

## Autosegmental laryngeal features in a dialect of Quechua

Due Friday, March 13

**Directions:** Provide an autosegmental, OT analysis of the distribution of [+spread glottis] and [+constricted glottis] in this dialect of Quechua. (I can tell you the data source later if you want.)

- These data show generalizations about what roots look like, rather than alternations.
  - I've given you some legal words and some illegal hypothetical words.
- You need to explain why the illegal words aren't allowed to surface faithfully. That is, if there *were* an input like /pat'aj/, the faithful candidate \*[pat'aj] couldn't win.
  - And of course the actual words should still be allowed to surface intact (including #28 and #29)
- You will probably want to use featural ALIGN and MAX constraints—be sure to define your ALIGN constraint(s) precisely, including how violations are counted.

For your reference, here are the consonants of this dialect of Quechua:

p'	t'	t͡ʃ'	k'	q'	ʔ
p <sup>h</sup>	t <sup>h</sup>	t͡ʃ <sup>h</sup>	k <sup>h</sup>	q <sup>h</sup>	h
p	t	t͡ʃ	k	q	
	s	ʃ			
m	n	ɲ	ŋ		
	l	ʎ			
	r				
w		j			

### Legal words

1) p'ataj	to bite	16) rakt'a	thick
2) p <sup>h</sup> ataj	to explode, blow up	17) mi͡t͡ʃu	mixed, jumbled
3) tanta	collection, combination	18) moqt͡ʃ'ikuj	to wash or rinse out the mouth
4) t'anta	bread	19) sun͡t͡ʃu	yellow aster
5) t <sup>h</sup> anta	old, used up, worn out	20) rank'ukuj	to get twisted up
6) t͡ʃ'at͡ʃu	treacherous, tricky	21) musk <sup>h</sup> ij	to smell
7) t͡ʃ <sup>h</sup> at͡ʃu	ragged, tattered	22) naq'o	dented, bruised
8) k'anaka	rooster	23) leq <sup>h</sup> e	rotten, putrid
9) k <sup>h</sup> anka	slimy, clammy	24) ranq <sup>h</sup> a	forgetful
10) q'ata	turbid, muddy	25) warak'a	sling made of wool
11) q <sup>h</sup> ata	mountainside	26) ʔapij	(made up, but should be legal)
12) wirp'a	lip	27) hapij	(made up, but should be legal)
13) sup <sup>h</sup> u	body hair	28) taʔij	(made up, but should be legal)
14) musp <sup>h</sup> apakuj	to be delirious	29) tahu	(made up, but should be legal)
15) ʎat'aj	to unplug, uncork		

*Illegal words—of course, there are no glosses!*

- |                              |  |
|------------------------------|--|
| 30) *pat'aj                  | 52) *q'at'a                            |
| 31) *tant'a                  | 53) *ʔap'ij                            |
| 32) *tjatʃ'u                 | 54) *ʔaʔij                             |
| 33) *kank'a                  | 55) *p <sup>h</sup> at <sup>h</sup> aj |
| 34) *qat'a                   | 56) *t <sup>h</sup> ant <sup>h</sup> a |
| 35) *pat <sup>h</sup> aj     | 57) *t <sup>h</sup> at <sup>h</sup> u  |
| 36) *tant <sup>h</sup> a     | 58) *k <sup>h</sup> ank <sup>h</sup> a |
| 37) *tjatʃ <sup>h</sup> u    | 59) *q <sup>h</sup> at <sup>h</sup> a  |
| 38) *kank <sup>h</sup> a     | 60) *hap <sup>h</sup> ij               |
| 39) *qat <sup>h</sup> a      | 61) *hup <sup>h</sup> u                |
| 40) *rak'ta                  | 62) *hahij                             |
| 41) *moq'tʃikuj              | 63) *hahu                              |
| 42) *rak <sup>h</sup> ta     | 64) *p'at <sup>h</sup> aj              |
| 43) *moq <sup>h</sup> tʃikuj | 65) *t'ant <sup>h</sup> a              |
| 44) *w'irpa                  | 66) *tʃ'atʃ <sup>h</sup> u             |
| 45) *ʕ'ataj                  | 67) *k'ank <sup>h</sup> a              |
| 46) *s <sup>h</sup> upu      | 68) *q'at <sup>h</sup> a               |
| 47) *m <sup>h</sup> uspakuj  | 69) *p <sup>h</sup> at'aj              |
| 48) *p'at'aj                 | 70) *t <sup>h</sup> ant'a              |
| 49) *t'ant'a                 | 71) *t <sup>h</sup> atʃ'u              |
| 50) *tʃ'atʃ'u                | 72) *k <sup>h</sup> ank'a              |
| 51) *k'ank'a                 | 73) *q <sup>h</sup> at'a               |