Uniform Exponence and Reduplication
Evidence from Kinande

Bronwyn M. Bjorkman, MIT

17mfm, May 30 2009

Goal of the Talk: Show that reduplication can be subject to Output-Output correspondence constraints enforcing identity between reduplicants

Secondary Goal: Present an analysis of verbal reduplication in Kinande, a Bantu language spoken in the Democratic Republic of the Congo.

- The idea that uniformity is enforced by grammar not only between whole words or stems, but also potentially between affixes, is developed, among other places, in Kenstowicz (1998) as well as in Burzio (1998). This is formalized by Kenstowicz using a constraint Uniform Exponence:

(1) Uniform Exponence (Kenstowicz, 1998, p. 1)
Uniform Exponence: a lexical item (stem, affix, word) has the same realization for property P in its various contexts of occurrence.

- Uniform Exponence has previously been applied to preventing allomorphy, particularly in the domain of metrical alternations.

In this talk I apply the mechanism of Uniform Exponence to reduplication in Kinande, a Bantu language spoken in the Democratic Republic of the Congo, to account for patterns of non-correspondence as in (2) and (3): ¹

(2) Reduplication of CVC Roots
a. eri-huka to cook eri-huka= huka
b. eri-hukira to cook for eri-huka= hukira
c. eri-hukana to cook e.o. eri-huka= hukana
d. eri-hukwa to be cooked eri-huka= hukwa (∼ eri-hukwa= hukwa)
e. mó-tw-á-huk-ire we cooked (yesterday) mó-tw-á-huka= huk-ire
f. huk-e cook! huka= huk-e (∼ huke= huk-e)

(3) Reduplication of C(V) Roots
a. erítä to bury (people) erítata= tå
b. erítabwá to be buried erítata= tabwá (∼ erí-tabwa= tabwá)
c. erítána to bury each other erítata= tána (∼ erí-tana= tána)
d. erítéra to bury for erítata= téra (∼ erí-tera= téra)

¹Many thanks to Pierre Mujomba for sharing his language. Thanks are also due to Adam Albright, Edward Flemming, Patrick Jones, and Donca Steriade for helpful and insightful discussion, and to the participants in the Spring 2008 Workshop in Phonology and Morphology at MIT.

²This data diverges from what has been previously reported for Kinande, particularly in Mutaka and Hyman (1990). The data I discuss were collected in my own elicitation, and possibly reflect a different dialect than has been previously reported.
• The forms in parentheses are optional more faithful reduplicants – abstracting away from them, the reduplicants in (2b-f) and (3b-d) are not very faithful. What they are is uniform with respect to one other.

• I will account for this fact by using a reduplication-relativized version of Uniform Exponent:

\[(4) \text{Uniform Exponent(red)}\]

All occurrences of the Kinande verbal reduplicative morpheme RED within words containing a single root R must be in correspondence with each other.

Plan for the talk:

1. Kinande reduplication and uniformity.

2. Addressing the optionality in (2c-d) and (3b-d), in the context of the Morpheme Integrity Constraint that has been the focus of previous work on Kinande (Mutaka and Hyman, 1990; Steriade, 1997; Downing, 1999, 2000).

3. Extending reduplicant uniformity to a case of radical non-correspondence.

4. Conclusion.

1 Kinande Reduplication and Uniformity

1.1 Basic Kinande Data

• Verbal reduplication in Kinande is typical of the Bantu family: the reduplicant is a bisyllabic prefix that occurs immediately to the left of the verb root, and contributes the meaning of ‘quickly’ or ‘repeatedly’.

\[(5)\]

\[
\begin{array}{llll}
\text{a.} & \text{eri-hum-a} & \text{‘to hit’} & \text{eri-huma=hum-a} & \text{‘to hit repeatedly’} \\
& \text{INF-hit-FV} & \text{INF-RED=hit-FV} & & \\
\text{b.} & \text{eri-gend-a} & \text{‘to go, to travel’} & \text{eri-genda=gend-a} & \text{‘to go/travel quickly’} \\
& \text{INF-travel-FV} & \text{INF-RED=travel-FV} & & \\
\text{c.} & \text{eri-twal-a} & \text{‘to carry’} & \text{eri-twala=twal-a} & \text{‘to carry quickly’} \\
& \text{INF-carry-FV} & \text{INF-RED=carry-FV} & & \\
\end{array}
\]

• The Base of reduplication is the verbal root plus its suffixes: the I(nflectional)-Stem.

• The I-Stems in (5) are canonical I-stems: they involve a CVC root with a single Inflectional Final Suffix [-a]. Because they are bisyllabic, canonical I-Stems can be fully reduplicated.

• Shorter verb stems triplicate (overcopy) when reduplicated, in order to fill the bisyllabic template:

\[(6)\]

\[
\begin{array}{llll}
\text{a.} & \text{so-:} & \text{eri-sw-a} & \text{‘to grind’} & \text{eri-swasa=sw-a} & \text{‘to grind quickly’} \\
& \text{INF-cl8-grind-FV} & & & \text{INF-cl8-RED-grind-FV} & \\
\text{b.} & \text{lu-:} & \text{eri-lw-a} & \text{‘to fight’} & \text{eri-lwalwa=lw-a} & \text{‘to fight quickly/repeatedly’} \\
& \text{INF-cl8-red-FV} & & & \text{INF-cl8-RED-grind-FV} & \\
\text{c.} & \text{tu-:} & \text{eri-tw-a} & \text{‘to cut’} & \text{eri-twata=tw-a} & \text{‘to cut quickly/repeatedly’} \\
& \text{INF-cl8-red-FV} & & & \text{INF-cl8-RED-grind-FV} & \\
\text{d.} & \text{t-:} & \text{eri-t-a} & \text{‘to bury (a person)’} & \text{eri-tata=t-a} & \text{‘to bury quickly/repeatedly’} \\
\end{array}
\]

• Prefixes never reduplicate, even when the I-Stem is smaller than two syllables. (7) shows this with a CV root and an object-agreement prefix (the I-Stem is encased in brackets):

\[(7)\]

\[
\begin{array}{llll}
\text{eri-bi-[sw-a]} & \text{to grind it (e.g. corn)} & \text{eri-bi-swasa=[sw-a]} & \\
\text{INF-cl8-grind-FV} & & \text{INF-cl8-RED-grind-FV} & \\
\end{array}
\]*
We can use the following constraints to determine the size and position of the reduplicant:

\[(8) \quad \text{RED}=\sigma\sigma\]
The Reduplicant is two syllables long.

\[(9) \quad \text{ALIGN(RED,R; I-Stem,L)} [\text{ALIGN}]
\text{Align the right edge of the Reduplicant with the left edge of the I-Stem.}\]

\[(10) \quad \text{S-DEP}_{BR}
\text{Every segment in the Reduplicant must have a corresponding segment in the Base.}\]

\[(11) \quad \text{INTEGRITY}
\text{No segment in the Base may correspond to more than one segment in the Reduplicant.}\]

\[(12) \quad \text{RED}=\sigma\sigma, \text{ALIGN, S-DEP}_{BR} \gg \text{INTEGRITY}
\begin{align*}
a. \quad & \text{RED}=\sigma\sigma \gg \text{INTEGRITY} \rightarrow *\text{eri-swa}=\text{swa} \text{ (no monosyllabic RED)} \\
b. \quad & \text{ALIGN} \gg \text{INTEGRITY} \rightarrow *\text{eri-biswa}=\text{bi-swa} \text{ (no copy of prefixes)} \\
c. \quad & \text{S-DEP}_{BR} \gg \text{INTEGRITY} \rightarrow *\text{eri-yswa}=\text{swa} \text{ (no epenthesis)}
\end{align*}\]

### 1.2 Uniform Exponence

- With the basic analysis of Kinande reduplication in place, we can develop the uniform exponence analysis.
- The relevant data are repeated in (13) and (14), with the uniform reduplicants bolded.
- While underived stems reduplicate as expected, all derived stems, and stems with non-default IFS (-e subjunctive, -i perfect) exhibit imperfect base-reduplicant faithfulness.

\[(13) \quad \text{CVC roots proliferate CVC+a reduplicant}
\begin{align*}
a. \quad & \text{eri-huka} \quad \text{to cook} \quad \text{eri-huka}=\text{huka} \\
b. \quad & \text{eri-hukira} \quad \text{to cook for} \quad \text{eri-huka}=\text{hukira} \\
c. \quad & \text{eri-hukana} \quad \text{to cook e.o.} \quad \text{eri-huka}=\text{hukana} \\
d. \quad & \text{eri-hukwa} \quad \text{to be cooked} \quad \text{eri-huka}=\text{hukwa} (\sim \text{eri-hukwa}=\text{hukwa}) \\
e. \quad & \text{mó-tw-á-huk-ire} \quad \text{we cooked (yestd.)} \quad \text{mó-tw-á-huka}=\text{huk-ire} \\
f. \quad & \text{huk-e} \quad \text{cook!} \quad \text{huka}=\text{huk-e} (\sim \text{huke}=\text{huk-e})
\end{align*}\]

\[(14) \quad \text{C(V) roots proliferate triplication}
\begin{align*}
a. \quad & \text{erítā} \quad \text{to bury (people)} \quad \text{eri-tata}=\text{tā} \\
b. \quad & \text{erítabwā} \quad \text{to be buried} \quad \text{eri-tata}=\text{tabwā} (\sim \text{eri-tabwa}=\text{tabwā}) \\
c. \quad & \text{erítāna} \quad \text{to bury each other} \quad \text{eri-tata}=\text{tána} (\sim \text{eri-tana}=\text{tána}) \\
d. \quad & \text{eríterā} \quad \text{to bury for} \quad \text{eri-tata}=\text{téra} (\sim \text{eri-tera}=\text{téra})
\end{align*}\]

- Recall the UE red constraint (repeated from (4)):

\[(15) \quad \text{UNIFORM EXPONENTE(RED) [UE-RED]}
\text{For all occurrences of the Kinande verbal reduplicative morpheme RED within words containing a single root R, RED has the same realization.}\]

- Ranking this constraint above both S-MAX_{BR} and F-DEP_{BR} will force uniformity (I assume that non-corresponding reduplicant-final [a] is a mutated Base vowel, violating F-DEP_{BR} rather than S-DEP_{BR}):
(16) \( \text{UE-RED} \gg \text{S-MAX}_{BR}, \text{F-Dep}_{BR}, \text{Integrity} \)
   a. \( \text{UE-RED} \gg \text{S-MAX}_{BR} \rightarrow \) allows non-copy of Base segments
   b. \( \text{UE-RED} \gg \text{F-Dep}_{BR} \rightarrow \) allows mutation of Base vowels
   c. \( \text{UE-RED} \gg \text{Integrity} \rightarrow \) allows triplication

- This gets uniformity, but not necessarily the right uniformity, as shown in (17).

(\text{UE-RED} \text{ requires that whole reduplicative paradigms be evaluated simultaneously. Three representative forms make the necessary points below})

(17) \( \text{UE-RED} \gg \text{S-MAX}_{BR}, \text{F-Dep}_{BR} \)

<table>
<thead>
<tr>
<th>{ \text{eri-RED-huk-a} }</th>
<th>\text{UE-RED}</th>
<th>\text{S-MAX}_{BR}</th>
<th>\text{F-Dep}_{BR}</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ( \circ { \text{eri-huka=huka} )</td>
<td>✓</td>
<td>***!</td>
<td>**</td>
</tr>
<tr>
<td>b. ( \circ \bar{\sigma} { \text{eri-hukwa=huma} )</td>
<td>✓</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>c. { \text{eri-huki=huka} }</td>
<td>✓</td>
<td>***!</td>
<td>****</td>
</tr>
<tr>
<td>d. { \text{eri-huka=huka} }</td>
<td>✓</td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

(18) \( \text{UE-RED} \gg \text{Integrity}, \text{S-MAX}_{BR}, \text{F-Dep}_{BR} \)

<table>
<thead>
<tr>
<th>{ \text{eri-RED-ta} }</th>
<th>\text{UE-RED}</th>
<th>\text{Integrity}</th>
<th>\text{S-MAX}_{BR}</th>
<th>\text{F-Dep}_{BR}</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ( \circ { \text{eri-tata=ta} )</td>
<td>✓</td>
<td>*</td>
<td>**</td>
<td>*</td>
</tr>
<tr>
<td>b. ( \circ \bar{\sigma} { \text{eri-tata=tabwa} )</td>
<td>✓</td>
<td><em>!</em>*</td>
<td>*****</td>
<td>*</td>
</tr>
<tr>
<td>c. ( \circ \bar{\sigma} { \text{eri-tabwa=ta} )</td>
<td>✓</td>
<td>**</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>d. { \text{eri-tera=ta} }</td>
<td>✓</td>
<td>**</td>
<td>**!</td>
<td></td>
</tr>
</tbody>
</table>
**Problem:** The correct winner is harmonically bounded by another uniform paradigm, in which a non ‘basic’ form proliferates.

- A possible solution: highly rank S-Dep_{BR}
- This misses an intuition, however: what’s really wrong with the (incorrect) winners in (17) and (18) is not that they violate Dep, but that the reduplicants contain morphemes not present in their bases.
  → Though in (18c) the reduplicant tabwa in *eri-tabwa=ta* doesn’t literally contain the passive morpheme, its segments are in correspondence (via UE) with the passive morpheme.
- I implement this intuition using a constraint M-Dep, modified from a constraint with similar function in Downing (2000):

(19) $\text{M-Dep}_{BR}$
A segment in a reduplicant may not correspond, directly or indirectly, to a segment belonging to a morpheme not contained in its base.

(20) $\text{M-Dep}_{BR}$, $\text{UE-RED} \gg \text{Integrity}$, $\text{S-Max}_{BR}$, $\text{F-Dep}_{BR}$

<table>
<thead>
<tr>
<th>Reduplicant Set</th>
<th>$\text{M-Dep}_{BR}$</th>
<th>$\text{UE-RED}$</th>
<th>Integrity</th>
<th>$\text{S-Max}_{BR}$</th>
<th>$\text{F-Dep}_{BR}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ${ \text{eri-RED-ta} }$</td>
<td>$\text{M-Dep}_{BR}$</td>
<td>$\text{UE-RED}$</td>
<td>$\text{Integrity}$</td>
<td>$\text{S-Max}_{BR}$</td>
<td>$\text{F-Dep}_{BR}$</td>
</tr>
<tr>
<td>${ \text{eri-tata=ta} }$</td>
<td>$\text{M-Dep}_{BR}$</td>
<td>$\text{UE-RED}$</td>
<td>$\text{Integrity}$</td>
<td>$\text{S-Max}_{BR}$</td>
<td>$\text{F-Dep}_{BR}$</td>
</tr>
<tr>
<td>${ \text{eri-tabwa=tabwa} }$</td>
<td>$\text{M-Dep}_{BR}$</td>
<td>$\text{UE-RED}$</td>
<td>$\text{Integrity}$</td>
<td>$\text{S-Max}_{BR}$</td>
<td>$\text{F-Dep}_{BR}$</td>
</tr>
<tr>
<td>${ \text{eri-tera=tera} }$</td>
<td>$\text{M-Dep}_{BR}$</td>
<td>$\text{UE-RED}$</td>
<td>$\text{Integrity}$</td>
<td>$\text{S-Max}_{BR}$</td>
<td>$\text{F-Dep}_{BR}$</td>
</tr>
</tbody>
</table>

A Prediction of UE:

When a root lacks an underived form...

...if all derived forms are based on one particular derived form (a lexicalized causative, for example), uniform exponence will not proliferate an ‘underived’ reduplicant, but will proliferate the simple causative reduplicant.

...if there is no underived form but more than one derived form exists (causative and passive, for example) it is less clear what should happen. Learners may be willing to postulate an underived reduplicant in the absence of an underived stem.
2 Optional Non-uniformity and the Morpheme Integrity Effect

- This section returns to the non-uniform option available to Kinande reduplicants. The relevant reduplicants are bolded in the repeated data below:

(21) Canonical $C_0 V C_0$ Roots

a. eri-huka to cook eri-huka=huka
b. eri-hukira to cook for eri-huka=hukira
c. eri-hukan to cook e.o. eri-huka=hukana
d. eri-hukwa to be cooked (eri-huka=hukwa ∼) eri-hukwa=hukwa
e. mó-tw-á-huk-ire we cooked (yestd.) mó-tw-á-huka=huk-ire
f. huk-e cook! (huka=huk-e ∼) huke=huk-e

(22) Subminimal $C(V)$ Roots

a. er¯ı-taña to bury (people) eri-tañã=tañã
b. er¯ı-tabwã to be buried (eri-taña=tabwã ∼) eri-tabwa=tabwã
c. er¯ı-taña to bury each other (eri-taña=tányã ∼) eri-tana=tána
d. er¯ı-téra to bury for (eri-taña=téra ∼) eri-tera=téra

- This cannot be analyzed as UE being partially enforced – UE-redplaces all relevant reduplicants in correspondence, or none of them.

- What these data illustrate is the Morpheme Integrity Condition effect that has been the focus of previous discussions of Kinande reduplication (Mutaka and Hyman, 1990; Steriade, 1997; Downing, 1999, 2000).

(23) Morpheme Integrity Constraint (Mutaka and Hyman, 1990, 83)

“Mapping of a melody to a reduplicative template takes place by morpheme. If the whole of a morpheme cannot be successfully mapped into the bisyllabic reduplicative template, then none of the morpheme may be mapped.”

→ All dialects of Kinande seem to exhibit the MIC..
→ ...while only some exhibit Uniformity

2.1 Details of the MIC

- Extension suffixes that ‘fit’ in the reduplicant do reduplicate: the two suffixes that do not add a syllable to the canonical I-Stem – passive -w- and causative -j- – must reduplicate in this dialect.

(24) a. eri-hum-w-a ‘to be beaten’ eri-humwa=hum-w-a
INF-hit-PASS-FV
b. eri-huk-y-a ‘to cause to cook’ eri-hukya=huk-y-a
INF-cook-CAUS-FV

- Similarly, syllable-adding extension suffixes attached to CV roots also reduplicate:

(25) a. erí-t-abw-á to be buried erí-tabwa=t-abw-á
INF-bury-PASS-FV
b. erí-t-án-a to bury e.o. erí-tana=t-án-a
INF-bury-RECP-FV
c. erí-t-ér-a to bury for erí-tera=t-ér-a
INF-bury-APPL-FV

- The reduplications in (24) and (25) are mandatory in non-Uniformity dialects; they are optional in this dialect.
Extension suffixes that add a syllable to the I-Stem do not reduplicate in any dialect when following CVC roots – we see default final [a] instead:

(26) a. eri-huk-ir-a 'to cook for' eri-huka=huk-ir-a
   INF-cook-APPL-FV *eri-huki=huk-ir-a
b. eri-huk-an-a 'to cook each other' eri-huka=huk-an-a
   INF-cook-RECP-FV
  c. eri-huk-is-y-a 'to cause to cook' eri-huka=huk-is-y-a
   INF-cook-CAUS-FV *eri-huki=huk-is-y-a
d. mó-tw-á-huk-íre we cooked (yestd.) mó-tw-á-huka=huk-íre
   INFORM.-2PL-TNS-cook-PERF.FV *mó-tw-á-huki=huk-íre

The final [a]'s in (26) cannot result from segment-skipping: a reduplicant-final [a] appears in all non-faithful forms, even when the I-Stem has a different inflectional final suffix:

(27) mó-bá-hum-íre 'they beat yesterday' mó-bá-huma=hum-íre
    mu-hum-is-y-e 'make him beat!' mu-huma=hum-is-y-e

Why is RED [a]-final? All approaches have linked the occurrence of [a] in RED to the default inflectional suffix -a.

○ For Mutaka and Hyman the morpheme -a could be inserted to fill a reduplicative template because it has no specific morphological role.

○ Steriade (1998) proposes that reduplicants are constrained to resemble actual I-Stems, among which the [a]-final forms are privileged.

○ Downing (1999, 2000) advances the view that RED must be analyzable as a potential, though not necessarily actual, canonical I-Stems.

• The UE analysis outlined above accomplishes a similar effect – the [a]-final reduplicant proliferates because it occurs in underived and canonical contexts.

2.2 A Brief Outline of a Lexical Conservatism account of the MIC

• This is an extension of Steriade (1998)'s discussion of Kinande reduplication in terms of Lexical Conservatism.

• Steriade proposed that Kinande reduplicants must correspond to some otherwise occurring I-Stem in the language.

The Problem: Reduplicants are actually constrained in which stems they can correspond to.

→ the existence of the subjunctive imperative I-Stem gend-e ‘travel!’ does not license the reduplication eri-gende=gend-er-a, where the [e] belongs to an applicative morpheme.

• To deal with this, we can build into the constrain enforcing lexical conservatism a restriction on the stems to which correspondence is possible:

(28) Lexical Conservatism (RED) [RED-LC]
A reduplicant of an I-Stem must correspond to that I-Stem, or to some other existing I-Stem whose derivational structure is a subconstituent of the adjacent I-Stem.

---

3Similarly Reduplicant-final [-a] is not a fixed segment resulting from the emergence of the unmarked (TETU, Alderete et al., 1999). There is no evidence elsewhere in Kinande that [-a] is a phonologically-unmarked vowel (Archangeli and Pulleyblank, 1989; Mutaka, 1986). For example, it is not the vowel epenthesized in loanwords in Kinande to break up disallowed consonant sequences: the vowel occurring in such environments is [i].
• The effect of this constraint on a verb with structure as in (29)...

(29)

I-Stem
M-Stem SUBJ: -e
Root APPL: -ir-
FIGHT: lw

...is to require that its reduplicant correspond to that I-Stem, or to one of the I-Stems in (30), which contain subparts of (29)'s derivational structure, but the default IFS [a]:

(30)

a. 

I-Stem
M-Stem DEFAULT: -a
Root -ir
lw

b. 

I-Stem
M-Stem DEFAULT: -a
Root DEFAULT: -a
lw

The ranking of red-LC with respect to the other constraints will be as in (31), and successfully gets us the default [a] required in reduplication of morphologically complex forms:

(31)  red=σσ, red-LC, Cont ⊃ DepBRV ⊃ S-MaxBR

<table>
<thead>
<tr>
<th>mu-RED-humire</th>
<th>RED=σσ</th>
<th>RED-LC</th>
<th>Cont</th>
<th>DepBRV</th>
<th>S-MaxBR</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. *! mu-huma=humire</td>
<td></td>
<td></td>
<td>*</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>b. mu-humi=humire</td>
<td></td>
<td>*!</td>
<td></td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>c. mu-hume₁=humire₂</td>
<td></td>
<td>*!</td>
<td></td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>d. mu-hume₁=humire₁</td>
<td></td>
<td>*!</td>
<td></td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>e. mu-humire=humire</td>
<td></td>
<td>*!</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

• The MIC effects, triggered by lexical conservatism, will be visible whenever UE-red is ranked below a constraint requiring total faithful copy of a base – this effect can be obtained with locally conjoined S-MaxBR & F-DepBR.

3 Other Cases of UE and Reduplication

• Recent work by Sharon Inkelas and Cheryl Zoll (Inkelas, 2005; Inkelas and Zoll, 2005) has discussed cases of non-correspondence in reduplication, and has argued on their basis for a non-correspondence-based approach to reduplication more generally (Morphological Doubling Theory, MDT).

• Output-Output correspondence, formalized as Uniform Exponentence, provides a way to account for such data within Correspondence Theory.

• Perhaps the most striking data discussed in Inkelas and Zoll (2005) involve stem suppletion in reduplication in Sye.

• Sye strong verbs have two stem allomorphs, historically related but synchronically unpredictable (Crowley,
The two stems occur in complementary morphosyntactic environments:

(32) **Sye Stem Alternations** (Crowley, 1998, p. 84)

<table>
<thead>
<tr>
<th>Stem 1</th>
<th>Stem 2</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>amol-</td>
<td>omol-</td>
<td>fall</td>
</tr>
<tr>
<td>ovol-</td>
<td>ampol-</td>
<td>turn it</td>
</tr>
<tr>
<td>oruc-</td>
<td>anduc-</td>
<td>bathe</td>
</tr>
</tbody>
</table>

- Sye reduplication totally copies the Stem. When a Stem 1 form reduplicates, both copies are in the Stem 1 form. When a Stem 2 form reduplicates, however, the second copy is always a Stem 1 form:

(33) **Sye Reduplication** (Crowley, 1998, p. 79, 143)

a. omolomol cw-amol-omol
   fall.stem1-fall.stem1 3pl.fut-fall.stem2-fall.stem1
b. ovol-vol- ampol-vol-
   turn.it.stem1-turn.it.stem1 turn.it.stem2-turn.it.stem1

- These data are presented in Inkelas and Zoll as evidence against a Correspondence-based approach to reduplication, and in favour of their Morphological Doubling Theory approach.

- They can be understood within a correspondence-based approach, however, with the mechanism of Uniformity enforced between reduplicants; the suppletive reduplicants in (33) can result from UE-red dominating all FaithBR constraints:

(34)

<table>
<thead>
<tr>
<th></th>
<th>omol-red</th>
<th>amol-red</th>
<th>UE-red</th>
<th>FaithBR</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>omol-omol</td>
<td>amol-omol</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>b.</td>
<td>omol-amol</td>
<td>amol-amol</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>c.</td>
<td>omol-amol</td>
<td>amol-amol</td>
<td></td>
<td>*!</td>
</tr>
</tbody>
</table>

- Again, this account requires a mechanism for privileging Stem 1 (the basic form) over Stem 2 – the tableau in (34) is equally satisfied by both uniform possibilities. Whether this preference if morphological, or simply the result of a majority of words containing Stem 1, is a topic for future research.

### 4 Conclusion

- This talk has argued for the existence of Output-Output correspondence in the domain of reduplication – but between reduplicants rather than between a reduplicant and its base.

- I’ve developed this idea within the framework of Uniform Exponent (Kenstowicz, 1998)
  - Applied to Kinande, it accounts for a pattern of default segmentism, unexpected given the availability of more-faithful reduplicated forms.
  - In the discussion of Sye, it might account for apparent non-correspondence, where the allomorph of a root that occurs in a reduplicant can be distinct from the allomorph that occurs in the Base.

---

4 Weak verbs alternate, but the alternation is reported to be phonologically predictable.
A speculative concluding remark: why might Kinande reduplication be subject to Uniform Exponence?

→ The effect of the MIC is to create an already-very-uniform paradigm of reduplication for CVC roots. This may provide learners with enough evidence to postulate a UE constraint even for reduplication, the prototypically non-uniform morpheme.

References


Jones, Patrick. 2008. Accounting for falling tones in Kinande infinitive verbs. Phonology Circle presentation, MIT.


