; 04-5 ; 06$ | $3 ; 03-5 ; 0$ | $0 ; 02-1 ; 06$ | $-3--2$ |
| Simultaneous | Mean (SD) | $4 ; 09(0.6)$ | - | - | $0.09(0.9)$ |
| bilinguals | Range | $4 ; 02-5 ; 07$ | - | - | $-1-1$ |
| Monolinguals | Mean (SD) | $4 ; 09(0.5)$ | - | - | - |
|  | Range | $4 ; 02-5 ; 04$ | - | - | - |

As Table 1 shows, the mean length of exposure to French for the sequential bilinguals was relatively short. Unsurprisingly, these children were much less fluent in French than the simultaneous bilinguals. This difference was statistically significant $(\mathrm{F}(1,21)=57.857, \mathrm{p}<.001)$.

### 4.2. Task

An elicitation task where children had to describe pictures was employed to target the production of object clitics. The task contained eight test items, all with optionally transitive verbs: manger (to eat), boire (drink), couper (to cut), lire (to read), frapper (to hit), pousser (to push), chatouiller (to tickle) and lécher (to lick). Stimuli were equally balanced among animate and inanimate objects, and masculine and feminine objects. The task additionally included one training item, as well as four distractors. An example of an inanimate test item and picture are given in example (2) and Figure 1 below.
(2) Inanimate object:

Qu'est-ce que la tortue fait avec le lait?
What is the turtle doing with the milk?

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Target clitic response: Elle le boit. ("She's drinking it.")
DP response: Elle boit le lait. ("She's drinking the milk.")
Null object response: Elle boit. ("She's drinking.")
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Figure 1
Example of picture used in the task, corresponding to the example (2).

### 4.3. Results

Responses produced by the children were coded as 'scorable', including clitics, DPs, and null objects (see (1), above), or 'others', which included failure to answer, responses with a verb other than the one expected, and two responses with a strong pronoun in the simultaneous bilingual group. Mean numbers and SDs for all response types from sequential bilingual, simultaneous bilingual, and monolingual children are presented in Table 2. Note that for two verbs, chatouiller (to tickle) and lécher (to lick), not a single scorable response was produced by the sequential bilinguals.

TABLE 2
Mean number and SDs (in parentheses) of response types per group

|  | Clitic | DP | Null | Other |
| :--- | :--- | :--- | :--- | :--- |
| Sequential bilinguals | $0.73(1.1)$ | $1.18(1.8)$ | $3.36(2.2)$ | $0.73(1.4)$ |
| Simultaneous bilinguals | $1.18(1.8)$ | $0.73(1.3)$ | $3.64(1.9)$ | $0.45(0.7)$ |
| Monolinguals | $3.18(1.3)$ | $1.27(1.2)$ | $1.36(0.9)$ | $0.18(0.4)$ |

Table 2 shows that, for both bilingual groups, the majority of responses were null objects. Clitics were produced, albeit at a low rate. Both clitics and DPs were much less frequent, and a small number of other responses were also produced. The monolingual children produced many more clitics and exhibited lower rates of null objects. Crucially, although the sequential bilinguals produced more responses classified as other, this category contained no strong pronouns and no errors in clitic placement. In the simultaneous bilingual group, two instances of strong pronouns were observed (one produced by a child with fluency rating -1 and the other by a child with rating 0 ). These results do not show systematic qualitative differences with respect to monolingual children in either group. The high number of object omissions points to a quantitative effect when compared to monolingual children.

Figure 2 illustrates the frequency of null object responses across groups; it shows that the frequency of these responses is comparable for the bilingual groups, who produce them at much higher rates than the monolingual groups.


Figure 2
Frequency of null object responses across groups

In both bilingual groups, null objects represent over half of all responses. In the monolingual group, they represent less than one fourth of the responses confirming rates reported in previous studies (e.g., in Pérez-Leroux et al. 2008, object omission gravitates around $25 \%$ for four year-old children). The data was submitted to a generalized mixed-effect logistic regression model with null object responses as the dependent variable. The model included group as a fixed effect, and participant as a random effect. The effect of group was significant ( $\beta=-0.9889, \mathrm{SE}=0.3415, \mathrm{p}=0.004$ ). Chi-square tests on the frequencies of null object responses show that sequential bilingual children are significantly different from the monolingual children $\left(\chi^{2}=13.94, \mathrm{df}=1, \mathrm{p}<0.001\right)$ but not from simultaneous bilingual children $\left(\chi^{2}=0.12, \mathrm{df}=1, \mathrm{p}<0.72\right)$.

Further explorations of age of first exposure and length of exposure suggest that these factors do not seem to make any difference with respect to the frequency of omission responses. In Table 3 separate the sequential bilinguals according to whether the age of first exposure was before or after 4 . Omission rates are similar for the two sub-groups.

TABLE 3
Mean number of null objects with respect to age of first exposure to French

|  | Age of first exposure | Null |
| :--- | :--- | :--- |
| Sequential bilinguals $(\mathrm{n}=6)$ | $3 ; 03-3 ; 11$ | 3.6 |
| Sequential bilinguals $(\mathrm{n}=5)$ | $4 ; 01-5 ; 0$ | 3 |
| Simultaneous bilinguals $(\mathrm{n}=11)$ |  | 3.6 |

Similarly, classifying children in terms of length of exposure reveals no specific pattern. Table 4 below shows omissions by length of exposure.

Table 4
Mean number of null objects with respect to length of exposure to French

|  | Length of Exposure | Null |
| :--- | :--- | :--- |
| Sequential bilinguals $(\mathrm{n}=3)$ | $17-18$ months | 3.3 |
| Sequential bilinguals $(\mathrm{n}=8)$ | $2-8$ months | 3.3 |

In sum, the results indicate that these sequential bilinguals are like simultaneous bilinguals in French, and that both groups are quantitatively different from French monolinguals.

## 5. DISCUSSION AND CONCLUSIONS

The present study offers a comparison of a very controlled - albeit small - sample that cuts across different acquisitional types: sequential bilinguals, simultaneous bilinguals, and monolinguals. The early child L2 learners in the present study behave very much like age-matched simultaneous bilingual children in terms of their production of clitics in French. In both groups, null objects were the primary response, and clitics and DPs were less frequent. No errors in clitic placement were present, and the use of strong pronouns was negligible. The monolingual children produced more clitics and less null objects. Both sequential and simultaneous bilinguals attended the same francophone daycares, having therefore very similar or identical input in their school environment. The difference between the groups is the age of exposure to French, the length of exposure to French, and the input at home (sequential bilinguals have minimal or no French input at home, as the parents reported). These factors do not appear to impact the acquisition of clitics in this group of sequential bilinguals. This confirms H0, the absence of an age of onset effect, and a similar developmental pattern in sequential and simultaneous bilingual acquisition.

The proportion of object omissions was higher than in the previous studies on child L2 French found in Prévost (2006) and Grüter (2006), where the maximum rates were around $30 \%$, and closer to the rates in Paradis (2004) and Grüter (2005), who reported more than $50 \%$ null object responses. One difference might be the chronological age of our participants; the children in our study are younger than the children in these previous studies. We know from monolingual acquisition that object omission decreases with age. This effect could therefore be in line with the pattern observed in monolingual acquisition. As for the absence of errors in clitic placement and
the use of strong pronouns, our results are similar to those reported in previous studies (except for Hulk 2000). One interesting similarity exists with respect to the results in Grüter (2005). The L2 group in that study (age 6;08 at testing, 1.5 years of French exposure) performed similarly to our L2 group (age 4;09 at testing, 9 months of exposure), showing around $50 \%$ and $60 \%$ of clitic omission, respectively. Given that both groups had a relatively short length of exposure to French, it seems reasonable to attribute the rate of omission to the length of exposure. One possibility, then, would be that children with a short exposure to French exhibit a high rate of clitic omission; this rate will subsequently drop as a result of a longer exposure. An earlier study on the matter, Adiv (1984), seems to corroborate this interpretation by showing that clitic omission rates drop dramatically between children in grade 1 (short exposure to French) and children in grade 3 (longer exposure to French); see also results from Unsworth (2013) concerning the role of length of exposure in grammatical development. However, our simultaneous bilingual group shows comparable rates of omission at a comparable age. We conclude that a bilingual effect is observed independently of variations in age of onset and length of exposure. This bilingual effect manifests itself as a quantitative difference with respect to monolingual acquisition, namely as a delay in the disappearance of null objects.

We tentatively conclude that an age of onset between age 3 and 5 does not impact the acquisition of object clitics in comparison to the patterns observed in simultaneous bilingual acquisition. In other words, within this time frame and in the grammatical domain of object clitics, there is no difference, qualitative or quantitative, between sequential and simultaneous bilingual acquisition. Our study supports the view that the acquisition of certain structures is not affected by age of onset and length of exposure in this particular temporal window. Interestingly, Paradis (2011) showed that external factors such as length of exposure to the L2 had less impact on L2 children's performances on various types of linguistic tests than child-internal factors such as memory, analytic components of language aptitude and chronological age. The results of our study partially match these findings, because neither length of exposure, a child-external factor, nor age of onset, an internal factor, seems to affect the acquisition of object clitics. Crucially, comparing sequential with simultaneous bilinguals allows us to see that the difference with monolinguals does not necessarily stem from age of onset effects, but seems to be an effect of bilingualism.

Why do sequential bilinguals behave like simultaneous bilinguals in object clitic production? It is tempting to propose that the omissions have the same underlying cause in both populations, namely the retention of the null default representation due to reduced and ambiguous input in the two languages (see also Pérez-Leroux et al. 2009 and Pirvulescu et al. 2012, 2014) ${ }^{3}$. Exposure to French is short in our group of sequential bilinguals and the results indicate that there is no transfer in the initial stages of L2 acquisition. This suggests that the L2 children have access to a default null object property provided by UG, as do simultaneous bilinguals and monolinguals, which is reminiscent of proposals by Epstein, Flynn \& Martohardjono (1996), according to whom the initial state in L2 acquisition is UG itself - with no L1 transfer.

In conclusion, we propose that there is an initial object clitic omission stage in child L2 acquisition. However, if this is the case, we would expect this stage to exist independently of language combinations. The data on German-French and Italian-French from Belletti \& Hamann (2004) seem to run contrary to this prediction, but only one child was recorded for each of these language pairs. In the case of the Italian-French child, we also expect the omission stage to be

[^2]shorter, since both languages have clitics and therefore present a similar input. Further research is needed to determine whether sequential and simultaneous bilinguals continue to develop in parallel as their length of exposure increases and whether sequential bilinguals with a higher age of onset behave the same as those with a lower age of onset.

## References

Abrahamsson, Niclas \& Kenneth Hyltenstam. 2009. Age of onset and nativelikeness in a second language: listener perception versus linguistic scrutiny. Language Learning 59(2): 249306.

Adiv, Ellen. 1984. Language learning strategies: the relationship between L1 operating principles and language transfer in L2 development. In Roger Anderson (ed.), Second languages: A crosslinguistic perspective, 125-142. Rowley, MA: Newbury House.
Belletti, Adriana \& Cornelia Hamann. 2004. On the L2/bilingual acquisition of French by two young children with different source languages. In Philippe Prévost \& Johanne Paradis (eds.), The acquisition of French in different contexts, 207-242. Amsterdam: John Benjamins.

Blom, Elma. 2008. Testing the domain-by-age model: inflection and placement of Dutch verbs. In Belma Haznedar \& Elena Gavruseva (eds.), Current trends in child second language acquisition: a generative perspective, 271-300. Amsterdam: John Benjamins.

De Houwer, Annick. 1990. The acquisition of two languages from birth: A case study. Cambridge: Cambridge University Press.
Epstein, Samuel, Suzanne Flynn \& Gita Martohardjono. 1996. Second language acquisition: Theoretical and experimental issues in contemporary research. Brain and Behavioral Sciences 19. 677-758.

Granfeldt, Jonas \& Suzanne Schlyter. 2004. Cliticisation in the acquisition of French as L1 and L2. In Philippe Prévost \& Johanne Paradis (eds.), The acquisition of French in different contexts, 333-370. Amsterdam: John Benjamins.

Grüter, Theres. 2005. Comprehension and production of French object clitics by child second language learners and children with Specific Language Impairment. Applied Psycholinguistics 26: 363-391.

Grüter, Theres. 2006. Object (clitic) omission in L2 French: Mis-setting or missing surface inflection. In Mary O'Brien, Christine Shea \& John Archibald (eds.), Proceedings of the $8^{\text {th }}$ Generative Approaches to Second Language Acquisition Conference (GASLA 2006), 6371. Somerville, MA: Cascadilla Proceedings Project.

Grüter, Theres \& Martha Crago. 2012. Object clitics and their omission in child L2 French: The contributions of processing limitations and L1 transfer. Bilingualism: Language and Cognition 15(3): 531-549.
Hamann, Cornelia, Luigi Rizzi \& Ulrich Frauenfelder. 1996. The acquisition of subject and object clitics in French. In Harald Clahsen (ed.), Generative Perspectives on Language Acquisition, 309-334. Amsterdam: John Benjamins.

Hawkins, Roger. 2001. Second Language Syntax: A Generative Introduction. Oxford: Blackwell.
Herschensohn, Julia. 2000. The second time around: minimalism and L2 acquisition. Amsterdam: John Benjamins.
Hulk, Aafke. 2000. L'acquisition des pronoms clitiques français par un enfant bilingue françaisnéerlandais. Revue canadienne de linguistique 45(1/2) : 97-117.
Hale, Kenneth \& Samuel J. Keyser. 2003. Prolegomenon to a Theory of Argument Structure. Cambridge, MA: MIT Press.Jakubowicz, Celia, Lea Nash, Catherine Rigaut \& Christophe-Loic Gérard. 1998. Determiners and clitic pronouns in French-speaking children with SLI. Language Acquisition 7: 113-160.
Meisel, Jürgen. 1989. Early differentiation of languages in bilingual children. In Kenneth Hyltenstam \& Loraine Obler (eds.), Bilingualism Across the Life Span: Aspects of Acquisition, Maturity and Loss, 13-40. Cambridge: Cambridge University Press.
Meisel, Jürgen. 2008. Child second language acquisition or successive first language acquisition. In Belma Haznedar \& Elena Gavruseva (eds.), Current Trends in Child Second Language Acquisition: A Generative Perspective, 55-80. Amsterdam: John Benjamins.
Meisel, Jürgen. 2010. Age of onset in successive acquisition of bilingualism: Effects of grammatical development. In Michèle Kail \& Maya Hickmann (eds.), Language acquisition across Linguistics and Cognitive Sytems, 1-30. Amsterdam: John Benjamins.
Meisel, Jürgen. 2011. First and Second Language Acquisition. Cambridge: Cambridge University Press.
Montrul, Silvina. 2008. Incomplete acquisition in bilingualism. Re-examining the age factor. Amsterdam: John Benjamins.
Müller, Natascha, Berthold Crysmann \& Georg A. Kaiser. 1996. Interactions between the acquisition of French object drop and the development of the C-system. Language Acquisition 5: 35-63.
Müller, Natascha \& Aafke Hulk. 2001. Crosslinguistic influence in bilingual language acquisition: Italian and French as recipient languages. Bilingualism: Language and Cognition 4: 1-21.
Paradis, Johanne. 2004. The relevance of specific language impairment in understanding the role of transfer in L2 acquisition. Applied Psycholinguistics 25: 67-82.
Paradis, Johanne. 2011. Individual differences in child English second language acquisition: Comparing child-internal and child-external factors. Linguistic Approaches to Bilingualism 1(3): 213-237.
Paradis, Johanne, Martha Crago \& Fred Genesee. 2005/2006. Domain-general versus domainspecific accounts of Specific Language Impairment: Evidence from bilingual children's acquisition of object pronouns. Language Acquisition 13(1): 33-62.

Paradis, J., \& Navarro, S. (2003). Subject realization and crosslinguistic interference in the bilingual acquisition of Spanish and English: What is the role of input? Journal of Child Language 30: 1-23.
Paradis, Johanne \& Fred Genesee. 1996. Syntactic acquisition in bilingual Children: autonomous or interdependent? Studies in Second Language Acquisition 18. 1-25.

Pérez-Leroux, Ana Theresa, Mihaela Pirvulescu \& Yves Roberge. 2008. Null Objects in Child Language: Syntax and the Lexicon. Lingua 118: 370-398.
Pérez-Leroux, Ana Theresa, Mihaela Pirvulescu \& Yves Roberge. 2009. Bilingualism as a Window into the Language Faculty: The Acquisition of Objects in French-speaking Children in Bilingual and Monolingual Contexts. Bilingualism: Language and Cognition 12(1): 97112.

Pirvulescu, Mihaela, Ana Theresa Pérez-Leroux, \& Yves Roberge. 2012. A bidirectional study of object omissions in French-English bilingual acquisition. In Kurt Braunmüller, Christoph Gabriel \& Barbara Hänel-Faulhaber (eds.), Multilingual individuals and multilingual societies, 171-188. Amsterdam: John Benjamins.

Pirvulescu, Mihaela, Ana Theresa Pérez-Leroux, Yves Roberge, Nelleke Strik \& Danielle Thomas. 2014. Bilingual effects: Exploring object omission in pronominal languages. Bilingualism: Language and Cognition 17 (3): 495-510
Prévost, Philippe. 2006. The phenomenon of object omission in child L2 French. Bilingualism: Language and Cognition 9(3): 263-280.

Prévost, Philippe \& Lydia White. 2000. Missing surface inflection or impairment in second language acquisition? Evidence from tense and agreement. Second Language Research 16(2): 103-133.

Schlyter, Suzanne. 1997. Formes verbales et pronoms objets chez des apprenants adultes de français en milieu naturel. In Claire Martinot (ed.), Actes du colloque international sur l'acquisition de la syntaxe en langue maternelle et en langue étrangère (Annales littéraires de 1'Université de Franche-Comté), 273-293. Paris: Les Belles Lettres.

Schwartz, Bonnie. 2004. On child L2 development of syntax and morphology. Lingue e Linguaggio 3: 97-132.
Serratrice, Ludovica \& Antonella Sorace. 2003. Overt and null subjects in monolingual and bilingual Italian acquisition. In B. Beachley, A. Brown \& F. Conlin (eds.), Proceedings of the 27th Annual Boston University Conference on Language Development, 739-750. Somerville, MA: Cascadilla Press.
Towell, Richard \& Roger Hawkins. 1994. Approaches to Second Language Acquisition. Clevedon: Multilingual Matters.

Unsworth, Sharon. 2013. Assessing the role of current and cumulative exposure in simultaneous bilingual acquisition: The case of Dutch gender. Bilingualism: Language and Cognition 16(1): 86-110.

White, Lydia. 1996. Clitics in L2 French. In Harald Clahsen (ed.), Generative Perspectives on Language Acquisition, 335-368. Amsterdam: John Benjamins.
Zesiger, Pascal, Laurence Chillier-Zesiger, Marina Arabatzi, Lara Baranzini, Stéphany CronelOhayon, Julie Franck, Ulrich Frauenfelder, Cornelia Hamann \& Luigi Rizzi. 2010. The acquisition of pronouns by French children: a parallel study of production and comprehension. Applied Psycholinguistics 31: 571-603.

## Appendix

## Language background questionnaire

Current date: $\qquad$
Name of child: $\qquad$
Date of birth: $\qquad$
Target child
Fluency rating
(Check one)

| First language: | Not fluent |  | Somewhat fluent |
| :---: | :---: | :---: | :---: |
|  | Quite fluent |  | Completely fluent |
| Second language: | Not fluent |  | Somewhat fluent |
|  | Quite fluent |  | Completely fluent |
| Other language: | Not fluent | - | Somewhat fluent |
|  | Quite fluent | - | Completely fluent |

## Family language background and practices

Mother
Fluency rating
(Check one)

| First language: | Not fluent Quite fluent | Somewhat fluent Completely fluent |
| :---: | :---: | :---: |
|  |  |  |
| Second language: | Not fluent Quite fluent | Somewhat fluent |
|  |  | Completely fluent |
| Other language: | Not fluent Quite fluent | Somewhat fluent |
|  |  | Completely fluent |

## Father

Fluency rating
(Check one)

Sibling 1 Age: $\qquad$
Fluency rating
(Check one)
First language: $\quad$ Second language:
S____
Other language: $\qquad$

| Not fluent |  | Somewhat fluent |
| :---: | :---: | :---: |
| Quite fluent |  | Completely fluent |
| Not fluent |  | Somewhat fluent |
| Quite fluent | - | Completely fluent |
| Not fluent | - | Somewhat fluent |
| Quite fluent |  | Completely fluent |

Sibling 2 Age: $\qquad$
Fluency rating
(Check one)
First language:
Second language: $\qquad$
Other language: $\qquad$

| Not fluent | - | Somewhat fluent <br> Quite fluent | - |
| :--- | :--- | :--- | :--- |
| Completely fluent | - |  |  |
| Not fluent | - | Somewhat fluent | - |
| Quite fluent | Completely fluent | - |  |
| Not fluent | — | Somewhat fluent | - |
| Quite fluent | —— | Completely fluent | - |

$\qquad$
Fluency rating
(Check one)
First language: $\quad$ Second language: $\quad$ ___
Other language: $\qquad$

| Not fluent |  | Somewhat fluent |  |
| :---: | :---: | :---: | :---: |
| Quite fluent | - | Completely fluent |  |
| Not fluent |  | Somewhat fluent |  |
| Quite fluent |  | Completely fluent |  |
| Not fluent |  | Somewhat fluent |  |
| Quite fluent |  | Completely fluent |  |

Main caregiver other than parent (baby sitter, grandparent etc.)
Fluency rating
(Check one)

| First language: | Not fluent |  | Somewhat fluent |
| :---: | :---: | :---: | :---: |
|  | Quite fluent |  | Completely fluent |
| Second language: | Not fluent | - | Somewhat fluent |
|  | Quite fluent | - | Completely fluent |
| Other language: | Not fluent | - | Somewhat fluent |
|  | Quite fluent |  | Completely fluent |

Childs language behavior (please circle only one option)
Speaks mostly English / French with mother.
Speaks mostly English / French with father.
Speaks mostly English / French with sibling 1.
Speaks mostly English / French with sibling 2.
Speaks mostly English / French with sibling 3.
Speaks mostly English / French when playing with friends at school.
Speaks mostly English / French when playing with friends at home/in the community.
Speaks mostly English / French with maternal grandparents.
Speaks mostly English / French with paternal grandparents.
Watches mostly English / French television and videos.
Please add any information you feel is pertinent to your child's language acquisition (i.e. difficulties with learning language, hearing difficulties, referral to speech pathologist, etc):


[^0]:    ${ }^{1}$ Errors in clitic placement are more frequent in adult L2 acquisition of French (Towell \& Hawkins 1994; Schlyter 1997; Herschensohn 2000; Hawkins 2001; Granfeldt \& Schlyter 2004; a.o.), although clear counts are scarce. Adult L2 learners seem to produce clitics in both post-verbal and medial position (i.e., between an auxiliary and a past participle) in the earliest stages. These patterns are attributed to transfer from the L1.

[^1]:    ${ }^{2}$ Children's English was rated as completely fluent for all sequential bilinguals, and with an average of 3.36 for simultaneous bilinguals.

[^2]:    ${ }^{3}$ See also another possibility discussed in Pérez-Leroux et.al (2009): that bilingual co-activation of comparable lexical entries could delay the resolution of transitivity in each language and therefore promoting the (optional) omission of objects.

