On French Causatives and English Passives

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Snyder & Hyams (2015,S&H) account for children's late acquisition of English *be*-passives (age 4+), in terms of smuggling (Collins 2005): *be*-passives (BPs) require the object to move past an intervening argument (a PRO subject or a *by*-phrase). Simple A-movement would violate relativized minimality, so the object must be "smuggled" out, inside a larger phrase. S&H propose that prior to about 4, children cannot smuggle. In contrast, English *get*-passives (GPs) are attested by age 2-3. S&H argue, on the basis of control facts, that the lower V in a GP has nothing in SPEC,vP. Hence, minimality is respected and smuggling isn't needed.

Interestingly, Guasti (2016:185) conjectures that French (and other Romance) *faire-par* causatives ('FP') as in (1) will be acquired substantially earlier than *faire-à* causatives ('FA',2), because the two exhibit striking parallels to GPs and BPs, respectively. In both FPs and GPs, the lower V must be actional and must take a directly-affected object (3-4), while in FAs and BPs this isn't necessary. Here we evaluate the plausibility of Guasti's conjecture, and find considerable support for it. Moreover, we argue that the acquisitional time-course of FP vs. FA (much like GP vs. BP) can be understood as a direct consequence of S&H's smuggling account.

To begin with the link to smuggling, the S&H account for delayed BPs - based on a need for smuggling in A-movement - might at first glance seem irrelevant to Romance causatives, which do not appear to require A-movement. Yet, Belletti & Rizzi (2012) argue that precisely in FAs with an embedded transitive, smuggling actually is needed - not for purposes of A-movement, but for case-valuation of the lower verb's direct object. Without smuggling, the dative causee (in SPEC,vP) intervenes. In contrast, according to Folli & Harley (2007) the FP embeds a <u>nominalized</u> VP with an optional PP adjunct (cf. the *by*-phrase in English derived nominals). No smuggling is needed in FPs, because the *par*-phrase (if present) is not an intervening argument for either movement or case-valuation. Note that FAs with <u>unergative</u> verbs (5) do not require smuggling, since there is no embedded object in need of case valuation. Therefore the prediction of S&H's smuggling account is slightly different from Guasti's conjecture: FAs <u>with transitives</u> (and hence, with a dative-marked causee) will be delayed, but both FPs <u>and FAs with unergatives</u> will be acquired earlier.

Investigation: From CHILDES (MacWhinney 2000) we selected 11 longitudinal, spontaneous-speech corpora for French; located all child utterances containing any form of the verb *faire*; selected the causatives; and classified them as FP (with transitive or unaccusative V; cf. 1,6), FA-transitive (cf. 2), or FA-unergative (cf. 5). The strong prediction of S&H is that FA-transitives will not appear until the same late age-range when BPs appear; any production of FAs with a clear dative-marked causee by a child younger than 4 would be a counterexample. Results: (i) <u>None</u> of the 11 children used a single FA-transitive prior to age 4 (Binomial $p < .0001$; see 7); (ii) as expected, shortly after 4, some children began using clear-cut FA-transitives; (iii) also as expected, FPs appeared much earlier; in fact, two children produced FPs with *par*-phrases well before age 3 (2;05,12 and 2;09,16); (iv) finally, FA-unergatives appeared at an early age, sometimes even before 3 (2;07,28, 2;09,15 and 2;11,14). Thus, our acquisitional evidence provides exciting new support for the S&H smuggling analysis of English passives, by showing that it makes accurate predictions for Romance causatives.

(1) Jean a fait laver la voiture (par Paul).   *[faire-par = FP; specifically, FP-transitive]*
    'John had the car washed (by Paul).'

(2) a) Jean a fait [laver la voiture] à Paul.   *[faire-à = FA; specifically, FA-transitive]*
     'John made Paul wash the car.'
    b) Jean lui$_i$ a fait [laver la voiture] t$_i$.
     'John made Paul wash the car.'

(3) a. ?* John got liked.   *[The verb liked is non-actional]*
    b. ?* The answer got found. *[The underlying object, the answer, is not affected]*

(4) a. ?* Ils ont fait aimer Jean (par Marie).
      'They had John loved (by Mary).'
    b. ?* Ils ont fait trouver la solution (par le chercheur).
      'They had the solution found (by the researcher).'

(5) Jean a fait courir Marie.   *[FA-unergative; causee occupies lower Spec,vP]*
    'John made Mary run'

(6) Jean a fait tomber Marie. *[FP-unaccusative; lower Spec,vP is empty]*
    'John made Mary fall'

NB: Folli & Harley 2007 and Guasti 1996 argue faire-causatives with lower Spec,vP empty are FPs.

(7) **Statistics:** To check for statistical significance of the observed delay in FA-transitives, we first calculated the total number (U) of child utterances in our sample that were produced <u>after</u> the given child was already producing both datives and FPs, but <u>before</u> the age of 4. To estimate the per-utterance frequency of FA-transitives in speakers whose grammar allows them, we analyzed all parental utterances in our 11 corpora; we calculated each parent's per-utterance frequency of FA-transitives, and then took the median, F. To calculate the probability that U would be as high as observed (or even higher), under the null hypothesis that FA-transitives were always available to children as soon as they had both FPs and dative arguments, we calculated the binomial probability $p = (1-F)^U$: U=33,244 utterances. F= (7 FAs)/(22,778 parental utterances). p = .00003651 < .0001

References: Belletti & Rizzi (2012) Moving verbal chunks in the low functional field. *Cartography of Syntactic Structures 7* / Collins (2005) A smuggling approach to the passive in English. *Syntax* / Folli & Harley (2007) Causation, Obligation and Argument Structure: On the Nature of Little v. *LI* / Guasti (1996) Semantic restrictions in Romance causatives and the incorporation approach. *LI*. / Guasti (2016) Voice alternations (active, passive, middle). *Oxford Handbook of Developmental Linguistics*. / Snyder & Hyams (2015) Mimimality effects in children's passives. *Structures, Strategies and Beyond*.