

Direct versus indirect *wh*-scope marking strategies in French child grammar

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This paper presents some new data on the acquisition of long-distance questions in French L1. These results are consistent with the previous study, presented in Oiry & Demirdache (in press): French child grammar involves *wh*-scope marking strategies.

I. Previous study: Evidence from French L1 Acquisition.

This section presents a summary of the main hypothesis based on French data originally presented in Oiry (2002) and analysed in Oiry & Demirdache (in press).

Oiry & Demirdache (in press) argued for the existence of two *wh*-scope marking strategies in French L1, namely a direct versus an indirect strategy. The former involves a partially moved *wh*-phrase bound by a non-lexical Q morpheme. The latter exhibits two *wh*-phrases, which move overtly or covertly to each CP.

1.1 Partial movement in French L1: a direct dependency analysis.

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In Oiry & Demirdache (in press), henceforth O&D, empirical evidence were presented for a *direct dependency* strategy in the French first language grammar. Look first at the sentence in (1).

(1) L1 French (Oiry 2002)¹

Tu penses **quoi** # que # Tinky Winky l'adore ?
you think what C° Tinky Winky CL-loves
'What do you think that Tinky Winky likes?'

Although the example in (1) is not grammatical in the French adult grammar, the strategy is productive in children's answers. The *wh*-phrase *quoi* (*what*) in (1) moves from its original position, namely the object of the verb *adorer* (love), to the intermediate Spec CP, which bears the features [-*wh*]. Hence, no lexical scope marker appears in the matrix CP. In this respect, French children's questions differ from their English counterparts, as illustrated in (2).

(2) L1 English (Thornton 1990: 246)

What do you think which Smurf really has roller skates?

Wh-Scope Marking strategies in English L1 are conformed to the German partial movement, see (3).

(3) German Adult Grammar (Mc Daniel 1989: 569).

Was_i glaubt Hans mit wem_i Jakob jetzt _t spricht?
what believes H. with who J. now talk.to
'With whom does Hans believe that Jacob is now talking?'

The matrix verb *believe* in (3) selects a [-*wh*] complement. Partial movement of the embedded *wh*-phrase to the intermediate [-*wh*] Spec CP position thus violates the *Wh*-criterion (Rizzi 1996, among others) which requires that every *wh*-phrase shows up in the specifier of a [+*wh*] C°. The sentence

¹ The symbol # indicates a phonological pause.

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in (3) would be ungrammatical if the German *wh*-phrase *was* (*what*) in the matrix [+*wh*] Spec CP was omitted. The latter is analyzed as a base-generated dummy *wh*-phrase acting as a scope marker, that is, signaling where the medial *wh*-phrase is to be interpreted.

McDaniel (1989) suggests that the scope marker (in scope marking structures involving partial movement) is directly coindexed with the contentful medial *wh*-phrase with which it is associated. It is a kind of expletive *wh*-phrase forming a *wh*-chain with the *wh*-phrase whose scope it marks in the overt syntax and replaced by the latter at LF.

Since the syntax of the exceptional questions in (2) parallels the syntax of partial *wh*-movement in (3), Thornton (1990) concludes that children produce questions involving partial *wh*-movement. *What* in (2) is thus analyzed as a base-generated scope marker indicating the (matrix) scope of the intermediate *wh*-phrase.

Thornton (1990) and Crain & Thornton (1998) conclude that the non-adult long-distance (henceforth LD) questions illustrated in (2), are determined by principles of Universal Grammar. That is, children produce questions that, although not well-formed in the target language (English), are nonetheless well-formed in other languages (e.g. German). This is expected under the Continuity Hypothesis according to which children's developing grammars can differ only in the way adult grammars can differ from each other.

The French L1 questions differ crucially from their English counterparts, lacking an overt scope marker. O&D postulate the existence of a non-lexical Q morpheme in the French L1 grammar, which fulfills at least three functions: it marks the matrix clause as interrogative, checks the strong Q features of CP1 and binds the partially moved *wh*-phrase.² The structure for the French L1 question in (1) is illustrated below in (4).

(4) Partial *wh*-movement (at Spell-out & LF)
[_{CP} [Q_i Tu penses [_{CP} **quoi**_i # que # Tinky Winky l'adore t_i ?
you think what C° Tinky Winky CL-loves
'What do you think that Tinky Winky likes?'

In sum, once we adopt the proposal that French children's L1 grammar has a non-lexical Q morpheme, then the syntax of partial *wh*-movement is no longer surprising.

² Based on Mathieu (1999), Cheng & Rooryck (2000); see O&D for details.

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This proposal is further supported by the fact that partial *wh*-movement structures without an overt scope marker are attested cross-linguistically in languages such as, Quechua (5), Bahasa Indonesia (6) or Kitharaka (7). We analyze these partial movement structures as involving a null Q morpheme signaling where the medial-*wh* is to be interpreted at LF.

(5) Ancash Quechua (Cole and Hermon 1994: 240)

Ø Jose munan **may-man** Maria away-na-n-ta ?
Jose wants where-to Maria go-NOM-3-ACC
'Where does Jose want Maria to go?'

(6) Bahasa Indonesia (Saddy 1991: 189)

Ø Bill tahu **siapa** yang Tom cintai ?
Bill knows who FOC Tom loves
'Who does Bill know that Tom loves?'

(7) Kitharaka (Muriungi 2004: 10)

Ø U - ri-thugania ati **n-uu** John a- ring-ir- e- t ?
2ndSG-T°-think that FOC-who J. SUBJ-beat-T°-FINALVOWEL
'Who do you think that John beat?'

Furthermore, following Cheng & Rooryck (2000) and Matthieu (1999), French *wh*-in situ is licensed by a Q morpheme:

(8) *Wh*-in situ
[_{CP} [Q_i] il mange **quoi**_i ?]
Q he eat what
'What does he eat?'

Under this proposal, the syntax of partial *wh*-movement in French L1 parallels the syntax of *wh*-in situ. In both (4) and (8), a non-lexical Q morpheme is merged in the matrix [+*wh*] Spec CP in the syntax.

Both partial *wh*-movement in French L1 and *wh*-in situ in child/adult French are *wh*-scope marking constructions involving a scope marker generated in a *non-argument/operator position* in the matrix clause (Spec CP) and *directly associated* (via binding) with a lower *wh*-phrase, itself either in situ or stranded in the specifier of [-*wh*] C°.

O&D do not assume that the scope marker licensing both partial *wh*-movement in the child grammar of French and *wh*-in situ (be it in the child or adult grammar) is a semantically vacuous element subject to expletive replacement at LF, for at least three reasons. First, LF-raising of the associate (i.e. the contentful *wh*-phrase) to the expletive position is argued not to be conceptually motivated in Chomsky (1998); that is, expletives do not attract and need not be replaced. The associate simply does not move. Moreover, as Fanselow & Mahajan (2000) point out, merging an expletive into Spec CP is in fact no longer even an available option in the Minimalist framework. Second, O&D do not take the scope marker base-generated in the matrix Spec CP and licensing partial *wh*-movement/*wh*-in situ in child/adult French to be semantically vacuous, but rather to be a full-fledged Q morpheme serving three functions. It marks the matrix clause as interrogative, binds the medial/in-situ *wh*-phrase and checks the latter's *wh*/Q feature via Agree (see the discussion below). Thirdly, this proposal allows to draw a principled distinction between the grammar of overt long movement in French on the one hand, and that of *wh*-in situ and partial movement on the other, as illustrated in (4) and (8).³

O&D leave open the question of whether this null Q morpheme is phonological or not. Following Cheng & Rooryck (2000) intonation plays a certain role in French *wh*-in situ. Previous acoustic studies seem to suggest that the rising contour that Cheng & Rooryck argued for, is not the only intonative pattern of French *wh*-in situ. This is still an open question.

The question then is how to compositionally assign matrix scope to the medial/in situ *wh*-phrases in (4), without further (covert) movement. There are at least two well-defined semantic mechanisms available in the literature for encoding scope without movement. (i) Unselective Binding as in Pesetsky (1987) and Nishigauchi (1990): the lower *wh*-phrase is analyzed as an indefinite introducing an individual variable subject to existentially closure, and the matrix Q provides the existential binder (see Fanselow & Mahajan (2000) for an analysis of partial movement in German along these lines). (ii) A choice function analysis (Reinhart 1997): the lower *wh*-phrase is analyzed as an indefinite introducing a variable over choice functions, and the matrix Q provides the existential quantifier binding this variable (see Brandner (2000) for an analysis of partial movement in German along these lines).

1.2 *Wh*-scope marking in French L1: an indirect dependency analysis.

³ Fanselow (to appear) draw a correlation between languages with simple partial *wh*-movement (i.e. without an overt scope marker) with the availability of both in situ marking and long-distance movement. This generalization is consistent with our data.

O&D also provided empirical arguments for an indirect dependency strategy in French L1.

The *wh*-scope marking construction in Hindi is illustrated in (9), from Dayal (2000: 160-162). Notice that two *wh*-phrases appear in (9): *kyaa* ('what') appears in the object position of the main clause, and *kisse* ('who') in the object position of the embedded verb *talk*.

- (9) Jaun **kyaa** soctaa hai ki Merii **kis-se** baat karegii?
John think-PR that Mary who-INS talk do-FUT
'Who does John think Mary will talk to?'
- (10) Jaun **kyaa** soctaa hai?
John what think-PR
'What does John think?'

Dayal (2000) argues that the *wh*-scope marker *kyaa* (what) occurring in the matrix clause is crucially not a non-referential (expletive) scope marker. Rather, it is an ordinary *wh*-phrase appearing in its base argument position. Dayal thus draws a parallel between the matrix clause in (9) and the independent clause in (10). In both (9) and (10), the object *wh*-phrase *kyaa* occurs in the internal argument position of the verb 'think' and is used to indicate a question over the set of propositions that John thinks about, i.e., the set of propositions *p* such that John thinks *p*.

In (9), we thus have two clauses, each containing a contentful *wh*-phrase, each interpreted as a *wh*-question in its own right. The matrix (CP1) is a question over propositions, and the subordinate clause (CP2), syntactically analyzed as an appositive clause adjoined to the matrix, is a question over individuals.

The LF for (9) is given in (11). The in situ *wh*-phrases each move to CP specifier position, yielding two local *wh*-dependencies. The connection between the two clauses is established *indirectly* by coindexing the matrix *wh*-phrase and the subordinate *wh*-question.

- (11) Covert syntax of *wh*-scope marking in Hindi
[CP1 **kyaa**_i [Jaun t_i soctaa hai] [CP2 **kis-se**_j ki Merii t_j baat karegii]
what John think-PR who-INS that Mary talk do-F
'Who does John think Mary will talk to?'

We found in the French data some questions involving an indirect dependency, illustrated below.

- (12) *Wh*-Scope Marking in French L1 (Oiry 2002)
a. Tu crois **quoi** # lala elle aime bien **quoi** ?
you believe **what** L. she likes well **what**
'What do you believe Lala likes?'

- b. **Qu'est-ce que** tu crois **qu'est-ce** caché dans le sac ?
what-is-it that you believe what-is-it hidden in the bag
'What do you think that is hidden in the bag?'

The French data exhibit either the LF or Spell-out structure of Hindi's *wh*-scope marking: in (12a), each *wh*-phrase appears in situ whereas in (12b), the two *wh*-phrases move covertly to each CP. Syntactically, we have two juxtaposed/adjoined matrix questions. Semantically, the *wh*-phrase *que/KESK* in CP1 is a quantifier over propositions restricted by the *wh*-question with which it is coindexed (CP2).

The proposal that the French L1 questions illustrated in (12) are *wh*-scope marking structures instantiating indirect dependency explains the seemingly ungrammatical syntax of these non-adult questions. In particular, the syntax of these questions involves two root questions with a *wh*-phrase occurring in both the matrix and the subordinate clause. Both *wh*'s can either remain in situ or be fronted in the overt syntax. The *wh*-phrase occurring in the first clause can be any of the *wh*-phrases used to quantify over propositions in French: that is, either *quoi*, *que/KESK* or *(ce) que*. Indirect dependency straightforwardly explains how these two root questions combine semantically to yield the meaning of a long distance question.

Furthermore, Dayal (2000) draws a parallel between *wh*-scope marking in Hindi and sequential questions in English. She takes sequential questions to have properties characteristic of scope marking. In (13a), the *wh*-phrase occurring in CP2 is construed as taking scope outside its syntactic domain as the possible answers to (13a) show: the answer in (13b) embeds the proposition corresponding to CP2 as a complement to the verb in CP1, supplying a value for the variable in CP2. The sentence in (13a) is assigned the LF structure in (13c). Syntactically, the two independent clauses are adjoined. Semantically, the *wh*-phrase in CP1 is a quantifier over propositions restricted by the *wh*-question with which it is coindexed (CP2).

- (13)
a. What do you think? Who will Mary see?
b. I think Mary will see Tom.

- c. LF: [[CP1 what_i do you think t_i] [[CP2] who_j t_j will Mary see]

In conclusion, O&D clearly identified two classes of *wh*-scope marking strategies: *indirect* vs. *direct* dependency. The direct dependency strategy yields both partial *wh*-movement and *wh*-in-situ: the matrix non-lexical Q morpheme is merged in the matrix clause in an operator/A' position and *directly associated* (via binding) with the lower *wh*-phrase, itself either in situ or stranded in the specifier of [-*wh*] C° at Spell-out. The indirect dependency strategy (in the sense of Dayal 2000) involves two clauses, each containing a contentful *wh*-phrase, and interpreted as a *wh*-question in its own right. Both *wh*'s can simultaneously appear at Spell-out either in situ or else fronted to the specifier position of the CP in which they occur. The *wh*-phrase in the matrix is *not directly associated* with the *wh*-phrase in the subordinate clause; rather, it is associated (coindexed) with the CP containing the latter.

II 2005 study: Task, Participants & Results

2.1 Production Task

This experiment was adapted from Crain & Thornton's (1998) protocol to induce long distance questions. Two experimenters were involved and acted out different situations with props and toys to lead the child to ask questions. A lead-in to a subject LD question is presented below in (14).

- (14) LD Subject extraction (original version and translated)

Exp 1 : Koko, on a caché trois objets, on va voir si tu devines où est caché chaque objet. *Koko n'entend pas. Parler à voix basse à l'enfant.*
On sait où chaque chose est cachée. Le chat est dans le lit, le pistolet est sous le chapeau et l'indien est sous le pot de yaourt. On va voir si Koko peut deviner où on a caché chaque objet. On commence par le lit, d'accord ?
On sait que le chat est dans le lit, mais demande à Koko ce qu'il pense.
2.a (Question sujet) Enfant : ...
S'il ne répond pas ou seulement une question racine : demande à Koko ce qu'il pense qui est caché sous le lit.
Koko : euh... Le chat !

Exp 1 : Koko, we have hidden three objects; we will see whether you can guess where they are hidden.

Talk to the child with a low voice, and then, Koko can't hear:

Both of us know where each object is hidden. The cat is in the bed, the weapon is below the hat and the Indian character is hidden below the jar of yoghurt. We will see whether Koko can guess. Let's begin with the bed, ok?

We know that the cat is hidden in the bed, but ask Koko what he thinks.

2. a. child answer:...

If he doesn't answer or only a matrix question: ask Koko what he thinks is hidden in the bed.

Koko: hum...the cat?

2.2 Participants

Nine children were involved in his study: 6 boys and 3 girls, aged between 3.08 and 5.09.⁴

The two experimenters induced 14 questions from each child. Two controls were part of this protocol. When the child produced a matrix question or a LD yes-no question, we prompt again by repeating the lead-in. This technique was used for eliciting subject (5), object (5) and adjunct (2) LD *wh*-questions with bare *wh*-phrases.

The types of target questions elicited are shown in (15) below.

(15) Expected Answers

a. (control)

Tu veux jouer avec nous ? / Est-ce que tu as envie de jouer avec nous ? /

'Do you want to play with us?' / 'Do you feel/wish to play with us?' /

Veux-tu jouer ?

'Do you want to play?'

b. (subject-animate)

Qui est-ce que tu penses qui est caché dans le lit ?

'Who do you think is hidden in the bed?'

c. (subject-inanimate)

⁴ They were originally 11 but two three years old were eliminated because they didn't produce any LD questions, but answered them.

Qu'est-ce que tu penses qui est caché sous le chapeau ?
'What do you think is hidden below the hat?'

d. (subject-animate)

Qui est-ce que tu penses qui est caché sous le pot de yaourt ?

'Who do you think is hidden below the jar of yoghurt?'

e. (control)

Tu as faim? Est-ce que tu as faim ? As-tu faim ?

'Are you hungry?'

f. (object-inanimate)

Qu'est-ce que tu penses que le policier mange ?

'What do you think the policeman is eating?'

g. (object-inanimate)

Qu'est-ce que tu penses que l'indien mange ?

'What do you think the policeman is eating?'

h. (object-inanimate)

Qu'est-ce que tu penses que le cow-boy mange ?

'What do you think the policeman is eating?'

i. (adjunct-inanimate)

Où est-ce que tu penses que l'assiette est cachée ?

'Where do you think the plate is hidden?'

j. (subject-inanimate)

Qu'est-ce que tu penses qui est caché sous le tabouret ?

'Who do you think is hidden below the stool?'

k. (subject-inanimate)

Qu'est-ce que tu penses qui est caché dans le lit ?

'Who do you think is hidden in the bed?'

l. (object-inanimate)

Qu'est-ce que tu penses que l'infirmière a caché ?

'What do you think that the nurse hid?'

m. (object-inanimate)

Qu'est-ce que tu penses que le policier a caché ?

'What do you think that the policeman hid?'

n. (adjunct)

Comment est-ce que tu penses qu'ils rentrent chez eux ?

'How do you think they come back home?'

2.4 General Results

See table 1 below which shows the general results of the experiment.

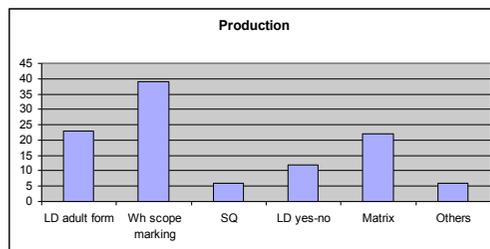
Table 1- Typology of questions produced

<i>Wh</i> - scope marking	39 ⁵	(36%)
Fronted- <i>wh</i> LD / adult form	23	(21%)
Matrix questions	22	(20%)
Yes-no LD	12	(11%)
Other	12	(11%)
Total	108	

The most striking result is that the preferred structure is the *wh*-scope marking strategy (36%). The adult strategy is the second most produced (21%), almost equal to the root question strategy (20%).

Table 2: General results.

⁵ 20 produced at first elicitation, 19 more after the second elicitation.



The results show that most subjects, i.e. 7/9 (78%), produced *wh*-scope marking structures. In contrast, only 4 children (44%) volunteered adult LD questions. None of the children produced in situ LD questions. Each question type is illustrated below.

(16) **Scope Marking**⁶

- a. Tu penses où elle est cachée l'assiette ?
 you think where it-FEM is hidden the-plate
 'Where do you think the plate is hidden?'
- b. Est-ce que tu penses qu'est-ce qui est caché dans le lit ?
 ESK you think what is hidden in the bed?

⁶ What-is-DEM-that = KESK. Realize as KESKi when a *wh*-subject is extracted.

'What do you think is hidden in the bed?'

- c. Est-ce que tu penses qu'est ce qui est caché en d'ssous le chapeau ?
 ESK you think KES/ K +C° is hidden below the hat
 'What do you think is hidden below the hat?'
- d. Qu'est-ce que tu penses l'assiette où elle est cachée ?
 what-is-it that you think the-plate where it-FEM is hidden
 'Where do you think the plate is hidden?'

(17) **Fronted-*wh* LD / adult form**

- a. Qu'est-ce que tu penses que le policier mange ?
 what-is-it that you think that the policeman eats
 'What do you think the policeman is eating?'
- b. Qu'est-ce que tu penses que l'infirmière elle a caché en d'ssous le pot ?
 what-is-it-that you think that the-nurse she has hidden below the jar ?
 'What do you think that the nurse hide below the jar of yogourt?'
- c. Où est-ce que tu penses que l'assiette est cachée ?
 Where ESK you think that the-plate is hidden
 'Where do you think the plate is hidden?'

- d. Qu'est-ce que tu penses, koko, qu'il mange le facteur ?
 what-is-it-that you think K. that-he eats the postman
 'What do you think the postman is eating?'

(18) **Yes-no LD**⁷

- a. Est-ce que tu penses que l'assiette que l'assiette elle est cachée en d'ssous
 ESK you think that the-plate that the-plate it-FEM is hidden below
 du tabouret ?
 DE+LE stool
 'Do you think the plate is hidden below the stool?'
- b. Est-ce que tu sais que l'indien mange des oranges ?
 ESK you know that the-indian eats art-pl oranges
 'Do you know that the Indian is eating some oranges?'

(19) **Matrix questions**

- a. Qu'est-ce qu'est caché sous le chapeau ?
 what-is-it-that-is hidden below the hat
 'What is hidden below the hat?'
- b. Comment not/zamis rentrent chez eux ?
 How our-liaison-friends go-back at them
 'How do our friends go back home?'

(20) **Sequential questions**⁸

- a. Qu'est-ce que tu penses, Koko ?

⁷ DE+LE designates a definite article *le* (the) contracted with the preposition *de* (some).

⁸ It's the same children who produced both (a) and (b), respectively for the first and the second elicitation. Recall that a sequential question is the simplest way to express long distance dependencies, see (13) in section 1.

what-is-it-that you think K.
 'What do you think, Koko?'

- b. Qu'est-ce qui est caché sous le pot, là ?
 what-is-it-that is hidden below the jar there
 'What is hidden below the jar, there?'

(21) **Unclassified**

penses a (hum) **qui** va les chercher Koko ?
 think a (*hum* hesitate) who is-going-FUT them looking-for K.
 [Target: **Comment** tu penses que les amis rentrent chez eux.]

2.5 Age results

Table 3: production by age range

	LD adult form	<i>Wh</i> -scope marking	Sequential Questions	LD yes-no	Matrix	Others	Total
3 years (n=2)	0	0	0	8	15	1	24
4 years (n=4)	15	19	6	0	5	3	48
5 years (n=3)	8	20	0	4	2	2	36
TOTAL	23	39	6	12	22	6	108

2.5.1 Three-year-olds

Table 4: three-year-old production

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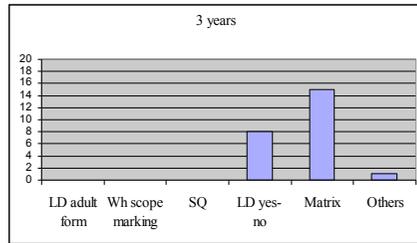


Table 4: production's details

	LD adult form	Wh-scope marking	Sequential Questions	LD yes-no	Matrix	Others
3 years (n=2)	0	0	0	8	15	1

The first strategy that was adopted is a non-long-distance strategy: for 3-year-olds, 60% of their total production were matrix questions. They produced no LD *wh*-questions, but some LD dependencies, i.e. yes-no LD questions.

2.5.2 Four-year-olds

Results for the 4-year-olds exhibit a greater contrast in their strategies: they produce predominantly Scope marking strategies, and a lot of LD questions as well.

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Table 5: four-year-old production

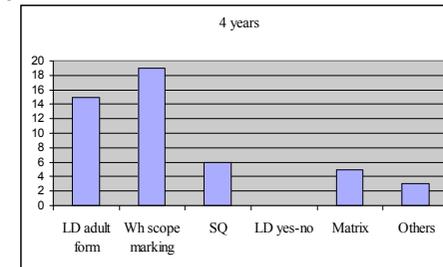


Table 5: production's details

Direct versus Indirect Strategy in French L1

The primary strategy for four-year-olds is scope marking, used 40% of the time.

2.5.3 Five-year-olds

Table 6: five-year-olds production

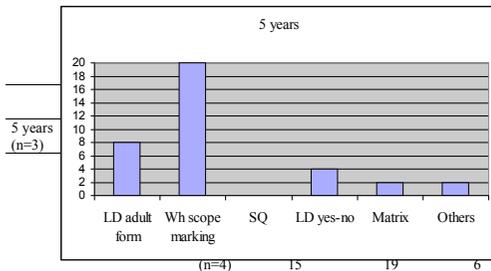


Table 6: production's details

The primary strategy for five-year-olds is scope marking, used 56% of the time.

III Results analysis

These results confirm the existence of *wh*-scope marking strategies in the child grammar.

Along the lines of O&D, I analyse the French data as involving either a direct or an indirect dependency strategy.

3.1 Direct versus indirect dependency

3.1.1 Direct dependency

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3.1.1.1 Licensed by a null Q morpheme

In (22), the matrix non-lexical Q morpheme is merged in the matrix clause in an operator/A' position and directly associated with a lower *wh*-phrase *où/where* moved from the adjunct position of *cache* (hide) to Spec CP2.

- (22) Q_i tu penses **où_i** elle est cachée l'assiette ?
 you think where it-FEM is hidden the-plate
 'Where do you think the plate is hidden?'

3.1.1.2 Licensed by a lexical Q morpheme

The data from Oiry (2005) exhibit a new fact compared to the previous study. We found as in (23) the same partial *wh*-movement, only with a lexical scope marker, namely ESK.

- (23) Est-ce que tu penses qu'est-ce qui est caché dans le lit ?
 ESK you think what-is-it-that is hidden in the bed?
 'What do you think is hidden in the bed?'

In (23), ESK acts as a counterpart to the null Q morpheme, marking the clause as interrogative, checking the strong Q features of C°, and indicating the matrix scope of the real *wh*-phrase. Children used ESK to license the partially moved *wh*-phrase.

In the French adult grammar, ESK is usually used as a yes-no question marker. Thus, it seems that children misuse the scope marker ESK in order to mark interrogative *wh*-questions instead of yes-no questions.¹⁰

3.1.2 Indirect Dependency

Two independent clauses are adjoined, each containing a contentful *wh*-phrase.

⁹ Note also that *J'assiette* "the plate" is right dislocated.

¹⁰ We still need an acoustic test to determine whether *est-ce que* (ESK) is not *Qu'est-ce que* (what) with *que* elided. If *Qu'est-ce que* is part of these questions and not *est-ce que* in (22), we should reanalyse the question in (22) as involving an indirect dependency.

- (24) Qu'est-ce que tu penses l'assiette où elle est cachée ?
 what-is-it that you think the-plate where it-FEM is hidden
 'Where do you think the plate is hidden?'
- (25) Qu'est-ce que tu penses, Koko, ce qui est sous le tabouret ?
 what-is-it you think K. that who is below the stool
 'What do you think is hidden below the stool?'

IV Work in progress

4.1 Methodological Issues

Herburger (1994) shows that partial movement and long-distance movement in German don't have the same semantic, so she concludes that they should have a different syntax.

- (24)
 a. Was glaubt der Georg, wen die Rosa geküßt hat?
 what believe G. whom R. kissed has
- b. Wen glaubt der Georg, daß die Rosa geküßt hat?
 whom believes G. that R. kissed has
 'Whom does Georg believe Rosa kissed?'

In the partial movement structure, the embedded clause has to be understood as *de re*. That is, in (24a), the *wh*-clause cannot be understood as being part of Georg's belief-state. It must be understood as being part of the speaker's *de re* belief (Rosa kissed somebody, who does Georg think it was?).

In contrast, the embedded clause can be interpreted *de re*, though doesn't have to be, in the long distance movement structure. Thus in (24b), it is possible to interpret the proposition that Rosa kissed someone *de re*. But it is equally possible to interpret it as a mere figment of Georg's imagination, that is, *de dicto*.

In the production task illustrated in (14), the target question is *Qu'est-ce que tu penses qui est caché dans le lit? (What do you think is hidden in the bed?)* the subordinate clause has to be interpreted as *de re*.

A new experimental design must then be set up where the context makes clear that the subordinate can be interpreted *de dicto*.¹¹ See Demirdache (2005) for more details.

4.2 Comprehension Tasks

Along the lines of O&D, this paper argued for the following steps in the course of the acquisition of long-distance questions: (i) indirect dependency (adjunction), (ii) direct dependency (subordination), and finally (iii) long overt movement, where child grammar matches the adult grammar.

The null hypothesis is such that the syntax of LD questions in French L1 correlates with the acquisition of complementation.¹² I designed and carried out (in tandem with the production task) some comprehension tasks to determine the syntactic status of 'complement' clauses in French L1.

¹¹ I ran a grammatical judgment test with 6 German speakers, offering for each story a choice between partial movement and long movement. Unfortunately, it seems obvious that German speakers do not show a preference for long movement when it involves the complementizer 'das'.

Herburger's hypothesis seems to be right in one respect: German speakers clearly prefer (i), i.e. long movement, to (ii), i.e. partial movement, in the following context. "There is gossip about Zoey being involved with someone, and someone claimed she kissed someone, and I don't know who. I doubt there is anything to the rumor; however, I would still like to know who it is about:

(i) Ich bezweifle dass an der Geschichte irgendwas dran ist, aber wen glaubst du dass sie gekuesst hat?
 I doubt on the story anything on-it is but
 was glaubst du wen sie gekuesst hat?"
 what believe you who she kissed has
 'The story seems doubtful to me, but whom do you believe that she kissed?'

¹² Dayal (2000): Variation in the syntax of scope marking, from juxtaposition to subordination, reflecting diachronic stages in the process of language change. Roeper (1999) and Abdulkarim & Roeper (2003): sequence in the acquisition of subordination from adjunction, to VP-complement, to subcategorized V^o-complement.

A Bound Variable comprehension task has been conducted to test whether a QP in the matrix question could bind a pronoun in the subordinate clause, where 'every' should be coreferent with 'he' in order to get the distributive reading.
 A Sequence of Tense task, based on Hollebrandse's dissertation.
 A task presenting multiple *wh*-questions, based on Weissenborn, Roeper & De Villiers.

V Conclusion

Oiry (2005) confirms the previous study (O&D), and fits the general idea of two distinct strategies in the child grammar. In the course of acquisition of LD questions, children adopt first an adjunction stage, with a scope marking strategy, and secondly, a subordinate stage with partial movement, then the final stage with overt long-distance movement.

There still remain some open questions that were briefly touched in the last section. These should be addressed in further studies.

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