

# An adversity passive analysis of Sesotho child passives: Reanalyzing a counterexample to Maturation

Are the Sesotho data valid counterexamples to the Maturation Hypothesis? Do they support the Continuity Hypothesis?

## Background

**The Maturation Hypothesis:** Children do not have access to full adult grammar at birth; instead, the capacity for grammar matures.  
**Evidence:** Delayed passives/unaccusatives in English and Hebrew (Borer and Wexler 1987), Japanese (Sugisaki 1998), Spanish (Pierce 1992)

**Problem:** Children produce verbal passives as early as 2;8  
**Evidence:** Inuktitut (Allen and Crago 1993, 1996a, 1996b), Zulu (Suzman 1985, 1987, 1990), K'iche' (Pye 1992), Sesotho (Demuth 1989, 1992)  
**Continuity Hypothesis (Pinker 1984):** Children have full access to grammar from birth; adult use and language properties will determine course of acquisition.

**Proposal:** The Sesotho passive data are not good counterexamples to Maturation. The data also do not support a Continuity view of acquisition.

## Original Study (Demuth 1989)

**Sesotho:** Bantu language of Nguni group; SVO word order  
**Bantu verb complex:** SM-OA-Verb root-CAUS-APPL-REC-PASS-FV

Interval	1	2	3	4	5	6	Adult caregivers
Age (y;m)	2;1-2;3	2;4-2;6	2;7-2;9	2;10-3;2	3;9-3;10	4;0-4;1	
# of utterances	1704	2925	3307	3159	1520	1603	386
# of passives	6	11	33	27	32	30	23
Passives/total utterances	.4%	.4%	1%	.9%	2.1%	1.9%	6.0%

**- Movement analysis:** Demuth assumes that movement occurs when the subject marker agrees with the moved object.

- (1) Thabo o-pheh-il-e lijo name SM-cook-PERF-FV food Thabo cooked some food  
 (2) Lijo li-pheh-il-o-e t<sub>i</sub> (ke Thabo) Food SM8-cook-PERF-PASS-FV (by T) The food was cooked (by Thabo)

**- No lexicalized forms:** Sesotho passives cannot be lexicalized forms, because Sesotho does not have adjectival passives. (Demuth 1989:60)

- (3) Lijo tse tala food COP green green colored food  
 (4) Lijo li tala food COP raw the food is raw (uncooked)  
 (5) \*Lijo li-tal-ets-e food SM-green-PERF-FV the food was raw (uncooked)  
 (6) \*Lijo li-tal-o-a food SM-green-PASS-FV The food is raw (uncooked)

**- Productive alternations:** Demuth (1989:64) shows children can alternate between passive and active forms of the same verb.

- (7) ho-th-o-e o-tla-shap-uo-a! SM17-say-PASS-FV SM-FUT-lash-PASS-FV It is said that you will be lashed!  
 (8) ke 'me o-re o-tla-o-shapa (ke 'me ea-re-ng o-tla-o-shapa) COP mother REL-say-REL SM-FUT-OA-lash-FV It's mother who says she will lash you

**Demuth's conclusion:** A Continuity view better explains the early passive data. Children hear more passives because of two properties of Sesotho:

**Applicatives:** Objecthood properties in Sesotho allow for more passives.

**Subject wh questions/discourse:** Subjects cannot be questioned in situ. Subject questions are obligatorily passive, increasing passive frequency in child directed speech (Demuth 1989:60).

- (9) \*Mang o-pheh-ile lijo? Who SM-cook-PERF food Who cooked food?  
 (10) O shap-il-o-e ke mang? SM-lash-PERF-PASS-FV by who You were lashed by who?

## Reanalysis

**Sources for Reanalysis:**  
 1. Demuth (1989) appendix of passive tokens  
 2. Transcripts of 2 children from Demuth corpus (child H and child L)

	H	L	Adult
# of utterances	1093	1585	3138
# of passives	38	63	138
passives/total utterances	3.5%	4%	4%

all passive utterances, more adult utterances

## Result 1

**Movement Analysis:** Impersonal passives with subject marker 17 in subject position do not require A-movement (Demuth 1989).

- (11) ho-j-uo-a litapole (ke batho) SM17-eat-PASS-FV potatoes (by people) There is eaten potatoes (by people)

22% of Demuth (1989) appendix contains impersonal passives. Individual transcripts (H and L) contained 44% and 48% impersonal passives.

**Lexicalized Forms:** Demuth (1989) suggests early passives might be rote produced, especially with high frequency verbs like buy, do, lash, and give. 29% of H and 27% of L's passives used these verbs.

**Alternations:** Alternation example is anecdotal. Children do not systematically alternate between active and passive forms of the verbs (Child L):

TYPE	ENGLISH	SESOTHO	PASSIVE	ACTIVE
non alternating	cut off	khaola	3	0
	sin against	sit(ets)a	1	0
	teach	ruta	3	0
	dress	ten(ts)a	1	0
	win	hlola	7	0
possible alternation	close	kwala	1	1
	tear	taboa	2	2
	TOTAL		18	3

**Conclusion:** The Sesotho data not a good counterexample to the Maturation Hypothesis. Non-movement forms, lack of productivity, possible lexicalized forms, and lack of alternation question the data's validity.

## Result 2

**Applicatives:** Demuth (1998) shows children use applicatives with active verbs, but of 3 passive applicatives in entire corpus, only one is valid.

**Subject wh questions:** Subject questions are not obligatorily passive; they can be formed with active verbs, using either a cleft relative (12), a focus construction (13), or a copular construction (14) (Demuth 1990:72).

- (12) Ke mang ea o-shap-il-e-ng? COP who REL OM-lash-PERF-FV-REL It's who that lashed you?  
 (13) o-shap-il-e ke mang? SM-lash-PERF-FV COP who Who lashed you?

- (14) ke mang? COP who who is it?

Children used active or copular forms of verbs in subject wh questions:

	H	L
Passive subject questions	0 0%	1 5%
Cleft relative subject questions	1 20%	2 10%
Focused subject questions	0 0%	4 20%
Copular subject questions	3 60%	12 60%
Gloss unclear	1 20%	1 5%
Total subject wh questions	5 100%	20 100%

**Conclusion:** The Sesotho data do not support the claims of the Continuity Hypothesis (see Crawford 2004 for further discussion).

Can the Sesotho data be explained by the Maturation Hypothesis?

## Delayed Mechanisms

**A-Chains Deficit Hypothesis (ACDH)**  
 Until about 5 years of age, children do not represent A-chains as grammatical. (Borer and Wexler 1987, 1992)

**Problems:** VP internal subject hypothesis (Koopman and Sportiche 1991); Children's adult-like performance on Romance reflexives (Snyder, Hyams, & Crisma 1995)

**External Argument Requirement Hypothesis (EARH)**  
 Children under the age of 5;0 require every sentence have an external argument; Children take structures with defective v as ungrammatical. (Babyonyshev et al 2001; Wexler 2004)

## Syntactic homophones

**Syntactic homophone (s-homophone)**  
 (15) A is a syntactic homophone of B if A and B have different syntactic constructions but similar pronunciation. (Babyonyshev et al 2001)

- Children use syntactic homophones for constructions requiring A-movement if available in the language, e.g., verbal passives and adjectival passives in English (Borer and Wexler 1987):

- (16) The door<sub>i</sub> was opened t<sub>i</sub> verbal passive  
 The door was opened adjectival passive  
 (17) The people<sub>i</sub> arrived t<sub>i</sub> unaccusative  
 The doll giggled unergative

- Children do not perform well on constructions that require A-movement when there is no s-homophone available. e.g., Russian genitive of negation construction (Babyonyshev et al 2001):

	NEG NP Type	Adult Responses	Child Responses (younger group=4;0)
NO MOVEMENT	Transitive nonspecific direct object	GEN	73% GEN
	Unergative	ACC	ACC
COVERT A-MOVEMENT	Unaccusative	GEN	60% ACC
	Bleached Unaccusative	GEN	69% ACC

## Homophony in Sesotho

Allomorphs of the perfective morpheme (-il-, -ets-) are homophonous with allomorphs of the applicative morpheme (-el-, -ets-):

- (18) Lijo li-pheh-ets-w-e Food SM-cook-PERF-PASS-FV The food has been/is in a state of having been cooked.  
 (19) Nama e-pheh-ets-w-e 'me Meat SM-cook-APPL-PASS-FV mother The meat has been cooked (for) my mother Demuth 1998:788

## Pylkkänen (2000)

High Applicatives (symmetric passives): Sesotho, Zulu  
 Low Applicatives (asymmetric passives): English, Swahili

Semantically, high applicatives relate an event to an individual, and low applicatives relate an individual to another individual in directional possessive relations. Syntactically, arguments in high applicatives are introduced above the VP, taking an event as their argument and introduce an individual related to that event. Low applicatives are introduced as sister to the VP.

## Adversity passives

- Suzman (1985) observed that children's early passives describe events where patient is negatively affected.

- Wexler (1999) suggested that Sesotho child passives may be like Japanese verbal passives which do not require A-movement (Miyagawa 1989).

- Sesotho has adversity constructions that are quite similar to Japanese. Sesotho introduces a negatively affected (malefactive) argument with the applicative construction:

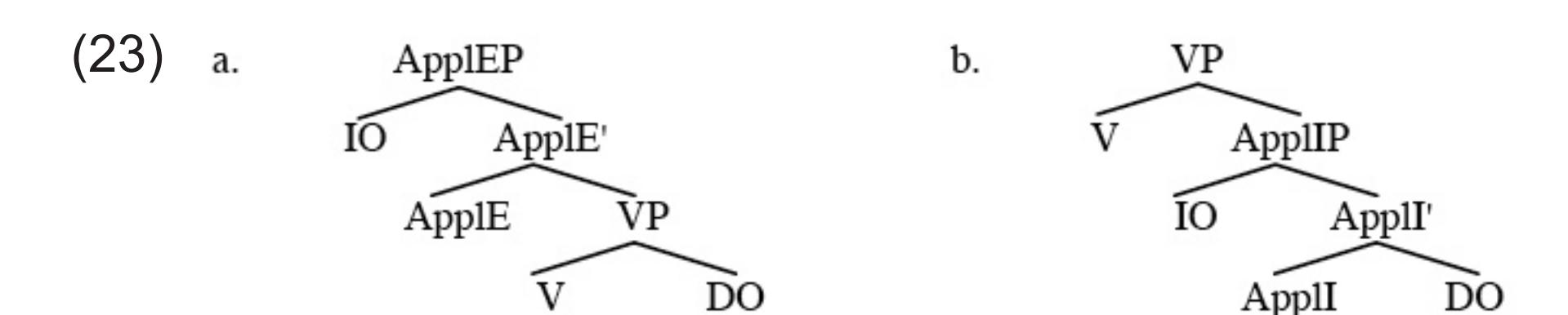
- (20) Monna a-sho-ets-e Lineo. Man AGR-die-APPL-FV Lineo 'The husband has died on Lineo.'  
 (21) Lineo o-sho-ets-o-e ke-monna. Lineo AGR-die-APPL-PASS-FV by-husband 'Lineo has been bereaved of the husband.' Woolford 1993

BUT: A-chain analysis is no longer relevant. What about the external argument?

Japanese adversity passives have applicative syntax--one more argument than verbal passives.

- (22) Sensei-ga seito-ni kuruma-o ker-are-ta Teacher-NOM pupil-BY car-ACC kick-PASS-PAST The teacher is such that his car was kicked by the pupil

Pylkkänen's (2000) analysis of applicatives: argument in high applicatives is a type of external argument (from McGinnis 1998):



The passive morphology on Japanese adversity passives, (*ri*)are, is the default spell-out of the verbal category feature of nonactive verbal functional heads which do not introduce an agent. This is the only similarity adversity passive constructions have with real passives though.

## Conclusion:

High or symmetric applicatives, i.e., those found in Sesotho and in Japanese adversity constructions, introduce a type of external argument that is not an agent. Under the EARH version of the Maturation Hypothesis, this would satisfy the children's requirement for an external argument. Adding this type of argument produces default passive morphology. Early Sesotho passives may be applicative constructions containing default passive morphology.

Glosses: SM=subject marker; OA=object agreement; PERF=perfective; APPL=applicative; CAUS=causative; REC=reciprocal; FV=final vowel (mood); FUT=future; PASS=passive; COP=copula; NOM=nominative; ACC=accusative; GEN=genitive

Selected References:  
 Babyonyshev, M., Ganger, J., Pesetsky, D., and Wexler, K. 2001. The Maturation of Grammatical Principles: Evidence from Russian Unaccusatives. *Linguistic Inquiry* 32, 1, 1-44.

Borer, H. and Wexler, K. 1987. The Maturation of Syntax. In T. Roeper and E. Williams (eds.) *Parameter Setting*. Dordrecht: Reidel

Crawford, J. 2004. Acquisition of the Sesotho passive: Reanalyzing a Counterexample to Maturation. MA thesis, Boston University.

Demuth, K. 1989. Maturation and the Acquisition of the Sesotho Passive. *Language* 65, 56-80.

Demuth, K. 1992. The Acquisition of Sesotho. In D. Slobin (ed.) *The crosslinguistic study of language acquisition*. Vol. 3

Pylkkänen, L. 2000. What applicative heads apply to. *Proceedings of the 24th Annual Penn Linguistics Colloquium*. U. Penn Working Papers in Linguistics, Vol. 6.4

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