The Acquisition of Long Distance WH-Questions in Brazilian Portuguese

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This paper focuses on recursion at the CP level in Brazilian Portuguese (BP). More specifically, it investigates how children produce long distance WH-questions, which involve one CP embedded inside another CP, and a WH-expression moving out of the embedded CP and landing at the matrix spec,CP, as shown in (1).

This kind of structure has already been studied in some languages, including English, Dutch, French, Basque, and Spanish. In these studies, 4-year-olds showed no difficulty in producing this kind of question. However, together with adult-like questions such as (1), children acquiring all these languages also produced some non-adult questions, like (2) and (3).

Thornton (1990) named structures like (2a) ‘partial movement WH-questions’ and structures like (2b) ‘medial-WH questions’. Thornton analyses cases like (2a) as instances of WH movement of the WH-word ‘who’ from its base position to the embedded spec,CP. The WH-word appearing in the matrix spec,CP is analyzed as being inserted for scope reasons and would not be derived by movement. In medial-WH questions, the WH-word in the intermediate position is analyzed as being in C0. It would be a type of agreeing form which children produce in order not to violate the ECP. Since traces in the embedded subject position must be licensed, children first assume that the WH-word might work as an agreeing C licensing the trace. Only latter would they learn that the form of the agreeing C is a null element in English.

In the present study, we investigate children acquiring BP as their native language. Experiments similar to those conducted by Thornton (1990) were replicated in BP. 19 children from 4;0 to 6;6 were interviewed. In total, children produced 334 WH-questions. 6 of these questions were partial WH-movement cases and 7 were WH-copies. Examples of children’s productions are shown in (4).

It should be noted that children’s non-adult productions cannot be analyzed as conjoined questions, something like “What do you think? What’s inside the pan?” The first argument against this analysis is the fact that the prosodic contour is that of one question, not two. Second, in two of these cases, the WH-word appearing in the matrix spec,CP is not ‘what’, but ‘where’ (4b) and ‘which’ (4e). In such cases, no conjoining questions would be possible (cf. *which do you think? Who is the owner of these things?). This leads us to conclude that children were in fact producing recursive structures, that is, instances of long distance WH-questions.
Children’s productions are revealing. In one case, the child produced the complementizer ‘que’ followed by the WH-word (shown in (4b)). In this case, we cannot say that the WH-word in the embedded clause is sitting in C0. If it were, there would be no room for the complementizer ‘que’, which precedes it.

This kind of production makes us refute Thornton’s analysis for the medial-WH questions and follow a different path. We will assume a richer structure for the left periphery (à la Rizzi 1997) and propose that in these cases, the WH-word in the intermediate position is not an agreeing form. It is sitting in spec,FocP. The complementizer is in Force0, as shown in (5).

This analysis is further supported by data found in Gutiérrez Mangado (2006), who studied one child acquiring Spanish. The author also found structures in which a complementizer in the embedded CP is followed by a wh-phrase, which is analogous to the structure (4b) found in BP. If the WH-phrase were in C0, there would be no room for a WH-phrase following it.

Considering that WH-movement occurs in a successive-cyclic manner, the WH-word generated in the embedded clause must pass through the intermediate spec,CP on its way up to the matrix clause. In the adult grammar, both the lower copy and the intermediate copy must be deleted and only the copy at the top is pronounced. Pronouncing the lower or intermediate copies would violate the Linear Correspondence Axiom, LCA (Kayne 1994) (Nunes 2004). The analysis to be further developed in this study will try to explain why children produce the intermediate copy of the WH-word in medial-WH questions. One possibility is that initially children have problems with the LCA and not ‘obey’ it 100% of the time. One advantage of this proposal is that it can also explain why children produce resumptive NPs in relative clauses (as shown in (6)). Assuming a raising analysis for relative clauses, we could analyze resumptive NPs as the pronunciation of both copies of the relative head, in violation of the LCA. Both medial-WH questions and resumptive NP relatives are fairly rare in children’s productions, an indication that this problem is not pervasive and is overcome somehow around the age of 5.

**Examples and data**

1. [CP O que você acha [CP que o João comeu __ ]]?
   - What you think that the John ate
   - ‘What do you think John ate?’

2. **English** (Thornton 1990):
   a. What do you think who jumped over the can? (partial movement WH-question)
   b. Who do you think who is in the box? (medial-WH question)
(3) **Spanish** (Gutiérrez Mangado 2006):

a. ¿Tu **qué** crees **cómo** há hecho el castillo?  
   you what think-2sg how has made the castle  
   ‘How do you think he made the castle?’

b. ¿Dónde crees **dónde** ha iso el niño?   
   where think-2sg where has gone the child  
   ‘Where do you think the child has gone?’

(4) **Brazilian Portuguese**

a. O **que** você acha **o que** está dentro da panela?  
   What you think what is inside the pan  
   ‘What do you think is inside the pan?’

b. Onde é o lugar **que onde** ele entrou?   
   Where is the place that where he entered  
   ‘where is the place he entered?’

c. O **que** você acha **onde que** a Poli foi?   
   What you think where that the Poli went  
   ‘Where do you think Poli went?’

d. O **que** você acha **que cor que** é o boné?   
   What you think that color that is the cap  
   ‘What color do you think the cap is?’

e. Qual você acha **quem** é o dono das coisas?   
   Which you think who is the owner of things  
   ‘Who do you think is the owner of these things?’

(5) \[\text{ICP onde} [\text{IP é o lugar} [\text{ForceP [Force que]} [\text{Focus onde} [\text{IP, ele entrou t}]][]])\]

   ‘Where is the place that where he entered’

(6) Na foto eu vi a mesa que eu gostei muito da mesa.  
   In the picture I saw the table that I liked a lot the table  
   ‘In the picture, I saw the table that I liked the table a lot.’

**References**


