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THE LEFT PERIPHERY IN CHILD FRENCH: EVIDENCE FOR A SIMPLY-SPLIT CP

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We discuss examples of Misplaced and Intrusive QUE in child French, arguing that these constructions provide evidence in favor of Rizzi's (1997) approach to the complementizer system. We analyze them as simply-split CPs built on the model of pseudo-relatives, resulting from an early Merge of the complementizer and of a dislocated subject DP. This early Merge is brought about by the performance limitations of the child's computational system.

1. Introduction

In this paper, we investigate a non-adult-like usage of the complementizer QUE. Labelle (1993, 2000) reported a number of examples from various corpora of child French in which the complementizer is not produced where it is expected (called 'Misplaced QUE') or where it is unnecessarily repeated after a left dislocated DP (called 'Intrusive QUE'). We show that the data provide evidence in favor of Rizzi's split CP system (Rizzi 1997), as well as in favor of a view of movement as a combination of Copy, Merge, Chain Formation, and Chain Reduction (= Delete) (Nunes 1999, 2001). We follow Mayer, Erreich & Valian (1978) in assuming the Basic-operations Hypothesis according to which in language acquisition one (or more) basic operation may fail to apply. In particular, we claim that 'Misplaced' and 'Intrusive' QUE constructions are simply-split CPs arising from a not fully matured control over Merge, Chain Reduction and agreement. In that sense we treat them as performance errors: the child knows the underlying processes but has an as yet imperfect mastery over the control procedures that would allow her to execute them without error in all instances. We therefore view these performance errors here as misapplications of competence-driven operations: the child's competence dictates what operations

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she should perform, but cognitive overload or insufficient short-term memory occasionally impedes her from carrying out the operations correctly. Intrusive and Misplaced QUE constructions therefore provide a window on the underlying operations of the computational system.

In section 2 we survey the facts to be accounted for; in section 3, we present the fundamental ideas of Rizzi (1997); in section 4, we discuss complex CPs in child French; section 5 details our account of Intrusive and Misplaced QUEs. We then show that Misplaced and Intrusive QUE's can be considered as one example of a general difficulty that children have in the acquisition of the CP system.

2. Misplaced and Intrusive QUE

Labelle (1993) lists 23 examples of constructions of the type illustrated in (1) to (6), which she labels *Misplaced* and *Intrusive* QUE.

2.1. 'Misplaced QUE'

In the *Misplaced QUE* construction, the complementizer QUE follows a dislocated subject DP instead of preceding it. The construction is illustrated in (1) to (3) with a complement clause, an adverbial clause and a relative clause; the expected position of the complementizer is indicated by an underline.

(1) *Complement clause:*

Il s'est aperçu la porte QUE elle était ouverte (GL, MG 5)¹
He noticed the door THAT it was open
"He noticed that the door was open."
= (expected) : Il s'est aperçu que la porte elle était ouverte.

(2) *Adverbial clause:*

C'est pour Christian QU' i(l) vient (MP, child of 6)
It's for Christian THAT he comes
"It's in order that Christian come."
= (expected) : C'est pour que Christian il vienne.

¹ Examples from GL are from an unpublished corpus by Guy Labelle (UQAM) where the age of children is given in years only; MP stands for Méresse-Polaert (1969) who does not give the exact age of the six-year-old children she studied; BP stands for Bouvier & Platone (1976); ML stands for Labelle (1989). The examples from PHI (Philippe) and GRE (Grégoire) are from the CHILDES database (Macwhinney 1991). The child's identification may follow these initials.

- (3) *Relative clause:*
 Où elle est la boule _ Gabriel QU' il a cassée ? (ML, Cl.4;6)
 Where she is, the ball _ Gabriel THAT he broke
 "Where is the ball that Gabriel broke?"
 = (expected) : Où elle est la boule que Gabriel il a cassée ?

2.2. 'Intrusive QUE'

In the *Intrusive QUE* construction, a complementizer is followed by a dislocated DP, which in turn is followed by a second instance of a complementizer. This second complementizer is the 'Intrusive' QUE. The construction is illustrated in (4) to (6) with a complement clause, an adverbial clause and a relative clause.

- (4) *Complement clause:*
 Ils savaient pas QUE leur maman QU' elle était rentrée
 Theyknew not THAT their mother THAT she was back
 "They didn't know that their mother had come back." (MP, child of 6)
 = (expected) : Ils savaient pas que leur maman, elle était rentrée.
- (5) *Adverbial clause:*
 Quand QUE les indiens QU' i(ls) veulent l' attaquer (MP, child of 6)
 When THAT the indians THAT they want-to him attack
 "When the indians want to attack him."
 = (expected) : Quand (que) les indiens ils veulent l'attaquer.
- (6) *Relative clause:*
 Un trésor QUE le bandit QU' i(l) avait camuché (MP, child of 6)
 A treasure THAT the thief THAT he had hidden
 "A treasure that the thief had hidden."
 = (expected) : Un trésor que le bandit il avait ca(mu)ché.

Observe in (5) that the Intrusive QUE is distinct from the QUE found in doubly-filled COMP constructions: the adverbial clause is introduced by a doubly-filled COMP (*quand + que*), followed by a DP, followed by an Intrusive QUE.

Although infrequent, these constructions are produced by children of various linguistic and socio-economic backgrounds; the examples in Labelle (1993) come from five distinct studies ranging from spontaneous production, to elicitation of relative clauses, some conducted in France, others in Canada. The ages of the children producing the examples vary from 3;5 to six. To give an idea of the frequency of the constructions, Méresse-Polaert (1969) cites ten such examples out of a corpus of about 40,000 words of narrative speech elicited from

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72 six-year-old children. The corpus of relative clauses gathered by Labelle (1989) contains seven such examples (produced by six different children) out of a total of 1348 relative clauses, that is 0.5%. Interestingly, a similar proportion (0.4%) has been estimated by Stromswold (1990: 60) for double tensing errors in English children's question structures (see section 6). The fact that misplaced and intrusive QUE's are reported by different authors and are attested in different settings suggests that they reflect a feature of developing French.

The constructions produced by the children have the general form illustrated in (7):²

- (7) a. Misplaced QUE: ... Ø DP que [_{IP} pronoun]
 b. Intrusive QUE: ...que DP que [_{IP} pronoun]

In all the examples reported, the DP preceding the erroneous complementizer corresponds to the subject and is interpreted as a left-dislocated (= topicalized) subject DP in an embedded clause. Importantly, neither type of construction is produced with a comma intonation between the dislocated DP and QUE. Labelle (1993) proposed an analysis in terms of CP-adjunction, as schematized in (8):

- (8) a. ... [_{CP} DP [_{CP} que [IP]]] (Misplaced QUE)
 b. ... [_{CP} (WH) [_C (que) [_{CP} DP [_{CP} que [IP]]]]] (Intrusive QUE)

However, the assumption that grammars of child French generate sentences with the form in (8a) raises formal learnability problems since adjunction to an embedded CP is not allowed in adult French, as shown in the complement and relative clauses in (9b) and (9d).

- (9) a. Je pense que Pierre, il est parti.
 I think that Pierre he is-gone
 "I think that Pierre is gone."
 b. * Je pense Pierre qu'il est parti.
 c. L'endroit où Pierre il est parti.
 The place where Pierre he is-gone
 "The place where Pierre is gone."
 d. * L'endroit Pierre où il est parti.

Furthermore, CP-recursion of the type schematized in (8b) is not a feature of adult French either. In both cases, it remains unclear how the language acquiring

² There is a second type of these forms involving *qui* as the lower complementizer. For clarity, we postpone its discussion to section 5.2.

child could retreat from its non-adult-like grammar without negative evidence. We show that the data find a better explanation within Rizzi's Split CP proposal.

3. Brief Summary of Rizzi (1997)

Rizzi (1997) proposes that the traditional CP may be viewed as a system of four distinct heads, as illustrated in (10). The **Force** head faces outside: it is the interface between a proposition and a higher clause or discourse, marking a proposition as a question, declarative, relative, etc. **Topic** expresses old information. Left-dislocated elements appear in Spec,TopP. Topics are recursive. **Focus** expresses new information. Focused elements appear in Spec,FocP. **Finiteness** is the interface of the complementizer system facing inside. It expresses the fact that complementizers agree with the finiteness of the embedded clause, and that they may, in some languages, agree in person or number with the verb.

(10) [ForceP [TopP [FocP [TopP [FinP [IP]]]]]]

The Topic or Focus phrases are not projected if the clause contains no overt topic or focus element. If no constituent is topicalized or focused, two possibilities for the complementizer system are discussed by Rizzi. Either Force and Fin are realized as a syncretic head, that is, a single head as in (11), or two heads are projected into a simply-split CP (12) (Rizzi, fn. 28).

(11) Force/FinP
 Force/Fin⁰ IP

(12) ForceP
 Force⁰ FinP
 Fin⁰ IP

In the second case (12), the complementizer is generated in Fin and moves to Force to check the Force features. Assuming with Nunes (1999, 2001) that movement consists of Copy, Merge, Chain Formation, and Chain Reduction (see section 5.1. for details), this movement from Fin to Force is represented as in (13). It is excluded by minimality when a Focus or a Topic head intervenes.

(13) ..._{[ForceP que_i [_{FinP} ... que_i [_{IP} ...]]]}

In what follows, we propose that Misplaced and Intrusive QUE constructions result from the children's projection of a simply-split CP. Non-adult-like instances of 'early' Merge as well as improper Chain Reduction result in Misplaced or Intrusive QUE:

(14) a. Misplaced QUE: [_{ForceP} que_i [_{FinP} DP que_i ...]]
 b. Intrusive QUE: [_{ForceP} que_i [_{FinP} DP que_i ...]]

4. Complex CP Structures in French

Before entering the core of the analysis, it is appropriate to ask what aspects of the grammar of a French-speaking child might provide a source for the constructions under discussion. Do children project a complex CP system? Do they have evidence for QUE heading Force or Fin? As it turns out, French two-year olds already produce complex CP structures.

4.1. Clitic Left Dislocation (CLLD)

Clitic left dislocation is a normal feature of French. In fact, subject CLLD is so frequent³ that some researchers (e.g. Hulk 1995 for child language) suggest that the left dislocated element is in reality a subject in Spec,AgrSP (the clitic being a part of the verbal inflexion). However, Labelle & Valois (1996) show that two-year-old children already left and right dislocate both subjects and objects, (15a) being an example of a left-dislocated object. Also, Labelle (2000) shows that at least some left dislocated subjects are topicalized elements; in (15b), the marker *là* delimits the Topic (furthermore, the DP is dislocated twice). Clitic left dislocations are found even in embedded clauses, as shown by the early example from Philippe in (16).

(15) a. L'argent on le garde. (PHI 2;7,11, Labelle&Valois 1996:69)
 "The money, we keep it."

³ G. Labelle (1976) gives the following figures for five-year-old children. Children from Montreal, Canada: 89% of lexical subjects are dislocated. Children from Paris, France: 79%. For early child language, Labelle & Valois (1996) calculated, for example, 31 preverbal lexical subjects vs 25 left dislocated subjects (and 32 right dislocated subjects) in the corpus of Grégoire (10 files) (CHILDES).

- b. pi lui, le g(r)os bonhomme là, (il) s'appelle quoi?
 'And him, the fat man là, (he) is called what?(Max 2;2.9, de Cat 2002)
- (16) elle a vu [QUE [le lapin [il était parti]]] (PHI 2;11.7, file 26:832)
 she saw THAT the rabbit it was gone
 "She saw that the rabbit was gone."

We conclude that French-speaking children produce CLLD constructions, and take Intrusive and Misplaced QUE construction as providing further evidence in favor of dislocated subject DPs in child language. Assuming Rizzi's system, (16) has the dislocated DP in Spec,TopP and the Force head filled by the complementizer QUE (the exact status of subject clitic pronouns is not crucial for the point we want to make, and we won't discuss it further):

- (17) [_{ForceP} que [_{TopP} DP_i [_{FinP} [_{IP} il_i...]]]]

4.2. Pseudo-relative constructions

Pseudo-relative constructions are found in presentational constructions (18a) and as complements of verbs of perception (18b). They are among the earliest complex constructions produced by French-speaking children (Labelle 1989).

- (18) a. ça c'est une tortue qui mange des herbes. (GRE 2;5.13 (09:1429))
 that it's a turtle who is-eating some grass
 "That's a turtle eating grass."
- b. on regarde le grand-père qui est dans le tracteur. (GRE 2;5.27(10:529))
 one look-at the grandfather who is in the tractor
 "We are looking at the grandfather in the tractor."
- c. (c'est une petite fille...) ...qu'a va en promenade (ML; 3;4 07A)
 (that it's a little girl...) ...that she is taking a walk
 (that's a little girl)... "talking a walk"

The (pseudo-)relativized DP always corresponds to the embedded subject. In (18c), the clause is introduced by QUE followed by a subject pronoun (*a = elle* 'she'), instead of being introduced by QUI followed by a null subject. Marie-Hélène Côté (1998:154) proposes to analyze pseudo-relatives as in (19a), which we reformulate as in (19b), with the DP in Spec,FinP:

- (19) a. ... [_{CP} DP_i [_{C'} QUI_i [_{IP} ec_i ...]]] (Côté 1998: 154)
 b. ...[_{FinP} DP_i [_{Fin'} QUI_i [_{IP} ec_i ...]]]

While in CLLD a complementizer precedes the dislocated subject (17), in pseudo-relatives, a complementizer follows the DP. We hypothesize that pseudo-relatives, providing evidence for a lower complementizer, are the source of Misplaced and Intrusive QUE constructions.

5. The Proposal Proper

5.1. *Source of the Child Forms and Grammatical Constraints*

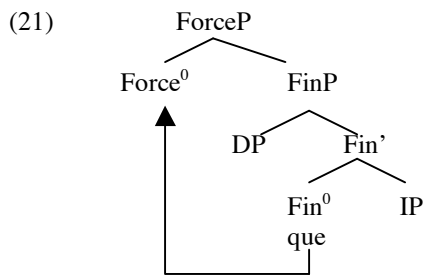
The leading idea of our proposal is that Intrusive and Misplaced QUE constructions are performance errors with complex CPs. Under taxing conditions, a limited number of computational operations are either applied too soon or not at all. As a matter of execution, we follow the general framework of the Minimalist Program (Chomsky, 1995) and Nunes' (e.g. 1999, 2001) 'Copy+Merge' theory of movement.

Nunes argues that instances of apparent movement are the result of the interplay of four independent primitive operations, Copy, Merge, Chain Formation, and Chain Reduction (= Delete): an element is merged, copied, and this copy is merged in a higher position checking features in the process. Nunes assumes that only the upper copy checks its formal features, not the lower one. Chain Formation then applies under asymmetrical c-command. Chain Reduction may delete either one of the copies: if the lower copy is deleted, the derivation converges without additional operation. If the upper copy is deleted, the formal features of the lower copy must be deleted by a subsequent operation, FF-Elimination, for Full Interpretation at PF. Consequently, Chain Reduction is optimal if FF-Elimination does not apply. This ensures that the derivation with the lower copy deleted is more economical. FF-Elimination is thus independent of feature checking operations and basically governs the phonetic realization of copies after Chain Formation. In this theory, while Merge is a single operation, movement consists of four operations, one of them being Merge. Now, Mayer, Erreich & Valian's (1978: 1) Basic-Operations Hypothesis predicts that "for any transformation which is composed of more than one basic operation, there exists a class of errors in child speech correctly analyzed as failure to apply one (or more) of the operations specified in the adult formulation of the rule." This allows for the possibility that in child language Copy, Merge, Chain Formation, and Chain Reduction may not be properly employed. We suggest that this is what happens in Intrusive and Misplaced QUE constructions.

In CLLD, the correct construction would require (among other operations) merging a null head under Fin, then a Top head with the topic DP in Spec,TopP, and finally the complementizer under Force, giving a fully complex CP:

$$(20) \quad [_{\text{ForceP}} \text{que} [_{\text{TopP}} \text{DP Top} [_{\text{FinP}} \emptyset [_{\text{IP}} \dots]]]]$$

We propose that the child, attempting to produce a CLLD construction, erroneously merges the overt complementizer and the topicalized subject DP *early* in the structure. She merges the overt complementizer in Fin and the topicalized DP in Spec,FinP, basically applying the operations deriving pseudo-relatives instead of those required for topicalization. With QUE and the DP merged in the earliest possible (relevant) positions, the child then projects a simply-split CP in order to check the Force feature of QUE. The simply-split CP allows the complementizer to move to Force and the derivation to converge.



With movement of QUE to Force in a simply-split CP, the most economical derivation results in the Intrusive QUE construction in which both Chain Reduction and FF-Elimination have not applied :

$$(22) \quad [_{\text{ForceP}} \text{que} [_{\text{FinP}} \text{DP que} \dots]]$$

Misplaced QUE constructions follow from improper Chain Reduction and failure in the application of FF-Elimination:

$$(23) \quad [_{\text{ForceP}} \text{que} [_{\text{FinP}} \text{DP que} \dots]]$$

An anonymous reviewer suggests that Misplaced QUE could also be due to covert movement of the complementizer to Force. In this scenario, the child follows the economy principle Procrastinate (or any other interpretation of covert movement). Either case involves movement of the complementizer.

Deletion of the lower copy yields (24), which is superficially like the adult forms (cf. (16)), except that the Topic is erroneously merged in Spec,FinP.

(24) [_{ForceP} que [_{FinP} DP ~~que~~ ...]]

This implies that the superficially correct constructions produced by the children may, in a few cases, be structurally non-adult.

The early Merge proposed here may follow from economy considerations: the child attempts to take out lexical elements from the numeration as soon as possible with the result of building up a more economical representation. The numeration is ‘emptied’ earlier, less structure is projected, and movement and construal relations hold across fewer nodes. With an early Merge, the ‘derivational horizon’ (Uriagereka, 1998) is narrowed down sooner and the computational burden is reduced. We assume that, given their limited capacities, children are particularly constrained by this condition on the economy of representation. The early merge of QUE in Fin would then be triggered by a combination of 1) the pressure to reduce the computational burden on short-term memory and 2) the frequency of the operation, used to construct pseudo-relatives (19b). Unlike Mayer, Erreich & Valian (1978) then, we view errors such as these as performance phenomena which result from the computational system erroneously failing to apply or typically applying too soon some operation, probably because of computational overload.

5.2. *The Case of ‘qui’*

For the sake of clarity, we only discussed child forms with QUE as the lower copy of the complementizer. However, there is a second subtype, involving QUI as the lower copy. Compare (25) with (26), with a feminine DP to the left of Fin. While in (25) the complementizer QUE (elided to QU’) is followed by the feminine personal pronoun *elle*, in (26) the complementizer is realized as QUI, followed by a null subject. (With a masculine DP, the phonetic realization [ki] is ambiguous between QUI and QU’*i* (*i* being a reduced subject pronoun *il* ‘he’) or *ils* ‘they’), so that QU’*i*(*l/s*) in (1) to (6) may also be interpreted as QUI.)

(25) Pendant [la soupe [QU’ elle refroidit]] (MP, child of 6)
 While the soup THAT it cools down
 “While the soup is cooling down”
 = (expected) : Pendant que la soupe (elle) refroidit

(26) Le camion où QUE [la dame [QUI donne de l’essence]] (BP, 5 ;6)

the truck where THAT the lady THAT gives some gas
 “The truck that the lady is filling up with gas”
 = (expected) : Le camion où (que) la dame (elle) donne de
 l’essence.

These examples have the following structures (ec = empty category):

- (27) a. [_{ForceP} (que) [_{FinP} DP que [_{IP} pron]]]
 b. [_{ForceP} (que) [_{FinP} DP qui [_{IP} ec]]]

Our simply-split CP analysis involving movement accounts straightforwardly for the QUE cases. We now have to account for the fact that in (26) the upper complementizer surfaces as QUE and the lower one as QUI. Assuming that QUI is an agreeing allomorph of QUE (Kayne, 1976), we follow the spirit of Rizzi (1990) who proposes that C^0 is realized as QUI in the context illustrated in (28), in which a Spec-head agreement relation holds in both CP and IP and the Spec position of the lower phrase contains an empty category:

- (28) [_{XP}_i C^0 _i [_{ec}_i I^0 _i ...]]

Translating this idea into the Split-CP framework and employing Distributed Morphology (Halle & Marantz, 1993), we assume that at PF QUE under Fin is spelled-out as QUI, if (29) holds, that is, if Fin^0 formally agrees with I^0 :

- (29) [_{XP}_i Fin^0 _i [_{ec}_i I^0 _i ...]]

(26) is then analyzed as (30) where the configuration of (29) is given in FinP but crucially not in ForceP. Consequently, the complementizer in Fin is spelled out as QUI and the one in Force as QUE.

- (30) Le camion [_{ForceP} où QUE [_{FinP} la dame_i QUI_i [_{IP} ec_i donne_i de
 l’essence]]]

The QUI examples provide an argument in favor of our early Merge analysis. While CLLD constructions involve a clitic subject, pseudo-relatives are introduced by QUI with an empty category in subject position. Given that children often produce QUE+pronoun as well as QUI+ec in relative clauses and in pseudo-relatives (Labelle 1990 provides the following figures: with a feminine antecedent, *qu’elle*: 103 (26.9%), *qui* 280 (73.1%)), the occurrence of both QUE and QUI as the lower complementizer is an indication that they are constructing

a child-like pseudo-relative type of structure (cf. (19b)) and not a CLLD topic construction.

Nothing so far has been said about the correlation between the realization of the complementizer and that of the subject. QUI involves movement of the DP leaving a trace (an empty category), whereas QUE occurs with a base-generated DP and a resumptive pronoun (Haegeman 1994: 409). We tentatively assume that the correlation can be derived by double Spec positions in FinP coupled with some version of the Shortest Link Condition. In (31a) the DP in the lower Spec position is ‘close enough’ to have moved from Spec,IP, leaving a trace, whereas in (31b) the DP in the upper Spec is not close enough and the subject position is spelled out as a (true) resumptive pronoun:

- (31) a. [... [_{FinP} DP_i qui [_{IP} ec_i]]]
 b. [_{FinP} DP_i [_{FinP} Ø que [_{IP} pron_i]]]

The constellation of (29) holds in (31a), yielding QUI, but not in (31b). A full discussion of the nature of the intervening null element (Ø) as well as of the nature of the violation leading to the resumptive-pronoun strategy would go beyond the scope of this paper (see Aoun, Choueiri & Hornstein 2001 for some recent discussion of related facts). This analysis accounts for (32), in which two topic phrases are in the C-system:

- (32) [Quand [ma petite sœur [le soir [QU’ [elle dort.]]]]] (MP, child of 6)
 When my little sister at night THAT she sleeps
 “When my little sister sleeps at night.”
 = (expected) : Quand (que) ma petite sœur le soir elle dort.

Assuming that both Spec positions are filled by a dislocated DP, the adverbial DP intervening between the left-dislocated subject and the subject position results in the subject position being spelled out with a resumptive pronoun:

- (33) [_{ForceP} Quand [_{FinP} ma petite sœur_i [_{FinP} le soir [_{Fin’} QU’ [elle_i dort]]]]]

In the absence of intervening head positions, the complementizer is allowed to move to Force. (32) is then analyzed as Misplaced QUE with the upper copy either inappropriately deleted, as discussed above, or independently deleted by the Doubly-Filled Comp Filter. If no copy of the complementizer is deleted, we derive example (5) as an instance of Intrusive QUE.^{4,5}

⁴ With two topic DPs, the construction in (33) is structurally similar to (i), observed in some North-western Italian dialects, here exemplified by Ligurian (Paoli 2001: ex. (17)):

In our data, no logical options other than those in (27) have been observed (children of that age never produce a construction of type [DP que ec]). We take these restrictions on the realization of the complementizers to show that Intrusive and Misplaced QUE's are occasional performance errors, that is, errors in applying the computational operations required to derive a construction acquired by the child. This explains the apparent gap between the first emergence of CLLD (2;0-3;0) and the occurrence of the errors discussed here (3;5-6). The type of performance error we have in mind is only expected when the competence system has acquired the construction but where the operations are not streamlined yet so that they may tax the computational system. In the present case the embedding of CLLD in a subordinate clause may require all the computational resources of the child, so that in cases of stress or other cognitive load, early Merge errors are produced.

5.3. *The case of Topic*

We proposed that Intrusive and Misplaced QUE constructions result from the erroneous merge of a complementizer in Fin and a Topic in its Spec, producing a structure constructed on the model of a pseudo-relative. The error in Topic positioning may be accounted for by Jakubowicz' (1999) Hypothesis on Computational Complexity (HCC). According to the HCC, syntactically necessary functional phrases which are part of the obligatory functional skeleton are computed more easily than semantico-conceptual ones, present only in some sentences. Given that Topic and Focus are "optional" parts of the embedded CP while Fin and Force are part of the functional skeleton, the HCC implies that Topic and Focus phrases are more complex to compute. This increased computational burden may lead to errors in merging these elements. The HCC also accounts for the fact that Fin and Force are projected in Intrusive and Misplaced QUE constructions, while Topic is not.

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- (i) A Maria a credda che ti a-u Gianni che ti ghe l'agi za dato.
 The Maria SCL believe THAT you to-the John THAT SCL to-him L.have already give
 'Mary thinks that you have already given it to John.'

Note, however, that these dialects allow two overt instances of the complementizer *che* only when the matrix verb selects the subjunctive mood. Furthermore, the lower complementizer is also allowed between the two topics (i.e. between *ti* and *a-u Gianni*). For these reasons, we think that this is a distinct phenomenon involving, perhaps, Merge of distinct (homophonous) heads. Despite these differences between examples like (i) and child French, both types of structures involve split CPs, and we take them to show that the application of Rizzi's system is on the right track here.

⁵ Alternatively, (32) could involve two topics in Spec,Top, with Top heads blocking movement of QUE from Fin to Force. The Force feature would then be checked by *quand* merged in Spec,ForceP.

Note now that the positioning of a topic in Spec,FinP results in a mismatch of features in FinP, as a topic element is in the Spec position of a non-topic phrase:

(34) ... [_{FinP} DP[+Top] que [_{IP} ...]]

Interestingly, even at five and six, children continue to experience difficulties with agreement, be it subject-verb or adjective-noun (Méresse-Polaert 1969), showing that they do not have a perfect control over all aspects of feature checking. We propose then that Intrusive and Mismatched QUE's disappear when the child gets control over Agree. As the child gains full control over feature checking, feature mismatch is avoided. Whereas the performance preference for early Merge is "violable", feature checking is a Condition on Convergence of derivations. This forces the child to project a TopP in order to merge the dislocated DP in Spec,TopP. As a fully complex CP does not allow movement of the complementizer from Fin to Force, the (overt) complementizer is then merged in Force and only one copy of it is in CP. It follows that only one copy can be phonetically realized.

6. Independent Evidence for the Proposal

Considering complex CPs in child French, we have shown that children experience difficulties when a Topic intervenes between the two interfaces in the CP system. The facts add to the evidence from other languages and from other kinds of clauses that the acquisition of structural aspects (e.g. CP) as well as the application of some primitive operations (e.g. Merge and Delete) may result in problems. For example, Schönenberger (1996) employs a simply-split CP to account for systematic Verb Second phenomena in embedded clauses, produced by Swiss German children. Bearing in mind that the finite verb in embedded clauses appears in final position in adult Swiss German, the complementizer followed by the finite verb is non-adult-like (her ex. 28a):

(35) Chasch mer achli Gift geh, [_{ForceP} dass [_{FinP} werdet_i [_{IP} mini Ohre
 can me some poison give THAT turn my ears
 au bru t_i]]]
 also brown
 "You can give me some poison so that my ears turn brown too"

In root questions, two- to four-year-old English-speaking children occasionally produce double tensing errors of the type illustrated in (36) (data from O’Grady 1997: pp. 161). We view these Intrusive and Misplaced Tense as failure or misapplication of Chain Reduction after movement of {PAST} and *will* (this is followed by *do*-support and affix-hopping in (37a)):

- (36) a. What *did* you *brought*?
 b. Where \emptyset the other Joe *will* drive?
 (37) a. [_{ForceP} what {PAST} [_{IP} you {PAST} bring]]
 b. [_{ForceP} where ~~will~~ [_{IP} the other Joe will drive]]

We take these examples to provide support for the type of analysis we have proposed here.

7. Conclusion

We have assumed that the internalized grammar of the children is adult-like with respect to the relevant structural aspects of complex CPs and claimed that it does not allow them to freely produce Intrusive and Misplaced QUE constructions. We suggested that these constructions result from processing errors due to performance limitations and immature control of feature checking. Under conditions taxing to the computational system, children occasionally produce simply-split CP constructions by means of ‘early’ Merge. This may result in improper Chain Reduction. We have linked these errors to other errors in the production of complex CP constructions in child language.

More generally, Intrusive and Misplaced QUE constructions provide evidence in favor of Rizzi’s (1997) split-CP hypothesis by showing that the lower interface of the complementizer system surfaces under certain conditions. They also provide psycholinguistic evidence in favor of the Basic-operation Hypothesis, in general, and the analysis of movement in terms of operations such as Copy, Merge, Chain Formation, and Chain Reduction, in particular. In this respect, the study of language acquisition provides a window to some generally invisible operations of the computational system C_{HL} and is thus well worth our attention for the construction of a theory of grammar.

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