

# On the Reciprocal in Ndebele

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## ABSTRACT

This article presents an analysis of the reciprocal extension in the Ndebele language (S.44, ISO 639-3 nde; not to be confused with South African Ndebele, S.407, ISO 639-3 nbl) using the apparatus of the Lexical Functional Grammar's Lexical Mapping Theory. The reciprocal in Ndebele, like in most Bantu languages, is clearly marked by the verbal suffix *an-*. Its typical properties are that the subject NP must be plural or alternatively must be a coordinate structure and that it is an argument changing verbal extension. This article will demonstrate that in Ndebele the reciprocal verb can take the direct object. It will further show that the reciprocal in Ndebele can co-occur with the passive and finally the paper will show that the notion of transitivity is not so straightforward both at syntactic and semantic levels when viewed in the context of certain reciprocal constructions.

*Keywords:* reciprocal, argument structure, LMT, dyadic and monadic reciprocal.

## 1. INTRODUCTION

This article discusses the Ndebele reciprocal derivation using the Lexical Mapping Theory (henceforth LMT), which is a sub-theory of Lexical Functional Grammar (henceforth LFG). It is important to note that LFG owes its origins from the dissatisfaction with Chomsky's early framework of linguistic analysis as espoused in the Principles and Parameter framework and Government and Binding Theory. LFG has been described as the non-transformational successor to the transformational generative forerunners of Government and Binding. As an alternative theory, LFG rejects some of the most central assumptions of the transformationalist approach to grammar, but certainly not its goals. Proponents of LFG do not see the relevance of transformational grammar. Transformations are dismissed on the grounds that they are believed to be psychologically unreal and that they are based on the idea that the lexicon plays a limited role in syntax (Falk 2001, Petzell 2004). Instead, LFG postulates three parallel autonomous representations of surface syntactic structure and surface grammatical functions

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<sup>1</sup> This research benefited from presentations and discussions at the Bantu 4 Conference in Berlin (2011) and the African Languages Association of Southern Africa (ALASA) conference (2011) in Durban. I am grateful to three anonymous reviewers for comments that contributed significantly to improvements of the article. However, the responsibility for errors remains with me.

and an active lexical component, that is, the argument structure, the functional structure and the constituent structure.

It must be stated that morphological complexity in the verbs played a pivotal role in motivating derivational accounts of sentence relatedness (cf. Bresnan 1978, ‘A realistic transformational grammar’). It is an obvious fact that active sentences tend to be less morphologically complex than say, their passive, applicative, causative, reciprocal and other counterparts. Proceeding on the assumption that the least morphologically complex form was the base structure, a latter day version of the ‘kernel’ sentences of Chomsky 1957, the view evolved that the morphological additions characterizing the other constructions could be taken to represent ‘constructional derivation’ altering grammatical relations or grammatical functions. In effect, LFG simply reduced that to ‘lexical derivation’ and accounted for grammatical function changing in terms of alternative linking of semantic roles to grammatical functions.

According to Lødrup (2011); “for a long time, one of the principal goals of generative grammar has been to derive syntactic information from semantic information. Lexical Functional Grammar’s contribution towards this goal is Lexical Mapping Theory”. LMT is a theory of the relation between thematic roles and grammatical functions. It can best be described as a lexicalist theory, meaning that it recognizes the syntactic importance of the information that derives from the lexicon.

In the LMT each argument in an argument structure is mapped onto a grammatical function. The mapping is not arbitrary, but is constrained in a principled way (cf. Lødrup 2011, Bresnan 2001, Mchombo 2004, Khumalo 2007). This article will use the LFG-LMT to analyse the morpho-syntax of the reciprocally extended verbs in the Ndebele language. The Ndebele data on the reciprocally extended verbs presented in this article will challenge some of the assumptions of the LMT, and most fundamentally, we will appeal to the architecture of the LFG to account for the data.

## 2. THE STRUCTURE OF THE VERB IN NDEBELE

Ndebele is a less documented Southern Bantu language which belongs to the Nguni group of languages. The Nguni languages are classified by Guthrie (1967–71) as **S40** (short for Group 40 Zone S) and Ndebele is classified as **S44**. Ndebele is mainly spoken in Zimbabwe and it is recognized as one of the two national languages in the country<sup>2</sup>. Ndebele has very close affinity to Zulu and other Nguni

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<sup>2</sup> Officially, Zimbabwe’s multilingual character has been suppressed since Doke (1931) recommended in his government commissioned report that only Ndebele be recognized in the western region and that only Shona be recognized in the rest of the country. This classification of the African population is what one may be tempted wrongly to think as giving the complete picture of the language situation in Zimbabwe and one gaining weight from the delineation of the country on its map into the two halves, Matebeleland and Mashonaland with the Ndebele and Shona people belonging to each respective region. Ndebele is the mother tongue to most

languages which comprise of Xhosa, Ndebele and Swati. There is also Ndebele spoken in South Africa but there are no known studies that compare the Zimbabwean and the South African Ndebele languages (Khumalo 2007: 22). Bown and Lotridge (2002) and Khumalo (2003) have provided the latest descriptions of the grammar of the Ndebele language. Ndebele, however, has been described as "... barely studied..." Hachipola, (1998: 3), Chimhundu (1997: 129), hence the reliance on comparable analysis with other *well-documented* Bantu languages like Chichewa.

The morphology of the verbal constructions in Bantu is complex. It shows "... the fullest extent of the agglutinative nature of the Bantu language family" Wald (1987: 291). The Ndebele verbal morphology typically comprise of a verb root (VR) to which extensions such as the causative, applicative, reciprocal, passive etc. are suffixed and to which morphemes that encode negation (NEG), subject marker (SM) and object marker (OM) that cross-reference noun phrases (NPs), tense/aspect, modality, etc. are prefixed. The reciprocal in Ndebele, like in most Bantu languages, is clearly marked by the verbal suffix *-an-*. It denotes "action [...] performed [...] by someone or something upon another and vice versa" Fortune (1967: 159).

At the core of the verbal structure is a root morpheme, which is called the verb root (VR)<sup>3</sup>. The VR forms the nucleus of the verbal morphology. This core

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people in Matebeleland North and South provinces. Since people other than the Ndebele inhabit both provinces, it means that other ethnic groups in the region have also adopted Ndebele as their main language of communication. Since Ndebele is the official national language, it is the only language taught in schools especially from the fourth grade onwards. It has been the only language recognized for media communication purposes for the inhabitants of the above-mentioned regions and even spoken in some parts of the Midlands region. It is however, spoken side by side with many other *minority* (*indigenous* is the preferred term) languages in the regions where it is spoken. In fact the majority of the so-called *minority* languages in Zimbabwe are spoken in the two Matebeleland regions.

<sup>3</sup> The following abbreviations will be adopted:

Appl	applicative
Assoc	associative marker
Caus	causative
DEM	demonstrative
FV	final vowel
Lit	literally
OM	object marker
Passpassive	
PLA	plural affix
Prespresent tense marker	
Pst	past tense marker
Rec	reciprocal
SM	subject marker
TM	Tense marker
TAM	Tense Aspect Marker
VR	verb root
VS	verb stem
1SG	First Person Singular
2SG	Second Person Singular
1...17	Denotes Noun Classes 1 to 17

element supports a number of affixes, both prefixes and suffixes. Each affix type occupies a specific position in the verbal morphology. The affixes include the SM, the OM<sup>4</sup>, TAM, and various derivational extensions. The verb is characteristically terminated with a final vowel (FV) and this final vowel of the verb may encode mood, tense, polarity and potential modality.

The basic verbal form is summarized in (1) below:

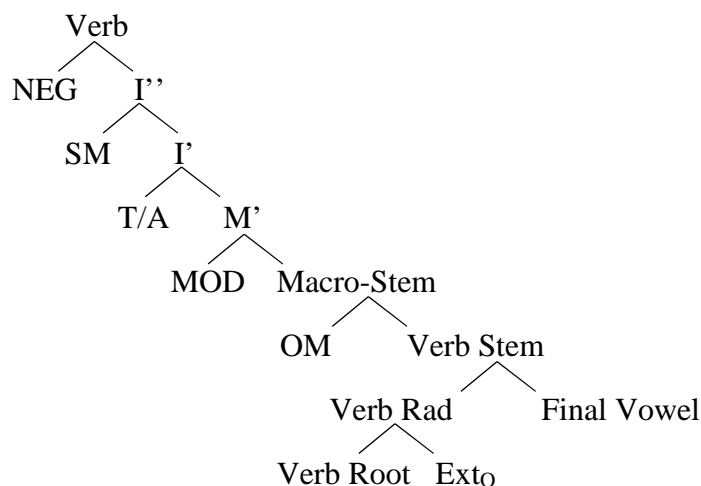
1. SM - TM - Root - FV  
Miti (2006: 299).

The final vowel (FV) is generally the *default* vowel /-a/. It indicates that the verb radical with which it occurs is used in the indicative mood.

2. u-      ya-      thand -a      ‘s/he loves’  
2SG- Pres- love<sub>VR</sub> -FV

Since the suffixes are optional, in their absence the FV becomes the *default* /-a/. This default vowel is obligatorily inserted to the verb root to form a verb stem, which is necessary for the latter to be phonetically realized or syllabically pronounceable. Mchombo (2007: 207) proposes the following structural representation of the verb in Chichewa, which is also applicable to the Ndebele verbal structure:

**Figure 1.**



Mchombo (2004: 70).

Khumalo (2007: 79) proposes the following verb slot system for the complex verbal form in Ndebele.

<sup>4</sup> One of the evident issues in Bantu verbal morphology discourse is the plethora of terminology that is used to refer to both prefixal and suffixal information. SM and OM are thus terms used in Bantu literature to refer to verbal prefixes which agree with either an overt or salient subject or object respectively. Other terms which are used for these prefixes include ‘clitic’, ‘concord’ and ‘agreement’.



The extensions interact in complex ways with the valency of the base verb. Semantically (with the exception of the passive extension) they alter the number of participants expressed by the verb. Grammatically they alter the number of arguments present expressed by an NP or a pronominal element. This article focuses on argument structure changing morphology, focusing specifically on the reciprocal constructions in Ndebele.

### 3. THE ARGUMENT STRUCTURE

Bantu extended stems are complex constructions. They consist of the VR (which can be simplex, complex or reduplicated), and one or more verbal extensions attached to the right of the VR. Verbal extensions are distinguished from one another by their shape, syntactic function and meaning. They can be valency maintaining, valency increasing or valency decreasing. The argument structure changing verbal extensions include the causative, the applicative, the reciprocal, the passive and the stative (or neuter).

The verb stem (VS) consists of the verb root plus verb extensions plus the terminating vowel (FV) /-a/. Mchombo (2007: 204) states that the linguistic significance of the VS is shown by its being the centre for a number of linguistic processes whose influence does not extend to the clitics. As stated above verbal extensions are derivational suffixes that alter the meaning and often the argument structure of a verb. There are extensions that have the effect of reducing the number of participants of the extended verb. These valency decreasing extensions include the stative, the reciprocal and the passive (the latter has interesting effects on the argument structure of the verb). Example 4 (a-d) illustrates the stative extension in Ndebele and its effect of deleting the agent argument.

4. a			4. b	
Umfana	uvala	isivalo	Isivalo	savaleka
Um-fana	u-val-a	isi-valo	isi-valo	sa-val-ek-a
1-boy	1SM-shut <sub>VR</sub> -FV	7-door	7-door	7SM-shut <sub>VR</sub> -STAT-FV
	‘The boy closes the door’			‘The door closed’

According to the Lexical Mapping Theory (LMT) this can be represented as follows; (c) representing the active transitive verb form ‘*vala*’ (to close) and (d) the derived form ‘*valeka*’ (be closed or become closed).

4. c	vala	<agent	theme >	
	‘close’	[-o]	[-r]	intrinsic
				agent is SUBJ
		-----	[+o]	default
		SUBJ	OBJ	



#### 4. THE RECIPROCAL EXTENSION

According to Fortune (1967: 159) the reciprocal idea means that the action is performed mutually ‘... by someone or something upon another and vice versa.’ The reciprocal extension is realized by the suffix *-an-*. Unlike other derivational suffixes in Ndebele, it has no allomorphic variation. Example 5 is instructive.

5. a    *umfana*        *uthanda*        *inkazana*                    [underived]  
           *Um-fana*        *u-thand-a*        *i-nkazana*  
           1-boy            1SM-love<sub>VR</sub>    5-girl  
           ‘The boy loves the girl’

5. b    *umfana*        *lenkazana*        *bayathandana*            [derived]  
           *um-fana*        *la-i-nkazana*        *ba-ya-thand-an-a*  
           1-boy            and-5-girl        2SM-Pres-love<sub>VR</sub>-REC-FV  
           ‘The boy and the girl love each other’

The underived verb *-thand-* is transitive and in (5.a) the boy is the subject NP while the girl is an object NP. After the morpholexical operation of verb derivation in (5.b) the verb is de-transitivized and derives the predicate with a reciprocal interpretation. The reciprocal extension has the effect of reducing the transitivity of the base verb. In other words, the verb suffixed with the reciprocal extension combines with the transitive verb to form surface intransitives as illustrated in (5.b). It is also imperative to note that the subject NP of the derived construction must be coordinated as in (5.b) above and the agreeing SM is a plural morpheme, otherwise the subject NP must be plural as in (6.a) below. The singular subject NP in (6.b) is ungrammatical.

6. a    *abantwana*        *bayahlekana*  
           *aba-ntwana*        *ba-ya-hlek-an-a*  
           2-children        2SM-Pres-laugh-REC-FV  
           ‘The children are laughing at each other’

6. b    \**umntwana*        *uyahlekana*  
           *um-ntwana*        *u-ya-hlek-an-a*  
           1-child            SM-Pres-laugh-REC-FV

The syntactic configuration of the reciprocal construction in Ndebele requires a plural or a group-denoting subject NP as shown in (6.a) and (6.b) respectively.



## 5. THE DISCONTINUOUS RECIPROCAL

However, when the group-denoting NP is not a coordinate structure, sometimes a comitative construction is used as illustrated in (7).

7. a    umfana    wahlekana                    lenkanzana  
          um-fana    wa-hlek-an-a                la-i-nkazana  
          1-boy      1SM-laugh-REC-FV        and-5-girl  
          ‘lit. the boy laughed each other and the girl’  
          ‘The boy and the girl laughed at each other’

7. b    umfana    uqabulana                    lenkazana  
          um-fana    u-qabul-an-a                la-i-nkazana  
          1-boy      1SM-kiss-REC-FV        and-5-girl  
          ‘lit.the boy is kissing each other and the girl’  
          ‘The boy and the girl are kissing each other’

This type of construction is also known as the *discontinuous reciprocal* construction. It makes it possible for the syntactic object to be singular while still satisfying the semantic requirement that reciprocation must be between a plural numbers of participants. The syntactic subject is *umfana*, the verb carries singular subject agreement *u-* and the plural agreement marker *ba-* may not be substituted as the ungrammaticality of variant (7.c) indicates.

7. c    \*umfana    baqabulana                    lenkazana  
          um-fana    ba-qabul-an-a                la-i-nkazana  
          1-boy      2SM-kiss-REC-FV        and-5-girl  
          ‘lit. the boy are kissing each other and the girl’

The Ndebele preposition *la-* corresponds to English prepositions *by* and *with* and can be used to introduce adjuncts and oblique argument in a variety of constructions including the suppressed agent of the passive construction and an argument of ordinary discontinuous reciprocals. In Ndebele discontinuous reciprocals there is a subject NP and an (comitative) oblique NP expressed with the preposition *la-* as shown in (7.e)<sup>9</sup>. It is an oblique NP because it is obviously neither subject nor object NP. However, this oblique NP is uniquely obligatory for without it the sentence would be ungrammatical. This is described by Mchombo and Ngunga (1994) as a form of extraposition yielding what is essentially a comitative construction.

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<sup>9</sup> Example (7e) is carefully chosen because it also highlights certain salient features like *reciprocity* and *mutuality* of the Ndebele reciprocal, which are discussed below.

7. d    isilwane    ledube            kuyaxotshana  
           isi-lwane    la-i-dube        ku-ya-xotsh-an-a  
           7-lion        and-5-zebra    15-Pres-chase-REC-FV  
           ‘The lion and the zebra are chasing each other’

7. e    isilwane    sixotshana                    ledube  
           Isi-lwane    si-xotsh-an-a                la-i-dube  
           7-lion        7SM-chase-REC-FV        and-5-zebra  
           ‘The lion is chasing (each other) the zebra’

The discontinuous reciprocal construction is therefore useful as an alternative to conjunctions such as (7.d) since noun class agreement to conjunctions of different classes is not always straightforward in Ndebele since for a conjoined subject the solution with class 15 is not always possible.<sup>10</sup> Ndebele discontinuous reciprocals seem to involve two arguments, a subject and a comitative oblique, which retain their syntactic and semantic identity. However, if the comitative constructions do not involve an *intransitivized* reciprocal verb, what makes them reciprocal? This is clearly at odds with the common characterization of the reciprocal as a *detransitivizing* operation.

## 6. RECIPROCAL DERIVATION AND MUTUALITY

The reciprocal morpheme in Bantu languages is predicted to typically express reciprocity. This means that the meaning of the derived verb expresses a situation with a mutual relation, that is, the action of the verb is performed mutually between the participants. Let us take a look at examples (8.a) and (8.b);

8. a    umntwana    uyathandana  
           um-ntwana    u-ya-thand-an-a  
           1-child        1SM-TM-love-REC-FV  
           ‘The child is in love’

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<sup>10</sup> \*Ubaba lenja            kuyathandana  
           u-baba    la-inja            ku-ya-thand-an-a  
           1-father and-9-dog    15-Pres-love-REC-FV  
           ‘The father and the dog love each other’

However, the discontinuous reciprocal construction is acceptable:

Ubaba        uthandana            lenja  
           u-baba        u-thanda-an-a        la-i-nja  
           1-father        1SM-love-REC-FV    and-9-dog  
           ‘The father loves the dog and the dog loves him’



In terms of meaning the reciprocal shows that the subject NP is both agent and patient.<sup>12</sup> Although the reciprocal construction is syntactically analyzed as intransitive, it is semantically transitive. This is demonstrated in (9.c) and (9.d).

9. c \*um-fana la-i-sela ba-shay-**an-a** i-pholisa  
1-boy and-5-thief 2SM-Pres-beat<sub>VR</sub>-REC-FV 5-police officer.  
'The boy and the thief beat each other police officer'

9. d \*um-fana la-i-sela ba-ya-**li-shay-an-a**  
1-boy and-5-thief 2SM-Pres-5OM-beat<sub>VR</sub>-REC-FV

In example (9.c) adding a direct object to a reciprocal construction is proscribed since the construction is analyzed as syntactically intransitive. Example (9.d) illustrates that replacing the direct object with the OM is equally unacceptable since the occurrence of the OM would require the construction to be transitive. The fact that its use renders the sentence ungrammatical is therefore evidence that the reciprocal verb is in fact intransitive. However, the veracity of this statement is challenged by the Ndebele reciprocal constructions in (10) below.

10. a Ba-ya-qabul-**an-a**  
2SM-Pres-kiss-REC-FV  
'They are kissing each other.'

10. b Ba-qabul-**an-a** um-lomo  
2SM-kiss-REC-FV 3-mouth  
'They are kissing each other (on) the mouth.'

10. c Ba-xhawul-**an-a** iz-andla  
2SM-shaking-REC-FV 8-hands  
'They are shaking each other (the) hands.'

10. d U-phambana<sup>13</sup> ingqondo  
1-phambana 10-gqondo  
'S/he is having a brain mix-up'

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<sup>12</sup> A discontinuous reciprocal with a subject NP and an (comitative) oblique NP expressed with the preposition *la-* is perfectly grammatical as shown in the example below:

Umfana	ushayana	lesela
Um-fana	u-shay-an-a	la-i-sela
1-boy	1SM-beat-REC-FV	and-5-thief

<sup>13</sup> Note that there is no lexical verb in its underived form **-phamba**. The reciprocal **-phambana** is thus a fossilised form.

Examples in (10) have a peculiarity because of the relationship between the subject NP and the object NP. The object NP is part of the subject NP (i.e. the mouth, hands and brains respectively) hence this part-whole semantic relationship, with the subject NP being the whole. In all the examples above the OM is proscribed. (\**umlomo ba-ya-wu-qabul-an-a*; \**Izandla ba-ya-zi-xhawul-an-a*; \**Inggondo u-ya-zi-phambana*). It would seem therefore that the body part nouns, which seem to be direct objects, are in fact not. This is consistent with Hopper & Thompson's (1980) view on the distinction between syntactic transitivity and semantic transitivity. They argue that semantically the transitive construction should portray a situation where there is interaction or energy transfer between human or animate participants with the object clearly being affected. Crucially, they argue that there should not be a part-whole relationship between the subject and the object of the transitive construction, with the object NP being a sub-part of the subject NP.

It is to be expected that verbs with the reciprocal extension – which are therefore intransitive – cannot be passivized. In fact, this is exactly what has been shown for Chichewa and Shona, respectively in Mchombo (2004) and Mudzingwa (2008). However, Ndebele has certain constructions that seem to be exceptions to this prediction. Consider examples in (11) below<sup>14</sup>.

11. a Um-fana la-i-nkazana ba-bon-an-a e-mthonjeni  
 1-boy and-5-girl 2SM-see<sub>VR</sub>-REC-FV LOC-water point  
 'The boy and the girl see each other at the water point.'
11. b Ku-bon-an-w-a e-mthonjeni  
 It-see<sub>VR</sub>-REC-PASS-FV LOC-water point  
 'There is seeing each other at the water point'
11. c E-sikolo be-ku-bon-an-w-a la-ba-balisi  
 LOC-school Pst-15-see<sub>VR</sub>-REC-PASS-FV with-2-teachers  
 'At the school there was seeing each other (meeting) with the teachers'

Reciprocalization in Ndebele can also take place in the presence of an applied object (11.d). However, it is imperative to state that, with the exception of verbs with fossilized forms (11.e), the reciprocal extension cannot precede the applicative extension in Ndebele suffix ordering as shown in examples below.

<sup>14</sup> It has been observed (Khumalo 2010: 26) that Ndebele seems to permit passive intransitive verbs in the presence of a locative subject.

Kulelipulazi kulinywa ngobaba [unergative]  
 Ku-le-li-ipulazi ku-liny-w-a ngo-baba  
 17-DEM-5-farm 17-plough-PASS-FV by-men  
 'On this farm is ploughed by men.'

11. d Abafana bamhlanganele bamtshaya  
 Aba-fana ba-m-hlang-an-el-e ba-m-tshay-a  
 2-boys 2SM-1OM-meet<sub>VR</sub>-REC-APPL-PAST 2SM-1OM-beat<sub>VR</sub>-FV  
 ‘The boys met (came together) to beat him up’
11. e Ababusi bayasivumelana isinqumo  
 Aba-busi ba-ya-si-vum-el-an-a isi-nqumo  
 2-leaders 2SM-Pres-7OM-agree<sub>VR</sub>-APPL-REC-FV 7-decision  
 ‘The leaders agree with each other on the decision’

Note that in (11.e) the meaning of the unextended verb *-vuma* (‘agree’) and the applied extended verb *-vumela* (‘give permission’) is radically different.

Unspecified object deletion<sup>15</sup> or object ellipsis (often occurs with verbs of ingestion) can co-occur with a reciprocal verb in Ndebele as illustrated below where *ukudla* ‘food’ is deleted, whereas it is proscribed in Bantu languages like Chichewa.

12. a Udlela ~~ukudla~~ yena  
 U-dl-el-a ~~ukudla~~ yena  
 2PS-eat-APPL-FV ~~føøð~~ PRON  
 ‘S/he is eating ~~føøð~~ for him’
12. b Udlelana lomntwana ~~ukudla~~  
 U-dl-el-an-a la-um-ntwana ~~ukudla~~  
 2PS-eat-APPL-REC-FV and-1-child ~~føøð~~  
 ‘S/he is eating ~~føøð~~-for the child and the child is it eating for her/him’

Interestingly, and as alluded to elsewhere above, there are some reciprocals in Ndebele, derived with **-an-**, but lack the independently existing verb stems. These are illustrated in (13).

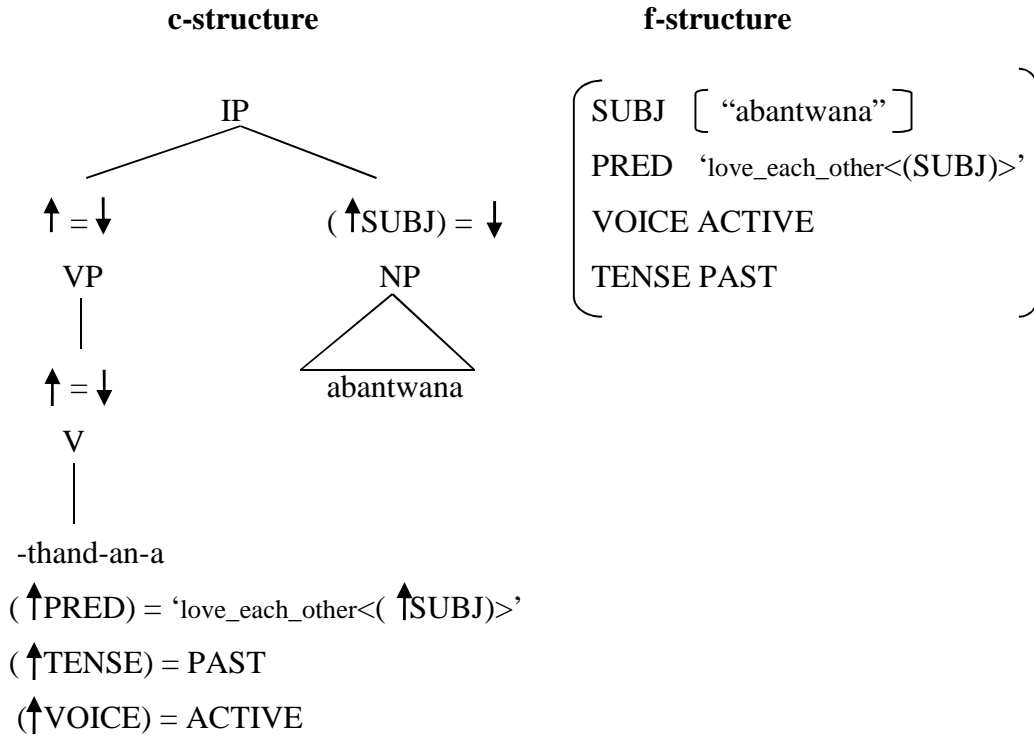
13. a hlangana \*hlang-**an**-a  
 ‘meet each other’
13. b xabana \*xab-**an**-a  
 ‘fight each other’

These verbs seem to have lexicalized.

<sup>15</sup> Unspecified object deletion occurs when the lexical object of a verb is occasionally omitted from the discourse (e.g. I am writing (a letter) to John, I am cooking (some food) for you.), Demuth (2000).



Figure 2.



In this sense the LFG architecture allows for information from the semantic level and information from the argument structure to be simultaneously available to rules of argument selection, Bresnan (2001). It is in this vein that the architecture of the LFG allows for the repair of the violation of the mapping principle pointed out above. This, according to Hurst (2006), can be achieved by allowing for a different structure from figure 2 above, (figure 2 shows the valency reducing analysis as predicted in the LMT). Figure 3 below shows that the argument structure and the functional structure of the verb remain unchanged when it is reciprocated and instead, a (zero) pronoun sits in the object position of the f-structure of the clause. Under this analysis the valency of the verb is not altered and therefore each argument retains its thematic role. Hurst (2006: 3) calls this a valency preserving analysis of the reciprocal, and the architecture below illustrates this.





17. isilwane ledube kuyaxotshana *monadic reciprocal construction*  
 isi-lwane la-i-dube ku-ya-xotsh-an-a SUBJ<sub>pl</sub> Verb-rec  
 7-lion and-5-zebra 15-Pres-chase-REC-FV  
 ‘The lion and the zebra are chasing each other’

Hurst (2010) proposes that in (16) what we referred to earlier as the (comitative) oblique NP “*ledube*”, is an argument-adjunct in LFG. An a-adjunct cannot be assigned a theta role but is crucially licensed by the a-structure. In this analysis a-adjuncts are postulated to have some sort of intermediate status between an argument and an adjunct. Like arguments, they participate in the event described by the predicate and according to Jackendoff (1990) are viewed as forming part of their predicate's conceptual structure; and like adjuncts they are optional and can be productively added to any semantically suitable predicate. This analysis then proposes two tiers of a-structure. The first tier specifies canonical arguments: those which are uniquely selected by the predicate and which are obligatory. The second tier specifies the a-adjuncts and, if present, their mapping takes place after the first-tier arguments. The thematic role of the a-adjunct is not assigned but its description is underspecified.

In Hurst’s (2010) analysis, the monadic reciprocal construction is first formed through a process of argument binding (19), and forms the basis of the discontinuous reciprocal construction, which is subsequently formed from it with the addition of an a-adjunct (20):

18. isi-lwane si-xotsh-a i-dube chase<[P-A] [P-P]>  
 7-lion 7SM-chases-FV 5-zebra intrinsic -o -r  
 ‘The lions chases the zebra’ default -r  
 SUBJ OBJ

19. isi-lwane le-dube ku-ya-xotsh-an-a chase\_rec<sub>monadic</sub><[[P-A] [P-P]]>  
 7-lion and-5-zebra 15-Pres-chase-REC intrinsic -o  
 ‘The lion and the zebra are chasing each other’ default -r  
 SUBJ

20. isi-lwane si-xotsh-an-a le-dube chase\_rec<sub>dyadic</sub><[[P-A] [P-P]]>, tier 2:<[ ]>  
 7-lion 7SM-chase-REC-FV and-5-zebra intrinsic -o -o  
 ‘The lion is chasing (each other) the zebra’ default -r +r  
 SUBJ OBL

The resulting form of the dyadic reciprocated verb correctly predicts the syntax of these constructions. As predicted earlier in our discussion, the a-structure of the dyadic verb *xotshana* – ‘chase\_each\_other’ from (20) maps the comitative entity to an oblique argument. This LFG based analysis is clearly able to account for the syntax of reciprocal constructions in Bantu languages. It is, according to insights from Hurst (2010: 302) also able to generally explicate the grammaticalisation process so common to verbally marked reciprocal

constructions. This is because since the complex argument structure of the discontinuous reciprocal construction maps to just two grammatical functions, it is thus highly susceptible to grammaticalisation. In this process, the two bound arguments mapped to the subject NP are treated as a single argument and the partner a-adjunct becomes a first-tier partner argument.

## CONCLUSION

The discussion of the reciprocal in Ndebele is within the context of similar studies in other Bantu languages and as noted from the literature the reciprocal has clearly attracted considerable attention. The reciprocal in Ndebele, like in most Bantu languages, is clearly marked by the verbal suffix **-an-**. The reciprocal verbs typically require more than one agent and the agents are at the same time mutual patients of their action. Its typical properties are that the subject NP must be plural or alternatively must be a coordinate structure. Following the LMT analysis of the reciprocal (Mchombo 1992) the reciprocal is an argument changing verbal extension. This means that it reduces by one the array of arguments associated with the underived predicate. It is in this sense a detransitivizing morpheme. However, this type of analysis is a problem for the LMT because it violates the theory's mapping principles. This violation is repaired by appealing to the architecture of the LFG, which allows for the argument structure of the reciprocal verb to remain unaltered at the level of the f-structure.

In Bantu languages like Chichewa (Mchombo 2004) and Shona (Mudzlingwa 2008), the reciprocal verbs do not take direct objects. This can be shown by their failure to co-occur with an OM in a monotransitive construction. Further the reciprocal is not predicted to co-occur with the passive in a basic underived or unextended verb in Chichewa and Shona. The noted incompatibility between reciprocal verbs and OMs or passive morphology derives from the intransitive nature of the verb. This article has also demonstrated that an LFG based analysis is clearly able to account for the syntax of reciprocal constructions in Bantu languages.

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