



# Uyghur disharmony without diacritics (or, Phonological representations are phonological)

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## Uyghur back harmony

### (1) Harmonic forms

- a. tyɾ-dæ/\*da 'type-LOC'
- b. pul-ɤa/\*gæ 'money-DAT'

### (2) Transparent and neutral vowels

- a. ymid-lær/\*lar 'hope-PL'
- b. amil-ɤa/\*gæ 'element-DAT'
- c. biz-gæ/\*ɤa 'us-DAT'
- d. din-ɤa/\*gæ 'religion-DAT'

### (3) Disharmonic suffixes

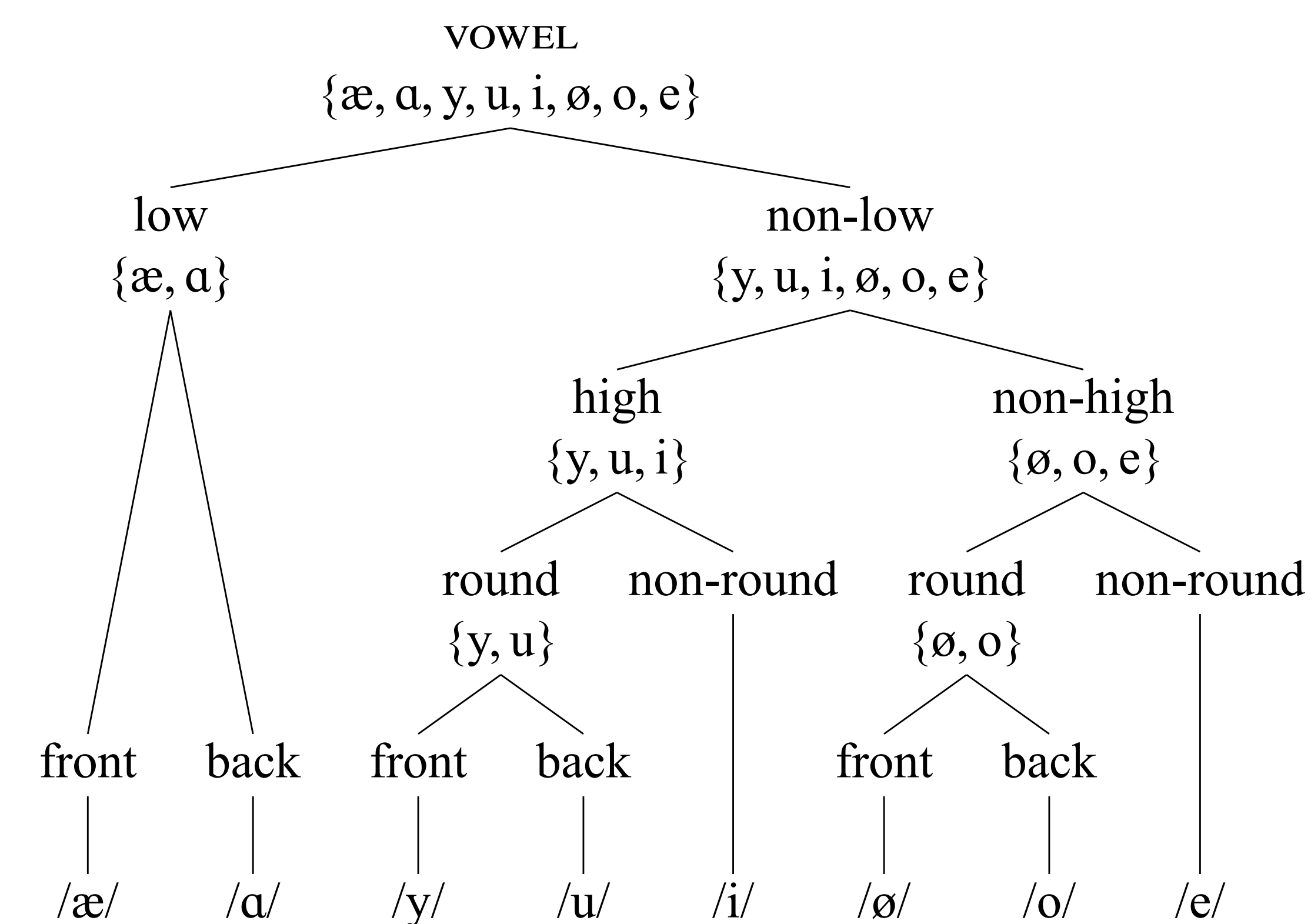
- a. sɔzlæ-wat-i-du 'speak-wat-NPST-3'
- b. sɔzlæ-gæn 'speak-PERF'
- c. talla-wat-i-du 'choose-wat-NPST-3'
- d. talla-gan 'choose-PERF'
- e. tap-i-du 'find-NPST-3'
- f. tæp-i-du > tep-i-du 'kick-NPST-3'

### (4) Grammatical disharmony

- a. iz-lar 'tooth-PL' (N)
- b. iz-læ-f 'tooth-VRB-GER' (V)

## Inventory and feature hierarchy

non-round		round	
front	back	front	back
i	(u)	y	u
e	(ɤ)	ø	o
æ	a		



Form	Surface	Morphologically Segmented	Root/Affix
(1a) tyɾdæ			
(1b) pulɤa			
(2a) ymidlær			
(2b) amilɤa			
(2c) bizgæ			
(2d) dinɤa			
(3e) tapidu			
(3f) tæpidu			
(4a) izlar			
(4b) izlæf			

## Past accounts of disharmony

Hahn (1991)

- abstract vowels /u, ɤ/ as back unrounded triggers

“underlying featural contrast is used to condition phonological behavior despite corresponding to no observable phonetic differences in the conditioning segments themselves” (Mayer, Major & Yakup 2022)

- but, Dresher and Compton (2011) provide arguments from Inuit for abstract vowels
- MMY 2022 is equivalent to linearity and invariance conditions rejected by Chomsky (1964)

Mayer, McCollum, & Eziz (2022)

- lexical exception marks
- [+back] affixes are default for neutral vowels; [-back] affixes for neutral vowels are lexical exceptions

“[the diacritic] is arbitrary, unconstrained, and makes no predictions about the behavior of the morpheme beyond that rule” (Buckley 1995)

## Events, features, precedence: Our autosegmental approach

- Idsardi (2022) generalizes proposals in Papillon (2020) and Raimy (2000)
- present autosegmental (Goldsmith 1976) approach sequences features to code ‘exceptional’ affix behavior
- no abstract underlying /u, ɤ/
- features are not diacritics
- harmonic and disharmonic forms accounted for with the same representations
- Phonological representations are phonological

### References

Bregman, A. S. 1990. *Auditory Scene Analysis*. ■ Buckley, E. 1994. *Proc. NELS*, 24(1): 17–30. ■ Chomsky, N. 1964. *Current Issues in Linguistic Theory*. ■ Chomsky, N. & Halle, M. 1968. *The Sound Pattern of English*. ■ Compton, R. & Dresher, B. E. 2011. *Cdn. Jour. Ling.*, 56: 203–228. ■ Goldsmith, J. 1976. PhD dissertation, MIT. ■ Hahn, R. 1991. In *Studies in the historical phonology of Asian languages*, 68–101. ■ Hall, D. C. & Ozburn, A. 2019. *Proc. NELS*, 49(2): 89–102. ■ Idsardi, W. 2022. *Cdn. Jour. Ling.*, 67: 670–682. ■ Idsardi, W. & Raimy, E. 2024? *The Cambridge Handbook of Minimalism* ■ Kaisse, E. 1986. In *A Festschrift for Sol Saporta*, 231–239. ■ Kidima, L. 1991. PhD dissertation, UCLA. ■ Kiparsky, P. 1973. In *Three Dimensions of Linguistic Theory*, 57–86. ■ Lightner, T. M. 1965. *Word*, 21: 244–250. ■ Mayer, C., McCollum, A., & Eziz, G. 2022. *Lang. Linguist. Compass.*, e12478. ■ Mayer, C., Travis Major, T., & Yakup, M. 2022. *Proc. AMP, 2021*. ■ Papillon, M. 2020. PhD dissertation, U. Maryland. ■ Raimy, E. 2000. *The Phonology and Morphology of Reduplication*. ■ Stang, C. S. 1957. *Slavonic accentuation*. ■ Zonneveld, W. 1978. *A Formal Theory of Exceptions in Generative Phonology*.

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