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Interrogative Chunks, Derivational Complexity and L1 Transfer at the Initial State of L2 French

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1. Introduction

This study uses longitudinal learner corpus data to examine trends in the development of root interrogatives at the initial state of English classroom learners of L2 French. The acquisition of French interrogatives has previously been attributed to derivational complexity, L1 transfer and the input (Prévost et al., 2010, 2014), but an interaction of these factors is yet to be tested in an L2 classroom environment where prototypical interrogative chunks constitute a significant portion of the L2 input. In doing so, we track the production of learners' L2 question forms as they progress through the initial state, from first exposure to the L2 (age 11) and then two years after this (age 14). We observe whether the structures of these question forms are influenced by derivational complexity, properties of the L1 or interrogative chunks derived from learners' classroom input. The results show how at the onset of acquisition, learners prefer interrogative structures with the least complex derivation, but as they progress through the initial state they opt for structures that mirror those of the interrogative chunks. We argue that for classroom learners specifically, the exposure to and use of prototypical interrogative chunks from the L2 input can be facilitative on learners' acquisition of optional target properties.

Section 2 provides a background to the current study, including three hypotheses of the L2 initial state that we test in the present study, the assumed syntactic derivation of root interrogatives in French and English respectively, and relevant previous studies. Section 3 presents the data used for analysis and Section 4 outlines our specific research questions and predictions. Section 5 presents the results and Section 6 offers a discussion of these.

2. Background

2.1. Theories of the L2 initial state

There are many theories of the L2 initial state within different frameworks/approaches to SLA. The three that we test in the present study are the Full Transfer/Full Access (FT/FA) hypothesis (Schwartz and Sprouse, 1996), the

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Derivational Complexity Metric (DCM) (Jakubowicz, 2011) and the usage-based notion that formulaic input can be the catalyst for acquisition (Ellis, 2012). The FT/FA assumes that the initial state of L2 acquisition consists of the final state of L1 acquisition. Then the L2 input tiggers a restructuring of the grammar via UG when it does not align with the L2 interlanguage that mirrors the L1 representation.

Assuming that language development is constrained by economy considerations, Jakubowicz's DCM proposes that working memory capacity can impact the amount of computational complexity that a learner is able to handle, where computational complexity refers to the number of External and Internal Merge operations that are involved in an utterance's derivation. The DCM therefore states that, since an L2 learner is sensitive to these Merge operations, those structures requiring less computation in the target language will emerge before those that require more computation (Jakubowicz, 2011).

Finally, usage-based theories of SLA posit learners' analysis of frequently used, prototypical formulaic language (fixed expressions, chunks, formulas etc.) in the target language input as the catalyst for SLA (Ellis, 1996; Ellis 2012). Under these models, general cognitive mechanisms (such as working memory, phonological memory) allow learners at the initial state to analyse and subsequently generalise a formula's surface structure to derive similar functional structures upon related contextual cues. The proposed developmental sequence is from formulaic phrase to limited-scope slot-and-frame pattern, to fully productive schematic pattern (Ellis, 2012).

2.2. Root interrogatives in English and French

Following Chomsky (1995); Radford (2009), we assume that wh-words carry an interpretable wh-feature [*i*WH] and finite verbs carry an interpretable tense feature [*i*T], whilst in root interrogatives C carries an uninterpretable interrogative feature [*u*WH] and an uninterpretable tense feature [*u*T]. In English, the [*u*WH] and [*u*T] features carry the EPP property, which is checked by moving the wh-word and finite verb to the specifier and head of CP respectively. Hence, both wh-movement and inversion are obligatory, except in echo questions, hence ruling out (1b-c):

(1) Wh-questions in English
  a. *where are you?*
  b. **where you are?*
  c. **you are where?* (apart from echo question)

Yes/no questions also make use of this obligatory feature checking strategy by movement of the finite verb from head T to head C.

(2) Yes/no questions in English
  a. *are you happy?*
  b. **you are happy?* (apart from echo question)

Conversely, wh-questions in French exhibit a large range of variation. The wh-word can remain in-situ (3-a) or be fronted. Wh-fronting can occur without subject verb inversion (3-b), with the question marker *est-ce que* (3-c), with clefting (3-d) or without subject verb inversion (3-e).

(3) Wh-questions in French '*where do you work'?*

a.	*vous travaillez où?* *you work where*	[wh IN SITU]
b.	*où vous travaillez?* *where you work*	[wh + NO INV]
c.	*où est-ce que vous travaillez?* *where [ESK] you work*	[wh + ESK]
d.	*c'est où que vous travaillez?* *it is where that you work*	[wh + CLE]
e.	*où travaillez-vous?* *where work you*	[wh + INV]

Under Jakubowicz's (2011) DCM, (3a)-(3e) can be ordered from lowest to highest in terms of derivational complexity, on account of their associated External and Internal Merge operations. With interrogatives displaying wh in situ + no inversion (3-a), neither the [*u*WH] nor the [*u*T] feature in C carry the EPP property, therefore there is no movement of the wh word or finite verb to spec and head of CP respectively. The uninterpretable features in C are instead checked via Agree (Prévost et al., 2014). Conversely, in those interrogatives which display wh-movement (3-b) (3-e), the [*u*WH] feature is presumed to carry the EPP property. Where wh-movement occurs without inversion in plain wh-fronting (3-b), the [*u*T] feature on C is still lacking, and hence the finite verb remains uninverted. With interrogatives containing wh-movement + *est ce-que* [ESK] the [*u*T] feature now carries the EPP property, which is checked by the External Merging of the interrogative particle/question marker [ESK] in C (Prévost, 2009; Prévost et al., 2014). In wh-movement with clefting (3-d), it is assumed that the wh-word is directly merged in the matrix CP projection. Taking root scope by means of Agree with a [*u*WH] in C (Jakubowicz, 2011), it moves an empty operator to the embedded C, which, together with the embedding of the wh-cleft, entails another layer of derivational complexity. Lastly, in those interrogatives displaying wh-movement and inversion (like English), both the [*u*WH] and [*u*T] features carry the EPP property, and hence the wh-word and finite verb are moved to the CP projection, showing the highest complexity.

Yes/no questions in French can also show inversion via EPP feature checking of T (4-a) or be in declarative form (4-b), where it is assumed that the interrogative (WH) feature has scope over the sentence which allows it to be interpreted as a question in either case.

(4) Yes/no questions in French `*do you have a pen?'*

a.	*as-tu un stylo?*	[yes-no INV]
	have you a pen	
b.	*tu as un stylo?*	[yes- no NO INV]
	you have a pen	

Jakubowicz's DCM posits that yes/no questions with inversion are more derivationally complex than those without.

2.3. Child L2 acquisition of French wh- interrogatives

Like French root interrogative structures themselves, the literature reports a great amount of variation with respect to their acquisition. Differences are also found between naturalistic and elicited data. We briefly outline some results from past child L2 studies[1], specifically concentrating on wh-questions since these have been the most widely investigated structures.

Grondin and White (1996) examined data from two English speaking 5-year-olds with limited exposure to French at the time of recording. Both learners overwhelmingly favoured wh-fronted structures to begin with, before some [wh IN SITU] ones started to appear in later recordings. Within those wh-fronted structures, some of these also showed inversion. However, most of these instances were with the copular *est*, particularly the sequence *où est* (where is), which casts doubts on whether these were fully analysed forms. Balletti and Hamann (2004) examined two children of different L1 backgrounds, German and Italian, who at the time of recording had one year's exposure to French. Both learners began with the [wh IN SITU] strategy before [wh + NO INV] followed.

In elicited data studies, slightly different results were found for English speaking learners of French. Haiden et al. (2009) (cited in Prévost 2009) tested 19 British children around 9 years old who had immigrated to France two years previously. These children still favoured a wh-fronting strategy, but the rate of in-situ structures was higher at around 40%. Of the wh-fronted questions, only 16% of these showed inversion. Prévost et al. (2010) tested another 19 English speaking children with a similar average age but slightly more exposure to French and found similar results, with mean in-situ rates of 42%. The higher rates of in-situ for both groups of learners compared to the naturalistic ones of Grondin and White (1996) could be down to their increased length of exposure to the target language.

[1] Note that all learners under analysis are adolescents at 11 years old during the first data collection period. Since they are under 18, we classify them as child rather than adult learners.

Interestingly, Strik (2012) used a similar methodology to Prévost et al. (2010) with 15 Dutch speaking children of a similar age (4-8) and target language exposure (0-8 years) and found much lower rates of [wh IN SITU] structures (6.5%). These learners overwhelmingly preferred wh-fronting strategies more than the English learners of Prévost et al. (2010), despite the fact that in both L1s (English and Dutch) wh-movement and inversion are obligatory in wh-questions. In a follow up review, after controlling for age, age of onset and length of exposure to the target language, Prévost et al. (2014) interpret this difference as an interaction between derivational complexity, L1 properties and the input. They argue that the high rate of [wh IN SITU] use from the English-speaking learners of French shows that in some instances derivational complexity can override L1 influence. The comparatively low instance of [wh IN SITU] in the Dutch learners is analysed as a result of the fact that Dutch has a generalized (XP) movement to the left periphery in root clauses whereas in English this movement is largely restricted to wh-questions (Prévost et al., 2014). The authors state that, because this property is pervasive in the Dutch learners' L1, their exposure to wh-fronting in the French input may stronger reinforce this movement in their Dutch-French interlanguage, despite this being derivationally more complex than other possibilities available in the target language input (i.e. wh IN SITU). Another finding that Prévost et al. (2014) noted when analysing the two groups of learners was that both English and Dutch children with higher rates of [wh + INV] in French were those with an increased exposure to formal schooling. They suggested that an increase in this structure is dependent on learners being formally exposed to/taught it in a classroom environment.

The present study seeks to investigate the interaction of these three factors further, with longitudinal English classroom learners who were frequently exposed to interrogative chunks in their L2 input from the onset of acquisition. Section 3 now presents this data.

3. Data: The French Progression Corpus

The data in the present study comes from a subcomponent (n = 24) of the longitudinal French Progression Corpus of Myles and colleagues (Myles et al., 1998, 1999), a collection of semi-naturalistic spoken transcripts from English adolescent classroom learners of L2 French. Learners were recorded 6 times over 2 years between the ages of 11 and 14. No learner was exposed to French before age 11 and the secondary school classroom was their principle source of L2 input. In several works (Myles et al. 1998, 1999; Myles 2004), Myles and colleagues note that the learners' input consisted heavily of what they term 'interrogative chunks'; highly prototypical formulaic L2 question forms that learners were consistently shown to reproduce across all rounds of data collection. These can be seen below, split into wh-questions and yes/no questions.

(5) Classroom wh-interrogative 'chunks'

a.	*comment t'appelles tu?* ('what is your name?')	[wh + INV]
b.	*quel âge as-tu?* ('how old are you?')	[wh + INV]
c.	*où habites-tu?* ('where do you live?')	[wh + INV]
d.	*quel est le date de ton anniversaire?* ('when is your birthday?')	[wh + ESK]
e.	*qu'est ce-que tu aimes faire?* ('what do you like to do?')	[wh + ESK]

(6) Classroom yes/no- interrogative 'chunks'

a.	*tu as un animal?* ('do you have a pet?')	[NO + INV]
b.	*tu as des freres ou des soures?* ('do you have any brothers or sisters?')	[NO + INV]

Myles et al. (1999) also analysed a subcomponent of the progression corpus and showed how learners were frequently using the above formulas well in advance of respective competence at the earlier ages, and even overextending them in similar contexts. This establishes the salience of these expressions to all learners under analysis and reinforces the notion that they played a significant role in their L2 classroom input. Note that structurally, the wh-interrogative chunks display only two types of structures: [wh + INV] (5a-c), and [wh + ESK] (5d-e). The yes/no interrogative chunks are both in declarative form and do not exhibit inversion. This allows us to predict what kinds of interrogative structures learners would produce if predominantly influenced by these chunks. Our research questions and predictions based on all three theories of the initial state tested in the present study are now given in Section 4.

4. Research questions and predictions

Through examining learners' productions of L2 interrogatives in the longitudinal transcripts of the French Progression Corpus, we test general predictions of the three hypotheses of the initial state as outlined in Section 2.1. We analysed learners' production of the interrogative chunks and the form of all learners' grammatical interrogatives outside of the chunks at the first stage of data collection (Round 1, ages 11-12) and the last (Rounds 5/6, ages 13 and 14). The three theories of the initial state predict different results as regards the form of learners' interrogatives outside of the chunks at these learners' initial stages of L2 learning.

(7) The Full Transfer/Full Access hypothesis
The FT/FA hypothesis predicts that learners' data will be most dominant with French wh-interrogatives of the [wh + INV] type and yes/no interrogatives with inversion, as these are the most structurally similar to the L1.

(8) The Derivational Complexity Metric
The DCM predicts that learners' data will be most dominant with wh-interrogatives closer to (3-a) [wh IN SITU) rather than to (3-e) [wh + INV), and yes/no interrogatives in declarative (4-b) rather than inverted (4-a) form, as these are the least derivationally complex options.

(9) Usage based models which posit formulaic input as the main catalyst for acquisition
Usage based models would predict that learners will produce more French interrogatives that mirror the structure of the prototypical interrogative chunks derived from their classroom input. These are [wh + INV] and [wh + ESK] wh-interrogative structures (3-e and 3-c) and yes/no interrogative structures without inversion (4-b).

5. Results

5.1. Round 1 (ages 11-12)

At the age of first recording, all 24 learners were shown to produce at least one of the wh- and yes/no interrogative chunks as identified by Myles and colleagues in previous works (Myles et al., 1998, 1999; Myles, 2004). Overall, there were 63 instances of learners producing the identified wh-interrogative chunks (excluding repetitions), which constitutes an average of 2.625 productions per learner. Out of the 24 learners, 15 of these also produced the identified yes/no interrogative chunks, and in total these were produced 22 times with an average of 0.91 per learner. In most learners' cases, these chunks are likely formulaic, as they go beyond respective interlanguage competence. Outside of these expressions, learners often resort to a 'clipping' strategy of related non-finite lexical items with presumed rising intonation. Some examples can be seen below.

(10) **un petit ou un grande?* (Learner 6 Round 1)
a short or a tall
'are they short or tall?'

(11) **les yeux?* (Learner 28 Round 1)
the eyes
'what colour are your eyes?'

The tables below show the manifestation of all learners' grammatical L2 interrogatives *outside* of the identified chunks, split between wh-interrogatives (Table 1) and yes/no interrogatives (Table 2). Both raw numbers and relative percentages out of all structural possibilities are given.

Table 1: All learners' grammatical manifestations of wh- interrogatives outside of the interrogative chunks at Round 1

wh- interrogatives						
	wh IN SITU	wh + NO INV	wh + ESK	wh + CLE	wh+ INV	**TOTAL WH Q**
number	12	1	0	0	1	14
%	**86%**	**7%**	**0%**	**0**	**7%**	

Table 2: All learners' grammatical manifestations of yes/no interrogatives outside of the interrogative chunks at Round 1

yes/ no interrogatives			
	INV	DEC	**TOTAL Y/N**
number	0	20	20
%	**0%**	**100%**	

Table 1 shows that outside of the wh-interrogative chunks, only 14 grammatical wh- questions were produced by all learners under analysis, again highlighting the discrepancy in syntactic complexity between these expressions and the majority of other interlanguage productions at this age. Out of these interrogatives, 93% lack inversion (13/14) and are mostly of the [wh + IN SITU] type (12/14). Note also that some of these cases of [wh- IN SITU] are learners asking the name (14) or age (15) of another person after producing the chunks *comment t'appelles tu* and *quel âge as tu* in [wh + INV] form.

(14) *elle s'appelle comment?* (Learner 12 Round 1)
she calls herself how
'what is her name?'

(15) *il a quel âge?* (Learner 5 Round 1)
he has what age
'how old is he?'

There are only two instances where the wh-word is fronted at this stage, one without corresponding inversion (16) and one with it (17).

(16) *comment ça s'écrit?* (Learner 9 Round 1)
how that writes itself
'how do you spell it?'

(17) *comment s'appellent- ils?* (Learner 28 Round 1)
how call themselves they
'what are their names?'

Outside of the yes/no interrogative chunks, only 20 other grammatical yes/no questions were produced in total by all learners under analysis. Like the chunks, these are all in declarative rather than inverted form.

(18) *tu aimes la animal?* (Learner 19 Round 1)
you like the animal
'do you like your pet?'

(19) *il a le cheveux longs?* (Learner 20 Round 1)
he has the hair long
'has he got long hair?'

The results from Round 1 of data collection mostly support the prediction of the DCM (see (8)), as learners overwhelmingly opt for the least derivationally complex possibilities outside of the interrogative chunks for both wh-questions and yes/no questions. Usage-based models would also predict manifestations of yes/no questions in declarative form, as these mirror the structure of the corresponding interrogative chunks, but these models would not be able to account for the high relative percentage of [wh + IN SITU] structures which are not found in the wh-interrogative chunks.

5.2. Rounds 5 and 6 (ages 13-14)

Two years later at Rounds 5 and 6 (the final stage of data collection), only 13 out of the 24 learners produce the wh-interrogative chunks (examples below), which results in 26 total productions and an average of 1.083 instances per learner.

(23) *[*comment t'appelles tu] le monsieur?* (Learner 1 Round 5)
how call yourself you the gentleman
'what's the gentleman's name?'

(24) *[*quel âge as tu] il* (Learner 12 Round 6)
what age have you he
'how old is he?'

Importantly, all of these instances are learners overextending the chunks in an attempt to derive similar functional interrogatives, as was also reported in Myles et al. (1998, 1999); Myles (2004). This is an indication that the chunks are likely still formulaic for these particular learners. No learner is shown to produce the yes/no question chunks at this stage of data collection. The tables below show the manifestation of learners' grammatical interrogatives outside of the wh-interrogative chunks in wh-questions and yes/no questions respectively:

Table 3: All learners' grammatical manifestations of wh- interrogatives outside of the interrogative chunks at Rounds 5 and 6

wh- interrogatives						
	wh IN SITU	wh + NO INV	wh + ESK	wh + CLE	wh+ INV	TOTAL WH
number	12	7	32	0	51	102
%	**12%**	**7%**	**31%**	**0%**	**50%**	

Table 4: All learners' grammatical manifestations of yes/no interrogatives outside of the interrogative chunks at Rounds 5 and 6

yes/ no interrogatives			
	INV	DEC	**TOTAL Y/N**
number	9	95	104
%	**9%**	**91%**	

At rounds 5 and 6, learners now produce a total of 102 grammatical wh-questions outside of the wh-interrogative chunks, which indicates an overall increase in L2 competence from the first round of data collection. The majority of these interrogatives are now in [wh + INV] form, and out of these 51 instances, 32 are with the combination *où est* (where is) as in (28), which constitutes 62.75%.

(26) *quel âge a Richard?* (Learner 2 Round 5)
what age has Richard
'how old is Richard?'

(27) *où habite le garson?* (Learner 7 Round 6)
where lives the boy
'where does the boy live?'

(28) *où est le manger en Belleville?* (Learner 24 Round 5)
'where is the restaurant in Belleville?'

(29) *a quelle heure est diner?* (Learner 23 Round 5)
at what time is dinner
'what time is dinner?'

The next most popular manifestation is the [wh + ESK] (*est ce-que*) structure, which constitutes 31% of learners' total interrogatives (32/102). The 32 [wh + ESK] structures are observed from 6 learners only, and 29 of these productions (over 90%) are with the wh-word *que* (what). It is therefore likely that the sequence *qu'est ce que* is unanalysed and could also be formulaic. Some examples are below.

(30) *où est ce qu'on peut manger le dejeneur?* (Learner 9 Round 6)
where is it that one can eat breakfast?
'where can you eat breakfast?'

(31) *qu' est ce qu' elle fait?* (Learner 28 Round 5)
what is it that she does
'what does she do?'

(32) *qu' est ce que fait la fille?* (Learner 2 Round 6)
what is it that she does the girl
'what does the girl do?'

Yes/no questions are still produced overwhelmingly in declarative form (33-34), with only 9% (9/104) of these showing inversion (35).

(33) *elle est grand?* (Learner 3 Round 5)
she is tall?
'is she tall?'

(34) *le fille est pres le boulangerie?* (Learner 19 Round 5)
the girl is near the bakery
'is the girl near the bakery?'

(35) *est la fille assez grand?* (Learner 7 Round 5)
' is the girl fairly tall?'

The high relative percentage of [wh + INV] interrogatives is predicted by the Full Transfer/Full Access hypothesis (see (7)), but this cannot account for the extremely low rate of inverted yes/no interrogatives, as this structure is obligatory in the L1. Instead, this comparatively low rate of inversion and high rate of declarative yes/no questions is predicted by the DCM (see (8)), but this cannot account for the high percentage of [wh + INV] and [wh + ESK] structures that dominate learners' wh-interrogatives. A more consistent predictor of the results as a whole is the usage-based notion that prototypical formulaic input can be the catalyst for acquisition, as the overwhelming majority of learners' interrogatives (both wh- and yes/no) match the structure of the corresponding interrogative chunks derived from their classroom input.

6. Discussion

In general terms, the results of Section 5 highlight the interplay between the input, derivational complexity and L1 transfer at the initial state of L2 French, as was found in Prévost et al. (2014). More specifically, at the very onset of acquisition (Round 1), the majority of interrogatives produced by learners are input-derived interrogative chunks, that in most cases go beyond respective L2

competence as little other structures of a similar complexity are observed. Where grammatical interrogative structures are observed outside of the classroom chunks, derivational complexity seems to override L1 transfer, as learners prefer interrogative structures with the least complex derivation over those which share properties of the L1. For wh-interrogatives specifically, derivational complexity also seems to override learners' exposure to formulaic input, as learners opt for the [wh + IN SITU] strategy despite the chunks exemplifying [wh + INV] and [wh + ESK] structures. This differs from the naturalistic L2 English children learning French of Grondin and White's (1996) study, who overwhelmingly favoured plain [wh + NO INV] structures before some [wh + IN SITU] ones started to appear in later recordings. For the yes/no questions specifically, it is ambiguous as to whether learners opt for the declarative form due to their lower derivational complexity or structural similarity to the yes/no interrogative chunks.

Over the course of the initial state (Rounds 5 and 6), learners' L2 competence increases, and the identified interrogative chunks are used far less, and always overextended in similar functional structures. Outside of these, learners are seen to overwhelmingly opt for wh- and yes/no structures that mirror the interrogative chunks. For wh-questions, this is despite their more costly derivation ([wh + INV] and [wh + ESK]) and despite dissimilarity from the L1 with yes/no questions (declarative rather than inverted form). Again, these results differ from past studies on English speaking children of L2 French, whose general trend is that fronted wh- structures (mainly without inversion) appear before IN SITU ones (Grondin and White, 1996; Haiden et al., 2009; Prévost et al., 2010). The high percentage of [wh + INV] structures found after learners had endured 2 years of formal schooling (along with the fact that most input-derived wh-interrogative chunks exhibited this structure), supports the suggestion by Prévost et al. (2014) that an acquisition of this structure is highly dependent on learners' exposure to it in a language learning classroom environment.

As has been found with past studies of L2 acquisition of French, the first [wh + INV] structures we observe at Rounds 5 and 6 are mainly with the combination *où est*, a pattern which is also frequent in French L1 acquisition (Prévost 2009). This raises a question as to whether this sequence is a representative case of wh-movement and inversion or unanalysed at this stage. Similarly, as also found with L1 children, (e.g. Plunkett 1999) the first [wh + ESK] structures overwhelmingly feature the combination *qu'est ce que*, which is again ambiguous to whether this sequence is being produced via holistic retrieval or online derivation. If it is that these combinations (*où est* and *qu'est ce que*) are also being used as interrogative chunks, then this increases the influence of learners' classroom input on their acquisition of French interrogative structures, as it is likely that these will have been formally presented this way in the L2 classroom. This would further support the usage-based notion that prototypical chunk exposure and use can influence the acquisition of similar target language structures.

7. Conclusion

To conclude, this longitudinal corpus study has added to previous research which posits an interaction of derivational complexity, L1 properties and L2 input at the initial state of child SLA. It has shown how at the onset of acquisition, classroom learners rely heavily on interrogative chunks derived from their L2 input in their production, and that the production of any grammatical interrogatives outside of these seems to be constrained by derivational complexity rather than L1 transfer. As learners progress through the initial state, these interrogative chunks seem to be facilitative on their acquisition of optional target properties, despite these properties' derivational complexity or structural dissimilarity to the L1.

References

Balletti, Adriana. and Hamann, Cornelia. (2004). On the L2/bilingual acquisition of French by two young children with different source languages. In Prévost, Philippe. and Paradis, Johanne., editors, *The Acquisition of French in Different Contexts: Focus on Functional Categories*, pages 147–176. John Benjamins, Amsterdam.

Chomsky, Noam. (1995). *The minimalist program*. MIT Press.

Ellis, Nick. (1996). Sequencing in SLA: Phonological memory, chunking and points of order. *Studies in Second Language Acquisition*, 18:91–126.

Ellis, Nick. (2012). Formulaic language and second language acquisition: Zipf and the phrasal teddy bear. *Annual Review of Applied Linguistics*, 32(17).

Grondin, Nathalie. and White, Lydia. (1996). Functional categories in child L2 acquisition of French. *Language Acquisition*, 5:1–34.

Haiden, Martin., Prévost, Philippe., Tuller, Laurie., Ferré, Sandrine., and Scheidnes, Maureen. (2009). Production and comprehension of wh-questions in acquisition of French: Comparing L2 children with L1 children with SLI. In *Annual Meeting of the German Linguistics Society*, Osnabrük, Germany.

Jakubowicz, Celia. (2011). Measuring derivational complexity: New evidence from typically-developing and SLI learners of L1-french. *Lingua*, 121:339–51.

Myles, Florence. (2004). From data to theory: The over-representation of linguistic knowledge in SLA. *Transactions of the Philological Society*, 102(2):139–168.

Myles, Florence., Hooper, Janet., and Mitchell, Rosamond. (1998). Rote or rule? Exploring the role of formulaic language in classroom foreign language learning. *Language Learning*, 48:323–363.

Myles, Florence., Mitchell, Rosamond., and Hooper, Janet. (1999). Interrogative chunks in French L2: A basis for creative construction? *Studies in Second Language Acquisition*, 21:49–80.

Plunkett, Bernadette. (1999). Targeting complex structure in French questions. In Greenhill, Annabel., Littlefield, Heather., and Tano, Cheryl., editors, *Proceedings of the 23rd Annual Boston University Conference on Language Development*, pages 764–775, Somerville MA. Cascadilla Press.

Prévost, Philippe. (2009). *The acquisition of French: The development of inflectional morphology and syntax in L1 acquisition, bilingualism, and L2 acquisition*, volume 51. John Benjamins.

Prévost, Philippe., Strik, Nelleke., and Tuller, Laurie. (2014). Wh-questions in child L2 French: Derivational complexity and its interactions with L1 properties, length of exposure, age of exposure, and the input. *Second Language Research*, 30(2):225–250.

Prévost, Philippe., Tuller, Laurie., Scheidnes, Maureen., Ferré, Sandrine., and Haiden, Martin. (2010). Computational complexity effects in the acquisition of wh-questions in child L2 French. In Dominguez, Laura. and Guijarres-Fuentes, Pedro., editors, *New directions in language acquisition: Romance languages in the generative perspective*, pages 415–443. Cambridge Scholar Publisher.

Radford, Andrew. (2009). *Analysing English sentences: A minimalist approach*. Cambridge University Press.

Schwartz, Bonnie. and Sprouse, Rex. (1996). L2 cognitive states and the full transfer/full access model. *Second Language Research*, 12(1):40–72.

Strik, Nelleke. (2012). Wh-questions in child bilingual acquisition of French: Derivational complexity and cross-linguistic influence. *Canadian Journal of Linguistics*, 57:133–156.

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