

Young Children Never Smuggle: Reflexive Clitics and the Universal Freezing Hypothesis

Nina Hyams and William Snyder
UCLA and University of Connecticut

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1. Background

- (1) In children acquiring English, clear, unequivocal verbal passives are not reliably present until after age 4;0 (Bever 1970, Horgan 1976, Maratsos et al. 1985, de Villiers & de Villiers 1985, Borer & Wexler 1987, Meints 1999; but cf. O'Brien, Grolla & Lillo-Martin 2005).
- (2) The same seems to be true in children acquiring German (Mills 1985, Abbot-Smith & Behrens 2005), Dutch (Verrips 1996), Japanese (Sugisaki 1997, Murasagi 2000) and Serbian (Djurkovic 2005).
- (3) Earlier acquisition of verbal passives has been claimed for Sesotho (Demuth 1987) and Inuktitut (Allen & Crago 1996), but the evidence is controversial (Crawford 2004, Johns 1992).
- (4) The **A-Chain Deficit Hypothesis** (ACDH, Borer & Wexler 1987, 1992): Young children (before about four years of age) lack the ability to represent (nontrivial) A-chains.
- (5) *One problem:* The VP-internal subject hypothesis forces a distinction between “trivial” and “nontrivial” A-chains.
- (6) The **External Argument Requirement Hypothesis** (EARH, Babyonyshev et al. 2001): Young children disallow any clause in which there is no external theta-role assigned to Spec of v.
- (7) *One problem:* Expletive subjects are permitted by young children. Wexler (2002:4) reports that young children understand the following sentence-type:

It seems to Ernie that Bert is wearing a hat.

2. Phase Theory

- (8) **Phase Impenetrability Condition** (PIC): The complement of a phasal head H is inaccessible to operations outside HP.
- (9) In the system of (Chomsky 1999), as adopted in (Wexler 2002, 2004), there are two phasal categories: C (when T is non-defective) and non-defective v.

- (10) Passive and unaccusative vP's are “defective” phases, and never interfere with the raising of a VP-internal DP to Spec of T.
- (11) The **Universal Phase Requirement** (UPR, Wexler 2002, 2004): For the immature child (until about age five), v always defines a strong phase.
- (12) Additional assumptions: A vP is present even when no external theta-role is assigned. Movement to Spec of v is possible *only* if v has an EPP feature. This EPP feature is available only if movement out of vP would have an “interpretive” effect, as is the case with *wh*-movement, for example.
- (13) *Consequence:* For the young child, raising should normally be impossible in passives, as well as unaccusatives (cf. Babyonyshev et al. for Russian).

3. Test Case: Reflexive Clitics in Romance

- (14) Marantz (1984) argues that the HAVE/BE alternation in (15) (for French) reflects the unaccusativity of (15b).
- (15) a. Je t' ai vu.
I you have seen
'I saw you.'
- b. Je me suis vu t.
I me am seen
'I saw myself.'
- (16) The surface subject *Je* in (15b) is an underlying direct object that raises into subject position.
- (17) A reflexive morpheme renders the predicate reflexive, and triggers the presence of a reflexive clitic (*me*) as a form of agreement.
- (18) The choice of BE as the past auxiliary is a reflex of unaccusativity.

3.1 Supporting Evidence

- (19) Marantz (1984:160), based on (Grimshaw 1982):
- (20) In the French *faire*-causative, the embedded subject is preceded by *à* if and only if the head of the embedded clause is transitive.
- (21) Il fera boire un peu de vin {à son enfant, *son enfant}.
he make-FUT drink a little of wine {at his child, his child}
'He will make his child drink a little wine.'
- (22) J'ai fait partir {Jean, *à Jean}.
I'PAST make leave {John, at John}
'I made John leave.'

(23) La crainte du scandale l'a fait tuer {au juge, *le juge}.
 the fear of-the scandal OBJclitic PAST make kill {at-the judge, the judge}
 'Fear of scandal made the judge kill him.'

(24) When the embedded clause is reflexive, its head behaves as an intransitive:

(25) La crainte du scandale a fait se tuer {le frère du juge,
 *au frère du juge}.
 the fear of-the scandal PAST make REFL kill {the brother of-the judge,
 at-the brother of-the judge}
 'Fear of scandal made the judge's brother kill himself.'

(26) Therefore, contrary to initial appearances, the reflexive clitic (*se*) is not functioning as the direct object. Marantz argues that the embedded subject (*le frère du juge*) is actually the underlying object.

3.2 UPR Predicts Problems, but Young Children Succeed

(27) The UPR predicts that young children will have difficulties with Romance reflexive clitics, because the construction requires raising of a VP-internal DP out of vP.

(28) Snyder, Hyams and Crisma (1994):

Italian (Calambrone 1992) **French** (Suppes, Smith & Leveille 1973)

Diana (1;8-2;6)
 Guglielmo (2;2-2;11)
 Martina (1;7-2;7)

Philippe (2;1-3;3)

(29) Method: Run a computer search for any child utterance containing a clitic, and hand-code the results.

	Diana		Guglielmo		Martina		Philippe	
	HAVE	BE	HAVE	BE	HAVE	BE	HAVE	BE
NREF	10	1	12	0	3	0	27	2
REFL	0	23	0	35	0	4	0	104
	$(p < .001)$		$(p < .001)$		$(p = .143 \text{ NS})$		$(p < .001)$	

[P-values are for two-tailed Fisher Exact Test, except for Philippe (X^2).]

(31) New subjects from CHILDES (MacWhinney 2000):

French	Italian
Max (1;9-3;2, York)	Elisa (1;5-2;1, Tonelli)
Léa (2;8-3;5, York)	Rafaello (1;7-2;11, Calambrone)

	Max		Léa		Elisa		Rafaello	
	HAVE	BE	HAVE	BE	HAVE	BE	HAVE	BE
NREF	17	0	45	0	15	0	10	0
REFL	2	4	2	13	0	4	0	2
	$(p = .002)$		$(p < .001)$		$(p < .001)$		$(p = .015)$	

[P-values are for two-tailed Fisher Exact Test.]

(33) Examples: Elisa

Mi sono bagnata myself am bathed '(I) bathed myself'	(2;1)	L'ho mangiata it have eaten '(I) have eaten it' (la pappa = the food)	(1;11)
Si e' spor[c]cata himself e dirtied '(He) dirtied himself'	(2;1)	L'ho buttata li' dentro it have thrown there inside '(I) threw it inside'	(2;1)

(34) This success cannot be attributed to associating particular verbs or clitics with BE. Depending on the subject, and hence the (non-)reflexivity, the same verbs and (in the case of first/second person) the same clitics can take HAVE or BE.

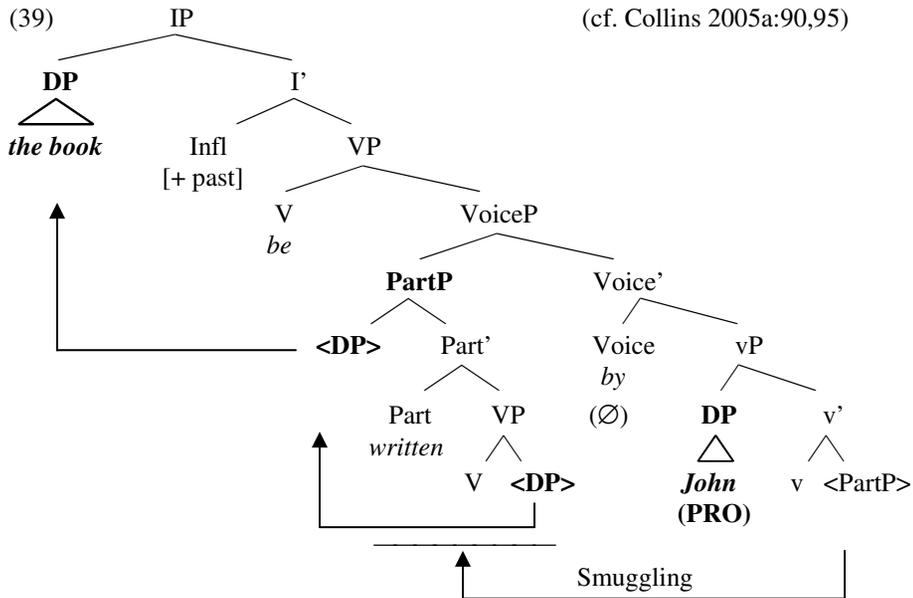
(35) The children's level of success would be extremely unlikely if they lacked the adult grammar for reflexive clitics.

(36) Wexler (2002:45) notes that the UPR would allow success on reflexive clitics if an EPP feature on v could somehow be motivated on interpretive grounds. Yet, this possibility is left as a direction for future research.

4. A New Approach: Young Children Never Smuggle

(37) Collins (2005a): In the passive, the external argument (PRO, in the short passive) occupies spec of vP. Simple raising would violate minimality (Relativized Minimality (Rizzi 2001), or the Minimal Link Condition (MLC, Chomsky 1995)).

(38) The solution is to "smuggle" the object past the verb's external argument.

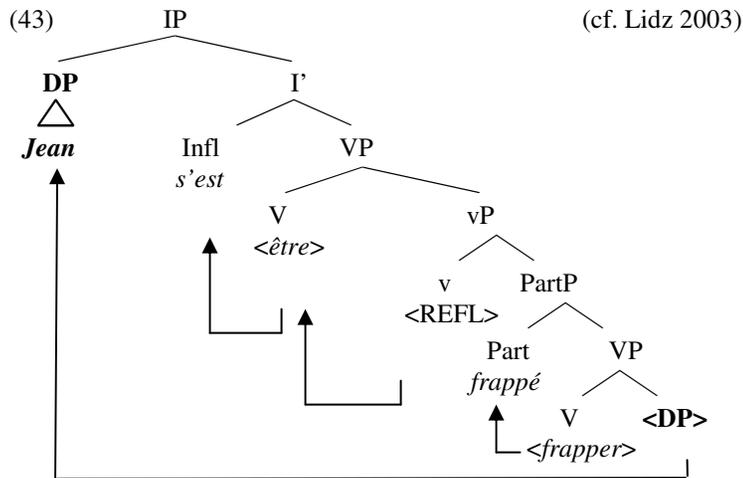


(40) Therefore, Müller's **Freezing Principle** (1998:124, *X [_Y ... <X> ...] <Y>), must fail to apply in certain cases (Collins 2005b:292).

(41) **PROPOSAL: The Universal Freezing Hypothesis (UFH)**. For the immature child (at least until age four), the Freezing Principle always applies: No subpart of a moved phrase can ever be extracted.

(42) **Consequence:** Children have trouble A-moving a DP past another argument.

4.1 Why Reflexives Aren't a Problem



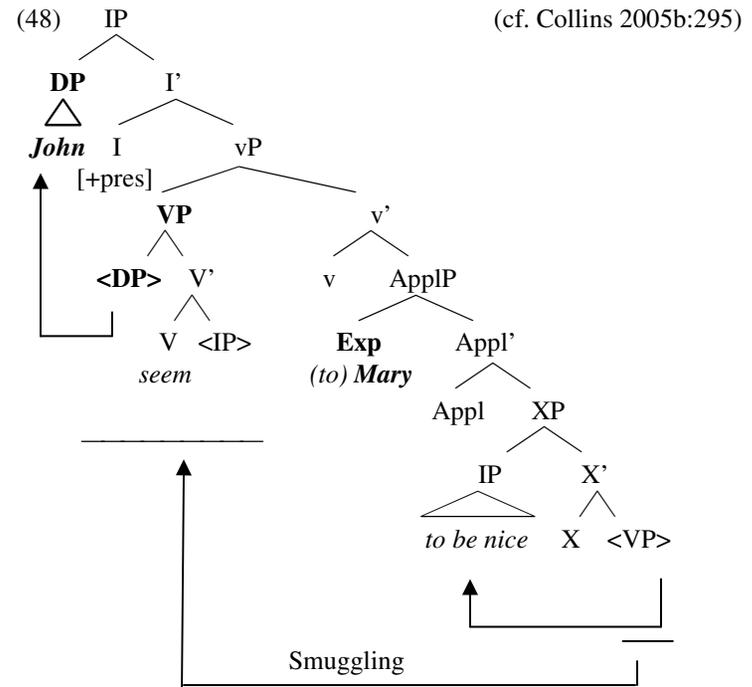
(44) On Lidz's analysis, an external theta-role of Agent/Cause is implicit, but not assigned syntactically. If the underlying object is animate, it can be interpreted as Agent, but an impersonal or mediopassive interpretation is also possible.

(45) Crucially, there is no external argument to create a minimality violation. Therefore, smuggling isn't required.

(46) Learnability: This reflexive construction is distinguished from the verbal passive in that the latter is never used to communicate reflexivity.

5. Prediction: Raising Past Experiencers (RPE)

(47) Raising past an experiencer requires smuggling.



(49) Wexler (2002:3-4) finds exactly what the UFH predicts:

- It seems to Ernie that Bert is wearing a hat. [Children succeed]
- Bert seems to Ernie to be wearing a hat. [Children fail]

(50) Note that raising without an experiencer is unproblematic, even for three-year-olds (Becker, to appear): *The dog seemed t to be purple.*

(51) Further prediction: Passive and RPE need not be mastered concurrently. This is because learning, as well as maturational ‘antifreeze’, is required for each of them (cf. Koopman 2004 on variation across English speakers in RPE, and absence of RPE in Dutch).

(52) Speculation: Presence of a *wh*-feature may overcome the usual MLC problem in passive, without the need for smuggling. This would account for the findings of Hirsch & Wexler (2004).

6. Conclusion

(53) The UFH looks like a promising approach to children’s difficulties with passives.

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- Hyams: hyams@humnet.ucla.edu
Snyder: william.snyder@uconn.edu