

Agreement Patterns in Shona Locative Inversion

Benjamin Baxter

Abstract

Certain Bantu languages such as Shona and Lubukusu display what appears to be an optional agreement strategy between either the logical subject appearing to the right of the verb, or the preposed locative. Such optionality is troublesome for a principled theory of agreement. Following work by Diercks (2011), the present investigation asserts that what appears optional on the surface is actually derived from one of two underlying structures. Predictions made by this theory are clearly demonstrated to be correct and the resulting analysis shows that despite their surface behaviour, languages such as Shona and Lubukusu in fact adhere to the single agreement strategy found in a large majority of languages of agreement with a c-commanding NP.

Keywords: Bantu, agreement, locative, inversion

1 Introduction

The behaviour of subject agreement in Indo-European and Bantu languages shows a clear divergence in instances instance of locative inversion. Whereas in Indo-European Languages, agreement is persistently controlled by the logical subject, in Bantu languages for the most part, the verb displays agreement with the constituent at the front of the sentence. The disparity is easily demonstrated by the examples in (1) and (2).

- (1)
- a. In the swamp was/*were found a child.
 - b. In the swamps was/*were found a child.
 - c. In the swamp *was/were found the children.
 - d. In the swamps *was/were found the children.

- (2)
- a. Ku-mu-dzi ku-nabwera a-lendo
17-3-village 17-came 2-visitor
“To the village came visitors.”
 - b. *Ku-mu-dzi pa-nabwera a-lendo
17-3-village 16-came 2-visitor
 - c. *Ku-mu-dzi a-na-bwer-a a-lendo
17-3 -village 2-came 2-visitors

(Bresnan & Kanerva, 1989, p.9)

The difference in agreement patterns above has led to the identification of a certain level of parameterization of the agreement function in Universal Grammar. The parameters are outlined by Baker (2008), as below:

- (3) The Case-Dependency of Agreement Parameter:
F agrees with DP/NP only if F values the case feature of DP/NP or vice versa.
- (4) The Direction of Agreement Parameter:
F agrees with DP/NP only if DP/NP asymmetrically c-commands F.

The intention is that the agreement patterns in (1) and (2) can be accounted for by the application of (3) and (4) respectively. That is to say that in Indo-European languages, the agreement relation

between the verb and the agreeing DP is reliant on the checking of uninterpretable case features. With this as the primary restriction, the probe can look either upwards or downwards in search of its goal. In contrast, for Bantu languages, the agreement relation depends only on an NP residing in the correct structural position (SpecTP in Baker’s analysis).

This parameterization is an attractive proposal by virtue of the fact that it provides a unified analysis for the agreement patterns of Bantu and Indo-European languages in that, at a deep level of the grammar, the language is set to one of the two parameters. However, there is something troublesome in the agreement patterns of certain Bantu languages. Locative Inversion constructions in languages like Lubukusu and Shona appear to licence both upward agreement with the preposed locative and downward agreement with the postposed logical subject in a seemingly optional paradigm.

(5) Khu-si-kulu kw-a-biringikha-kho ku-m-pira [Lubukusu]
 17-7-hill 3-PST-roll-17L 3-3-ball
 “Down the hill rolled the ball.”

(6) Mu-nju mw-ola-mo ba-ba-ana [Lubukusu]
 18-home 18-PST.arrive-18L 2-2-child
 “At home arrived the children.”

(Diercks, 2011)

The above examples demonstrate an apparent optionality between the strategies in (3) and (4) in the context of locative inversion. Such observations are clearly problematic as they flout the constrained nature of the parametrization theory.

The data presented here for Lubukusu has been drawn from an analysis by Diercks (2011) which convincingly argues for an underlying structure which only surfaces as an apparent optionality, but in fact conceals two differing constructions which adhere to the parameters of Baker (2008). The Shona data however has been previously argued by Harford Perez (1983) to be an example of ‘impersonal’ concord where locatives do not actually control agreement in cases of inversion. Harford Perez’s claims are refuted here in favour of an analysis that aligns with that of Diercks.

2 Shona Syntax

2.1 Class Agreement in Shona

Shona possesses a three way distinction in locative noun class that bear slightly different semantic interpretations. Class 16 *pa-* is used in an indicative locative sense, as though the location is being pointed to. Class 17 *ku-* is taken to mean the more general status of being ‘at a location’ though it can also be used to refer to a location distant from the speaker. Finally, class 18 *mu-* is used in the sense of being contained within a certain location. These prefixes are applied as pre-prefixes to nouns which are already coded for nominal class.

(7) Pa-chi-toro a-pa
 16-7-store that-16

(8) Ku-chi-koro i-chi
 17-7-school this-7

(9) Mu-rw-izi u-mu
 18-11-river that-18

This doubling of the prefix allows for the curious optionality between class of agreement on the nominal modifier. Therefore, the modifier following the noun can agree with the locative prefix as in (7) and (9), or it can take concord of the internal nominal prefix as in (8). On consulting with a native speaker, the semantic difference between such constructions was reported to be slight. Therefore, in examples like (8), when agreeing with the locative the NP was taken to refer to things happening at the school as a physical location. Instead, when agreement aligned with the internal prefix, the meaning was taken as referring to occurrences at the school as an organisation.

As for the wider status of agreement in the language, Fortune (1955) outlines tables for each noun class and the variants of concord appearing on each verbal element. In this way, there can be shown to be seven possible agreeing constituents: *Adjective*; *demonstrative*; *number*; *quantifier*; *possessive*; *subject*; and *object*. To this list can further be added the relative marker which appears on the verb and must agree with any non- subject relative (Zentz, 2016). Of most significance to the present study is that of subject agreement.

2.2 Shona Locative Inversion

A typical Shona declarative phrase follows the canonical SV ordering. The verb in such a phrase bears a prefix that is commonly referred to as the subject marker. This prefix co-varies in ϕ -features with the subject nominal as in (10):

- (10) V-ana va-notamba pa-chikoro
 2-children 2-play 16-school
 “The children play at school.”

In such a phrase, it is not possible for the verb to agree with any other NP than the sentence initial subject. However, there exist inverted constructions in which the subject concord on the verb can vary between possible candidates. Therefore, in the Locative Inversion derived from the declarative phrase in (10), the verb can either bear concord of the preposed locative NP or postposed logical subject.

- (11) Pa-chikoro pa-notamba v-ana
 16-school 16-play 2-children
 “At school the children play.”

- (12) Pa-chikoro va-notamba v-ana
 16-school 2-play 2-children
 “At school the children play.”

This optionality between agreement presents the same problems as the Lubukusu data discussed previously. The examples in (11) and (12) appear to show a parameterization between upward and downward agreement language internally. In the course of the following sections then, it will be argued that the apparent divergence from the Upward Agreement Hypothesis in Shona in fact adheres to it once some basic syntactic processes are assumed for the derivation of Shona Locative Inversion.

3 Locative Inversion Agreement as Impersonal Concord

3.1 Subject status of locatives

The first test which Harford Perez applies to the Shona data is that of reflexivization. Assuming, as Harford Perez does, that subjects are universally available for relativization, it can be rather easily demonstrated that preposed locative NPs behave in the same way as preverbal logical subjects in their

availability to relativisation and the manner in which this takes place. This is demonstrated with reference to the example in (13).

- (13) Ku-mu-sha u-ko ku-nogara va-nhu va-zhinji ku-no mu-sika
 17-3-village that-17 17-live 2-people 2-many 17-have 3-market
 “At that village, where many people live, there is a market.”

Harford Perez notes that the locative in this example patterns with the relativization of a logical subject with “a low tone on the subject prefix of the relative verb, and no relative prefix” (1983). Whilst Harford Perez concedes that such data indicate subject-like behaviour of locative NPs, this does not rule out her differing analysis.

Data from passivisation is also included by Harford Perez with further concession to the observation that the phenomenon offers no evidence in support of locative NPs not being subjects. Indeed, passivisation is available to logical subjects, objects and locative NPs all the same.

One observation of syntactic behaviour that is deemed by Harford Perez as vindicating of her analysis is the prohibition of “conjoinability” or formation of a coordinate structure. Specifically, this is the ruling out of a structure in which a preposed locative NP is conjoined with the preverbal logical subject of an identical verb phrase. Harford Perez notes that these structures are perfectly licit for preverbal logical subjects as in (14).

- (14) Zvi-rongo ne zvi-yo zvi-noteng-es-wa mu-mariketi
 8-pots with 8-grain 8-buy-CAUS-PASS 18-market
 “Pots and grain are sold at the market.”

(Harford Perez, 1983, p. 137)

It is not possible to construct an example of a coordinate structure in which a preverbal logical subject is conjoined with a preposed locative NP. Harford Perez explains this impossibility by demonstration of a complementary distribution between preposed locative NPs and preverbal logical subjects. The asymmetry is illustrated with the following examples.

- (15) a. Mu-komana Ø-akavata
 1-boy 1-slept
 “The boy slept.”
 b. *Mu-munda m-akavata
 18-field 18-slept
- (16) a. Mu-munda u-mu m-akavata m-ombe
 18-field that-18 18-slept 10-cattle
 “In the field slept cattle.”
 b. *Mu-komana Ø-akavata m-ombe
 1-boy 1-slept 10-cattle

(Harford Perez, 1983, p.137)

Whilst Harford Perez does not attempt to construct the relevant conjoined phrases and notes simply that the inability for locatives and logical subjects to appear in the same positions as in (15) and (16) demonstrates a prohibition for conjunction. This is shown by an ungrammatical judgement for a version of (14) in which a canonical declarative phrase is conjoined with a locative inverted phrase.

- (17) a. *Zvi-rongo ne mu-mariketi zvi-noteng-es-wa zvi-yo
8-pots with 18-market 8-buy-CAUS-PASS 8-pots
- b. *Zvi-rongo ne mu-mariketi mu-noteng-es-wa zvi-yo
8-pots With 18-market 8-buy-CAUS-PASS 8-pots

Examples (17a) and (17b) are included to show that the subject agreement on the verb does not have an effect on the grammaticality of the phrase. This is despite the fact that Shona makes use of a conflict resolution between conjoined subjects of different nominal classes whereby the subject agreement is with the NP of higher animacy (Hawkinson & Hyman, 1974).

This asymmetry between the availability of conjunction between logical subjects and the prohibition of conjunction between logical subject and preverbal locative is taken by Harford Perez as an indication that preposed locative NPs do not behave as one would expect of a subject, and as such challenges the notion of their controlling subject concord.

However, the examples in (15) and (16) do not show complementary distribution so much as an incompatibility. In (15b), what makes the construction illicit is not the presence of the locative in a preverbal position, but rather the lack of a postposed logical subject. Indeed the example in (16a) shows that when the postposed logical subject is present, a locative NP is grammatical in preverbal position. Likewise, in (16b), the prohibition of the phrase is not due to any positional restriction, but rather that there are two logical subjects of the verb. Furthermore, in Anderson (1976) from where Harford Perez takes the conjunction diagnostic, the stipulation is that coordination well-formedness between two phrases relies on “a shared chunk of material common to them both.” This is clearly not the case in the examples above. If anything, the examples in (15) and (16) only demonstrate that locatives cannot bear the same semantic role with the verb: an issue which is definitely not in contention and is the reason for differentiating the postposed element as the *logical* subject. Furthermore, locatives are perfectly licit in coordination constructions with other locative NPs, showing that syntactically, they still pattern with logical subjects:

- (18) Ku-chikoro ne ku-mba ku-nodzidza v-ana
17-school with 17-home 17-learn 2-children
“At school and at home children learn.”

3.2 Distributional and Morphological Evidence

Turning to distributional and morphological behaviour, Harford Perez (1983) argues that locatives behave differently in their apparent control of verbal concord than do logical subjects. Principally, Harford Perez notes that verbal concord can appear on the verb when there is no locative NP present:

- (19) Pa-ne mu-nhu Ø-akamirira ku-ku-ona
16-have 1-person 1-wait to-you-see
“There is someone who has been waiting to see you.”

According to Harford Perez (1983), the example above demonstrates that locative concord is not tied to the presence of a locative NP. This motivates her analysis of the agreement as an impersonal concord. While she entertains the theory that the locative NP could have been elided just as in examples of pro-drop with the logical subject, Harford Perez argues that there is no remnant locative reading available. Whilst such a conclusion is tenable with these observations, the data in fact are contradictory to the intuitions of a native speaker informant to this study who states that the locative reading that someone has been waiting *outside* is in fact mandated. Pro-drop is a highly productive feature of Shona and can proceed with any NP when licensed by agreement morphology on the verb

(Mugari, 2013). Therefore, with the locative interpretation available, Shona can be analysed as patterning with the Chichewa data discussed earlier in allowing pro-drop of agreeing preposed locative NPs.

There is one possibility for a verbal agreement with a null expletive if one assumes the analysis of Demuth and Mmusi (1997) and Marten (2006) that the class 17 prefix is ambiguous between a locative and expletive reading. It does not follow however that all cases of locative concord are subjectless. Indeed it does not mean to say that even uses of class 17 concord is impersonal. Rather the interpretation is that when there is class 17 agreement on the verb and no locative present in the phrase, the reading can be said to be ambiguous between locative and expletive.

Harford Perez then states that there are in fact verbs which take locative concord, but do not permit the presence of a preposed locative.

- (20) Ku-nofungirwa kuti Sekuru va-ngu ibenzi
17 -suspected that uncle 2-my fool
“It is suspected that my uncle is a fool.”

(Harford Perez, 1983)

These facts however are also in alignment with predictions made by the stipulation that the class 17 prefix is ambiguous between locative and expletive reference. Examples of such constructions with all three of the locative prefixes would be needed to argue for their total independence from locative NP control. In consultation with a native speaker informant, such examples were not grammatical. The informant reported that the specific verb used in (20) was not licit with any other locative prefix. Furthermore, the informant could not come up with any verbs which allow a choice between prefixes, but prohibit the appearance of a preverbal locative. These facts are in accordance with the view of the class 17 prefix as ambiguous between locative or expletive.

In addition to locative concord without the presence of a locative NP, Harford Perez notes that locative concord is also available when the locative NP appears post-verbally.

- (21) Kw-akasvika va-nhu ku-danga
27-arrive 2-people 17-cattle.pen
“People arrived at the cattle pen.”

(Harford Perez, 1983)

Such facts are indeed curious if one assumes that the locative is in its base generated position. Under such assumptions it does become unlikely that the locative is controlling agreement on the verb. Of course, as before, it is possible to maintain that the class-17 prefix is ambiguous between locative and expletive reading, but it should be noted that such constructions were deemed grammatical by this study’s informant with any of the three locative prefixes. Therefore, phrases such as (22) are perfectly acceptable.

- (22) Pa-nodzidza v-ana pa-chikoro
16-learn 2-children 16-school
“The children learn at school.”

Whilst this behaviour does seem to license an interpretation of locative concord as impersonal concord, I will argue that the sentence final locative is not in a base generated position but is structurally higher in the phrase than the verb and is only linearised to its right. This will be taken up later.

3.3 Mis-match Between Locative and Verbal Concord

One final oddity that is mentioned in Harford Perez (1983) but is also left unexplained is the existence of an apparent mismatch between the class of prefix on the locative NP and the locative agreement prefix on the verb. Harford Perez demonstrates three examples of this.

- (23) Mu-nguva i-yoyo kw-akazvarwa mw-ana
18-9time 9-that 17-was born 1-child
“At that time was born a child”

- (24) Mu-nguva ya -ma-Dzviti p-akanga pa-si-na Ø-aimbotipwe
18-9time 9of-6-Ndebele 16-was 16-NEG-have 1-said.dry-up
“In the time of the Ndebele (incursions) there was no one to put a stop to it (say dry-up)”
(Chakaipa, 1958, cited in Harford Perez, 1983)

- (25) Kw-abudwa pa-nze nhasi
17-came.out 16-outside today
“There has been come outside today” (someone has come outside)
(Fortune, 1955, cited in Harford Perez, 1983)

The examples in (23), (24) and (25) are indeed troublesome for a theory of verbal concord controlled by locative NPs. Interestingly, Harford Perez (1983) does not incorporate such constructions into her theory despite their being perhaps the strongest evidence of all that verbal concord and locative noun class act independently of one another. Instead her position is that despite their being independent, locative NPs influence the selection of impersonal concord by “providing an obvious choice among the three locative classes available”. Still, the data here presents a problematic anomaly for a theory of agreement with the locative NP. As can again be mentioned here, the examples in (23) and (25) align with earlier identification of the class 17 prefix as expletive. (24) however shows a direct mismatch between two prefixes which are undoubtedly locative. Such constructions are certainly rare and could not be generated by the informant to this study when asked to do so. In reference to the example in (24) despite the mismatch being perceived as odd, the informant offered that the different semantics of the prefixes could be at play, specifically; the mu- prefix used to mean “in” and the pa- prefix meaning “at.” There is perhaps a possibility that the specific spatial reference allowed for a semantics to override normal agreement techniques. However, the issue must be set aside until more data can be found to confirm the existence of the phenomenon and necessitate an analysis.

The arguments presented by Harford Perez (1983) are used to argue against the subject status of proposed locative NPs. The main empirical claim however is that locative NPs do not control verbal concord in the manner of the logical subject. Such a stance is not tenable from the tests discussed above and there exists a more comprehensive analysis of verbal agreement in Diercks (2011) which can easily be applied to Shona and explain both logical subject and locative agreement equally.

4 Aligning Shona with Lubukusu

4.1 Comparisons of Shona and Lubukusu Locative Inversion

Diercks’ (2011) study of Lubukusu reveals some similarities between the language and Shona in the domain of Locative Inversion. As such, it is productive to align the two analyses. As for the characteristics of Lubukusu itself, the relevant features can be summarised here.

The crucial point with regards to the Lubukusu comparison with Shona is the apparent presence of a downward agreement relation between the verb and postposed NP constituents. This phenomenon is labeled “disjoint agreement” by Diercks and contrasts with “repeated agreement” in which both the subject marker and locative clitic agree with the preposed locative NP.

(26) Mu-mu-siiru kw-a-kwa-mo ku-mu-saal [Disjoint Agreement]
 18-3-forest 3-PST-fall-18LC 3-3-tree

“In the forest fell a tree.”

(27) Mu-mu-siiru mw-a-kwa-mo ku-mu-salaa [Repeated Agreement]
 18-3-forest 18-PST-fall-18LC 3-3-tree

“In the forest fell a tree.”

As with Shona, the apparent downward agreement observed in disjoint agreement phrases is at odds with the parameterising of agreement processes. This contradiction however is dealt with by Diercks’ analysis of a different underlying structure for the two constructions in (26) and (27). The structures are presented by Diercks as below:

(28) Disjoint Agreement Locative Inversion
 [CP LocC-V [TP Subj...[Subj V Loc]]]

(29) Repeated Agreement Locative Inversion
 [TP Loc T-V [VP Subj V Loc]]

What is crucial in the above analysis is that the upwards agreement parameter is preserved under both disjoint and repeated agreement constructions. This is shown by the necessity of the NP that triggers verbal agreement to occupy the Specifier of TP position. Whichever element occupies this position controls agreement on the verb regardless of the surface word ordering. Therefore, when the subject marker co-varies with the noun class of the postposed logical subject, this is because the subject NP remains in SpecTP whilst the locative and verb raise to SpecCP and C respectively.

Conversely, when the subject agreement is with the preposed locative NP, this is triggered by the movement of the locative to the SpecTP position, thereby blocking the logical subject from appearing there. Thus the logical subject remains VP internal. As is commonly assumed for Bantu generally (Diercks, 2012; Demuth & Harford, 1999; Ngonyani, 1998) and Shona specifically (Zeller, 2009; Aranovich, 2015) the verb consistently undergoes V-to-T movement. Therefore, with the logical subject remaining VP internal, and the verb raising to T, the word order is inverted, thus accounting for this crucial characteristic of Locative Inversion.

Such an analysis makes clear predictions which can be tested for both Lubukusu and Shona. Diercks (2011) makes use of the extraction morphology of Lubukusu to demonstrate that in disjoint agreement constructions in the context of relativisation or raising, agreement morphology on the verb must pattern with the extraction of non-subject constituents. In contrast, with repeated agreement examples of extraction, the verb patterns with typical subject extraction.

Whilst Shona and Lubukusu do not share the same methods of extraction marking, extraction marking on the verb in Shona nevertheless patterns differently with respect to subjects and non-subjects. As mentioned by Harford Perez (1983), Shona subject extraction prohibits the presence of a relative marker on the verb. However, with non- subject extraction, such agreeing relative markers are obligatory (Zentz, 2016). Therefore, if in cases of Locative Inversion with locative agreement the locative NP sits in SpecTP, we expect that relativisation with an agreeing relative marker is ruled out. This is indeed the case.

- (30) Nda-karara ku-chikoro (*kwa-) ku-nodzidza v-ana
 1-slept 17-school (*17REL-) 17-learn 2-children
 “I slept at the school at which children learn.”

Conversely, when relativisation occurs for instances of Locative Inversion in which the verb agrees with the postposed logical subject, the relative marker is presumed to be necessitated. This again is what is observed.

- (31) Nda-karara ku-chikoro *(kwa-) va-nodzidza v-ana
 1-slept 17-school *(17REL-) 2-learn 2-children
 “I slept at the school at which children learn.”

These facts clearly align with the predictions made by an analysis of the locative NP occupying SpecTP when it triggers agreement and sitting in some other position when agreement is with the postposed logical subject.

More predictions can be made with regards to the position of the logical subject. If the logical subject can be clearly diagnosed as remaining VP internal, then we should expect that in those cases, the verb cannot bear agreement with the postposed logical subject. Just such a case presents itself in the paradigm of wh-question formation. In Shona, wh-questioned subjects are prohibited from appearing preverbally except in embedded clauses (Zentz, 2016). As wh-question formation is usually tied to the application of focus, the requirement of wh-subjects to appear postverbally is therefore in line with the IAV interpretation of Hyman and Polinsky (2010) which claims that the subject remains in SpecvP. With this in mind, we can therefore predict that in cases of locative inversion in which the postposed logical subject is questioned, the verb should be prohibited from agreeing in class morphology with the wh-subject as it could not have occupied the SpecTP position at any point in the derivation. This again is exactly what is observed:

- (32) Ku-chikoro kw-akasvika v-ana va-pi?
 17-school 17-arrived 2-children 2-which
 “Which children arrived at the school?”

- (33) Ku-chikoro v-akasvika v-ana va-pi?
 17-school 2-arrived 2-children 2-which

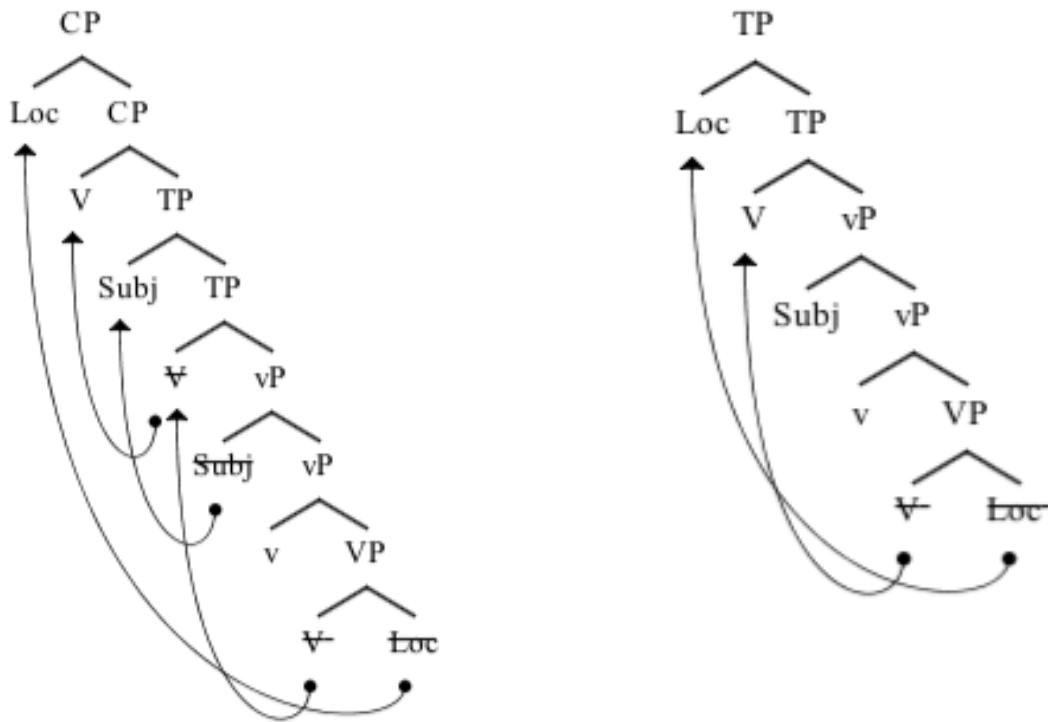
As for the position of the verb in the respective constructions, Demuth and Harford (1999) provide a compatible analysis of relativisation in Shona. They propose that in non- subject relative clauses, the presence of a relative clitic in the complementiser head triggers raising of the verb to C and a subsequent inversion of the verb and subject. The interpretation given by Demuth and Harford (1999) is that the relative clitic does not meet minimal phonological word requirements and that the verb raises to C as a repair strategy. Conversely, in instances when there is a fully lexical complementiser used, this movement of the verb is blocked. This interpretation therefore explains the availability of a preverbal wh-subject in embedded clauses as the complementiser head is occupied by the lexical relativiser ‘kuti’ and thus blocks movement of the verb to C. Given that the analysis defended in this study posits that the preposed locative occupies the SpecCP position and the verb bearing logical subject agreement is in C, we should expect such constructions to be ruled out if a fully lexical complementiser is occupying the complementiser head. In elicitations of such constructions from an informant, the phrases pattern exactly as expected.

- (34) Nda-karara ku-chikoro kuti v-ana va-dzidze
 1-slept 17-school that 2-children 2-learn
 "I slept at the school so that children can learn."

- (35) *Nda-karara ku-chikoro kuti va-dzidze v-ana
 1-slept 17-school that 2-learn 2-children

The above observations align neatly with the theory for Lubukusu in Diercks' (2011) and are further fortified by the motivation for inversion in relativised contexts outlined in Demuth & Harford (1999). However, if the interpretation is that the inversion is the *result* of relativisation, this does raise the question of why there exist non-relativised instances of Shona Locative Inversion in which the verb agrees with the postposed logical subject but does not carry a relative marker. Nevertheless, if we must set aside the motivation for inversion of verb and logical subjects for further research, we can still accept that in Shona Locative Inversion with postposed logical subject agreement on the verb, the verb behaves as if it occupies the complementiser head. Therefore it is possible to draw up the representations of the two agreement patterns in Shona as in the diagrams below.

- (36) Agreement with postposed logical subject (37) Agreement with preposed locative



There is however one issue which is not covered by the theory in its present form. That is the ability of locative phrases to control verbal concord whether appearing sentence initially or finally. Recall that this evidence was used by Harford Perez (1983) to argue against the control of verbal agreement by the locative under the assumption that the locative is in its base generated position low down in the phrase. However, if we maintain that verbal concord is only available to constituents in SpecTP, it must be the case that what appears to be a base generated position for the locative NP is in fact a structurally higher right-dislocated position. With this in mind, there is a simple test which can be implemented in the divination of right-dislocated status: postverbal word order. In Shona, the ordering of postverbal adjuncts such as locative and temporal phrases is fixed. Therefore, in the declarative sentence in (38), the temporal adjunct follows the locative NP.

- (38) V-ana v-anodzidza pa-chikoro nhasi.
 2-children 2-learn (16-school) today

“The children are learning at school today.”

However, when verbal concord is with the locative class, we see that the locative cannot appear in its base generated position, but instead appears to the right of the temporal adjunct.

- (39) Pa-nodzidza v-ana (*pa-chikoro) nhasi pa-chikoro
 16 -learn 2-children (16-school) today 16-school

“The children are learning at school today.”

Right-dislocation is certainly a productive feature in Bantu languages (Zerbian, 2006; Halpert & Zeller, 2015) and is shown to be a possible construction for right-edge wh-question formation in Shona by Zentz (2016). Therefore, what may appear to be a structurally low phrase within the VP, is actually in a position c-commanding the verb, thus allowing for proper upward agreement and only being linearised to the right of the phrase on the surface.

4 Conclusion

The data from Shona Locative Inversion presented here pose an interesting problem for the parameterized theory of agreement as laid out by Baker (2008). The agreement relations that surface in these constructions run counter to the claims that a language makes use of one of two strategies for agreement in that Shona appears to show an optional choice between both upwards and downwards agreement. An established theory of agreement in Shona Locative Inversion by Harford Perez (1983) was argued to be both lacking in its account of observed phenomena and insufficient in its compatibility with cross-linguistic theories of agreement relations. It was shown that the agreement marker on the verb in Shona is too closely linked to the class of preposed locative to allow for any other interpretation than direct control in the manner of typical preverbal subjects. Instead, the behaviour of agreement in Shona Locative Inversion has been shown to be directly compatible with Diercks’ (2011) theory of Lubukusu agreement. With reference to distributional effects and morphological extraction marking, the locative element can be shown to behave exactly as the logical subject in its control of verbal concord. Therefore, Shona can be considered an adherent of Baker's positional agreement parameter, and that apparent divergence from this can be shown to arise from one of two possible underlying structures.

References

- Anderson, S. R. (1976). On the notion of subject in ergative languages. *Subject and topic*, 1, 23.
 Aranovich, R. (2015). Realizational morphology beyond the lexicon: synthetic and periphrastic verbs in Shona. *Language Sciences*, 51, 54-66.
 Baker, M. C. (2008). *The syntax of agreement and concord* (Vol. 115). Cambridge: Cambridge University Press.
 Birner, B. (1995). Pragmatic constraints on the verb in English inversion. *Lingua*, 97(4), 233-56.
 Bresnan, J., & Kanerva, J. M. (1989). Locative Inversion in Chicheŵa: A Case Study of Factorization in Grammar. *Linguistic Inquiry*, 20(1), 1-50.
 Bresnan, J. (1994). Locative inversion and the architecture of universal grammar. *Language*, 72-131.

- Carstens, V. (2011). Hyperactivity and hyperagreement in Bantu. *Lingua*, 121(5), 721-741.
- Cheng, L. L. S., & Downing, L. J. (2009). Where's the topic in Zulu? *The Linguistic Review*, 26(2-3), 207-238.
- De Kind, J., & Bostoen, K. (2012). The applicative in ciLubà grammar and discourse: A semantic goal analysis. *Southern African linguistics and applied language studies*, 30(1), 101-124.
- Dembetembe, N. C. (1976). The Syntax of Sentential Complements in Shona. Doctoral dissertation, School of Oriental and African Studies.
- Demuth, K., & Harford, C. (1999). Verb raising and subject inversion in comparative Bantu. *Journal of African Languages and Linguistics*, 20(1), 41-61.
- Demuth, K., & Mmusi, S. (1997). Presentational focus and thematic structure in comparative Bantu. *Journal of African Languages and Linguistics*, 18, 1-20.
- Diercks, M. (2011). The morphosyntax of Lubukusu locative inversion and the parameterization of Agree. *Lingua*, 121(5), 702-720.
- Diercks, Michael. (2012). Parameterizing Case: Evidence from Bantu. *Syntax*, 15(3), 253-286.
- Ethnologue. (2016). Lubukusu, retrieved from: <http://www.ethnologue.com/language/bxk>.
- Ethnologue. (2016). Shona, retrieved from: <http://www.ethnologue.com/language/sna>.
- Fortune, G. (1955). *An Analytical Grammar of Shona*. London: Longmans, Green and Co.
- Halpert, C. (2012). Argument licensing and agreement in Zulu. Doctoral dissertation, Massachusetts Institute of Technology.
- Halpert, C., & Zeller, J. (2015). Right dislocation and raising-to-object in Zulu. *The Linguistic Review*, 32(3), 475-513.
- Harford Perez, C. (1983). Locative pseudo-subjects in Shona. *Journal of African languages and linguistics*, 5(2), 131-156.
- Harford Perez, C. (1986). *Aspects of complementation in three Bantu languages*. Reproduced by the Indiana University Linguistics Club.
- Hawkinson, A. K., & Hyman, L. M. (1974). Hierarchies of natural topic in Shona. *Studies in African linguistics*, 5(2), 147.
- Hyman, L. M., & Polinsky, M. (2010). Focus in Aghem. In M. Zimmerman & C. Fery (Eds), *Information Structure: Theoretical, Typological, and Experimental Perspectives* (pp. 206-233). Oxford: Oxford University Press.
- Levin, B., & Hovav, M. R. (1995). *Unaccusativity: At the syntax-lexical semantics interface* (Vol. 26). MIT press.
- Marten, L. (2006). Locative Inversion in Otjiherero: More on morpho- syntactic variation in Bantu. *ZAS Papers in Linguistics*, 43, 97-122.
- Marten, L., & van der Wal, J. (2014). A typology of Bantu subject inversion. *Linguistic Variation*, 14(2), 318-368.
- Mugari, V. (2013). Pronoun Dropping in ChiShona: A Comparative Approach. *Studies About Languages*, 23, 20-27.
- Ngonyani, D. (1998). V-to-I Movement in Kiswahili. In R.M. Beck, T. Geider, & W. Graebner (Eds), *Afrikanistische Arbeitspapiere 55, Swahili Forum V* (pp. 129-144). Institut für Afrikanistik, Universität zu Köln Köln, Germany.
- Rizzi, L., & Shlonsky, U. (2006). Satisfying the subject criterion by a non subject: English locative inversion and Heavy NP shift. In M. Frascarelli (Ed), *Phases of interpretation* (pp. 341-361). Berlin: Mouton de Gruyter.
- Van der Wal, J. (2008). Agreement inthetic VS sentences in Bantu and Romance. In C. De Cat & K. Demuth (Eds), *The Bantu-Romance connection. A comparative investigation of verbal agreement, DPs, and information structure* (pp. 323-350). Amsterdam: John Benjamins.
- Wu, H. H. I. (2008). Generalized inversion and theory of agree. Doctoral dissertation, Massachusetts Institute of Technology.
- Zeller, J. (2013). Locative inversion in Bantu and predication. *Linguistics*, 51(6), 1107-1146.
- Zentz, Jason. (2016). Forming Wh-Questions in Shona: A Comparative Bantu Perspective. Doctoral dissertation, Yale University.
- Zerbian, S. (2006). Inversion structures in Northern Sotho. *Southern African Linguistics and Applied Language Studies*, 24(3), 361-376.