

On lexical reciprocity in Swahili

Giada Palmieri & Joost Zwarts

Utrecht University

g.palmieri@uu.nl j.zwarts@uu.nl

Languages such as Hebrew and English distinguish between a *grammatical reciprocal* strategy, by which reciprocity is productively expressed by a reciprocal anaphor (e.g., *hem ra'u exad et ha-šeni* 'they saw each other'), and a non-productive *lexical* strategy where reciprocity arises from the inherent meaning of a medial/intransitive verb (e.g., *hem hitnašku* 'they kissed'). In Swahili (Bantu, G42), the verbal affix *-an-* is the only reciprocal marker, with no overt distinction between grammatical and lexical reciprocity. In the literature, a distinction between lexical/grammatical reciprocal strategies has been postulated for Bantu languages with only one reciprocal form (Shepardson 1986; Kemmer 1993), but only empirically supported by the semantic drift undergone by some reciprocal verbs (1a) and deponent entries (1b).

(1) a. *shind-a* 'to defeat' > *shind-an-a* 'to compete' b. **linga* > *ling-an-a* 'to be alike'

For Romance languages, where the clitic *se* is generally used for reciprocity, the existence of lexical reciprocals has been demonstrated (Doron & Hovav 2009; Siloni 2012; Palmieri et al. 2018) based on properties that have been traditionally associated to reciprocals formed 'in the lexicon', such as the possibility to undergo nominalization (Reinhart & Siloni 2005; Doron & Hovav 2009) or to appear in the discontinuous reciprocal construction (Dimitriadis 2008; Siloni 2012). However, in Swahili these properties are productive with all verbs with *-an-* (Mwamzandi 2014; Kloehn 2018), questioning the existence of a lexical/grammatical distinction in this language and disputing the postulated universal existence of lexical reciprocals in all languages (Haspelmath 2007).

In this paper, we rely on novel data to demonstrate that a lexical/grammatical reciprocity distinction is in fact part of the Swahili grammatical system. We illustrate semantic and morphological properties that characterize lexical reciprocals in this language, supporting a twofold account of the morpheme *-an-*: (i) as a reciprocal valence-reducing operator yielding grammatical reciprocity, in line with proposals on other Bantu languages (Dalrymple et al. 1994; Wunderlich 2020), and (ii) as a marker with no lexical semantics of its own, part of the verb stem of lexical reciprocals.

We base our distinction on three properties:

I. IRREDUCIBLE INTERPRETATIONS – Swahili lexical reciprocals denote single events, just like lexical reciprocal entries in other languages (Siloni 2012; Kruitwagen et al. 2017). While (2) necessarily denotes at least two unidirectional events, (3) is ambiguous between multiple relations (e.g., in at least two competitions) and a collective event (e.g., in one competition between N. and J.). This is in line with the semantic treatment of lexical reciprocity proposed by (Dimitriadis 2008; Winter 2018).

(2) *Nala na Juma wa-li-sikiliz-an-a* (3) *Nala na Juma wa-li-shind-an-a*
Nala and Juma 3pl-PST-listen-REC-FV Nala and Juma 3pl- PST-defeat-REC-FV
'Nala and Juma listened to each other' 'Nala and Juma defeated each other/competed'
i. $\exists e.\text{listen}(e,n,j) \wedge \exists e.\text{listen}(e,j,n)$ i. $\exists e.\text{defeat}(e,n,j) \wedge \exists e.\text{defeat}(e,j,n)$
ii. $\exists e.\text{compete}(e,n+j)$

IIa. AFFIX ORDERING: APPLICATIVE – The applicative morpheme *-i-* increases the valency of the verb by one (Ngonyani 1995) and can ordinarily co-appear with the reciprocal affix *-an-*, both in the REC+APPL (4a) and APPL+REC (4b) sequence. Yet, only the former order is allowed with lexical reciprocals (5a): the insertion of grammatical material between the verb stem and *-an-* leads to ungrammaticality (5b). This pattern hints to the lexicalized nature of such entries, where *-an-* and the verb stem cannot be separated.

- (4) a. *wa-li-sikiliz-an-i-a* *nyumba* b. *wa-li-sikiliz-i-an-a* *nyumba*
 3pl-PST-listen-REC-APPL-FV house 3pl-PST-listen-APPL-REC-FV house
 ‘They listened to each other at home’ ‘They listened to each other at home’
- (5) a. *wa-li-shind-an-i-a* *pesa* b. **wa-li-shind-i-ana*
 3pl-PST-defeat-REC-APPL- FV money 3pl-PST-defeat-APPL-REC-FV
 ‘They competed for money’

II. AFFIX ORDERING: CAUSATIVE – The causative morpheme *-ish-* cannot generally combine with the reciprocal affix *-an-*: even with verb stems that can in principle be causativized (6a), reciprocity cannot feed the causative operation (6b-c). Yet, lexical reciprocals can appear with *-ish-* (7), suggesting that causativization must apply to a reciprocal intransitive predicate where *-an-* is part of the entry.

- (6) a. *ni-li-wa-sikiliz-ish-a* (7) *ni-li-wa-shind-an-ish-a*
 1sg-PST-3pl-listen-CAUS- FV 1sg-PST-3pl-defeat-REC-CAUS- FV
 ‘I made them listen’ ‘I made them compete’
- b. **ni-li-wa-sikiliz-an-ish-a*
 1sg-PST-3pl-listen-REC-CAUS- FV
- c. **ni-li-wa-sikiliz-ish-an-a*
 1sg-PST-3pl-listen-CAUS-REC- FV

III. SINGULAR AGREEMENT: HABITUALITY & MODAL EMBEDDING – Reciprocal operators require plural antecedents (Dalrymple et al. 1994); accordingly, it is typically impossible for grammatical reciprocity to arise with singular subjects (8). However, this is possible with lexical reciprocals: (9a-b) denote the subject’s tendency/unwillingness to compete (possibly with an omitted understood participant). The grammaticality of (9) cannot be accounted for by a grammatical operation, but is instead in line with the possibility of lexical reciprocals to apply to morpho-syntactically singular arguments (Authier & Reed 2018).

- (8) a. **Nala hu-sikiliz-an-a* b. **si-taki* *ni-sikiliz-an-e*
 Nala HAB-listen-REC-FV NEG.1sg-want 1sg-listen-REC-FV
- (9) a. *Nala hu-shind-an-a* b. *si-taki* *ni-shind-an-e*
 Nala HAB-defeat-REC-FV NEG.1sg-want 1sg-defeat-REC-FV
 ‘Nala habitually competes’ ‘I don’t want to compete’

The two contrasting types of reciprocity in Swahili shed light on the cross-linguistic characterization of lexical reciprocity. Taking Swahili as a case study, we illustrate the existence of lexical and grammatical reciprocity in a language where these two processes are not morphologically discernible. In line with works that identified lexical reciprocals in other languages with only one reciprocal marker, such as Romance (Doron & Hovav 2009; Siloni 2012; Palmieri et al. 2018), our findings support the universality of a class of predicates where reciprocity is encoded in the lexicon. Our data also reveal morpho-syntactic dissimilarities between Swahili *-an-* and Romance *se*, which will be further discussed in the paper. These differences underline a contrast between languages that show only one reciprocal form on the surface. Despite the structural differences in the realization of lexical reciprocals across different languages, lexicalized reciprocal forms in Swahili nonetheless show a comparable semantics to lexical reciprocals cross-linguistically.

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