Constraints on Prefix copying in Lubukusu Reduplication

.   Abstract.

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This paper addresses the constraints against prefix copying during reduplication processes in Lubukusu, a Bantu language spoken in western part of Kenya. I argue that these constraints are due to the fact that the reduplicant (hereafter RED) copies the stem as its base which in the current literature on Bantu studies does not include the prefix (Hyman 2003, Odden 1998, Poletto 1998, Mutonyi 2000, among others). The canonical stem is made up of the root with or without the inflectional suffixes, but does not include the prefix. I also argue that in addition to the interaction of morphology (root, stem and affixes) and prosody (syllable, foot and prosodic word), in Lubukusu, like other Bantu languages (Odden 1996) the grammatical categories (nouns, adjectives and verbs) play a role in reduplication. This observation is fundamental especially so in Bantu languages with their rich agreement and inflectional affixes.

The issues we address are: what is the role of these categories, the RED size requirement and its location in reduplication. We also examine the thesis that reduplication results in unmarked structures referred to as The Emergence of The Unmarked (TETU) (McCarthy & Prince 1994, 1999). In this paper, I show that by recourse to ranking of universal constraints in the framework of Optimality Theory, (hereafter OT) of Prince and Smolensky (1993/2004), we can account for the above constraint in terms of alignment, show reduplication patterns of the language and the place of reduplication in markedness theory. None of the previous work; (Autern 1974, Mutonyi 2000, Downing 2004) identified the fact that the prefix is not copied because it is not part of the stem and more so within constraint based approach.

Data:

(1)Structure and canonical shape of Bantu stem/macrostem (verb)

Subj	- Tns/Asp	{ Obj	[Root	– Infl	- FV	] Stem	}Macrostem
O	- xa -	{ mu	[rum	-ir-an	- a	] Stem	}Macroste

The reduplicated form has the meaning of 'somewhat X, X or kind of X.' for adjectives/nouns or doing something repeatedly or haphazardly for verbs. The reduplicant is underlined throughout and hyphen separates morphemes.

(2) Input	Output	Gloss	Reduplication	Unattested
(i) o-mu-kesi	[omukesi]	'smart'	o mu <u>kesi</u> kesi.	*<u>omuke</u> kesi
(ii) xu-kendela	[xukende<u>la</u>]	'walk with'	xu-<u>kenda</u> kendela	*<u>xukenda</u> kendela
(iii) o-mu-βi	[omuβi]	'bad'	o <u>muβi</u> muβi	*omu <u>βi</u> βi
(iv) o-mu-imbi	[omwimbi]	'short'	o <u>mwimbi</u> mwimbi	*o<u>mbi</u> mwimbi
(v) e-N-laji	[endaji]	'good'	e <u>ndaji</u> laji/	*e<u>laji</u> laji

In (i) and (ii), we have total reduplication and partial reduplication without including the prefix. It is apparent that the RED must be minimally bisyllabic as monosyllabic stem fails to reduplicate in (iii) above. The prefix is only reduplicated to meet the RED size requirement, evident in examples in (iii) above or if needed to provide

a syllable onset as in (iv). A nasal prefix is absorbed into the following consonant forming a homorganic prenasalised stop to avoid forming a coda, shown in (v).

(3) Input   *Output*   *Gloss*   *Reduplicant*   *Unattested*
(i) ci-nda   [cinda]   'lice'   _____   *<u>cinda</u> cinda
(ii) xu-kwa   [xukwa]   'we fall'   ————   *<u>xukwa</u> xukwa
(iii) xu-kwila   [xukwila]   'we fall with'   xu <u>kwila</u> kwila   *<u>xukwila</u> xukwila
(iv) xu-ira   [xwira]   'we kill'   <u>xwira</u> jira   *<u>xwira</u> xwira
(v)xu-ajilisja   [xuajilisja]   'to hunt for'   xua-<u>jila</u> jilisja   *<u>ajila</u> jilisja

This data shows that, unlike adjectives, verbs and nouns can not recruit the prefix to meet RED size requirement as shown in (i) and (ii). However, if the same verb stem is augmented through verbal extension, reduplication takes place as expected as in (iii). Another difference is the insertion of the epenthetic [j] in vowel initial stems in verbs provide an onset for the bases that begin with vowels, shown in (iv). In polysyllabic vowel initial stems, infixation of the RED is preferred to prefix copying as in (v).

In OT approach we argue that the markedness and faithfulness constraints are responsible for these patterns. For example, MAX-BR and ALIGN-R are responsible for total reduplication, while MAX-BR$_{Root}$ and ALL-σ - LEFT are responsible for partial reduplication without prefix copying if they dominate MAX-BR. On the other hand, ONSET and RED=PRWD demands that the RED must have an onset and be minimally bisyllabic, if they dominate ALIGN-R, then we have prefix copying as below.

(4) /o-mu-Red-βi/   [omuβi muβi]

/o-mu-Red-βi/	Red=Prwd	AlignR
a. ☞o-<u>muβi</u> muβi		*
b. o-mu-<u>βi</u> βi	*!	

In essence, through constraint ranking we are able to show why prefixes are not copied but because constraints are also violable, we can capture conditions under which prefixes may be copied; to satisfy high ranked constraints. This is the approach I will adopt in analysis of the data in Lubukusu

Selected references.
McCarthy, J. J & Prince, A. 1994. The emergence of The Unmarked: Optimality in
          Prosodic Morphology. NELS. Amherst, MA.and Oxford, Blackwell (2004).
McCarthy, J. J & Prince, A.1995. Faithfulness and Reduplicative Identity. UMass.
          Amherst, MA: GLSA Publications.
Mutonyi, N. (2000). *Aspects of Bukusu morphology and phonology*. Doctoral
          Dissertation, Ohio State University, Colombus.
Prince, A & P. Smolensky (1993/2004). *Optimality Theory: Constraint interaction in
          Generative Grammar*. Rutgers University and University of Colorado at
          Boulders, (revised ed.2004), Blackwell.