

PASSIVIZATION AND A'-MOVEMENT IN SHONA*

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1. Introduction

Passivization is typically viewed as a two-pronged process. In a passive construction, the canonical direct object is elevated to the subject position of a sentence, and additionally, the canonical subject is either deleted or demoted to an oblique position. In Shona (Narrow Bantu), the passive is much more versatile, in that not only canonical direct objects, but other internal arguments, as well as adjuncts, can appear as the subject of a passive sentence.

In this paper, we propose that the Shona passive is a backgrounding operation acting solely to demote the agent of a sentence (Foley and Van Valin 1985), rather than to promote or foreground an internal argument. We treat the movement of objects (and adjuncts) to the subject position as an independent phenomenon, merely made visible in the passive environment. Under our analysis, all subjects in Shona occupy an A' topic position. In an active sentence, the agent at Spec, TP moves string-vacuously into the specifier of a topic position in the left clause periphery, Spec, Top(ic)P. In a passive, on the other hand, the agent is not an eligible topic, and as a result, a *v*P-internal DP topicalizes to the left edge of the clause. The apparent passivization operation is analyzed as an A'-movement to satisfy an EPP feature of the Top head.

The paper is organized as follows. In §2, we present our arguments for the claim that passivization in Shona is not an A-movement. §3 deals with the conflation of subjects and topics in Bantu generally, and §4 outlines our analysis of subject as topic for Shona. Our formal analysis of the Shona passive is presented in §5, and the interplay between passive and topicalization is discussed in §6. Finally, §7 presents our final conclusions and lays out avenues for future work.

2. Passivization in Shona is not A-Movement

In Shona, passivization is indicated by the morpheme *-w* affixed to the verb stem¹:

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¹ Unless otherwise specified, all data are from the authors' fieldwork with a native speaker of the Karanga dialect. Abbreviations are as follows: 1,2,3... = Noun Class 1, 2, 3, ...; AGR(eement); APPL(icative); CL(ass); FV = final vowel; IMP(erfective); INF(itive);

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- (1) a. Shingi a-ka-bik-a ma-nhanga.
 Shingi AGR1-PST-cook-FV CL6-pumpkins
 ‘Shingi cooked pumpkins’
- b. Ma-nhanga a-ka-bik-w-a na-Shingi.
 CL6-pumpkin AGR6-PST-cook-PASS-FV by-Shingi
 ‘Pumpkins were cooked by Shingi’

On the surface, the Shona passive has the appearance of a typical passive. The subject in (1a) emerges in a *by*-phrase in (1b), and the theme has become the subject of a passive-marked verb. However, in cases where there is more than one internal argument of a predicate, Shona allows either of them to emerge as the subject when the predicate is passivized. This is illustrated in (2), where the predicate *bik* ‘cook’ has been extended using the applicative marker *-ir*, adding an applicative object:

- (2) a. Shingi a-ka-bik-ir-a Mufaro ma-nhanga.
 Shingi AGR1-PST-cook-APPL-FV Mufaro CL6-pumpkin
 ‘Shingi cooked pumpkins for Mufaro.’
- b. Mufaro a-ka-bik-ir-w-a ma-nhanga na-Shingi.
 Mufaro AGR1-PST-cook-APPL-PASS-FV CL6-pumpkin by-Shingi
 ‘For Mufaro were cooked pumpkins by Shingi.’
- c. Ma-nhanga a-ka-bik-ir-w-a Mufaro na-Shingi.
 CL6-pumpkin AGR-PST-cook-APPL-PASS-FV Mufaro by-Shingi.
 ‘Pumpkins were cooked for Mufaro by Shingi.’

In (2b), the applicative object moves into subject position, and in (2c), the theme does so. This is a free alternation, conditioned only by discourse factors, a matter to which we return below. At this point, the flexibility shown by the passive constructions in (2) clearly demonstrates that passive in Shona does not target a specific argument for elevation into the subject position.

In fact, the data shows that the Shona passive is even more permissive. Not only does it allow for different arguments to be elevated, it allows for non-arguments to move from adjunct positions into the subject position. We show this in (3) and (4) using a companion adjunct, and a locative adjunct, respectively.

- (3) a. Mu-rume a-ka-famb-a no-mu-kadzi wake.
 CL1-man AGR1-PST-walk-FV POSS-CL1-woman with
 ‘The man walked his wife.’

NOM(inative); NEG(ative); PASS(ive); PERF(ective); PL(ural); POSS(essive); PST = past tense;
 SG = singular; STAT(ive); TOP(ic)

- b. Mu-kadzi a-ka-famb-w-a na-iye no-mu-rume
 CL1-woman AGR1-PST-walk-PASS-FV by-3SG by-CLAS1-man
 ‘The woman was walked with by the man’
- (4) a. Mu-rume a-ka-famb-a mu-sango.
 CL1-man AGR1-PST-walk-FV CL18-forest
 ‘The man walked in the forest’
- b. Mu-sango m-aka-famb-w-a no-mu-rume
 CL18-forest AGR1-PST-walk-PASS-FV by-CL1-man
 ‘In the forest was walked by the man’

In (3), the companion DP *mukadzi* ‘woman’ emerges as the subject when the intransitive predicate *famb* ‘walk’ is passivized. Similarly, in (4), the locative DP *musango* ‘in the forest’ becomes the subject of the sentence.

While there is considerable flexibility in terms of what can appear as the subject of a passive sentence, it is not the case that simply anything can be passivized.

- (5) a. Mu-rume a-ka-famb-a mangwanani.
 CL1-man AGR1-PST-walk-FV in the morning
 ‘The man walked in the morning.’
- b. * Mangwanani a-ka-famb-w-a no-mu-rume.
 in the morning AGR1-PST-walk-PASS-FV by-CL1-man
 ‘In the morning was walked by the man.’

In (5), the temporal adjunct *mangwanani* ‘in the morning’ cannot be elevated to the subject of the sentence, showing that there are indeed still limits on what can be passivized.

What is important to note here is that the division between what can and cannot be passivized is not strictly cut along an A/A’ distinction. While there are some limits, Shona clearly allows for non-arguments to be passivized. This distribution is incompatible with the classic view of the passive as a function on arguments. As such, passivization in Shona cannot be characterized as an A-movement. Instead, we will show that what appears to be passivization is indeed A’-movement. First though, in §3, we clarify the nature of this A’-movement.

3. “Subject” = “Topic”

For at least the past thirty years, there has generally been a persistent connection between the concepts of “subject” and “topic” within the Bantu language family (Givon 1976; Demuth and Harford 1999; Simango 2006). We claim that this is indeed the case for Shona, and that sentential subjects are in fact topics.

To test whether or not the sentential subject in Shona is tied to topicality, we employ a diagnostic using *wh*-questions. In a *wh*-question/answer sequence, the response corresponding to the questioned *wh*- item is new information, and can therefore be considered focal (rather than topical.) When questioning an object, the object in the response appears in its canonical post-verbal position.

- (6) a. Shingi a-ka-don-er-a payichi?
 Shingi AGR1-PST-fall-APPL-FV what
 ‘What did Shingi fall on?’
- b. Shingi a-ka-don-er-a pasi.
 Shingi AGR1-PST-fall-APPL-FV ground
 ‘Shingi fell on the ground.’

As shown in the above example, no special sentence structure is required to respond to a *wh*-question that questions the object.

However, when questioning the subject of a sentence, a different pattern emerges.

- (7) a. Ndiyana a-ka-bik-a ma-nhanga?
 Who AGR1-PST-cook-FV CL6-pumpkin
 ‘Who cooked the pumpkins?’
- b. Ndiye Shingi a-ka-bik-a ma-nhanga.
 It was Shingi AGR1-PST-cook-FV CL6-pumpkin
 ‘It was Shingi who cooked the pumpkins.’

In order to respond to a *wh*-question in which the canonical subject is new information, a cleft structure must be used, avoiding the structure wherein the subject of the sentence is focused.

- (8) # Shingi a-ka-bik-a ma-nhanga.
 Shingi AGR1-PST-cook-FV CL6-pumpkin
 ‘Shingi cooked the pumpkins.’

The above sentence is fully grammatical. However, it is unacceptable as a response to a subject *wh*- question. Given that there is nothing syntactically ill-formed about this sentence, we conclude that there is something in the information structure making it unacceptable.

From this, we propose that topicalization is grammaticized in Shona. Unlike languages like English, where the connection between subjecthood and topicality is a violable pragmatic effect, topicalization in Shona appears to be a mandatory process, hardwired into the syntax. In the next section, we present a detailed analysis of this phenomenon.

4. Formalizing the Subject=Topic Hypothesis

We have proposed that topicalization in Shona is formally required in the syntax. In this section, we flesh out this proposal, giving an account of how this can be implemented under a Minimalist framework.

Following Rizzi (1997), we assume that the left clausal periphery (the CP domain) contains an articulated set of functional heads. Specifically, we assume that the clausal structure in Shona contains a Top(ic) head, which projects to a TopP within the CP domain. It is the presence of this projection that drives the topicalization seen in Shona. To account for the connection between topics and subjects in the language, we further propose that the Top head bears an EPP feature that requires a DP to move to Spec, TopP. To satisfy this feature, a topic must always appear in the left clausal periphery.

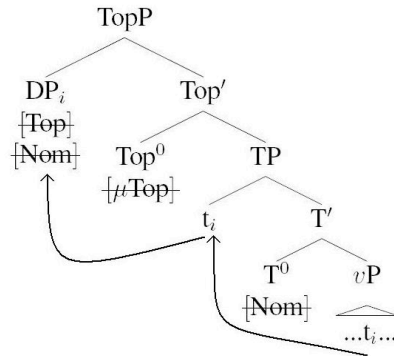
Following Adger (2003), we assume that nominative case and EPP are distinct features. We capitalize on this distinction, recognizing these features on different functional heads. Following standard theory, we assume nominative case is on T. However, as stated, we claim that the EPP is not on T, but rather on Top. Thus, under our analysis, Shona is crucially distinct from languages like English in that features which are generally assumed to be conflated on the same functional head are split across two heads.

Because both heads bear uninterpretable features, both trigger movement. The uninterpretable *nom* feature on T is checked by the closest DP with a matching interpretable feature. To satisfy this checking requirement, the highest argument from the *vP* domain is raised to Spec, TP. Additionally, the EPP on Top attracts the closest DP to Spec, TopP.

In the default case (i.e. an active sentence), the external argument satisfies both the nominative case checking requirement and the EPP in a two-step process. The external argument, being the highest argument in the *vP* domain, checks nominative case in T, and also checks the EPP on Top. As such, movement of this DP from Spec, TP to Spec, TopP is string-vacuous. This derivation is illustrated in the tree (9).²

² Note that our proposal of a TopP for a Bantu language is not new to our proposal: a similar analysis is presented in Simango (2006), in which a TopP in the CP domain is posited to account for object relatives in ciNsenga.

(9)



Importantly, we propose that it is in fact the Topic position, rather than Spec, TP which is the locus of “subject-verb” agreement. Starting with Givón (1976), it has been claimed that subject-verb agreement arises out of topic-verb agreement, and that effectively the two cannot be distinguished. To connect this to a more recent line of research within the Bantu family, we turn to argumentation and data from Demuth and Harford (1999). They argue that agreement can be considered a diagnostic for subjecthood; whatever shows “subject” agreement with the verb must, in their analysis, be the logical subject of the verb. They first discuss data from Sesotho, in which they claim that a topicalized locative shows subject agreement:

- (10) Maseru ho-ile basadi kajenio
 Maseru AGR17-go/PERF 2women today
 ‘To Maseru, they went today, the women.’

Discussion of this example is followed by data from Shona, in which a locative has moved into the sentential subject position under passivization.

- (11) Mumba m-a-tand-w-a vhanu.
 18house CL18-PST-chase-PASS-FV 2people
 ‘In the house were chased out people.’

They also present data from Dzamba which shows that topicalized objects can trigger subject agreement:

- (12) Babana ba-eza-aki oPoso bieka loome.
 2children AGR2-give-IMP 1Poso 8food today
 ‘To the children, Poso gave some food today.’

Given this cross-Bantu pattern of “topic-verb” agreement, and the fact that Demuth and Harford connect Shona locative passives to this topicalization pattern, it seems reasonable to treat passivization as a specific type of topicalization. Furthermore, given the robustness of the phenomenon of topics

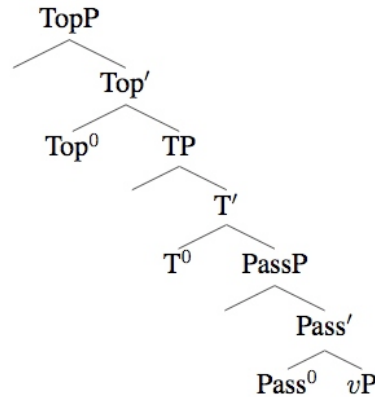
controlling verb agreement, it is reasonable to recognize the locus of agreement as being Top rather than T in Shona.³

In the following section, we turn our attention from the mechanics of agreement to the structure of passive sentences. In §6, we bring these two together, by applying the model of agreement outlined here to passive constructions.

5. Pass(ive)P Licenses a Covert Agent

Following Adger (2003), we assume that, in passive sentences, a functional head Pass projects above *v*P, as schematized in (13).

(13)



We further propose that the Pass licenses a covert agent, *pro*, in the Specifier of PassP. Evidence for this claim is based on the observation that passive verbs in Shona are always agentive, regardless of whether an agent is realized overtly in a by-phrase or not. The agentivity of passive sentences is particularly evident when they are seen in contrast with a similar clause type, namely stative constructions. Consider the pairs in (14) and (15).

- (14) a. Ma-nhanga ku-bik-w-a.
 CL6-pumpkin AGR6-cook-PASS-FV
 ‘Pumpkins were cooked’
- b. Ma-nhanga ku-bik-ik-a.
 CL6-pumpkin AGR6-cook-STAT-FV
 ‘Pumpkins were cooked’

³ It is interesting to note that Top has been recognized as the locus of agreement for other Bantu constructions. Recalling again the TopP analysis for ciNsenga (see footnote 2), the Top head in that analysis is considered to be the locus of relative clause agreement in that language.

- (15) a. Ma-nhanga haana ku-bik-w-a.
 CL6-pumpkin NEG AGR6-cook-PASS-FV
 ‘Pumpkins were not cooked’
 (= not cooked at all, by anyone)
- b. Ma-nhanga haana ku-bik-ik-a.
 CL6-pumpkin NEG AGR6-cook-STAT-FV
 ‘Pumpkins were not cooked’
 (= not completely cooked)

As shown in (14), passive *-w* and stative *-ik* are similar in meaning. However, the negated forms in (15) demonstrate that only the passive, and not the stative, is necessarily agentive. The negated passive in (15a) implies a lack of action, whereas the negated stative in (15b) implies a lack of completion. This contrast clearly shows that the passive requires an agent, even when not overt. As stated above, this can be formalized with a covert agent *pro* in Spec, PassP. We assume that when there is an overt agent specified in a by-phrase, *pro* is coreferential with the overt DP. Importantly, because the passive in Shona functions to background the agent, neither *pro* nor the overt DP in the by-phrase are eligible for topicalization (which we consider to be a type of “foregrounding.”). The relevance of this will become apparent in the following section.

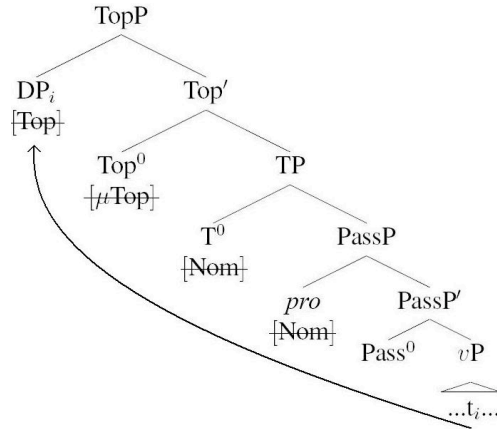
Having outlined the structure of passive clauses, we turn now to our analysis of Shona passivization as a type of A'-movement.

6. Passivization is Topicalization

As outlined in §5, we assume that Spec, PassP is occupied by a covert agent, *pro*. From this position, *pro* is the closest DP to T, and it therefore undergoes A-movement to Spec, TP to check nominative case. However, unlike active sentences, in which both nominative case and the Topic feature are satisfied by the same DP, in passive sentences, *pro* cannot satisfy the checking requirement on Top because *pro* is not an eligible topic. Formally, this can be understood as *pro* not bearing a matching Topic feature that can check the uninterpretable feature on Top.

Because *pro* cannot satisfy the EPP, Top continues to probe for a match. The result is that a *v*P-internal DP satisfies the checking requirement, and that is what gives the appearance of passivization. In essence, “passivization” is in fact A'-movement of a *v*P-internal DP to Spec, TopP. This derivation is schematized in (16) below.

(16)



The derivation in (16) shows agentive *pro* checking nominative case on T, and a *vP*-internal DP checking the uninterpretable Topic feature (i.e. the EPP) on Top. Crucially, for this derivation to converge, there must be a *vP*-internal DP that is an eligible topic, or that bears a Topic feature. What happens in the case when no DP is a candidate for topicalization?

Interestingly, in Shona, it appears that the passive construction does not require a DP to move to a topic position at the beginning of the sentence. In such cases, we assume that the EPP on Top is satisfied with an expletive. These constructions are called impersonal passives (Perlmutter 1978), and an example is given in (17).

- (17) **Ku**-aka-bik-w-a na-Mufaro
 INF-PST-cook-PASS-FV by-Mufaro
 ‘There was cooking by Mufaro.’

In (17), there is no topicalized DP, but instead an infinitival agreement form appears on the verb. The existence of impersonal passives in Shona provides strong evidence that the passive in this language is indeed backgrounding, rather than foregrounding. The passive construction necessarily demotes the agent, but does not necessarily promote a *vP*-internal DP. Consistent with the analysis developed here, we interpret this to mean that the passive itself never promotes a DP, but instead, apparent promotion via passivization is in fact topicalization.

7. Conclusion

In sum, we have shown that passivization in Shona is not A-movement, but rather, results from demotion of the logical subject or agent, in combination with topicalization of a *vP*-internal DP. This analysis accounts for a range of data related to the Shona passive, including the fact that it can target both

arguments and adjuncts, that it requires an agent, and that it need not promote a DP.

The claim that the passive in Bantu is backgrounding is not novel (cf. Foley and Van Valin 1985). However, our contribution has been to provide a formal analysis of the backgrounding passive in a Minimalist framework. Further, we have connected the passive to a prevalent phenomenon in Bantu, namely topicalization.

We have argued that topicalization in Shona is fully grammaticized, and we have formalized this in two ways. First, we have argued that the Top head bears an EPP feature requiring a DP to move to the left clausal periphery. Second, we have claimed that the topicalized DP controls verb agreement. In essence, under our analysis, the roles that T fulfills in languages like English are performed by Top in Shona. This insight leads to a number of questions regarding the extent to which topicalization affects the syntax of this and other Bantu languages. We leave this question for future research.

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