

Subject, topic and Sesotho passive*

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ABSTRACT

Counter to findings in English, German and Hebrew, recent acquisition studies have shown that the passive is acquired early in several non-Indo-European languages. In an attempt to explain this phenomenon, this paper addresses certain typological phenomena which influence the early acquisition of passives in Sesotho, a southern Bantu language. After outlining the structure of the Sesotho passive and its syntactic and discourse functions, I examine Sesotho-speaking children's spontaneous use of passives, showing that the acquisition of passives in Sesotho is closely linked to the fact that Sesotho subjects must be discourse topics. I conclude that a detailed examination of how passive constructions interact with other components of a given linguistic system is critical for developing a coherent and universally applicable theory of how passives are acquired.

INTRODUCTION

Recent acquisition research has reported the early acquisition of passive constructions in several non-Indo-European languages including Zulu (Suzman, 1985, 1987), Sesotho (Demuth, 1987, 1989), Turkish (Savasir, 1983) and Quiche Mayan (Pye, 1988). These findings are of great interest for

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two reasons. First, the grammatical description of the passive has been central to the development of linguistic theory (e.g. Chomsky, 1965, 1981; Bresnan, 1982) and there has been speculation that the acquisition of the passive is innate (e.g. Borer & Wexler, 1987), perhaps showing certain universal acquisition patterns. Secondly, there is still a prevailing assumption (though see Pinker, Lebeaux & Frost, 1987), largely based on findings from Indo-European languages and Hebrew, that passives are complex grammatical constructions that will be acquired late in language development. For instance, studies of English have indicated that the acquisition of the verbal passive construction is a gradual one covering a span of several years, and that frequency of use is low (Strohner & Nelson, 1974; Maratsos, Kuczaj, Fox & Chalkley, 1979). German passives are not frequent in children's speech until the age of five (Mills, 1985), while Hebrew passives are avoided until the age of eight, and few *by*-phrases are found before the age of 10 (Berman, 1985).

The goal of this paper is to help explain why there is such variation in the timing and nature of passive acquisition across languages.¹ As an illustrative example I focus on Sesotho, a southern Bantu language where the topic orientation of subjects requires the extensive use of passives, and where spontaneous acquisition data point to early comprehension and production of passives. After outlining the structure of the Sesotho passive and the topic orientation of subjects, I examine Sesotho-speaking children's spontaneous use of passives. I conclude that the acquisition of the passive constructions is closely tied to the grammatical role that passives play in a given language.

The grammatical structure of the Sesotho passive²

Basic word order in Sesotho is SVO, as shown in (1).

(1) (S) sm-(tense/aspect)-(obj)-Verb-(prf)-mood (O)

Sesotho is a pro-drop language; when the lexical subject is deleted the subject-verb agreement marker (sm) functions as the subject of the sentence. Notice that the sm agrees in noun class with the lexical subject in (2) (both *Thabo* and the sm are noun class 1).

[1] Throughout this discussion I restrict my comments to verbal or syntactic passives, i.e. those constructions which are generally thought to be derived through the promotion of object to subject position and the incorporation of passive morphology into the verb, etc. (Chomsky, 1981). This contrasts with the derivation of adjectival passives where no 'movement' takes place. The reader is referred to Demuth (1989) for further discussion of these issues and their consequences for acquisition.

[2] I restrict my discussion in this paper to an investigation of morphological passive only; the neuter or stative construction *-eha* (*rat-eha* 'be lovable') is not included.

- (2) (Thabo) o-pheh-il-e lijo³
 (1:T) 1-sm-cook-prf-m 8:food
 (Thabo)/he cooked some/the food.

Sesotho passive formation is similar to that of English: the object is promoted to subject position, the verb takes on a passive morpheme (-o- or -uo- (phonetically [w] or [uw])), and the original subject can optionally appear as the object of a by-phrase (see Demuth, 1989 for further detail). This is illustrated in (3).

- (3) Lijo li-pheh-il-o-e (ke Thabo)
 8:food 8:sm-cook-prf-PASS-m (by 1:T)
 The food was cooked (by Thabo).

Like some other Bantu languages (e.g. Kinyarwanda, see Kimenyi, 1980), Sesotho has a very productive passivization process whereby it can passivize almost any object. Thus, in the case of double-argument verbs, the dative object (or goal) can also be promoted to subject position, as shown in (4).

- (4) Mpho o-pheh-ets-o-e lijo (ke Thabo)
 M sm-cook-apl/prf-PASS-m food (by T)
 Mpho was cooked some/the food (by Thabo).

Sesotho also has impersonal passives which are similar, in some respects, to those described for German and Dutch (Perlmutter, 1978) (though see Machobane, 1987; Demuth, 1987). An example is given in (5).

- (5) Ho-j-uo-a litapole (ke batho)
 ho-eat-PASS-m potatoes (by people)
 There is eaten potatoes/Potatoes are eaten (by people).

However, unlike English, where passives are ambiguously verbal or adjectival, Sesotho passives are verbal; Sesotho has no adjectival passive (Demuth, 1989).

[3] Lesotho orthography is used throughout with the exception of second person singular subject marker *u*, rendered here as *o* (phonetically identical to third person singular subject marker, except for tone). Tone is not marked here due to problematic marking of tone on some child utterances. The present tense *sm* assumes an *-a* when the verb is final in the verb phrase. Gloss abbreviations are as follows: *apl* = applicative/benefactive, *cop* = copula, *dem* = demonstrative pronoun, *fut* = future marker, *ho* = impersonal marker, *inf* = infinitive, *m* = mood, *neg* = negative marker, *obj* = object clitic, *PASS* = passive, *pn* = independent pronoun, *pos* = possessive, *pot* = potential, *prf* = perfective, *pst* = past tense, *pst-cont* = past continuous tense, *rel* = relative marker, *sm* = subject-verb agreement marker, *wh* = question word, ($\times 4$) = 4 consecutive utterances, 8 = noun class 8.

In this section I have briefly reviewed the formation of active and passive constructions in Sesotho. In the following section I discuss the acquisition of Sesotho passives.

THE ACQUISITION OF SESOTHO PASSIVE

The data for this study were compiled over a two-year period of research in rural Lesotho (Demuth, 1984) and constitute 48 hours of spontaneous child interactions with adults, peers and older siblings. Oral recordings were transcribed with the assistance of mothers and grandmothers of the children. Four children were recorded at monthly intervals over one year. The data consulted for this study include 10 sessions for Hlobohang (2;1-3;0) and Litlhare (2;1-3;2), three sessions for Keneuoe (2;6-2;9), and four sessions for Tsebo (3;9-4;1). An adult sample of caregiver speech was taken from four adults interacting with Hlobohang at 2;1 years. Each session consisted of three to four hours of audiotaping. The Appendix provides a synthesis of the different verbs and types of passive constructions used. A complete listing of the data is given in Demuth (1989).

While the actual number of passives is small and exhibits both inter- and intra-speaker variation, a common artifact of spontaneous speech sampling, the data are suggestive of the children's overall use of passives. I have arbitrarily pooled the data into two to four month intervals in an attempt to identify certain developmental trends. Consider Table 1.

Table 1 shows that there is a gradual increase between two years and four years in the frequency with which passives are used. Interestingly early spontaneous use of Sesotho passives is approximately three times greater than that of English.⁴ This finding is interesting from two different perspectives. First, it makes a study of Sesotho spontaneous passives more fruitful than a study of spontaneous passives in English, where passives are difficult to find. Secondly, the higher percentage of spontaneous passives in

[4] A preliminary, very rough calculation based on the number of passives used per hour of spontaneous speech indicates that English-speaking children use passives at an approximate rate of 0.6 per hour, while Sesotho-speaking children use them at a rate of 1.7 per hour, almost three times as much. Calculations for English are based on approximately 70 hours of speech by Adam (3;1-4;11) [72 passives] and 110 hours of speech by Sarah (3;1-5;1) [32 passives], totalling 180 hours/104 passives for a rate of 0.6 passives per hour (Pinker *et al.*'s 1987 investigation of the spontaneous use of passives by children in Brown's 1973 study). For Sesotho, with a total of 84 hours for all the Sesotho speaking children studied (2;1-4;1) there were a total of 139 passives, yielding a rate of 1.7 passives per hour. This estimate is probably LOW for Sesotho, as 70 hours of the data is for children between the ages of 2;1 and 3;2, when passive production was much lower than a year later: A more accurate comparison of passive use in the two languages would involve the same number of children of the same ages conversing in similar discourse contexts with a relatively equal number of utterances.

SUBJECT, TOPIC AND SESOTHO PASSIVE

TABLE 1. *Total number and percent of Sesotho passives (from Demuth, 1989)*

Interval Age	1 2;1-2;3	2 2;4-2;6	3 2;7-2;9	4 2;10-3;2	5 3;9-3;10	6 4;0-4;1	Adult caregivers
No. of utterances	1704	2925	3307	3159	1520	1603	386
No. % of passives	6/0.4	11/0.4	33/1.0	27/0.9	32/2.1	30/1.9	23/6.0

early Sesotho speech indicates that the passive may play a much more important role in the grammar of Sesotho than it does in languages like English.

In the following sections I will show that the passive should be EXPECTED to be much more frequent in both adult and child Sesotho than the passive is in English.

THE ROLE OF PASSIVE IN SESOTHO GRAMMAR

As shown in (4), Sesotho has the potential for passivizing both accusative and dative objects, thus increasing the opportunities for use of the passive construction. This may account, in part, for the observation that passive constructions are quite productive in Bantu languages (Keenan, 1985). On these grounds alone we might expect children acquiring Bantu languages to use passive earlier and with greater frequency than English-speaking children.

However, the passive features especially prominently in certain Bantu languages: grammars of languages in the closely related Sotho Group, including Sesotho (Southern Sotho) (Doke & Mofokeng, 1957; Paroz, 1959), Setswana (Cole, 1955) and Sepedi (Northern Sotho) (Louwrens, 1981) note that passives are much more frequently used in these languages than in languages like English. The high frequency of passives in certain Bantu languages appears to be the result of a typological feature I will call topic orientation. By topic-oriented I do not mean to imply clause-external 'topic-prominence' (preposed topics, topicalization), as originally developed in Li & Thompson (1976) and as found in various dialects of Chinese, but rather CLAUSE-INTERNAL topic position which is grammaticized as subject.⁵ The topic-orientation of Sesotho subjects becomes readily apparent when one considers the constraints placed on Sesotho question formation.

[5] Robert Van Valin has pointed out that this grammaticalized clause-internal topic corresponds precisely with the notion of 'pragmatic pivot' in Role and Reference Grammar (Foley & Van Valin, 1984).

Question words (*who, what, etc.*) contrast with definite noun phrases in that they represent indefinite or new information. For theories of grammar that incorporate functional aspects of grammar, such as Role and Reference Grammar (Foley & Van Valin, 1984) or Lexical Functional Grammar (LFG) (e.g. Bresnan & Mchombo, 1987), the distinction between definite, given NPs and new, indefinite (or questioned) NPs is a critical one. While many of the world's languages allow for the questioning of either subject (*Who bought those shoes?*) or object (with wh-aux inversion in English – *What did you see?*), some languages, like those of the Sotho group, do not allow the questioning subjects.

- (6) *Mang o-o-shap-il-e?
 who sm-obj-lash-prf-m
 Who lashed you?

Louwrens (1981) demonstrates clearly the link between the discourse functions of given and new information and the grammatical status of NPs in languages like Sepedi (Northern Sotho), showing that only old, given, or 'topical' information is allowed in subject position. The fact that question words are not allowed in subject position shows that they are not topical information.

If a subject is to be questioned, it can only be questioned in a passive construction from a by-phrase, as shown in (7). The focused or contrastive alternative is to question a subject from a cleft construction, as in (8).

- (7) O-shap-il-o-e ke mang?
 sm-lash-prf-PASS-m by who
 You were lashed by who?
- (8) Ke mang ea o-shap-il-e-ng?
 cop who rel obj-lash-prf-m-rel
 It's who that lashed you?

Thus, there is an important typological distinction between those languages that have topic-oriented subjects, and those that do not: topic-oriented languages (e.g. Sesotho, Zulu) will disallow the questioning of subjects *in situ*, while others (e.g. English, Chichewa) will not. The consequence of this grammatical constraint on topic-oriented languages entails an increase in use of alternative grammatical constructions, such as passives and clefts, where the relevant NPs can be questioned.

Thus, Sesotho subject position selects for the argument which has already been mentioned and is therefore the theme or topic of the discourse. Conversely, arguments which are introduced into the discourse for the first time are selected for object position. Even in cases where the new noun is also the agent, a passive construction is highly preferred. Consider (9) where the

grandmother (MM) asks a question using an active verb, and the child (H) provides the answer with the passive of a different verb. Hlobohang (3;0) is drinking a corn drink called *motoho*.

- (9) (a) MM O-o-nk-il-e kae?
 sm-obj-get-prf-m where?
 Where did you get it from?
 (b) H Ke-o-f-uo-e ke ausi Linaese
 sm-obj-give-prf PASS-m by sister L.
 I was given it by sister Linaese.

Note here the child's choice of a passive construction in (9b): rather than replying with the active of the modelled verb (*Ke-o-nkile ho Linaese* 'I got it from Linaese') or selecting the active of 'give' (*Linaese o-m-phile oona* 'Linaese gave it to me'), as would be expected in English, he uses the passive of *fa* 'give'. In so doing, he maintains himself as both subject and topic, introducing the new argument (and agent) *Linaese* as an oblique object.

It is not clear how and when Sesotho-speaking children learn that their language encodes topics as subjects, but examples like (9) and the lack of overgeneralized subject questions indicates that it must be early. I suggest that an early awareness of the topic-oriented nature of Sesotho facilitates the early acquisition of passive.

We have seen that passives are frequent in Sesotho because (1) most objects, and therefore most verbs, can passivize and (2) the topic orientation of Sesotho forces the use of passive constructions where other languages might use active constructions. In other words, the passive is a very basic (see Keenan, 1976), canonical grammatical construction in Sesotho; without the passive the grammar of Sesotho would have to be radically restructured. The passive plays a much more important grammatical role in Sesotho than it does in Hebrew, for instance, where adjectival passives and middle constructions fulfil some of the same discourse functions (Berman, 1985). We would expect Sesotho-speaking children to use passives earlier and with greater frequency than their Hebrew-speaking peers.

I move now to a consideration of how passives are used in speech directed toward young Sesotho-speaking children, and how this might further influence the early acquisition of Sesotho passives.

CAREGIVER USE OF PASSIVES

While adult caregiver speech is not necessarily representative of adult Sesotho discourse in general, it nevertheless provides some insight into the types of passives young Sesotho-speaking children typically hear. It is therefore interesting to find that adult caregivers, during conversations with Hlobohang (2;1), used passives in approximately 6% of their verbal

utterances. Thus, Sesotho-speaking children have early and ample practice with comprehending passives.

Given the role of passives in the formation of questions, and the questioning nature of caregiver speech (Demuth, 1984), we should predict that young Sesotho-speaking children would receive as input an abundance of passive questions. This is the case: 73% of the caregiver passives were questions. Interestingly, Suzman (1987) reports similar findings from Zulu caregiver speech. The following question routine illustrates a great-aunt's alternating use of passive and cleft questions during an attempt to elicit a response from Keneuoe (2;6).

- (10) (a) O-'la-shatjo-a ke mang?
sm-pst-lash/PASS⁶-m by who
You were lashed by who?
- (b) Ke mang a n'a-o-shap-a? (x 2)
cop who rel pst-cont/sm-obj-lash-m
It's who that lashed you?
(another child tries to prompt K)
(K tries to respond)
- (c) O-n'o shatjo-a ke nkhono mang?
sm-pst-cont/sm-lash/PASS-m by old lady who
You were lashed by which old lady?
- (d) Ke mang a n'a-o-shap-a nkhono?
cop who rel pst-cont/sm-obj-lash-m old lady
It's who that was lashing you, the old lady?
(K tries to respond)
- (e) E? Nkhono a n'a-o-shap-a ke mang? E?
wh old lady rel pst-cont/sm-obj-lash-m cop who wh
Uh? The old lady that was lashing you is who? Uh?
(K finally answers)

Note the full (*by*-phrase) passives in (10a) and (10c), alternating with cleft constructions in (10b), (10d) and (10e). A full 57% of all caregiver passives in this sample were full passives. Thus, Sesotho-speaking children have significant opportunity for practice with comprehending not only passive questions, but *by*-phrases as well. I turn now to an investigation of the types of passive young Sesotho speakers use.

[6] The passive morpheme triggers a palatalization process whereby certain preceding consonants are permuted, in this case $p > tj$. In such cases the passive morpheme has not been separated morphologically from the stem.

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TABLE 2. *Types of passives (no. proportion of total passives) (from Demuth, 1989)*

Interval Age	1 2;1-2;3	2 2;4-2;6	3 2;7-2;9	4 2;10-3;2	5 3;9-3;10	6 4;0-4;1	Adult caregivers
No. of passives	6	11	33	27	32	30	23
Full	2/33.3	5/45.5	8/24.2	7/25.9	5/15.6	4/13.3	13/56.5
Short	4/66.7	6/54.5	14/42.4	17/63.0	17/53.1	17/56.7	7/30.4
Impersonal	0	0	11/33.3	3/11.1	10/31.3	9/30.0	3/13.0

TYPES OF PASSIVES USED BY SESOTHO-SPEAKING CHILDREN

A closer look at the types of passives Sesotho-speaking children use provides additional insight into how passive constructions are acquired, not only in Sesotho, but in other languages as well. Table 2 gives a breakdown (as a proportion of total passives) of the types of passives produced at different points in the acquisition process.

The data in Table 2 are interesting for a number of reasons. First, they provide insight into how the acquisition of passive in Sesotho differs from the acquisition of passive in English, helping us to revise long held and/or controversial proposals for the how and why English passive has exhibited the acquisition patterns that it has. Secondly, the Sesotho findings tell us more about how passives are acquired in Sesotho itself, and help us make predictions about the course of passive acquisition in other languages. I will devote the remainder of the paper to an exploration of these issues, referring to intervals 1 and 2 as Stage I (2;1-2;6; $n = 17$), intervals 3-4 as Stage II (2;7-3;2; $n = 60$), intervals 6-7 as Stage III (3;9-4;1; $n = 62$).

Full and reversible passives

The spontaneous Sesotho acquisition data show that full passives, all of which are also reversible passives (Slobin, 1966), constitute a larger proportion of all passives used at Stage I than at Stage II or Stage III. This would indicate that there is nothing in principle difficult about producing full nor reversible passives. The relatively high proportion of full/reversible passives at Stage I is most likely a reflection of the rich use of full/reversible passive questions by caregivers (e.g. 'You were bought it by who?'). The fact that full/reversible passives are appropriately comprehended and produced even by 2;2 (Demuth, 1989) indicates that these forms are probably an accessible grammatical construction to Sesotho-speaking children. Example (11) is a typical instance, where Keneuoe (K) is talking to a woman neighbour

(M), fantasizing with her about going to town in an airplane. When asked who is going to fly the plane, Keneuoe (2;6) says SHE will.

- (11) M (a) Se-khann-o-a ke mang sefofane?
 sm-drive-PASS-m by who airplane
 It will be driven by who, the airplane?
 K (b) Se-khann-o-a ke 'na.
 sm-drive-PASS-m by me
 It will be driven by me.

The early comprehension and production of Sesotho full/reversible passives is interesting in view of the fact that English-speaking children reportedly avoid *by*-phrases until late in language acquisition (Horgan, 1978). This might be expected if one accepts the observation that English passives are generally used without the *by*-phrase (Givón, 1979). However, Pinker, Lebeaux & Frost (1987) note that the use of *by*-phrases is probably tied closely to the type of discourse task at hand. Preliminary reports from English story-telling tasks, where most of the children's passives were full passives rather than short passives, confirms that this may be the case (Slobin, personal communication). Further research is needed in this area, but I suggest that the acquisition of the *by*-phrase is highly influenced not only by (1) the particular discourse situation in which the passive is used (in both English and Sesotho *by*-phrases will be more or less important depending on the discourse situation), but also on (2) the role that passive plays in the language. In Sesotho the subject must be the discourse topic. This means that newly introduced agents become oblique objects in a passive construction, i.e. a full passive results. Thus, full/reversible passives are a highly significant grammatical construction in Sesotho. That these constructions may be more difficult for and/or simply used less in daily discourse by English-speaking children tells us more about the structure of English and the discourse function of different passive constructions than it does about the innate linguistic capacities of the child.

Passive and the argument structure of verbs

Maratsos *et al.* (1979) and Maratsos, Fox, Becker & Chalkley (1985) have noted that there are semantic constraints on the types of verbs speakers tend to passivize most readily. In particular, English-speaking children find activity or change-of-state verbs easiest to comprehend and produce. Pinker *et al.* (1987) also predict that learning of the passive with action verbs should occur early and with few problems. The spontaneous Sesotho passives also consist primarily of action verbs, including several reversible verbs, none of which appears to cause acquisition problems (see Appendix). However, (12) shows a striking example of Tsebo (3;10) grappling with the verb *feta*

'surpass' in a comparative construction, alternately reversing subject and object. Tsebo (T), her mother (M), and the researcher are picking out stones from wheat that is to be ground up for bread flour. T has been cooperative in helping while the researcher talks, rather than running off to play with her friend Nkeletseng. When T's mother tells her she is a big girl for chatting so nicely, T agrees:

- (12) (a) T M...Ebileng ke-fet-o-a ke Nkeletseng.
 yes in fact sm-surpass-PASS-m by Nk
 Yes. In fact I'm surpassed by Nkeletseng.
 (*Mother ignores T...*
A little later – still picking out stones...)
- (b) T Ebile o-tseba 'me, o-tseba Nkeletseng o-fet-o-a ke 'na.
 in fact sm-know mother sm-know Nk sm-surpass-PASS-m by
 me
 In fact, you know, mother, you know Nkeletseng is surpassed
 by me.
 (*Mother accuses T of being tired, T protests*)
 (5 minutes later)
- (c) T 'Me a-bona ke-se ke-le moholo, ke-fet-o-a ke Nkeletseng.
 mother sm-see sm-already sm-cop big sm-surpass-PASS-m
 by Nk
 Mother, you see, I'm already big, I'm surpassed by Nke-
 letseng.
- (d) M O-fet-o-a ke Nkeletseng, kapo o-fet-a Nkeletseng?
 sm-surpass-PASS-m by Nk or sm-surpass-m Nk
 You are surpassed by Nkeletseng, or you surpass Nkeletseng?
- (e) T Kea-mo-fet-a...ke-feta...Nkeletseng o-fet-o-a ke'na,
 sm-obj-surpass-m sm-surpass Nk sm-surpass-PASS-m
 by me
 I surpass her... I surpass...Nkeletseng is surpassed by me,
- (f) kea, kea-mo-fet-a.
 sm sm-obj-surpass-m
 I, I surpass her.

Pinker *et al.* (1987) invoke Jackendoff's (1972) Thematic Hierarchy Condition to help explain certain errors in children's passive production. The Thematic Hierarchy Condition identifies a hierarchy of thematic relations ordered as

Theme > Location/Source/Goal > Agent

and specifies that objects of *by*-phrases must be lower on the hierarchy than subjects. Using this framework Pinker *et al.* (1987) note that easily passivized action verbs like 'hit' take the thematic relations (or argument structure)

agent-theme (i.e. the subject functions as the agent, while the object is the theme of the action). In contrast, the non-agentive verb 'surpass' exhibits the thematic relations theme-location. When passivized these roles are reversed, thereby violating the Thematic Hierarchy Condition, and possibly accounting for Tsebo's inappropriate reversals of subject and oblique object.

The fact that Tsebo correctly uses active verbs with reversible passives, but makes errors with the non-canonical verb *feta* 'surpass', would appear to confirm claims that active verbs passivize more easily than others. However, it is not clear if the difficulty in passivization of other verbs is due to violations of the Thematic Hierarchy Condition: Other versions of the ordering of thematic relations place location below theme in a hierarchy of thematic roles (e.g. Givón, 1984; Bresnan & Kanerva, 1989).

An alternative explanation for the problematic passivization of *feta* 'surpass' can be attributed to the topic orientation of Sesotho subjects. Closer examination of the discourse context in (12) indicates that some of Tsebo's confusion may come from the fact that she is trying to maintain the discourse topic in subject position. In (12a), when the conversation is initially centred around Tsebo herself, she maintains herself as subject and introduces the new referent *Nkeletseng* as the object. However, she has also selected the passive form of the verb, producing the opposite of the desired intention. Once *Nkeletseng* has been introduced in (12a), she (*Nkeletseng*) is no longer new information and can appear as the subject in (12b). The verb is again used in the passive, but this time the interpretation is consistent with that which Tsebo intended.

After a five-minute discussion of other matters the discourse topic is once again Tsebo herself, and she encodes herself as thematic subject with the verb still in the passive, rendering the erroneous (12c), similar to (12a). Tsebo's mother hears her this time and offers a correction in (12d), which Tsebo then clarifies in (12e), obviously understanding the semantic difference between the passive and active forms, but apparently wanting to maintain both the passive AND herself as thematic subject. She finally settles for the active form in (12f), still maintaining herself as discourse topic.

The difficulties exhibited in (12) appear to be influenced by a strong tendency to place discourse topic in subject position. The fact that *feta* 'surpass' is a reversible, non-action verb complicates the issue. It is not clear why Tsebo insists on selecting the passive form of *feta* 'surpass' rather than the active: Future experimental research on children's use of other reversible, non-action Sesotho verbs such as *nyala* 'marry' or *hlola* 'beat' (i.e. 'win') may help determine how the topic-orientation of Sesotho subjects interacts with the use of these verbs in the passive.

Impersonal passives

Unlike English, but somewhat like Dutch and German (Perlmutter, 1978), Sesotho also has impersonal passive constructions. Sesotho *ho* functions like an expletive in that it carries no semantic content; it is a non-referential 'dummy' subject. Impersonal passives like that in (13) constitute approximately one third of Tsebo's passives. Here Tsebo (3;10) is still talking with her grandmother as they pick out stones and imperfect grains from wheat which will later be ground and made into bread. Initially a short passive is used in (13*a*), followed by an impersonal passive in (13*b*).

(13) (a) 'Me...tse tjee ha...li-j-uo-e,
mother dem so neg sm-eat-PASS-m
Mother...these, can't...they be eaten?,

(b) ho-j-uo-a...tse...tjee feela?
ho-eat-PASS-m dem so only
Can only...these...be eaten?

No impersonal passives were found prior to 2;8-2;9, though each of the three younger children studied were using personal passive constructions before this point. There may be specific grammatical reasons for the later appearance of impersonal passives (Demuth, 1987), or it could be that the low frequency of adult input (13% of all passives) has some effect (see Appendix and Table 2). However, I suggest that the topic orientation of Sesotho subjects may also contribute to the later appearance of impersonal passives in that it clashes with the non-referential quality of the impersonal expletive *ho*. Impersonal constructions, with a lack of semantic content in apparent 'subject' position, and a generic or potential type of reading like that seen in (13*b*), may initially prove problematic for young children who prefer to maintain themselves or some other salient discourse topic as the subject of their utterances. This may be one of the reasons why no impersonal passives (except for lexicalized *ho thoe* 'it is said') were recorded before the age of 2;8.

DISCUSSION

One of the primary goals of linguistic theory has been to show that there is a unified and universal basis for linguistic structure. The logical outcome of this inquiry suggests that the mechanisms for learning linguistic structure will also be unified and universal. This would suggest that a construction such as the passive would be acquired in much the same way from one language to the next. We therefore need to address the question of why there is significant variation in how and when passives are acquired.

In this article I have tried to show how the course of passive acquisition can be influenced by the typological properties of the language under investigation. In particular, I have argued that the acquisition of the passive in Sesotho is early and robust not only due to the fact that Sesotho can passivize both accusative and dative objects, but also because of the topic orientation of Sesotho subjects. The Sesotho passive is therefore a very basic canonical construction for Sesotho-speakers in a way that it is not for speakers of English.

The typological explanation for the early acquisition of the Sesotho passive allows us to make certain predictions regarding the course of language acquisition. In particular, we should anticipate that languages which are typologically similar to Sesotho in their ability to passivize a wide range of objects and in the topic orientation of subjects should show passive acquisition patterns similar to that given here for Sesotho. This is in fact the case: Zulu is a topic-oriented language like Sesotho, i.e. it does not allow the questioning of subjects *in situ*. Suzman's (1985, 1987) reports on the early acquisition of passives in Zulu indicate that the process is similar to that of Sesotho. In contrast, Chichewa is a Bantu language that does allow for the questioning of subjects *in situ* (i.e. is not topic oriented), as well as for the passivization of various objects (Bresnan & Mchombo, 1987). We would therefore predict, all else being equal, the somewhat later acquisition of Chichewa passives than that found in Sesotho and Zulu, but probably earlier and more prevalent than that reported for English. Preliminary findings (Chimombo, personal communication) indicate that this may be the case.

Further research is needed on the grammatical status of passive constructions in other languages to determine how the typology of the language may affect the acquisition of passives. Pye (1988) notes the extensive adult use of passives (and antipassives) in the ergative language Quiche Mayan, and finds early acquisition of passives. It would be interesting to look more closely at the grammatical characteristics and acquisition of passives in Malayo-Polynesian languages where passives are extremely salient, some languages having more than one type of passive construction (e.g. Malagasy, see Keenan, 1976). While frequency alone is not sufficient to predict early acquisition, this group of languages should provide fertile ground for further investigation into the universal aspects of passive acquisition. On the other hand, we know that in languages like Hebrew, where middle constructions and adjectival passives play an important grammatical role and verbal passives are rarely used, even by adults, the acquisition of passive is late and its use infrequent (Berman, 1985).

A given grammatical construction will be more or less available to the child for linguistic processing depending on (1) the linguistic readiness of the child, and (2) how the construction interacts with the rest of the grammar of the language. It is not simply that certain languages present the child with

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more ample amounts of positive evidence than do others (though frequency probably facilitates the process), but that certain constructions are more central to the grammar of some languages than they are to others. It is the interaction between linguistic capabilities and grammatical functions that will determine how and when certain constructions will be acquired. In languages like English, which are more subject-oriented, there is a greater propensity to maintain agents in subject position, and active constructions result. In languages where subjects select for discourse topic rather than agent, children must acquire the ability to comprehend and produce passives before they can ask and answer simple questions such as *Who ate the cake?*.

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APPENDIX : SESOTHO PASSIVES

Child and age	Number of utterances ^a	Impersonal <i>ho</i>	Short (no <i>by</i> -phrase)	Full (<i>by</i> -phrase)
H 2;1	305	—	<i>fa</i> give (2) ^o <i>ntsa</i> take out	<i>ntsa</i> take out <i>rekela</i> buy for
H 2;4	360	—	—	
H 2;6	509	—	<i>bula</i> open <i>reka</i> buy	
H 2;8	443	<i>etsa</i> do/make	<i>ntsa</i> take out <i>qhoela</i> choke <i>rekela</i> buy for <i>tsipa</i> pinch <i>tsoara</i> grab	<i>shapa</i> lash
H 2;9	432	—	—	<i>fa</i> give
H 3;0	540	<i>lila</i> plaster (2)	<i>bilikisa</i> make turn <i>fefola</i> blow <i>koaela</i> cover <i>kuta</i> trim hair <i>lahla</i> throw away <i>phunya</i> puncture <i>phusha</i> push <i>shapa</i> lash <i>tantelisa</i> twist <i>thiba</i> prevent <i>tlama</i> tie up <i>tena</i> tire	<i>fa</i> give <i>felela</i> empty of (2) <i>thiba</i> prevent
L 2;2	462	—	<i>fa</i> give (2) <i>khama</i> choke	<i>fa</i> give
L 2;4	480	—	—	
L 2;6	551	—	—	<i>noka</i> season
L 2;8	439	—	<i>hlaba</i> slaughter (2)	
L 2;9	908	<i>etsa</i> do/make <i>hleka</i> clean up <i>tsela</i> pour		
L 2;10	692	—	<i>seha</i> cut	
L 3;2	874	<i>ea</i> go	<i>rekela</i> buy for <i>roma</i> send <i>shapa</i> lash <i>shapa</i> lash	<i>ruta</i> teach (2) <i>tentsa</i> dress
K 2;6	241	—		<i>khanna</i> drive <i>shapa</i> lash (2) <i>hlaba</i> stab (2) <i>kuta</i> trim
K 2;8	354	<i>bina</i> sing <i>heletsa</i> break down <i>hata</i> step on <i>pheha</i> cook <i>shapa</i> lash <i>tsamaea</i> leave	<i>hlatsoa</i> wash (2) <i>kuta</i> trim <i>shapa</i> lash (4)	
K 2;9	327	—	—	<i>kuta</i> trim <i>pepa</i> carry on back (2)
T 3;9	539	<i>apara</i> put on/wear <i>lila</i> plaster <i>qeta</i> finish <i>tlosa</i> remove	<i>beha</i> put (2) <i>ebola</i> peel <i>ja</i> eat	

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APPENDIX (cont.)

Child and age	Number of utterances ^a	Impersonal <i>ho</i>	Short (no <i>by</i> -phrase)	Full (<i>by</i> -phrase)
T 3;10	981	<i>ea</i> go (2) <i>ja</i> eat <i>tlosa</i> draw out	<i>etsa</i> do/make <i>fa</i> give <i>ja</i> eat (2) <i>khetha</i> pick out (3) <i>lahla</i> throw away <i>pheha</i> cook (4) <i>thula</i> knock out	<i>feta</i> surpass (4) <i>liela</i> fell
T 4;0	588	<i>bina</i> sing <i>koala</i> close off <i>lahla</i> throw away (3) <i>robala</i> sleep	<i>beha</i> put <i>besa</i> roast <i>lahla</i> throw away <i>lefa</i> pay <i>letsa</i> turn on <i>shapa</i> lash	
T 4;1	1015	<i>besa</i> kindle <i>etsa</i> do/make <i>reka</i> buy	<i>beha</i> put (2) <i>fasa</i> fasten <i>hleka</i> clean up <i>kena</i> enter into (2) <i>mena</i> fold <i>ngola</i> write <i>nka</i> pick up <i>roma</i> send <i>thuntsela</i> get dusty	<i>fa</i> give <i>hlatsoela</i> wash for <i>phoqa</i> mock <i>pitla</i> hit
Adults	386	<i>bina</i> sing <i>etsa</i> do/make <i>hama</i> milk	<i>besa</i> roast <i>bitsa</i> call <i>fa</i> give <i>hama</i> milk <i>rata</i> love <i>shapa</i> lash (2)	<i>bitsa</i> call <i>ebolela</i> peel for <i>fa</i> give (4) <i>nka</i> pick up <i>ntsa</i> take out (2) <i>qabola</i> quarrel <i>qala</i> attack <i>rekela</i> buy (2)

^a total number of utterances containing verbs (including imperatives). ^b(2) passive verb used in two or more non-consecutive and/or non-identical utterances.