

## Abstract: Duke-of-York Epenthesis in Arapaho

A Duke-of-York derivation is a derivation in which an intermediate state is created just to reverse it at a later step to the original Input. McCarthy (2003) disputes the realness of such phenomena and re-analyses known examples in OT with sympathy theory without reference to such an intermediate step I will show that Arapaho (Algonquin, Cowell and Moss 2008) displays a Duke-of-York phenomenon which is not derivable in parallel OT or Harmonic Serialism (HS), but in Stratal OT (Kiparsky 2000, Bermúdez-Otero 2008).

**Data:** Epenthesis in Arapaho interacts on one side with tone and on the other with adjacent consonants. Epenthesis is employed to re-syllabify coda consonants due to a constraint against place features in codas: /oowsee/ → hoowúsee. The epenthetic vowel is (mostly) [i] and triggers the same segmental changes on preceding consonants as underlying /i/ does: develarisation of velar consonants (/k,x,w/ → [tʃ,s,b]) and noise augmentation in coronal obstruents (t → θ, θ → s). Epenthetic vowels are potential hosts for floating high tones. If there is no floating high tone available, they are low-toned by default. Short high vowels are optionally deleted unless they bear a high tone. For epenthetic vowels, this deletion is obligatory. On the surface, epenthetic vowels are only pronounced in presence of a formerly floating high tone: wóxhoox, \*wóxuhoox. The consonantal changes however remain: /nihbebíθtiit/ → nihbebústiit.

**HS:** HS seems to be an ideal framework for intermediate steps and counterbleeding opacity (Elfner 2011, 2016, McCarthy 2008), and it can indeed account for consonantal changes in front of underlying /i/ which is deleted at a later step. HS fails if epenthesis comes into play: Due to its inert characteristics, it can only introduce harmonically improving intermediate steps and not re-rank constraints.

**Stratal OT:** The solution lies in the adoption of Stratal OT. I assume that epenthesis, consonantal change and tone assignment happen on a lower stratum, the stem-level, while deletion low-toned, un-sonorous vowels happens on a later stratum, the word level. In between, constraints are re-ranked and a formerly high ranked constraint against codas is now dominated by the constraint against said un-sonorous nuclei. Such a constraint is best understood as a ganging up effect of several constraints, formalised in HG (Stojković 2017).