Local interactions in the prosodic structure of Ndebele verbs

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Disyllabic minimality requirement

(1) Minimality effects in the **passive** stem

a. *(i- [phwa])$_\omega$ ⇒ ✓(i- [phiwa])$_\omega$ *'it is given'*
(infl [passive stem])$_\omega$

b. ✓(i- [phekwa])$_\omega$ *(i- [phekiwa])$_\omega$ *'it is cooked'*
(infl [passive stem])$_\omega$

(2) Minimality effects in the **participial** stem

a. *(e- [pha])$_\omega$ ⇒ ✓(e- [sipha])$_\omega$ *'as he was giving'*
(infl [participial stem])$_\omega$

b. ✓(e- [pheka])$_\omega$ *(e- [sipheka])$_\omega$ *'as he was cooking'*
(infl [participial stem])$_\omega$

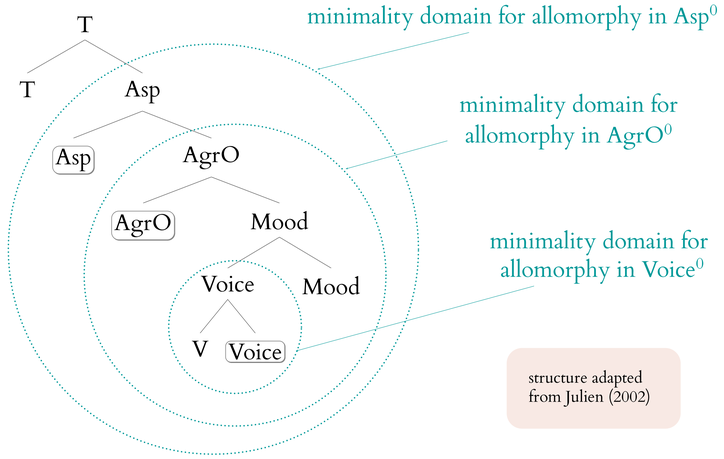
(3) **No** minimality effects in the **active** stem

✓(u- [pha])$_\omega$ ← monosyllabic stem✓
(infl [active stem])$_\omega$

Question: How are word-internal minimality domains defined?

Proposal: Prosodically Conditioned Allomorphy

(4) PrCA domains:

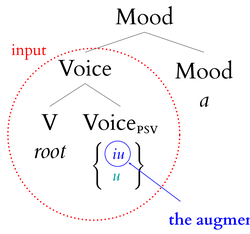


- Prosodic domains fall out directly from the syntax (Wagner 2005, Pak 2008)
- Terminal nodes are subject to cyclic spell-out (Embick 2010, Svenonius 2012)
- **PrCA**: a morpheme is paired with a set of exponents, and phonological computation immediately determines which allomorph is selected.

MinFoot > *STRUCTURE
MinFoot: a minimality constraint penalizing forms smaller than a foot
***STRUCTURE**: a markedness constraint penalizing segmental complexity

Example derivation: Passive stem

(5) PrCA in passive voice:



(6) Allomorph selection in Voice$_{PSV}$

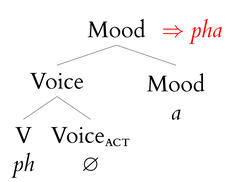
/ph{*iu, u*}/	MinFoot	*STRUCT
☞ phi.u		*
phu	*!	
/phek{*iu, u*}/	MinFoot	*STRUCT
phe.ki.u		*!
☞ phe.ku		

(7) After adding the exponent of Mood *-a*:

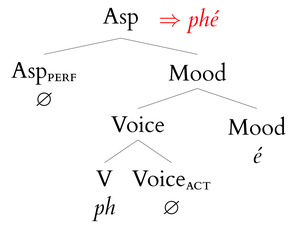
a. phi.u + a → phi.wa (ROOT: **ph** 'give')
b. phe.ku + a → phe.kwa (ROOT: **phek** 'cook')

Minimality as allomorphy ~ Domain variability

(8) **No** PrCA in active voice:

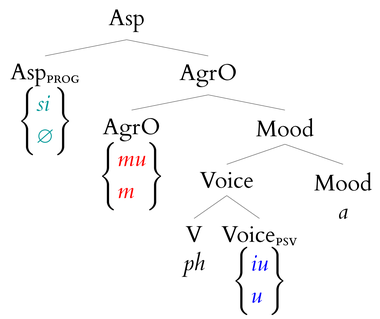


(9) **No** PrCA in perfect aspect:



(10) **Domain variability corollary:**
A constituent X is a minimality domain if its head is subject to PrCA.

Cyclicity ~ Upward bleeding



[**mu**-[ph-a]] *'give him'*
[**m**-[ph-**iw**-a]] *'given him'*
*[**mu**-[ph-**w**-a]]

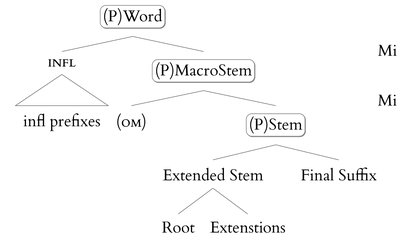
[**si**-[ph-a]] *'giving'*
[∅-[ph-**iw**-a]] *'being given'*
*[**si**-[ph-**w**-a]]

[∅-[**mu**-ph-a]] *'giving him'*
*[**si**-[**m**-ph-a]]

(11) **Upward bleeding:** An augmenting allomorph in a lower head bleeds augmenting allomorphs in higher heads, but not vice versa.

Against pre-defined minimality domains

(12) A **PDomain=MinFoot** analysis: Downing (2001)



Minimality in passive stems: **PStem=MinFoot**

Minimality in participial stems: **PMacroStem=MinFoot**

minimality effects ⇒ **epenthesis**

No global interactions:

(13) a. *a- ba- [$_{PStem}$ ph -w -anga] ← **PStem is disyllabic *and yet* a minimality effect occurs**
NEG- 2- give -PSV -FS

b. a- ba- [$_{PStem}$ ph -iw -anga]✓
NEG- 2- give -PSV -FS
'they weren't given'

(14) [$_{Mood}$ [$_{Voice}$ [$_V$ *ph*] {*u, iu*}] *anga*] Local allomorph selection

Resolution of minimality is morpheme-specific

- Downing: minimality violations trigger epenthesis
- **BUT:** There is no single resolution strategy for minimality violations.

AgrO: epenthesize */u/* **Voice$_{PSV}$**: epenthesize */i/* **Asp$_{PROG}$**: epenthesize */si/*

→ Non-uniform resolutions of minimality are unsurprising when viewed as allomorphy: **idiosyncrasy of exponents**

Correlation: minimality domains ~ morphosyntactic features

- **PDomain=MinFoot**-analysis is too strong: PStem is must be disyllabic only in the passive, PMacroStem – only in the progressive.
- Stipulation: which domain is "activated" by which morphosyntactic feature.
- Under the allomorphy analysis, no such stipulations are needed.

Conclusion

(References on the handout)

- Word-internal minimality effects are Prosodically Conditioned Allomophy
- Minimality domains need not be stipulated: they fall out from the syntactic position of the morpheme subject to PrCA.
- **Upward bleeding** and **domain variability** are predicted.