Syntactic Limits on Phonological Dominance

Jonathan David Bobaljik (Harvard)
joint work with Paula Fenger and Maria Kouneli

Brno • May 31 2023

(1) recessive: {i,e,u} isx-enk laχsχ-ank esx-ank-oŋ [Itelmen]
dominant: {e,a,o} father-LOC mother-LOC father-LOC-DAT

xi-k'isx-q xe-kta-q
very-dry-adv very-strong-adv

(2) [Kipsigis] Vowels

[+ATR]: /i,e,ɑ,o,u/
[–ATR]: /ɪ,ɛ,a,ɔ,ʊ/

(3) /ka-ɔ-tʃam/ → kaɔtʃam
PST-2PL-love

(4) /ŋo:k-ɪ/ → ŋo:gi
dog-DEM

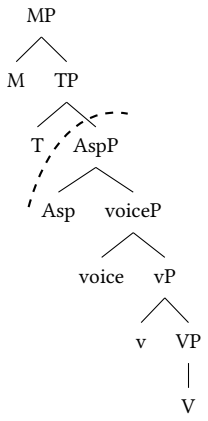
(5) /ka-kɪ-pet / → kɑgibet
PST-1PL-get.lost

(6) /a-tʃam-e/ → ɑtʃɑme
1SG-love-IPFV

(7) a. NoDomPref: No prefixes in D-R VH systems are dominant (Hall et al., 1974; Baković, 2000; Moskal, 2015)

b. Our proposed alternative: NoDomHigh (cf. Newell, 2008; Fenger, 2020; Kiparsky, 2023)
Aspect as domain (Aelbrecht, 2010; Ramchand & Svenonius, 2014; Wurmbrand, 2014; Fenger, 2020)

(8) a.



(9)

	high INFL	low DERIV	ROOT	low DERIV,ASP	high INFL
prefix-suffix	✗	✗		✓	✓
high-low	✗	✓		✓	✗

- Certain phonological properties fixed on first cycle
- Cannot be subsequently overwritten
- Not reversible *NoDomLow

(10) The Kipsigis (Kalenjin) verb (Toweett, 1979, Kouneli FieldNotes)

	INFL	DERIV	ROOT	DERIV	INFL ASP	INFL AGR
DOM	Ø	Ø		n = 4 APPL, AP VENT, PL	n = 1	Ø
REC	n = 9 PST(3) NEG(1) AGR(5)	Ø(+1?)		n = 8 ASS, MOT(2), ITER INSTR, INCH, MID STAT, CAUS	Ø	n = 1 AGR

(11) The Diola-Fogny verb (Sapir, 1965; Casali, 2018)

	INFL	DERIV	ROOT*	DERIV	INFL	
					ASP	AGR
DOM	Ø	Ø		n = 4(+2) DIR, NEG VENT, ASP?	Ø	
REC	n = 10 FUT(2) EMPH(1) AGR(7)	Ø		n = 3(+5) REFL, INSTR INCH, ITER STAT, CAUS	n = 2 HAB INCOMP	n = 13 AGR(8) PST(3) SUB, NEG

(12) The Chukchi verb (Bogoras, 1922; Skorik, 1977; Weinstein, n.d.; Dunn, 1999)

	INFL	DERIV	ROOT*	DERIV	INFL	
					ASP	AGR
DOM	Ø	Ø(+3?)		n=2(+6?) INCH	Ø	
REC	n=12 FUT, COND(2) STAT(2) AGR(8)	n = 6 CAUS, APPL AP, RECP NTNS, …		n = 9 DESID, ITER COLL, A.P. TH, …	n=2 PROG TH	n = 18 ACTIVE(11) STAT(7)

(13) a. /ɣəntev-ɣʔi/ → ɣəntek-vʔi
run-2SG
'You ran (away).' (Skorik 1977:21)

b. kət-ɣənt-et-rkən-i-tək → kət-ɣənt-at-rkən-e-tək [Chukchi]
NTNS-run-DERIV-PROG-E-2PL
'Run!' (Skorik 1977:77) Intensifier *kət-* ∼ *ɣt-* [+dominant] (diacritic)

(14) Summary: Cyclic / Domain-Based account

$$\underbrace{[\text{ Hi-Pref-}}_{\text{Outer}}\ \underbrace{[\text{ Low-Pref-}[\text{ ROOT }]\text{-Low-Suff }]}_{\text{Inner Domain}}\ \underbrace{\text{-Hi-Suff }]}_{\text{Outer}}$$

Kiparsky 2023 - An alternative cyclic approach (Stratal OT)?

(15) a. Harmony: *[αF][$-\alpha$F], MAXμF
b. Cyclicity: IDENT$_{Stem}$F

(16) Warlpiri rounding harmony (high vowels)

	regressive	progressive
	/kiji + rnu/	/wanti + mi + juku/
	kuju-rnu	wanti-mi-jiki

(17)

/kiji - rnu/	*[−RND][+RND]	MAX[+RND]	IDENT[RND]
a. kiji-rnu	∗!		
b. kiji-rni		∗!	∗
☞ c. kuju-rnu			∗∗

(18)

/wanti + mi + juku/	ID-STEM[ATR]	*[−RND][+RND]	MAX[+RND]	IDENT[RND]
a. wanti-mi-juku		∗!		
☞ b. wanti-mi-jiki			∗!∗	∗∗
c. wantu-mu-juku	∗!∗			∗∗

A stratal-OT account of NoDomHigh (Kipsigis)

(19)

/a-[tʃam-e]$_{Stem}$/	Id-Stem[ATR]	*[αATR][−αATR]	Max[+ATR]	Ident[ATR]
a. a-tʃam-e		*!		
b. a-tʃam-ɛ			*!	*
☞ c. ɑ-tʃɑm-e				**

(20)

*/ɑ-[tʃam-ɛ]$_{ftem}$/	Id-Stem[ATR]	*[αATR][−αATR]	Max[+ATR]	Ident[ATR]
a. ɑ-tʃam-ɛ		*!		
☞ b. a-tʃam-ɛ			*	*
c. ɑ-tʃɑm-e	*!			**

- After the first cycle (stem), all affixes will behave as if recessive, regardless of underlying form

Inner Domain: Stem or Phase or something else?

- Stem = Root + first affix; Kiparsky's examples reverse after first affix.
- Phase = Inner Domain may be more complex

Not just first affix, or even stem-formative

(21) a. /umk-čəku-ɣtə/ → omk-əčəko-ɣtə [Chukchi]
√*bush*-INESS-ALL
'into the bushes' (Dunn 1999:283)

b. /n-ine-n-req-ew-mɣo-qin/ → n-ena-n-raq-aw-əmɣo-qen
HAB-TR-CAUS-√*do.sth*-V.STEM-INCH-3SG
'he started to do something' (Dunn 1999:89)

Nouns (and adjectives)

(22) If anything, noun stem is smaller than verb stem. "Nouns, being free forms, are inherently stems. (K)"

verb	verb + 2	noun
/kiji-rnu/	/wanti-mi-juku/	/maliki-kurlu/
kuju-rnu	want-mi-jiki	maliki-kirli
regressive	progressive	progressive

(23) But in Chukchi, Kipsigis, N,A harmony domain is larger than in V

a. *Associative circumfix in Chukchi*
/ɣe-kʔeli-ma/ → ɣakʔalema
ASS-hat-ASS
'with a hat' (Dunn 1999:332)

b. *Case stacking in Chukchi*
/umk-čəku-ɣtə/ → omk-əčəko-ɣtə
√*bush*-INESS-ALL
'into the bushes' (Dunn 1999:283)

c. *Kipsigis Adjective*
/mʊgʊl-[e:]n/ → mugule:n
round-PL

d. *Kipsigis participle*
/ja:t-a:t-[i:]n/ → ja:ta:ti:n
open-PTCP-PL

- Tentative argument for phase approach: less evidence for intermediate phase in N,A vs. V
- Verbal Domains conference: https://blogs.ncl.ac.uk/verbal-domains/

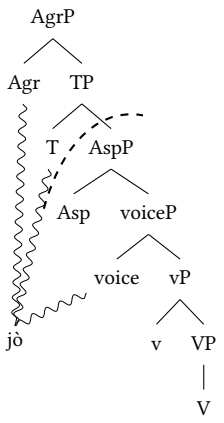
Outstanding issues

1. … Tense fusional morphemes (Karimojong)
2. … Agreement(?) in verbs (Turkana)
3. … Tense in simple verbs (Nez Perce)
4. … Affixes with variable behaviour (Kipsigis ventive)
5. … Also: reports of prefixes that are dominant with function words or numerals (summary in Moskal, 2015), but not part of harmony with lexical roots.
6. … Larger issues: Conflicting syntactic diagnostics for domains (phaseology)
7. … Why DR harmony, but not (all) other processes - high dominant OK in tone, stress

Dominant TAM marker at right-edge [Karimojong]

(24) ɛ-to-dóŋ-ɑn-ɑkín-**jò**
3S/P-CAUS-pinch-FREQ-DAT-**PASS.PRS.3S/P**
(Lesley-Neuman, 2007, p.16)

(25)



References

Aelbrecht, Lobke. 2010. *The syntactic licensing of ellipsis.* John Benjamins.

Baković, Eric. 2000. *Harmony, Dominance, and Control*: Rutgers University dissertation.

Bogoras, Waldemar. 1922. *Chukchee.* Washington: Government Printing Office.

Casali, Roderic. 2018. Markedness and dominance in the ATR harmony system of Diola-Fogny. *Journal of African Languages and Linguistics* 39. 201–239.

Dunn, Michael. 1999. *A grammar of Chukchi*: Australian National University dissertation.

Fenger, Paula. 2020. *Words Within Words: the internal syntax of verbs*: University of Connecticut dissertation.

Hall, Beatrice, R.M.R. Hall, Martin D. Pam, Amy Myers, Stephen A. Antell & Godfrey K. Cherono. 1974. African Vowel Harmony Systems from the Vantage Point of Kalenjin. *Afrika und Übersee* 57(4). 241–267.

Kiparsky, Paul. 2023. A Stratal OT perspective on vowel harmony. In Nancy Ritter & Harry van der Hulst (eds.), *Oxford handbook of vowel harmony*, Oxford: Oxford University Press.

Lesley-Neuman, Diane. 2007. ATR Harmony in Karimojong: Justification for a Stratal Optimality Theory. University of Colorado at Boulder MA thesis.

Moskal, Beata. 2015. *Domains on the border: Between morphology and phonology*: University of Connecticut dissertation.

Newell, Heather. 2008. *Aspects of the morphology and phonology of phases*: McGill dissertation.

Ramchand, Gillian & Peter Svenonius. 2014. Deriving the functional hierarchy. *Language Sciences* 46. 152–174.

Sapir, J. David. 1965. *A grammar of Diola-Fogny.* Cambridge, UK: CUP.

Skorik, Piotr Ja. 1977. *Grammatika čukotskogo jazyka, čast' ii: glagol, narečie, služebnye slova*, vol. 2. Leningrad: Nauka.

Toweett, Taaitta. 1979. *A study of Kalenjin linguistics.* Nairobi: Kenya Literature Bureau.

Weinstein, Charles. n.d. Grammaire du tchouktche. http://charles.weinstein.free.fr/chukches/GRAM/gram.html.

Wurmbrand, Susi. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45(3). 403–447.