

Copy affixes in Kiranti

Eva Zimmermann, Leipzig University
Eva.Zimmermann@uni-leipzig.de

Main Claim I argue that the copying/doubling of affix material in the verbal agreement paradigms found in many Kiranti languages is the result of defective prosodic structure in the representation of specific morphemes. Since the copying in Kiranti is neither true phonological copying to avoid marked structure nor reduplication to realize certain morpho-syntactic features, its formal account is hence particularly interesting for the question of how to model (phonological) copying and (morphological) doubling in phonology and/or morphology (Kawahara, 2007; Inkelas, 2008; Saba Kirchner, 2010).

The phenomenon Many Kiranti languages employ what is termed ‘affix copying’ in the following: (parts of) affixes surface more than once without any apparent morpho-syntactic motivation. Consider for illustration the suffixes in 2→1 contexts in the intransitive paradigm of Athpare in (1-a) where the suffixes *-ŋa* (1.Ps.Obj), *-ci* (dual) and *-i* (pl.) occur twice without any apparent functional explanation. Or the example in (1-b) from Belhare where always two instances of the suffixes *-ŋ* (1.Ps.Agent) and *-m* (non-sg. non-third.Ps.Agent) appear at the surface. In the descriptive literature on Kiranti, this copying is described as being due to a specific ‘copy-slot’ or copying property of certain morphemes (e.g. Ebert (1997) on Athpare or Rutgers (1998) on Yamphu), as triggered by phonotactic markedness (e.g. Schackow (2014) on Yakkha), or it is subsumed under the heading of extended exponence in the formal discussion in Anderson (2001). In this talk, I show with some detailed case studies that the affix-copying in the verbal paradigms of Kiranti languages is, *first*, only triggered by certain affixes, *second*, not motivated by general well-formedness restrictions, *third*, restricted to certain phonological elements that can be copied, and, *fourth*, does not always involve the copying of exactly one single other affix as a whole. Under the view that the crucial typological distinction for copying/reduplication phenomena is the one between phonologically triggered copying and morpho-syntactic copying/doubling (Kawahara, 2007; Inkelas, 2008), the Kiranti pattern is an interesting ‘in-between’ case that shares properties from both. Neither a formal account of purely phonologically triggered copying (as autosegmental spreading (Kawahara, 2007) or string-internal correspondence (Inkelas, 2008)) nor an account of morpho-syntactic triggered reduplication (as RED-triggered BR-correspondence (Kawahara, 2007) or morphological doubling (Inkelas, 2008)) can hence account for the copying in Kiranti.

OT-analysis I argue that certain affixes in Kiranti contain additional empty prosodic structure that must be filled with segmental material and that copying is the preferred means to supply this additional material. Copying is formally taken to be fission inside correspondence-theoretic OT: one input segment is split up into two output correspondents under violation of INTEGRITY. The syllable copying in Athpare, for example, follows from assuming that the suffix *-t* contains an additional empty bimoraic syllable and the nasal copying in Belhare follows from assuming that the suffix *-ci* contains an additional floating mora. Both these empty prosodic structures are defective and must be filled with segmental material. Given that the prosodic nodes cannot associate to material that belongs to the same morpheme (a derived environment effect, cf. (2-b)) and that epenthesis is a dispreferred repair, copying of the material preceding the triggering morpheme hence emerges as optimal. This is briefly shown in tableau (3) for nasal copying. That the copying in this case is restricted to certain phonological elements then simply follows from standard markedness constraints against non-sonorous elements in the (moraic) coda (2-c).

Implications for the theoretical account of copying This analysis is couched inside the theory of Minimal Reduplication (Saba Kirchner, 2007, 2010) where copying is taken to be a general phonological repair process comparable to epenthesis or deletion. One marked structure that copying can avoid are otherwise empty prosodic nodes – the trigger for morphological copying where the (partial) copy of a base expresses a morphological category in Kirchner’s theory. In Kiranti, the copying-triggering morphemes consist of segmental material as well and not only of empty prosodic structure and the Kiranti copying is under this view analysed absolutely similar to instances standardly termed ‘fixed segmentism reduplication’ (Alderete et al., 1999; Nevins, 2005). The interesting new aspect of the Kiranti copying is the fact that the copied segments are phonologically restricted to a certain class. Such a phonologically-determined copying is straightforwardly predicted under an account where copying applies in the phonology. The architecture of Minimal Reduplication hence easily allows a copying pattern as the one in Kiranti that is neither purely phonologically motivated nor morpho-syntactically triggered.

(1)	a.	<i>Athpare (NPst), Ebert (1997)</i>	b.	<i>Belhare (NPst), Bickel (2003)</i>			
		1s	1de	1pe		3Nsg	
		2s	-ŋa-t-ŋa	-ci-t-ci-ŋa	-i-t-i-ŋa	1sg	-t-u-ŋ-chi-ŋ
		2d	-ci-t-ci-ŋa	-ci-t-ci-ŋa	-i-t-i-ŋa	1exc.	-t-u-m-chi-m-ma
		2p	-i-t-i-ŋa	-ci-t-ci-ŋa	-i-t-i-ŋa	1inc.	-t-u-m-chi-m
						2Nsg	-t-u-m-chi-m-ka

- (2) a. $\mu > S$
Assign a violation mark for every μ not dominating a segment.
- b. ALT (cf. van Oostendorp, 2007)
Assign a violation mark for every instance where two elements of the same morphemic affiliation that were not associated in the input are associated in the output.
- c. $*P]_{\sigma}$ (cf. Botma and van der Torre, 2000; van der Hulst, 2008)
Assign a violation mark for every obstruent in coda position.

(3) *Nasal Copying in Belhare*

	μ_I u ₁	+	η_1	+	ts ₃	μ_{II} i ₄	μ_{III}	$\mu > S$	MAX μ	ALT	DEP S	$*P]_{\sigma}$	INTEG
a.	μ_I u ₁		η_1		ts ₃	μ_{II} i ₄	μ_{III}	*!					
b.	μ_I u ₁		η_1		ts ₃	μ_{II} i ₄			*!				
c.	μ_I u ₁		η_1		ts ₃	μ_{II} i ₄	μ_{III} ts ₃			*!		*!	*
d.	μ_I u ₁		η_1		ts ₃	μ_{II} i ₄	μ_{III} ?				*!		
e.	μ_I u ₁		η_1		ts ₃	μ_{II} i ₄	μ_{III} η_1						*

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