



## MAIN CLAIM

Morphologically Distinct Templates\* are predicted if prosodic nodes have **different activities** and are thus **marked to different degrees**.

\*Templates of the same prosodic size but slightly different phonological shape: relevant in different morpho-syntactic contexts.

## THE PROBLEM: TEMPLATES & OT

OT: Markedness constraints can be violated outside of a template but are obeyed within a specific template and **unmarked structure emerges** (McCarthy and Prince, 1994; Downing, 2006; Urbanczyk, 2006).

→ There is **only a single unmarked shape** for every prosodic category and Morphologically Distinct Templates are unexpected.

## BACKGROUND: GSR

Gradient Symbolic Representations: All linguistic symbols have **activity** that can **gradiently** differ (Smolensky and Goldrick, 2016; Rosen, 2016).

Different activities result in gradient faithfulness violations and **gradient markedness violations** if elements can retain their activity in the output (Zimmermann, 2017a,b; Faust and Smolensky, 2017; Walker, 2019).

## DIFFERENT $\varphi$ IN CHUKCHANSI YOKUTS: BASE ADJUSTMENT

Iambic language with stress on every non-final heavy syllable (Guekguezian, 2015); Feet outside of template-context: H, LL, LH.

(1) Morphologically Distinct Templates (Guekguezian, 2011, 24-25), (Guekguezian, 2017, 82)

a. Non-templatic suffixes

/wan/ wan-it 'just gave'  
/max/ max-it 'just collected'

b. Template-demanding suffix: LL

/xat/ xata-ʔa-n 'he is eating' PROGR  
/sep/ sipa-ʔa-n 'he is tearing (intr.)' PROGR  
/max/ maxa-ʔhij- 'the collecting place' ADJUNCT

c. Template-demanding suffix: LH

/xat/ xata:-tʃ-i 'one who eats (acc.)' GERUND  
/sep/ sipa:-tʃ-i 'one that tears (intr.acc.)' GERUND  
/wan/ wana:-la-t 'just made X give' CAUS  
/max/ maxa:-la-t 'just made X collect' CAUS

## DIFFERENT $\varphi$ IN GERMAN: ALLOMORPH CHOICE

Trochaic and not quantity-sensitive (e.g. Eisenberg, 1991; Wiese, 2001).

(2) Past participle prefix /gə-/ (Wiese, 2001, §4.1.2)

a. gə-zu:x-t 'searched' gə-( $\sigma$ ) $\varphi$   
gə-re:d-ət 'talked' gə-( $\sigma\sigma$ ) $\varphi$   
gə-hāi:ra:t-ət 'married' gə-( $\sigma\sigma\sigma$ ) $\varphi$   
b. ʃma'rɔ:t-s 'freeloaded' \*gə-( $\sigma$ ) $\varphi$ ( $\sigma$ ) $\varphi$   
trɔm'pɛ:t-ət 'trumpeted' \*gə-( $\sigma$ ) $\varphi$ ( $\sigma\sigma$ ) $\varphi$   
disku'ti:rɛ-t 'discussed' \*gə-( $\sigma\sigma$ ) $\varphi$ ( $\sigma$ ) $\varphi$

→ /gə-/ only if the base contains a single foot (1, 2, 3 $\sigma$ )

(3) Nominalizing suffixes (Wiese, 2001, §4.1.3)

a. 'hø:fliç-kāit 'courtesy' ( $\sigma\sigma$ ) $\varphi$ -kāit  
gø'le:rɛ:zɑm-kāit 'eruditeness' ( $\sigma$ ) $\varphi$ ( $\sigma\sigma$ ) $\varphi$ -kāit  
b. 'ʃø:n-hāit 'beauty' ( $\sigma$ ) $\varphi$ -hāit  
gø'ʃpɑnt-hāit 'tenseness' ( $\sigma$ ) $\varphi$ ( $\sigma$ ) $\varphi$ -hāit  
intərə'sɑnt-hāit 'interestingness' ( $\sigma\sigma\sigma$ ) $\varphi$ ( $\sigma$ ) $\varphi$ -hāit

→ /-kāit/ only if it is adjacent to a bisyllabic foot

→ Affixed  $\varphi$ -nodes have different activity and tolerate different degrees of markedness ←

CHUKCHANSI YOKUTS:  $\varphi_1$  = tolerates H, LL, LH ♦  $\varphi_{1.5}$  = tolerates only LL or LH ♦  $\varphi_2$  = tolerates only LH

GERMAN:  $\varphi_1$  = tolerates mono-, bi-, or trisyllabic trochees ♦  $\varphi_2$  = tolerates only bisyllabic trochees

## ANALYSIS: BASE ADJUSTMENT IN CHUKCHANSI YOKUTS

(4) Default  $\varphi$ : Marked (H) $\varphi$  created

sep	FTBIN $\sigma$	DEP $\mu$	DEPV	STW	WTS	
	5	3.5	3.5	2	2	
a. (sep) $\varphi_1$	-1					-5
b. (se:pa) $\varphi_1$		-1	-1	-1	-1	-11
c. (sepa) $\varphi_1$			-1		-1	-5.5
d. (sepa:) $\varphi_1$		-1	-1			-7

→ markedness of the foot tolerated: No V-epenthesis or V-lengthening (but V-shortening to avoid an illicit  $\sigma_{\mu\mu}$ ).

(5) Progressive  $\varphi_{1.5}$ : Marked (H) $\varphi$  avoided; (LL) $\varphi$  created

sep + $\varphi_{1.5}$	FTBIN $\sigma$	DEP $\mu$	DEPV	STW	WTS	
	5	3.5	3.5	2	2	
a. (se:p) $\varphi_{1.5}$	-1.5					-7.5
b. (se:pa) $\varphi_{1.5}$		-1	-1	-1.5	-1.5	-13
c. (sepa) $\varphi_{1.5}$			-1		-1.5	-6.5
d. (sepa:) $\varphi_{1.5}$		-1	-1			-7

→ foot is 'strong enough' to demand epenthesis (\*(H) $\varphi$ ) and V-shortening (\*(HL) $\varphi$ )

→ it is still 'too weak' to trigger V-lengthening

(6) Default  $\varphi$ : Marked (LL) $\varphi$  created

ʔade	FTBIN $\sigma$	DEP $\mu$	DEPV	STW	WTS	
	5	3.5	3.5	2	2	
a. (ʔade) $\varphi_1$					-1	-2
b. (ʔade:) $\varphi_1$		-1				-3.5

→ the markedness of the foot is tolerated: No V-lengthening

(7) Gerund  $\varphi_2$ : Marked (H) $\varphi$  avoided; binary (LH) $\varphi$

se:p + $\varphi_2$	FTBIN $\sigma$	DEP $\mu$	DEPV	STW	WTS	
	5	3.5	3.5	2	2	
a. (se:p) $\varphi_2$	-2					-10
b. (se:pa) $\varphi_2$		-1	-1	-2	-2	-15
c. (sepa) $\varphi_2$			-1		-2	-7.5
d. (sepa:) $\varphi_2$		-1	-1			-7

→ The foot is 'strong enough' to demand epenthesis to avoid (H) $\varphi$ , V-shortening to avoid (HL) $\varphi$ , and V-lengthening to avoid (LL) $\varphi$ .

## ANALYSIS: ALLOMORPH CHOICE IN GERMAN

Listed suppletive allomorphs with a preference order: A less preferred one emerges only if realization of a more preferred one is impossible, under violation of PRIO (Bonet, 2004; Bonet et al., 2007).

(8) Nominalizer: Unmarked foot = Preferred allomorph

$\varphi_1$ hø:fliç + { $\varphi_2$ kāit > hāit }	DEPS	FTBIN $\sigma$	PRIO	
	10	5	4	
a. $\varphi_2$ hø:fliç kāit				0
b. $\varphi_1$ hø:fliç hāit			-1	-4

(9) Nominalizer: Marked foot = Dispreferred allomorph

$\varphi_1$ ʃø:n + { $\varphi_2$ kāit > hāit }	DEPS	FTBIN $\sigma$	PRIO	
	10	5	4	
a. $\varphi_2$ ʃø:n kāit		-2		-10
b. $\varphi_1$ ʃø:n hāit		-1	-1	-9
c. $\varphi_2$ ʃø:n nə kāit	-1			-10

(10) Past participle: Unmarked foot = Preferred allomorph

{ $\varphi_1$ gø > ø } + $\varphi_1$ re:d + t	DEPS	FTBIN $\sigma$	PRIO	
	10	5	4	
a. $\varphi_1$ gø re:dət				0
b. ø re:dət			-1	-4

(11) Past participle: Marked foot = Preferred allomorph

{ $\varphi_1$ gø > ø } + $\varphi_1$ zu:x + t	DEPS	FTBIN $\sigma$	PRIO	
	10	5	4	
a. $\varphi_1$ gø zu:xt		-1		-7.5
b. ø zu:xt		-1	-1	-9
c. $\varphi_1$ gø zu: xət	-1			-10