1. Introduction

Human language permits both fronted and in situ constructions of wh-questions. Many languages permit only one of these options in main clause information-seeking questions. These are questions that can be uttered "out of the blue," without any particular preceding discourse context. For example, English requires fronting in such questions, or overt movement of the wh-phrase, as in (1), while Mandarin disallows it, as in (2).

(1) a. What did John buy?
   b. *John bought what?

(2) a. Lisi mai-le sheme (ne)
    Lisi buy-ASP what (Q)
    “What did Lisi buy?”
   b. *Sheme Lisi mai-le (ne)
      what Lisi buy-ASP (Q)
      (“What did Lisi buy?”)

In these languages, the starred option is ungrammatical unless the question is functioning as an echo question (DeVilliers 1995). As is well known, echo questions are used to indicate surprise or incredulity on the part of the speaker, or to request clarification when the interlocutor’s previous utterance was unintelligible. English echo wh-questions have an in situ wh-phrase (You bought what??). Echo questions are considered non-information-seeking questions in that they cannot be uttered without the appropriate discourse context (see Culicover 1976, i.a.). In French, however, both fronted and in situ varieties of wh-questions are permitted, and both varieties can be used as typical,
information-seeking questions. Thus, both question types in (3) are grammatical, and (3b) need not function as an echo question.\footnote{We follow Hulk (1996) in considering the periphrastic form \textit{qu’est-ce que} in (3a) to involve an unanalyzed KESK question morpheme (based on Rooryck’s (1994) analysis of \textit{est-ce que} as an unanalyzed Q morpheme, represented by Hulk and others as ESK).}

(3) a. Qu’est-ce que tu as vu?
   what-is-it that you have seen
   “What did you see?”

   b. Tu as vu quoi?
   you have seen what
   “What did you see?”

An exception to this is \textit{pourquoi} ‘why’, which does not allow such variation. When it is found in a fronted position (as in 4a), it is functioning as the “reason” \textit{pourquoi}, whereas if it is found in an in situ position, the meaning of this wh-word actually changes and it becomes the purposive \textit{pourquoi} (4b).

(4) a. Pourquoi il part?
   why he leaves
   “Why is he leaving?”

   b. Il part pourquoi?
   he leaves for-what-purpose
   “He is leaving for what purpose?”

French also permits additional forms of wh-questions, namely wh-questions with or without subject-verb inversion (\textit{Comment tu as/as-tu fait ça?} ‘How did you do that?’). However, previous research on wh-questions in French has found that children rarely produce inverted forms (cf. Hamann 2006, Gotowski 2014). Thus, for the remainder of this paper we will disregard the issue of inversion and will instead focus only on the issue of the position of wh-phrase.

It is important to note that while both fronted wh-questions and wh-in situ questions are grammatical as information-seeking questions, there are nevertheless pragmatic differences between them, such that there are discourse contexts in which only one of the forms is licensed. For example, Chang (1997) has argued that wh-in situ is strongly presuppositional, so that it can be used only in cases where the referent of the wh-phrase is presupposed (see also Cheng & Rooryck 2000). In addition, there are prosodic differences between these question forms (Cheng & Rooryck 2000, Depréz et al. 2013). We will return to both of these issues later in the paper.

Previous work on children’s wh-questions has found that children produce more in-situ forms (3b) than French-speaking adults do, and this observation is the focus of this paper. Hamann (2006) and Zuckerman & Hulk (2001) account
for the asymmetry in production of in-situ forms in terms of Economy (Chomsky 1995). Specifically, they argue that wh-in situ forms are “more economical” than fronted wh-questions because of the lack of overt movement. In this paper, we present new data which supports the observation that French children produce more wh-in situ questions than their caregivers do. However, we propose an alternative analysis that revolves around the specific discourse properties of wh-in situ vs. fronted wh-phrases.

Our paper is structured as follows. In section 2 we present data on the production of wh-in situ in child French and French child-directed speech, focusing specifically on qu’est-ce que/quoi ‘what’, the most frequent wh-question type in French child-directed speech (see Table 3 below). Following that we point out some shortcomings of the account based on Economy. Section 3 turns to the discourse properties of wh-in situ questions, and we present Mathieu’s (2004) analysis of wh-in situ phrases in French as “lower order topics.” We posit that differences in rates of wh-in situ in child vs. adult French are due to children’s difficulties with mastering the discourse conditions under which a syntactic mechanism (overt movement) is required for foregrounding a referent. Finally, in section 4, we show that children preferentially produce in-situ forms only when their target language permits these forms as information-seeking questions. That is, these forms are grammatically sanctioned in French, but not in English, where they can only be echo questions, as we noted above. Thus, we explain the stark asymmetry between French- and English-speaking children in their rates of producing wh-in situ questions in terms of grammatical differences between the two target languages.

2. French-speaking Children’s Use of Wh-in Situ

As mentioned in section 1, it has been observed that French-speaking children produce an unusually high rate of wh-in situ constructions. Two of the studies that have highlighted this observation are a corpus based study by Hamann (2006), and an elicitation study by Zuckerman & Hulk (2001; henceforth Z&H). Let us briefly review the findings of these studies. We note that these studies report only children’s rates of wh-in situ and fronted wh-questions, but do not report numbers in (naturalistic) caregiver speech in the input. Hulk (1996) cites an estimate from Al (1976) that 33% of wh-questions in colloquial French (français familier) are wh-in situ questions, 46% involve fronting without inversion (e.g. Comment tu as fait ça? “How did you do that?”) and only 3% involve fronting with inversion (Comment as-tu fait ça?).

2.1 Previous Research

Hamann (2006) analyzed data from three children in the Geneva corpus (Hamann et al. 2003): Augustin, Louis, and Marie (1;8-2;9). Looking at all forms of wh-phrases (i.e. qui ‘who’, qu’est-ce que/quoi ‘what’, où ‘where’, etc.), she found that children overwhelmingly produced in situ forms, as seen in Table
1. Note that “fronted wh” consists primarily of wh+ESK (including *qu’est-ce que*, or KESK), as well as fronted forms without inversion or ESK, such as *Où il est*? (lit. where he is?).

<table>
<thead>
<tr>
<th>Table 1. Rates of Fronted-Wh and Wh-In-Situ Questions (Hamann 2006)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fronted Wh</td>
</tr>
<tr>
<td>Augustin (2;0-2;9)</td>
</tr>
<tr>
<td>Louis (1;9-2;3)</td>
</tr>
<tr>
<td>Marie (1;8-2;3)</td>
</tr>
</tbody>
</table>

Hamann accounts for children’s high rate of producing in-situ forms by appealing to the notion of Economy. Specifically, she suggests that “covert movement is less costly than overt movement” (p. 145), such that children will choose to project the less complex in-situ structure rather than the more complex fronted structure. Hamann also suggests that children’s input may be important in not only causing French-speaking children to produce in-situ forms at all (recall that wh-in situ is grammatical in adult French), but it may also be important in motivating children to produce fewer in situ forms as they develop, as such forms are less common in adult speech than in children’s speech, if Al’s (1976) estimate of 33% is correct. In other words, the fact that these forms occur at all in the input leads children to produce them, but then over time children scale back their production of these forms to ultimately match rates in the target language.

Zuckerman & Hulk (2001) conducted an elicitation study that looked at older children’s (ages 4;0-5;9) and adults’ production of both fronted wh-questions and wh-in situ forms. Participants were introduced to a “shy” puppet and were given an embedded question, which participants were then supposed to pose as a matrix question to the puppet. For example, they were given the input in (5), based on which they might ask the puppet one of the questions in (6).

(5) Je veux savoir où il est allé.
I want know-inf where he is gone
“I want to know where he went.”

(6) a. Où est-il allé? (fronting with inversion)
   b. Où est-ce qu’il est allé? (wh+ESK)
   c. Où il est allé? (fronting without inversion)
   d. Il est allé où? (in situ)

Z&H tested seven wh-phrases: *que* (*que + ESK, i.e. qu’est-ce que*, vs. *quoi*) ‘what’, *où* ‘where’, *comment* ‘how’, *quel* ‘which’, *pourquoi* ‘why’, *quand* ‘when’ and *combien* ‘how many’. Combining all wh-phrase types, Z&H found that children produced wh-in situ 3% of the time, compared to 1% for adults. While both rates are low, the contrast in rates is still statistically significant (p < 0.05). Moreover, children’s rate of in-situ production for *quoi* ‘what’ is much higher, 18%, compared to the adults’ rate of 3%.
Table 2. Rates of Fronted Wh-Questions and Wh-In Situ Questions (Z&H 2001)

<table>
<thead>
<tr>
<th></th>
<th>Wh-fronted (all)</th>
<th>Wh-in situ (all)</th>
<th>Wh-fronted (que’est-ce que)</th>
<th>Wh-in situ (quoi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>children (4-5;9)</td>
<td>97%</td>
<td>3%</td>
<td>82%</td>
<td>18%</td>
</tr>
<tr>
<td>adults</td>
<td>99%</td>
<td>1%</td>
<td>97%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Like Hamann, Z&H argue that these older children are still influenced by Economy. Specifically, they argue that children are not aware of pragmatic or stylistic differences between the different types of wh-questions, and that in the absence of pragmatic constraints leading to the production of fronted forms, children will produce the more economical in-situ forms.

2.2 New Data

Our research is based upon data from the Palasis corpus (Palasis 2010) on CHILDES (MacWhinney 2000). This corpus contains spontaneous speech from native French-speaking children in a preschool class, and the speech of the adult teacher who interacts with them. We analyzed the last 50 files of this corpus, which include 20 children ages 2;9-3;10 (two children were excluded from this analysis because they are not native French speakers). Thus, our data complement the existing data in terms of children’s ages, and should allow us to establish a continuum of wh-in situ production in child French from 1;8 to 5;9.

First we established the relative rates of production of different wh-phrases in child-directed speech (CDS) in the French data, as well as in English CDS for comparison (we will return to the English corpus in section 4). As seen in Table 3, wh-phrases meaning ‘what’ are by far the most common type in CDS.

Table 3. Raw Counts of Fronted Wh-Words in French and English CDS

<table>
<thead>
<tr>
<th>Wh-Word</th>
<th>French (Palasis 2010 ages 2;9-3;10)</th>
<th>English (Brown 1973; Eve files 1-20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KESK / what</td>
<td>626</td>
<td>1056</td>
</tr>
<tr>
<td>qui / who</td>
<td>19</td>
<td>70</td>
</tr>
<tr>
<td>où / where</td>
<td>15</td>
<td>252</td>
</tr>
<tr>
<td>quand / when</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>comment / how</td>
<td>83</td>
<td>42</td>
</tr>
<tr>
<td>combien / how many</td>
<td>3</td>
<td>44</td>
</tr>
</tbody>
</table>

Limiting our search to questions with qu’est-ce que/quoi ‘what’, we then examined the children’s spontaneous utterances for their productions of questions containing these forms. Only object wh-questions with a subject and verb were included; bare wh-questions, such as (7) and those lacking a subject (8-9), were excluded.
Confirming the impression of a child-adult asymmetry in wh-in situ production, as expressed in the prior literature, the results show that the children from the Palasis corpus produce significantly more wh-in situ questions than the adult in this corpus.

Table 4. Production of Qu’est-ce que vs. Quoi (Palasis 2010)

<table>
<thead>
<tr>
<th></th>
<th>Fronted Wh</th>
<th>Wh-In-Situ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td>11.8% (13)</td>
<td>88.2% (97)</td>
</tr>
<tr>
<td>Adult</td>
<td>83.4% (626)</td>
<td>16.6% (125)</td>
</tr>
</tbody>
</table>

Compared to the 16.6% rate from the adult in the Palasis data, and the 33% rate reported by Al (1976), we find that children’s rates of in situ, while dropping over time, are still higher than in adult French until around age 4.

Table 5. Rates of Wh-In Situ for Qu’est-ce que/quoi

<table>
<thead>
<tr>
<th>Corpus/Study</th>
<th>Children’s Ages</th>
<th>Child Rate of In-Situ</th>
<th>Adult Rate of Wh-In Situ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geneva</td>
<td>(1;8-2;9)</td>
<td>80%*</td>
<td>n/a</td>
</tr>
<tr>
<td>Palasis</td>
<td>(2;9-3;10)</td>
<td>88.2%</td>
<td>16.6%</td>
</tr>
<tr>
<td>Z&amp;H (2001)</td>
<td>(4;0-5;9)</td>
<td>18%</td>
<td>3%</td>
</tr>
<tr>
<td>Al (1976)</td>
<td>n/a</td>
<td>n/a</td>
<td>33%*</td>
</tr>
</tbody>
</table>

*includes other types of wh-phrases

Z&H’s rates are lower for both children and adults than any of the other studies. We surmise that their elicitation methodology may have yielded more fronted constructions than speakers would normally produce in naturalistic speech. This could be because an embedded question (I want to know where he went) creates a pragmatic domain in which an in-situ question would be infelicitous. We will return to the pragmatic conditions that distinguish fronted from in-situ wh-questions in section 3.

First, however, we discuss some weaknesses in the claim that Economy is reason for children’s greater production of wh-in situ compared to adults.
2.3 Weaknesses of the Economy Account

One weakness of the Economy explanation comes from Crisma’s (1992) study of Philippe’s data from the Leveillé corpus (Suppes, et al. 1973). She found that Philippe did not produce any instances of wh-in situ until after age 2;6, and instead produced fronted wh-questions exclusively before that point. Hamann (2006) explains this finding by attributing Philippe’s early production of fronted wh-questions to the input that he receives. That is, Philippe’s parents reportedly did not use wh-in situ questions in their speech. However, the children in the Palasis corpus hear fronted wh-questions with *qu’est-ce que* almost 85% of the time, and yet they produce them only about 12% of the time in their own speech. Furthermore, as we will show later with data from English CDS, input rates of wh-in situ are not directly related to children’s own rates of in situ production.

Secondly, European Portuguese (EP), like French, allows both fronted wh-questions and wh-in situ. Soares (2004) conducted a corpus study with data from three children (Marta 1;2-2;2, Sandra 2;6-3;5, Carlota 3;6-4;5) acquiring EP. These children did not produce any instances of wh-in situ early on, and in fact all of the questions produced by Marta, the youngest child, are fronted wh-questions. Thus, cross-linguistically, children do not seem to have a strong preference for wh-in situ at the earliest stages of question production, even when in situ is an option.

Lastly, we argue that an Economy-based analysis that claims that children avoid movement by producing wh-in situ (cf. Hamann 2006) is problematic on theoretical grounds as both fronted and in situ wh-questions involve movement of the wh-operator. The difference between these two forms is the level of representation at which this operator movement occurs: in fronted wh-questions the movement happens in the overt syntax, while in wh-in situ questions the movement is covert (Aoun et al. 1981, Huang, 1982, i.a.). Thus, in either case, children are not avoiding movement simply by producing wh-in situ. While Hamann (2006) explicitly states that covert movement is more economical than overt movement, we are unaware of any strong evidence for this distinction. Instead, we will offer an alternative explanation that focuses on particular discourse-related differences between fronted and in situ forms in French.

3. Properties of French wh-in situ

3.1 Mathieu’s account

As we noted above, there are pragmatic differences between fronted and in-situ wh-questions in French. One well known proposal is Chang’s (1997) claim that wh-in situ questions are associated with a strongly presuppositional context. One piece of evidence cited in favor of this analysis is that while a fronted wh-question (10a) can be answered as in (10b), the wh-in situ question in (11a) reportedly disallows the same answer. Thus, the question in (11a) is presuppositional in the sense that it presupposes that something was read.
(10)a. Qu’est-ce que tu as lu t?
   KESK that you have read
   “What did you read?”
   b. Rien.
      “Nothing.”
(11)a. Tu as lu quoi?
   you have read what
   “What did you read?”

Mathieu (2004), however, argues that there are varieties of spoken French in which the answer in (10b/11b) is perfectly acceptable as an answer to (11a), and that wh-in situ questions are not presuppositional in a different way than fronted wh-questions are. Instead of distinguishing wh-in situ from fronted wh-questions in terms of presupposition, Mathieu argues that wh-in situ constructions involve a type of “split DP,” unlike fronted wh-questions. An example of an overt split DP is given in (12a); (12b) shows the non-split version.

(12)a. Combien, as-tu lu ti de livres?
   how-many have-you read of books
   b. Combien de livres, as-tu lus ti?
   how-many of books have-you read
   “How many books have you read?”
   [Mathieu 2004, ex. 7]

In a wh-in situ question, the wh-operator is “split” from its nominal.

(13)[Op; [Tu as lu quoi;]]

Part of the rationale for analyzing wh-in situ phrases as split DPs comes from the fact that both types of DPs display similar syntactic restrictions. For example, wh-in situ questions, unlike fronted wh-questions, are not possible with negation (14) or within an embedded clause (15).

(14)a. *Il ne voit pas qui?
   he ne sees neg who
   (“Who does he not see?”)
   b. Qui, est-ce qu’il ne voit pas ti?
   who is-it that-he ne sees neg
   “Who does he not see?”
   [Mathieu 2004, ex. 4]
(15)a. *Il a dit que qui avait éternué?
   he has said that who have-subj sneezed
   (“Who did he say sneezed?”)
   b. Qui est-ce qu’il a dit qui t avait éternué?
Likewise, split-DP constructions are not possible in these contexts, as we illustrate with negation (see 16):²

(16) a. *Combien, n’as-tu pas lu t, de livres?
how-many ne-have-you neg read of books
(“How many books haven’t you read?”)
b. Combien de livres, n’as-tu pas lu t?
how-many of books ne-have-you neg read
“How many books haven’t you read?”
c. *Il ne voit pas qui?
(=14a)

The reason this connection is important is that Mathieu gives evidence that split DPs introduce discourse referents that are a special kind of Topic. More specifically, he argues that wh-in situ phrases constitute “new topics” (Aissen 1992). New topics are similar to lower-order topics in that they involve a backgrounded, or “non-prominent” referent. Fronted wh-phrases, in contrast, are canonically associated with Focus, which implies a foregrounded referent.

Building upon this analysis of French wh-in situ questions, we argue that the reason children overproduce these constructions compared to adults stems from children’s difficulties using particular syntactic mechanisms to correctly distinguish the discourse status of different referents. Previous research has shown that children at the age we are investigating are capable of distinguishing between Topic and Focus (de Cat 2009, 2011), and they understand the difference between given and new information (Hickmann 2003). However, many researchers have noted children’s consistent errors in overattributing referents to the common ground (e.g. Schaeffer & Matthewson 2005). How does this relate to fronted vs. in situ wh-phrases? In fronted wh-questions, the wh-phrase is a Focus element: it is foregrounded, since it is not yet part of the common ground. Conversely, a wh-in situ phrase is backgrounded material that is already in the common ground. But if children believe that the wh-phrase is already inherently salient enough in the discourse so that foregrounding of the nominal it is not necessary, they may produce more in situ wh-phrases. In other words, children may believe that saliency does not need to be grammatically encoded via a linguistic mechanism, specifically through overt movement.

This explanation would coincide with research that has indicated that children often think that any particular referent is salient in the discourse, and

² Returning to Z&H’s (2001) study for a moment, note that they elicited wh-questions by posing an embedded question (Je veux savoir... ‘I want to know...’) which does not permit wh-in situ. Thus, they may have elicited so few wh-in situ questions, relative to what is found in spontaneous speech, because participants were primed with a construction that disallows in situ questions.
that what is salient to them is salient to others (Wexler 1998; de Cat 2009). De Cat’s (2009) experimental work has demonstrated that children seem to “[exploit] joint attention” in conversation. As de Cat (2009) explains, children “bank on what is visible to them and their addressee to reduce the amount of information [that is] encoded linguistically.”

We predict, therefore, that children will produce wh-in situ questions regardless of the discourse context, but that adults will make a distinction as to when to use in situ forms based on what is in the common ground. The following examples are taken from the Palasis corpus. In (17) the adult (KAT) produces a fronted wh-question when first referencing the action that the referent le renard ‘the fox’ is engaged in; it is the event (eating) that is being placed in a focus position to bring it into the common ground. After the event has been successfully introduced into the common ground, KAT is then able to produce an in-situ question to ask about what the fox is eating, or to actions related to this event (LSN is a child).

(17) KAT: Qu'est ce-qu’ il fait le renard?  
Q he does the fox  
“What is the fox doing?”
LSN: Le renard il mange.  
the fox he eats  
“The fox is eating.”
KAT: Oui il mange quoi?  
yes he eats what  
“Yes, he is eating what?”

Children, on the other hand, might not be making the same kind of distinction. For example, in the exchange in (18) the adult is producing a fronted wh-question, while the child (LSN) is producing in situ in the same context:

(18) KAT : Tu lui demandes si i(l) sait ce que c’est.  
you him ask if he knows that that-is  
“Ask him if he knows what it is.”
LSN : C’est quoi ça ?  
that-is what that  
“What is that?” (Lit. That is what that?)
MAS : Euh je sais pas. C’est à moi.  
uh I know neg that-is to me  
“I don’t know. It’s mine.”
KAT : Est-ce que tu sais ce que c’est Enzo ?  
Q you know that that-is Enzo ?  
“Do you know what it is Enzo?”
MAS : Euh ça c’est à moi ça.  
uh that that-is to me that  
“Oh that’s mine, that.”
Therefore, children seem to produce wh-in situ questions in discourse contexts where adults would require (or at least strongly prefer) a fronted wh-phrase, because children permit a wider common ground in the discourse than adults, relying on joint attention.

4. Comparison of Child English and Child French

Finally, we compare child French with child English. First, we note that the rate of wh-in situ in CDS is quite similar between the two languages. The adults in Eve’s data (files 1-20; Brown 1973) produced wh-in situ questions 16% of the time across all files. Recall that the rate in the Palasis corpus is 16.6%.

Table 6. Input to Children: what/quoi

<table>
<thead>
<tr>
<th>Language/Source</th>
<th>N matrix obj what-Q</th>
<th>N in situ what-Q</th>
<th>% in situ</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>1056</td>
<td>201</td>
<td>16.0%</td>
</tr>
<tr>
<td>French</td>
<td>626</td>
<td>125</td>
<td>16.6%</td>
</tr>
</tbody>
</table>

It is important to note that in all of the English cases, wh-in situ questions are functioning as echo questions, specifically to request a repetition or clarification. For example, in the exchange in (19), Eve uses the pronoun it without a clear referent, so her mother’s question is asking for clarification:

(19) MOT: no more celery?
  MOT: alright.
  CHI: man have it.
  MOT: man have what? [Eve 01]

However, Eve’s own production of non-imitative wh-in situ occurred in only 0.4% of her wh-questions (N=1). Recall that French-speaking children produce in situ forms 88.2% of the time.

Table 7: Children’s in-situ Output

<table>
<thead>
<tr>
<th>Language</th>
<th>Corpus</th>
<th>In Situ (Adult Input)</th>
<th>In Situ (Child Output)</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>Brown (Eve1-20)</td>
<td>16.0%</td>
<td>0.4%</td>
</tr>
<tr>
<td>French</td>
<td>Palasis</td>
<td>16.6%</td>
<td>88.2%</td>
</tr>
</tbody>
</table>

Previous work on English-speaking children’s development of wh-questions has shown that children are sensitive to the pragmatic difference between echo and non-echo questions (Takahashi 1991), and they know that wh-in situ is not a grammatically licensed option for information-seeking questions.
The result of our corpus search of Eve’s data makes two important points: one is that input rates of wh-in situ are not transparently related to children’s own rates of producing wh-in situ forms, as we find quite similar rates of input in both French and English CDS, but widely divergent rates of children’s output in the two languages. The second is that children know early on whether their language permits wh-in situ questions or not, and they overproduce them only if their language licenses these questions as a grammatical option. This raises the interesting question of how children determine whether wh-in situ questions in their target language are echo questions or information-seeking questions. We submit that one potential cue comes from the fact that while what in information-seeking questions can only replace a DP (*What did you buy the?), in echo-questions it can be any category (You bought the what?).

5. Conclusions and Further Directions

Using corpus data, we reported that until about age 4, children acquiring French use much higher rates of wh-in situ than French-speaking adults do, but we argued against Economy as the primary explanation for this asymmetry. Instead, following Mathieu’s analysis of French wh-in situ phrases as backgrounded referents, we linked their overproduction of these forms to children’s known overattribution of referents to the common ground. Because of this overattribution there are more cases in which a referent or event can be asked about using a wh-in situ form, as compared to adult speech. Crucially, we also eliminated input rates in CDS as a direct cause of French-speaking children’s high rates of wh-in situ forms.

By way of concluding, let us mention two ways this work could be extended. First, since our data come exclusively from corpora, we hope to verify our analysis using an experimental task eliciting wh-questions from children. With such a study, we could control for whether a referent or event is foregrounded or backgrounded. If, as we predict, children are behaving as if any and all referents may be in the common ground, then we expect them to produce more in situ questions than adults when the referent has not been introduced into the discourse.

Secondly, there may be important links between the production of wh-in situ questions and prosody. Richards (2006) has linked prosodic features of languages to their licensing of wh-movement, wh-in situ, or both, and recent work by Déprez, Syrett and Kawahara (2013) has revealed a specific pattern of pitch compression in adult French wh-in situ questions. We hope to explore children’s prosodic features of wh-questions in the future.

References


