\(\mu\)-Suffixes and \(\mu\)-Circumfixes in Dinka

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**Background:** The Western Nilotic language Dinka (Andersen 1995) has two types of vowel-length changing morphology. Whereas centrifugal derivation (CF) and 3sg agreement systematically lengthen the vowel of their morphological base by 1 \(\mu\) (short/1-moraic vowels get long/2-moraic, long/2-moraic vowels get extra-long/3-moraic), the benefactive derivation (BEN) imposes 2-moraicity on short and long base vowels alike:

![Table](image)

Flack (2007) claims that these data provide definite evidence for morpheme-specific markedness constraints (Pater 2000, 2006). Both patterns derive from \(\mu\)-affixation, but the BEN-\(\mu\) triggers a markedness constraint blocking 3-moraic outputs while 3sg/CF don’t.

**Analysis:** I show that all Dinka data follow from a contiguity requirement in a Colored-Containment-theoretic (van Oostendorp 2005) approach to \(\mu\)-affixation (Zimmermann and Trommer 2011) under the assumption that 3sg/CF are moraic suffixes whereas the BEN is a circumfix consisting of a \(\mu\)-prefix and a \(\mu\)-suffix. I adopt the approach to affixation of Bye & Svenonius (2010), where morphemes may consist of different exponents with distinct linearization requirements. BEN consists of one \(\mu\)-exponent (the \(\mu\)-prefix) which is prefixed to the first \(\mu\) of the base and one \(\mu\)-exponent suffixed to the last \(\mu\) of the base (the \(\mu\)-suffix). Crucially, I assume that different exponents of a single morpheme have the same morphological color and are subject to the CONTIGUITY constraint in (2):

\[(2) \text{MCONT}_{\mu}\]: Assign * to every phonetic \(\mu\) \(M_1\) intervening between two phonetic \(\mu\)’s \(M_2, M_3\), and \(\text{Color}(M_2) = \text{Color}(M_3) \neq \text{Color}(M_1)\)

If \(\text{MCONT}_\mu\) and \(\mu \rightarrow \bullet\) (requiring that every \(\mu\) dominates some segment underlingly or in phonetic representation) dominate all relevant faithfulness constraints (3), the association between a base \(V\) and its mora(s) necessarily become phonetically invisible because this is the only possibility (apart from line-crossing configurations) to associate both components of the \(\mu\)-circumfix and to satisfy \(\text{MCONT}_\mu\). On the other hand, 3sg/CF which each consist of a single \(\mu\)-suffix result in simple augmentation of the base \(V\) because attaching a single colored \(\mu\) to a \(V\) vacuously fulfills \(\text{MCONT}_\mu\).

\[(3) \text{Input: } = (3c) \quad | \quad \text{MCONT}_\mu \rightarrow \cdot \quad | \quad \text{Max} | \quad \text{Dep} |\]

**Extensions:** I show that \(\mu\)-affixation in Dinka is subject to a further general restriction which blocks association of a vocalic root node to \(\mu\)’s of more than two colors, deriving the fact that 3sg morphology may not further augment BEN forms. Finally, I argue that the floating circumfix + contiguity approach extends to other cases of apparent morphologized featural overwriting such as tone-dominant affixes in Hausa (Inkelas and Zoll 2007) and apophony in Berber (Bye 2009).