Children's Passives: The Role of Discourse Features

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1. The Derivational Approach to Passives

(1) The British sank <u>fourteen battleships</u> in the winter of 1941.

Demotion of the logical subject:

(2) There were sunk (by the British) fourteen battleships in the winter of 1941.

Promotion of the logical object ['<>' marks an unpronounced copy]:

(3) <u>Fourteen battleships</u> were sunk (by the British) <<u>fourteen battleships</u>>.

The demoted subject of a passive(even if unpronounced) can still control PRO:

(4) The ships were sunk (by the British₁ / EC₁) [PRO₁ to protect the Channel].

The missing subject of an unaccusative cannot control PRO:

(5) The ships sank (*by the British₁) <the ships> [* PRO₁ to protect the Channel]. (cf. Roeper 1987)

2. Children's Acquisition of the Passive

- (6) 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).
- (7) 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).
- (8) Earlier acquisition of verbal passives has been claimed for Sesotho (Demuth 1987) and Inuktitut (Allen & Crago 1996), but the evidence is controversial (Crawford 2004, Crawford & Hirsch 2008, Johns 1992).
- (9) **Grammatical Maturation Hypothesis** (e.g. Borer & Wexler 1987, 1992; Babyonyshev et al. 2001; Wexler 2002, 2004): The *immature grammatical system* of a child younger than about five years cannot represent the passive construction.

- (10) Wexler and associates have made a variety of proposals about what exactly in the human language faculty undergoes maturational change.
- (11) In this presentation we will make a novel proposal about the nature of the maturational change.
- (12) We will remain neutral, however, on whether it is the grammar proper, or the language processing systems, that undergo maturation.

3. Evidence for a Crucial Role of the Demoted Subject

3.1 The Romance Reflexive-Clitic Construction

- (13) A near minimal pair is provided by the English passive and the Romance reflexive-clitic construction.
- (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. <u>Je</u> me suis vu <je>.

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.

3.2 Supporting Evidence

- (19) Marantz (1984:160), based on (Grimshaw 1982):
- (20) In the French *faire*-causative, the embedded subject is preceded by \dot{a} 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 <u>l'a</u> fait tuer {<u>au juge</u>, *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.

3.3 Young Children Succeed

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

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

Diana (1;8-2;6) Philippe (2;1-3;3) Guglielmo (2;2-2;11) Martina (1;7-2;7)

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

(29)	Diana		Guglielmo		Martina		Philippe	
	HAV	E BE	HAVI	E BE	HAVI	E BE	HAV	E 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 NS)		(p<.001)	

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

(30) 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)

(31)	Max		Léa		Elisa		Rafaello	
	HAVI	E BE	HAVI	E BE	HAVE	E BE	НА	VE BE
NREF	17	0	45	0	15	0	10	0
REFL	2	4	2	13	0	4	0	2
	(p=.002)		(p<.001)		(<i>p</i> <.001)		(p=.015)	

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

(32) Examples: Elisa

Mi sono bagnata	(2;1)	L'ho mangiata	(1;11)
myself am bathed		it have eaten	
'(I) bathed myself'		'(I) have eaten it' (la pa	ppa = the food)
Si e' spo[r]cata	(2;1)	L'ho buttata li' dentro	(2;1)
himself e dirtied		it have thrown there ins	ide
'(He) dirtied himself	,	'(I) threw it inside'	

- (33) 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.
- (34) The children's level of success would be extremely unlikely if they lacked the adult grammar for reflexive clitics.

3.4 What's Different?

- (35) On Lidz's (2003) analysis of reflexive-clitic constructions, an external theta-role of Agent/Cause is implicit, but <u>not</u> assigned syntactically. If the underlying object is animate, it can be interpreted as Agent, but an impersonal or mediopassive interpretation is also possible.
- (36) Therefore, in contrast to the verbal passive, the <u>logical subject</u> is not grammatically represented.

Supporting evidence from French:

- (37) * Jean s' est blessé pour toucher l'assurance. John REFL is injured to collect the insurance 'John injured himself [PRO to collect the insurance].'
- (38) Jean s' est blessé pendant la guerre. John REFL is injured during the war 'John was injured during the war.'

(39) * Jean s' est blessé par l' ennemi. John REFL is injured by the enemy 'John was injured by the enemy.'

4. Evidence for a Crucial Role of Discourse Features

- (61) O'Brien, Grolla, and Lillo-Martin (2006, 'OGL') report that three-year-old children succeed on a comprehension test of English passives, even with non-actional verbs, *provided* the experimental materials satisfy certain "felicity conditions" for having a *by*-phrase.
- (62) Specifically, a *by*-phrase is felicitous only if there is at least one alternative person who *could* have been the agent / experiencer, but was not.
- (62) Moreover, OGL show that the same children who succeed when the felicity conditions are satisfied, fail when the felicity conditions are not satisfied.
- (63) Story without felicity (OGL 2006:447)

EXP: In this story we have Santa and a naughty elf. The elf took a plate of goodies left for Santa and hid behind a wall so Santa would not see him.

ELF: Hee, hee. Santa won't see me behind this wall, and I can have these treats all for myself.

EXP: What the elf forgot, though, is that Santa has super vision. That's how he can see who is naughty and who is nice. He can see through anything, even a wall. So, right away, Santa saw the elf.

SANTA: Aha! I see you elf. I see you!!

EXP: Gobu, can you tell me something about that story?

GOBU: Well, let's see. In that story, the elf was seen by Santa.

(64) Story with felicity (OGL 2006:447)

EXP: Oscar is very grouchy. He doesn't like anybody. I wonder if someone likes him, though? Here's a Fancy Lady and a parrot. I wonder if the Fancy Lady likes Oscar?

FANCY LADY: Ew! Oscar stinks. I don't like him because he lives in a garbage can.

EXP: Well, I wonder if the parrot likes him?

PARROT: Oh, yes, I like you Oscar. I don't mind that he lives in a garbage can. I like you, Oscar.

EXP: Gobu, can you tell me something about that story? GOBU: Well, let's see. Oscar was liked by the parrot.

- (65) a. Children were at chance in Condition 1, but significantly above chance in Condition 2 (even with nonactional verbs, and regardless of whether the *by*-phase was included or omitted).
 - b. Similar results have recently been obtained in Takahashi's (2008) study of Japanese children, where the felicity condition was also satisfied.
 - c. OGL's interpretation: "Children's poor performance [in previous studies] may be in due in part to a failure to satisfy conditions on felicitous use of the *by*-phrase in long passives." [from BUCLD handout]
- (66) **Problem**: OGL's manipulation also led to significantly improved performance on SHORT passives, where no *by*-phrase was present!

5. Proposal

- (67) Passives are difficult for young children because:
 - (i) they require the child to relate the surface subject to an underlying directobject position, and
 - (ii) there's another argument (the demoted logical subject) intervening between the two.
- (68) The adult *can* keep track of the logical subject versus the logical object in the passive because they have different types of case features. The demoted subject bears <u>inherent</u> case features (e.g. prepositional or dative), while the logical object bears <u>structural</u> case features (nominative).
- (69) For the child, structural and inherent case features are not yet "distinctive," for purposes of keeping track of the arguments in a sentence.
- (70) However, even for the young child, arguments with <u>interrogative</u>, focus, or topic features are distinctive (cf. Rizzi 2004).

(71) Therefore:

- i. The reflexive-clitic construction is unproblematic because there's <u>no demoted subject</u> intervening between the surface-subject position and the underlying direct-object position.
- ii. The passive becomes unproblematic in OGL's felicity condition because the surface subject bears a [+Topic] feature, and/or because the demoted subject (whether pronounced or not) bears a [+Focus] feature (cf. 64).
- (72) Note that the locus of the problem could be construed as part of the <u>grammar</u> proper, or as part of the <u>processing system</u>.
- (73) Either way, as the child matures we expect her to become better at distinguishing the raised logical object (bearing <u>structural</u> case features) from the demoted subject (bearing inherent case features).
- (74) The *older* child (and adult) will be able to relate the structural-case argument to its underlying position, despite the inherent-case argument that intervenes.

6. Concluding Remarks

- (75) In order to handle children's success on <u>mismatch</u> items in OGL's felicity condition, we may need the discourse features to be established <u>independently</u> of the test sentence:
 - a. [+Topic] = Topic of Discussion
 - b. [+Focus] = Possible answer to Question Under Discussion

(76) **Predictions:**

- a. Improvement when test item is a <u>wh-question</u> (cf. Crain et al. 1987)
- b. Difficulties, and discourse-features will help, in:
 - i. Raising Past Experiencer (cf. Hirsch et al. 2007)
 - ii. A-scrambling across another NP in Japanese (cf. Sugisaki 1997)

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