

A Longitudinal Comparison of Object Clitic Production in the Spontaneous Language of L2 Children and Children with SLI

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1. Introduction

This paper examines the production of object clitics in sequential bilingual children acquiring L2 French (L1 English) compared to monolingual children with SLI. Difficulties with object clitic pronouns have been argued to be a clinical marker of SLI in monolingual children, but it is unclear whether the same difficulties can be used to accurately identify SLI in bilingual children. One major challenge in addressing this issue involves the role of length of exposure to the L2 (LoE). The main objective of this paper is to shed light on the impact of LoE on object clitic performance in sequential bilingual children (henceforth, L2 children) and how it affects the overlap between typically developing (TD) L2 children and children with SLI.

2. Object clitics in French

The properties of French object clitics that have received the most attention in the acquisition literature are exemplified in (1-3). In what has been argued to be the most complex property (Tuller, Delage, Monjauze, Piller, & Barthez, 2011), object clitics appear preverbally, while lexical objects involve SVO order (compare (1a) to (1b)). As shown in (2), while strong pronouns refer to animate referents, clitics are not specified for animacy, a property which has also been argued to be behind the delay (Jakubowicz, Nash, Rigaut, & Gérard, 1998). As also shown in examples (1b) and (2b), the object clitic is generally part of a clitic cluster (subject and object), which is also thought to increase difficulty. The third person accusative clitic furthermore involves gender agreement (1-2), which is thought to add to the complexity of the derivation relative to other clitic pronouns. Other work has highlighted the importance of the ambiguity in the input (Pirvulescu, Pérez-Leroux, Roberge, Strik, & Thomas, 2014). Indeed, 3P accusative clitics are omitted by French-speaking adults in certain discursive contexts (see (3) from Fónagy, 1985).

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- (1) a. Que fait la fille avec la giraffe
What does the girl with the giraffe?
'What is the girl doing with the giraffe?'
- b. Elle la lave.
She it.ACC.FEM.SG washes
'She washes it.'
- (2) a. Jean_i ne sait pas que je le_i connais.
John_i NEG knows not that I him.ACC.MASC.SG_i know
'John does not know that I know him.'
- b. Ce livre_i, je le_i laisserais sur la table.
This book_i I it.ACC.MASC.SG_i would leave on the table
'This book, I would leave it on the table.'
- (3) Voulez-vous que je vous donne mon numéro de téléphone? —Non, je connais ____.
want-you that I you give my number of telephone no, I know
'Do you want me to give you my phone number? No, I know ____.'

3. Acquisition of object clitics by L2 children compared to other learners: The role of length of exposure

Striking similarities in language performance involving object clitics have been observed between TD L2 children and children with SLI. Using spontaneous language samples, Paradis (2004) revealed considerable overlap between TD L2 children (L1 English) and monolingual French-speaking children with SLI in the production of object clitics in French. Focusing on object clitics in elicited production, Grüter (2005) also observed similar overlapping performance in her comparison of L2 children (also L1 English, L2 French) to French-speaking monolinguals with SLI. This overlap suggests that object clitics would not make effective markers of SLI in bilinguals, since presumably TD L2 children and L2 children with SLI would have similar difficulties with this property. However, these cross-sectional studies included L2 children who did not vary much in LoE (i.e., LoE between 1.5 and 2 years). It could be that L2 children with more exposure would have fewer difficulties with object clitics.

It would be unsurprising to see that object clitics are particularly sensitive to variation in LoE in L2 children, given the considerable documentation of the late acquisition of object clitics in TD L1 children acquiring Romance and other languages with similar systems (Varlokosta et al., 2016). Furthermore, prior reports from longitudinal case studies on simultaneous bilinguals (e.g., Pirvulescu et al., 2014; Schmitz & Müller, 2008) and (early) L2 children (Hamann & Belletti, 2008; White, 1996) have shown that the subject/object clitic asymmetry observed in monolingual children is also evident in simultaneous and sequential bilinguals. The later emergence of object clitics in TD L1 acquisition suggests that all types of learners require extra time to master this property.

More recently, increased attention has been paid to the impact of LoE on object clitic performance in elicitation tasks (Bianco & Guasti, 2016; Vender, Garraffa, Sorace, & Guasti, 2016) and how this might affect the assessment of bilingual children in clinical contexts. Bianco and Guasti's (2016) findings on L2 Italian suggest that LoE should be at least two years before object clitics in elicited production can accurately identify SLI in bilingual children. It could be that acquisition of the object clitic system is still ongoing in TD L2 children with LoE of less than 2 years; therefore, weak performance could be explained by limited LoE or by language impairment during that period.

The two-year LoE mark is interesting because it corresponds to the timing of the object clitic spurt reported by Hamann and Belletti (2008) for the early L2 child Elisa. Furthermore, Kenny and Greg, the two L2 children studied by White (1996), also appeared to go through a similar spurt after an LoE of about 20 months. However, Paradis' (2004) findings suggest that more than two years might be required, as the L2 children in her study, who had had at least two years LoE at time of testing, had a mean rate of production of 41.48% (*SD* 20.8) (p. 75), but more information about the individual variability in this group is needed. Although the group studies on L2 Italian and longitudinal case studies differ in methodology, thus complicating direct comparisons, it is interesting to note a convergence around this timing. Interestingly, Hamann and Belletti (2008) noted that this clitic spurt did not occur in the children with SLI. These authors observed that these children appeared to stagnate in a developmental stage characterized by low rates of object clitic use. This difference in speed of development may distinguish between TD L2 children and L2 children with SLI.

Because LoE has emerged as an important source of variation in the acquisition of object clitics in TD L2 children, there is a need to include longitudinal group study designs in this research. The fact that most group studies on the L2 and SLI comparison have been cross-sectional means that less is known about the behavior of the same group of children over time. A longitudinal comparative project conducted in France sought to fill this gap by collecting data twice at a 12-month interval from L1 English children learning L2 French and monolingual French-speaking children with SLI. Using elicited production data collected as part of this project, Prévost and Tuller (2017) reported that the L2 children's target object clitic production was significantly correlated with LoE at T1, indicating that L2 children with more exposure were more likely to produce object clitics.

The current paper analyzes spontaneous data from many of the same participants from Prévost and Tuller (2017). Examining spontaneous language is relevant because it is commonly used in clinical settings (Gutiérrez-Clellen & Simon-Cerejido, 2009). Furthermore, prior work has shown that performance on elicitation tasks and spontaneous language can lead to different results in monolinguals (Jakubowicz & Rigaut, 2000). In terms of the L2-SLI comparison, Paradis (2004)'s analysis of spontaneous language found that error types in L2 children differed from those of children with SLI: Though object clitic omission was the most frequent error in both groups, the L2 children used strong pronouns,

which can appear in canonical object position (see 4), more frequently than the children with SLI. Therefore, an additional goal of this paper will be to carry out error analyses in order to see if different strategies are employed by L2 children and children with SLI and whether these change over the 12-month interval.

- (4) Brigitte regarde ça.
 Brigitte looks.at that
 ‘Brigitte is looking at that.’

4. Objectives and research questions

The main goals of the present paper are to better understand the impact of length of exposure (LoE) on the production of object clitics in L2 children and the extent to which variation in LoE impacts the overlap in object clitic performance that has previously been reported for these groups. The research questions that will be addressed are as follows:

1. Do the L2 children overlap with the SLI in spontaneous language with respect to the production of object clitics? Does this change over time?
2. What is the link between object clitics and LoE in the L2 children?
3. Are similar error patterns (omission, lexical DPs or non-clitic pronouns) observed in both groups over time?

5. Method

5.1. Participants

The L2 children include 20 British children (6 boys) whose families migrated to France and whose parents are both native speakers of English. The earliest age of onset to French was 4;0. At the time of testing, they were all attending ordinary primary or middle schools in France (see Table 1 for overall characteristics). The children were tested twice at 12-month intervals. A traditional calculation of length of exposure (LoE) was used in which age of onset of exposure was subtracted from chronological age (i.e., age at time of testing).

The performance of 19 L1 French-speaking children (3 girls, 16 boys) with SLI is compared to that of the L2 children. These participants were recruited from language reference centers and special language classes located in different cities in France (Tours, Angers, Poitiers), where they had been diagnosed with SLI following usual inclusionary and exclusionary criteria (Leonard, 1998). Control data from 14 4-year-old (TD4) TD monolingual French-speaking children will also be included in order to have a monolingual baseline, but for this paper’s purpose, statistical tests will not include this group. At this age, the TD4 were considered approximate language matches to the SLI. Data collection from control groups was cross-sectional.

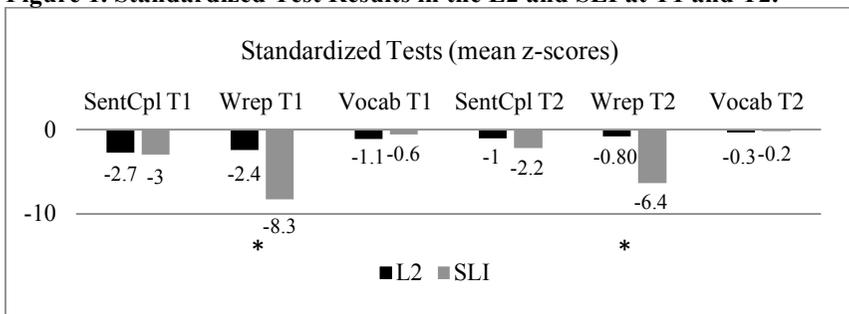
Table 1. General Characteristics of the L2 and SLI.

	L2 Children		Children with SLI	
	Mean (SD)		Mean (SD)	
	Range		Range	
	T1	T2	T1	T2
Chronological Age	9;5 (1;8)	10;5 (1;8)	9;9 (1;11)	10;10 (1;11)
Age of Onset (AoO)	7;0 (1;0) 4-10		6;5-12;11 7;7-14;2	
Length of Exposure (LoE)	2;6 (1;1)	3;6 (1;1)	0;11-4;0 1;10-4;11	

Note: L2 and SLI groups do not differ with respect to age ($p = .58$, Cohen's $d = 0.18$ at T1, $p = .52$, $d = 0.21$ at T2).

Table 1 compares the general characteristics of the SLI to the L2 group and shows that they are matched on age. Furthermore, these groups did not differ significantly in non-verbal performance ($p = .74$, Cohen's $d = 0.11$), as measured by Raven's Progressive Matrices (Raven, Raven, & Court, 1998): Both groups had mean scores that fell between the 25 and 50 percentiles. In terms of independent measures of French language abilities, Figure 1 presents results from standardized test scores which show considerable overlap in morphosyntax (sentence completion from the BILO-3C, Khomsi, Khomsi, Pasquet, & Parbeau-Gueno, 2007) and vocabulary (picture matching task, de Agostini et al., 1998) at both T1 and T2; however, the L2 children had stronger performance in phonology (word repetition from BILO-3C). The CELF4-UK (Semel, Wiig, & Secord, 2006) was used to evaluate the English of the L2 children (see Scheidnes & Tuller, 2016, for more details about the standardized test results in the L2 group).

Figure 1. Standardized Test Results in the L2 and SLI at T1 and T2.



Note: SentCpl = Sentence Completion, WRep = Word Repetition, T1 = First data collection 1, T2 = Second data collection. Data collection was done at an interval of 12 months.

5.2. Procedure

Object clitic production was evaluated in spontaneous language samples, which were obtained via a structured conversation between a native French-speaking research assistant and the child participant. A narrative was elicited by asking for a description of a book or movie that the child had read or seen recently. Sixty utterances per child were transcribed and coded at T1 and again at T2. Although this method was successful in eliciting object clitics in most of the participants, there remained variability in contexts for object clitics. As will be detailed below, children with less than three clitic contexts were excluded from group statistical analyses.

The language measure that will be of most interest here is the rate at which object clitics were produced (henceforth, object clitic production or OCP). The rate was calculated as the proportion of clitics produced out of the total of object clitic pronominalization contexts. With respect to identifying object clitic contexts, native speaker judgements were used to determine contexts in which an object clitic (instead of a lexical DP) was possible. Cases of legitimate and illegitimate omission were counted as omission. In other words, all situations in which an object was active in the discourse and was an obvious referent for the pronoun were considered clitic contexts, even if omission of the clitic was considered acceptable (see discussion in Pirvulescu, 2006). Accusative (1-2), dative (5) and reflexive (6) clitics were included in the analysis (the locative clitic *y* and the partitive *en* were excluded). Also included were object clitics produced with number or gender errors. In other words, an object clitic with incorrect gender or number marking was counted as an instance of clitic production.

(5) Il lui parle.

he her.DAT.3SG talks
'He is talking to her.'

(6) Il se regarde.

he REFL looks
'He is looking at himself.'

6. Results

The group and individual results at T1 and T2 for the L2 children, the SLI and controls will first be compared, followed by an examination of the impact of LoE on the L2 performance and lastly, an error analysis.

The descriptive statistics for the number of clitic contexts are presented in Table 2. These varied by individual, as is expected in spontaneous language; however, six L2 children and four children with SLI had less than three object clitic contexts in their samples at T1. Further analysis of this measure leads to three interesting observations: (1) All of the TD4 children had at least three object clitic contexts, (2) L2 children and children with SLI did not differ from each

other for this measure at T1 ($t = 0.06, p = .95$) but the L2 had significantly more clitic contexts than the SLI at T2 ($t = 2.92, p = .006$), and (3) all of the L2 children had at least three contexts at T2 (see also Table 3). This is discussed further below.

Table 2. Number of Object Clitic Contexts at T1 and T2.

Group	T1				T2			
	N	Mean	SD	Range	N	Mean	SD	Range
L2	20	6.55	4.67	0-15	20	10.10	4.59	4-19
SLI	19	6.63	4.44	0-17	19	6.42	3.19	2-14
TD4	14	11.5	5.56	3-26				

Note: N = number of children. SD = standard deviation. TD4: Typically developing monolingual 4-year-olds.

Turning to the rate of object clitic production (OCP), descriptive statistics for this measure are presented in Table 3. Individuals who had less than three clitic contexts were excluded from group statistical analyses, but inter-group comparisons gave similar results whether these data are excluded or not. At T1, there was considerable overlap between the L2 children and children with SLI ($t = 1.09, p = .28$), but the L2 children had stronger performance at T2 ($t = 2.21, p = .035$),¹ which suggests that the overlap in performance at T1 between the L2 children and children with SLI was temporary. When children with less than three contexts are excluded, paired t-tests revealed that neither group produced significantly more object clitics at T1 compared to T2 (L2: $t = 0.23, p = .82$, SLI: $t = 1.2, p = .25$). However, when all data are included, the L2 do improve significantly ($t = 2.41, p = .03$), but the SLI do not ($t = 0.04, p = 0.97$). The intragroup results suggest that the L2 children's improvement stems in part from producing more object pronoun contexts at T2 compared to T1; however, the SLI did not show the same improvement.

Table 3. Descriptive Statistics of Object Clitic Production Rate at T1 and T2.

Group	T1				T2			
	N	Mean	SD	Range	N	Mean	SD	Range
L2	14	.85	.20	.25-1.0	20	.85	.21	.29-1.0
SLI	15	.75	.28	0-1.0	17	.66	.29	0-1.0
TD4	14	.86	.15	.6-1.0				

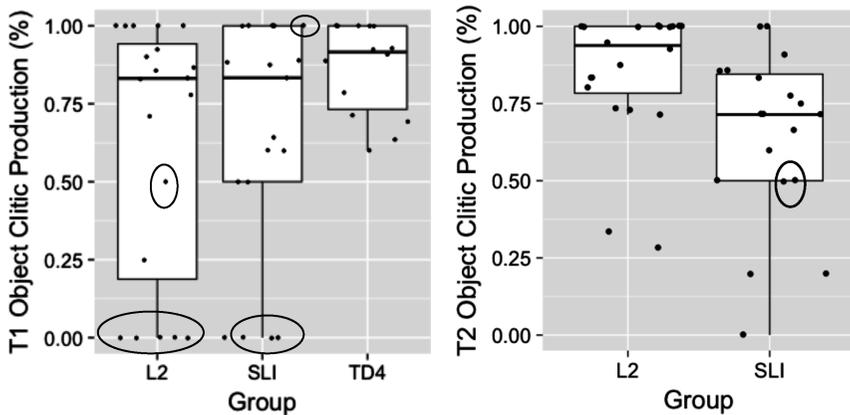
Note: N = number of children who had at least 3 clitic contexts in the spontaneous language samples. At T1, 6 L2 children and 4 children with SLI were excluded due to too few contexts. At T2, all L2 children were included and 2 children with SLI were excluded. SD = standard deviation. The control data (TD4) were cross-sectional.

Figure 2 presents boxplots with the individual OCP results. Visual inspection of the data shows the extent of the L2-SLI overlap at T1 and T2. Figure 2 includes

¹ With all data included, the L2 and SLI do not differ significantly in OCP at T1 ($t = 0.21, p = .84$), but do differ significantly at T2 ($t = 2.57, p = .015$).

the children with less than three object clitic contexts in the language sample (see circled points). In the L2 group, five children produced no object clitics at T1 (ALC, LOS, HAS, MAS and LOC, see also Figure 3). Two of these five (ALC and LOS), had zero object clitic contexts in their data. HAS and LOC had one omission out of one context and MAS had two omissions out of two contexts. In other words, all of the L2 children with 0% OCP at T1 had very few or no contexts in which an object could be pronominalized. A similar pattern can be observed in the SLI at T1: Out of the three children with 0% OCP in Figure 2, one of them had no contexts, one child had one omission out of one context and one had two omissions out of two contexts.

Figure 2. Rate of Object Clitic Production (OCP) by Group at T1 and T2.



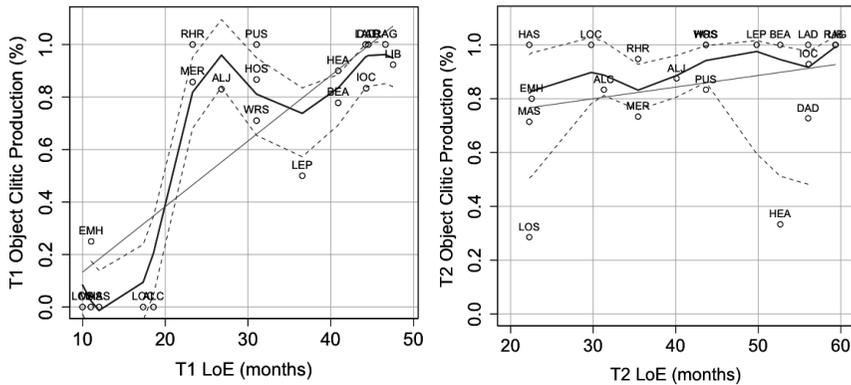
Note: Points represent individual children. These figures include all participants, including those who had fewer than three clitic contexts (the circled points) and who were therefore not included in the statistical analyses.

Examination of the individual patterns from T1 to T2 shows that the L2 children improved more than the children with SLI over the 12-month period. At T2, all L2 children had at least three object clitic contexts and only two L2 children had an OCP of less than 70% (LOS and HAS, see Figure 3). The improvement in the L2 children who had less than three clitic contexts at T1 is dramatic and fairly uniform: Only LOS, mentioned above, had a weak OCP relative to the other L2 children. On the other hand, eight out of the 19 children with SLI had an OCP below 70% at T2. Moreover, one child with SLI remained at 0% at T2 (0/6 at T1 and 0/4 at T2). In the SLI, only one of the four children with less than three clitic contexts at T1 produced object clitics above 70% at T2. Thus, the L2 children with limited LoE improved from T1 to T2, while many of the children with SLI appeared to remain in the same stage characterized by low rates of object clitic production.

Moving onto correlation analyses between LoE and OCP in the L2 data (children with < 3 contexts excluded), there was a significant correlation between

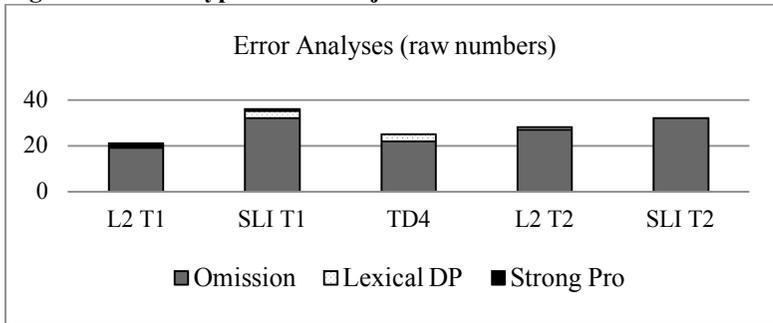
LoE and OCP at T1 ($r = .63, p = .02$), but not at T2 ($r = .27, p = .25$). Interestingly, as shown in Figure 3, the L2 children with < 3 clitic contexts at T1 (ALC, LOS, HAS, MAS and LOC) have the shortest LoE at T1 (< 18 months). If we include their data in the correlation analysis at T1, the correlation coefficient is much higher ($r = .79$). EMH also has limited LoE (11 months) and had difficulty producing object clitics at T1. At T2, when LoE was at least 22 months for all children, all L2 children had at least three clitic contexts and there were only two L2 children with rates of object clitic production under 70% (LOS, HEA).

Figure 3. Object Clitic Production and Length of Exposure (LoE) in the L2 children at T1 and T2.



In terms of errors, recall that the present analysis ignores gender and number agreement errors and is focused on whether a clitic was produced or not. At both T1 and T2, omission was by far the most common error in both groups (Figure 4). Some children produced lexical DPs in contexts where a clitic was expected, but this was very rare. There was only one strong pronoun substituted for a clitic in the L2 group (7) and no over-use of the strong pronoun *ça* ‘that’. In the SLI, only one error was made involving the over-use of the pronoun *ça* and there were no cases of other strong pronouns being used when a clitic was expected. There were no placement errors in either group.

- (7) et les autres il faut qu' ils viennent nous toucher avant que le loup
 touche eux (ALJ, L2, T1)
 and the others it is necessary that they come us.ACC1P touch before that the
 wolf touches them
 ‘And the others must come touch us before the wolf touches them.’

Figure 4. Error Types When Object Clitics were not Produced.

7. Discussion and conclusion

The overall objective of this paper is to better understand the impact of LoE on object clitic production in L2 children and LoE effects on the L2-SLI comparison. The first research question concerned whether L2 children and children with SLI would have overlapping performance in object clitic production, as has been shown in previous work, and whether this overlap would persist 12 months later. The results showed that the L2 children's performance did not differ significantly from that of the SLI at T1. However, at T2, the L2 children produced object clitics at a significantly higher rate than the SLI. In sum, the groups omitted clitics at similar rates at T1, but 12 months later the L2 children produced them more frequently than the children with SLI. Thus, the L2-SLI overlap observed at T1 was temporary.

While variability in the number of object pronominalization contexts is expected in any spontaneous language analysis, the improvement in object clitic production (OCP) from T1 to T2 in the L2 children is likely due in part to an increased number of contexts in the sample. Similar improvement was not observed in the SLI, which confirms previous work suggesting that children with SLI remain stuck in a stage in which object clitics are not produced (Hamann & Belletti, 2008). It is important to note that all of the TD 4-year-old controls had at least three clitic contexts, suggesting that object clitics are a natural part of the spontaneous language context in this study. One possibility is that the L2 children increased their lexical knowledge between T1 and T2, thereby allowing them to produce more transitive verbs at T2, which led to more object pronoun contexts (Pérez-Leroux, Castilla-Earls, & Brunner, 2012). However, the L2 children had age-appropriate levels of clausal embedding at T1 (Scheidnes & Tuller, 2014), which suggests that transitive verbs were being used. Furthermore, the L2 and SLI had very similar levels of receptive vocabulary at both T1 and T2, so an overall receptive vocabulary measure is not likely to explain why the L2 children had stronger performance compared to the SLI at T2, but not at T1. Additional work is needed to explain the nature of the development that allowed more object clitic contexts and object clitics to be produced by the L2 children at T2.

Despite the more dramatic improvement in the L2 children over time compared to the children with SLI, there nevertheless remains some overlap between the two groups at T2. Indeed, five children with SLI used object clitics in all clitic contexts at both T1 and T2, thus calling into question the use of object clitics as clinical marker in spontaneous language samples. This is somewhat unexpected, seeing as children with SLI were found to omit direct object clitics at a mean of 47% (Paradis, 2004). This difference could be explained in part by the difference in ages between the children with SLI in the current study (mean age = 9;9 at T1) compared to Paradis' group whose mean age was 7;3. Another difference between the two studies is that the present study included a wider variety of forms in the analysis (singular and plural datives, reflexives, and accusative clitics) in order to maximize the number of clitic contexts, while Paradis only included accusative clitics. However, a longitudinal case study on spontaneous language samples from a French-speaking adult with SLI revealed that object clitics (including all types) were produced at a rate of 84.2% (Audollent & Tuller, 2003),² suggesting that problems with clitics can continue into adulthood for some individuals with SLI. Yet, more recent work on elicited production has narrowed the focus to the 3SG form, which is the only form to include gender agreement, as it seems to cause the greatest difficulty for children with SLI (e.g., Tuller et al., 2011). It is possible that focusing on the 3SG accusative may lead to better discrimination between typical and atypical development in L2 children, but a different type of spontaneous language sampling method is needed to elicit more contexts for the 3SG accusative form.

The second research question targeted the link between LoE and the rate of object clitic production (OCP) in the L2 children. Correlation analyses revealed that OCP was correlated significantly with LoE at T1, but not at T2. Moreover, at T1, all of the L2 children with limited LoE (< 18 months) had difficulty producing object clitic contexts or object clitics, but almost all of these children performed with the rest of the group at T2, when LoE was at least 22 months for all L2 children. This finding is in line with Prévost and Tuller's (2017) analysis of the elicited production data from the same larger project, which showed a similar effect of LoE. Furthermore, the 18-month LoE mark is very close to the two-year timing of the object clitic spurt that was reported in longitudinal case studies on L2 children (see Elisa from Hamann & Belletti, 2008 and Kenny and Greg from White, 1996). While much of the research cited here is from L2 children with L1 English, the results from the studies on Italian, which included various L1s, suggest that this two-year cut-off may not be specific to L1 English or L2 French. Taken together, this pattern of results suggests that an LoE of about 1.5-2 years may indeed correspond to a developmental change with respect to object clitics in sequential bilinguals and therefore may indeed be a sort of minimal starting point for their assessment in L2 children. More research on L2 children with or without SLI is needed in order to confirm whether this 1.5-to-2-year mark does in

² The authors included gender and number errors in this analysis, but specify that omission was the principal error (p. 269).

fact make a difference in terms of accurately identifying SLI in L2 children using object clitics.

The third research question concerned error types in both groups. Error analyses revealed that omissions were by far the most common error type in both groups and that the use of a lexical DP in place of a pronoun was extremely rare. The prevalence of omissions confirms previous findings; however, the lack of lexical DPs and strong pronouns differs from Paradis' (2004) observation that L2 children produced strong pronouns or lexical DPs more often than children with SLI. It is hard to say what led to these diverging results, but the difference suggests that it seems unlikely that the overuse of lexical DPs or strong pronouns in spontaneous language could allow a clinician to rule out language impairment in an L2 child. In prior studies on elicited production, however, lexical DPs were commonly produced instead of object clitics (Varlokosta et al., 2016). Producing a lexical DP instead of a pronoun allows the speaker to avoid non-canonical word order (see 1), but the fact that neither the SLI nor the L2 consistently over-used lexical DPs in the current study suggests that the persistence of the lexical DP strategy in elicited production is related to the nature of the elicitation task.

The findings presented here suggest that TD L2 children take about two years before showing signs of mastering the French object clitic system. During this time, it is possible that omitting object clitics allows for avoidance of what is arguably a complex property, thereby lowering processing costs (Prévost, Tuller, Galloux, & Barthez, 2017), and that ambiguity in the input encourages this type of avoidance (Pirvulescu et al., 2014). However, even after the two-year mark, performance can be variable (e.g., LEP at T1, LOS and HEA at T2), thus suggesting that even L2 children with considerable LoE omit object clitics more often than may be expected in a TD population. More research is needed in order to understand this variability, specifically, when it is part of TD L2 development or when it is due to language impairment.

In conclusion, the findings presented here confirm the similarities in object clitic performance between L2 children and children with SLI (Paradis, 2004; Grüter, 2005), but limit the expectation of such overlap to L2 children with limited LoE (i.e., less than about two years). Taken together, the present findings and prior results suggest that TD bilinguals in early stages of development can be expected to produce object clitics in a way that overlaps with the clinical population, but that TD L2 children can be expected to improve their performance with continued exposure. This pattern can be expected whether elicited production or spontaneous language samples are used; however, the lexical DP strategy that is frequent in elicited production is rare in spontaneous language. The role of the two-year LoE mark for assessing object clitics in L2 children merits further scrutiny.

References

- Audollent, Cécile, & Tuller, Laurice. (2003). La dysphasie : Quelles séquelles en français? *ANAE*, 74–75, 264–270.

- Bianco, G., & Guasti, Maria Teresa. (2016). Clinical markers of SLI in Italian L2 children with SLI. Presented at the The Romance Turn VIII, Universitat Autònoma de Barcelona.
- de Agostini, Maria, Metz-Lutz, Marie-Noelle, van Hout, Anne, Chavance, Michel, Deloche, Gerard, Pavao-Martins, Isabel, & Dellatolas, Georges. (1998). Oral language evaluation battery of aphasic children (ELOLA): A French standardization (4-12 years). *Revue de Neuropsychologie*, 3, 319–368.
- Fónagy, Ivan. (1985). J'aime. Je connais. Verbes transitifs à objet latent. *Revue Romane*, 20, 3–35.
- 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.
- Gutiérrez-Clellen, Vera F., & Simon-Cerejido, Gabriela. (2009). Using language sampling in clinical assessments with bilingual children: Challenges and future directions. *Seminars in Speech and Language*, 30(4), 234–245. <https://doi.org/10.1055/s-0029-1241722>
- Hamann, Cornelia, & Belletti, Adriana. (2008). Developmental patterns in the acquisition of complement clitic pronouns: Comparing different acquisition modes with an emphasis on French. *Rivista Di Grammatica Generativa*, 31, 39–78.
- Jakubowicz, Celia, Nash, Lea, Rigaut, Catherine, & Gérard, Christophe-Loic. (1998). Determiners and clitic pronouns in French-speaking children with SLI. *Language Acquisition*, 7(2/4), 113–160.
- Jakubowicz, Celia, & Rigaut, Catherine. (2000). L'acquisition des clitiques nominatifs et des clitiques objets en français. *Canadian Journal of Linguistics; Toronto*, 45(1/2), 119–157.
- Khoms, Abdelhamid, Khoms, Jabril, Pasquet, Frédéric, & Parbeau-Gueno, Aude. (2007). *Bilan informatisé de langage oral au cycle III et au collège (BILO3C)*. Paris: Centre de Psychologie Appliquée.
- Leonard, Laurence B. (1998). *Children with specific language impairment*. Cambridge, MA: MIT Press.
- Paradis, Johanne. (2004). The relevance of specific language impairment in understanding the role of transfer in second language acquisition. *Applied Psycholinguistics*, 25(01), 67–82. <https://doi.org/10.1017/S0142716404001043>
- Pérez-Leroux, Ana Teresa, Castilla-Earls, Anny Patricia, & Brunner, Jerry. (2012). General and specific effects of lexicon in grammar: Determiner and object pronoun omissions in child Spanish. *Journal of Speech, Language and Hearing Research (Online)*, 55(2), 313–327.
- Pirvulescu, Mihaela. (2006). Theoretical implications of object clitic omission in early French. *Catalan Journal of Linguistics*, 5, 221–236.
- Pirvulescu, Mihaela, Pérez-Leroux, Ana-Teresa, Roberge, Yves, Strik, Nelleke, & Thomas, Danielle. (2014). Bilingual effects: Exploring object omission in pronominal languages. *Bilingualism: Language and Cognition*, 17(3), 495–510. <https://doi.org/10.1017/S1366728913000631>
- Prévost, Philippe, Tuller, Laurice, Galloux, Anne, & Barthez, Marie-Anne. (2017). Complexity and production/comprehension asymmetries in the acquisition of wh-questions in French: Comparing second language acquisition and language impairment in children. In Elma Blom, Leonie Cornips, & Jeannette Schaeffer (Eds.), *Studies in Bilingualism* (Vol. 52, pp. 231–258). Amsterdam: John Benjamins Publishing Company. <https://doi.org/10.1075/sibil.52.11pre>

- Prévost, Philippe, & Tuller, Laurie. (2017). Production of object clitics in French: Child L2 versus contexts involving language pathology. Presented at the GASLA 14, University of South Hampton.
- Raven, John, Raven, John C., & Court, John H. (1998). *Raven's coloured matrices*. London: H. K. Lewis.
- Scheidnes, Maureen, & Tuller, Laurice. (2014). L2 children embed normally, but children with SLI do not. In Alexandra Fieis & Maria Joao Freitas (Eds.), *New directions in the acquisition of romance languages: Selected proceedings of the Romance Turn V* (pp. 261–284). Newcastle upon Tyne: Cambridge Scholars Publishing.
- Scheidnes, Maureen, & Tuller, Laurice. (2016). Assessing successive bilinguals in two languages: A longitudinal look at English-speaking children in France. *Journal of Communication Disorders*, 64, 45–61. <https://doi.org/10.1016/j.jcomdis.2016.10.001>
- Schmitz, Katrin, & Müller, Natascha. (2008). Strong and clitic pronouns in monolingual and bilingual acquisition of French and Italian. *Bilingualism: Language and Cognition*, 11(1), 19–41. <https://doi.org/10.1017/S1366728907003197>
- Semel, Eleanor, Wiig, Elisabeth, & Secord, Wayne. (2006). *Clinical Evaluation of Language Fundamentals (CELF4-UK)* (Fourth UK). London: Harcourt Assessment.
- Tuller, Laurice, Delage, Hélène, Monjauze, Cécile, Piller, Anne-Gaëlle, & Barthez, Marie-Anne. (2011). Clitic pronoun production as a measure of atypical language development in French. *Lingua*, 121(3), 423–441. <https://doi.org/10.1016/j.lingua.2010.10.008>
- Varlokosta, Spyridoula, Belletti, Adriana, Costa, João, Friedmann, Naama, Gavarró, Anna, Grohmann, Kleanthes K., ... Yatsushiro, Kazuko. (2016). A cross-linguistic study of the acquisition of clitic and pronoun production. *Language Acquisition*, 23(1), 1–26. <https://doi.org/10.1080/10489223.2015.1028628>
- Vender, Maria, Garraffa, Maria, Sorace, Antonella, & Guasti, Maria Teresa. (2016). How early L2 children perform on Italian clinical markers of SLI: A study of clitic production and nonword repetition. *Clinical Linguistics & Phonetics*, 30(2), 150–169. <https://doi.org/10.3109/02699206.2015.1120346>
- White, Lydia. (1996). Clitics in L2 French. In H Clahsen (Ed.), *Generative perspectives on language acquisition* (pp. 335–367). Amsterdam: John Benjamins Publishing Company.

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