## Assignment \#3: beginning OT

Due Tuesday, Oct. 21

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Going back to your Kisseberth reading...

1. Show an OT tableau for /giti:n+hnil/ $\rightarrow$ [gi.ti:n.nil] (p. 295). Include the rival candidates [gi.ti:n.hnil], [gi.ti:h.nil], [gi.tiin.hil], and [gi.ti:n.hi.nil].
2. Show an OT tableau for /Rilk+hin/ $\rightarrow$ [Ri.lik.hin] (p. 296). Include the rival candidates [?il.khin], [?il.hin], and [?il.kin].
3. Show an OT tableau for /pu:lm/ $\rightarrow$ [pu:.lum] (p. 297). Include the rival candidates [pu:lm] and [pu:l].
4. Show an OT tableau for /di:yl+t/ $\rightarrow$ [di:y.lit] (p. 297). Include the rival candidates [di:ylt], [dii.yilt], and [di:y]. Kisseberth uses [y] to represent a glide (IPA [j]), not a vowel. Treat glides as consonants for purposes of evaluating constraints.
5. Assume a markedness constraint $* \mathrm{~V}$, forbidding vowels in surface representationsobviously, this is an example of a constraint that gets violated quite often! Show an OT tableau for /kili:y+a+ni/ $\rightarrow$ [ki.li:y.ni] (p. 301). Include the rival candidates [ki.li..ya.ni] and [kli..ya.ni].

## Notes/tips

- Assume that there are separate OT faithfulness constraints for stems (e.g., MAX-C $\mathrm{C}_{\text {stem }}$ vs. MAX-C suffix ), and for a consonant that underlyingly precedes a vowel (MAX-C/_v).
- Leave aside the special behavior of the zero-stems (rule 7).
- The "other rules" is ignored in these five questions, and not all the morphemes are shown.
- For this assignment, I have told you what candidates to include. In future, you will have to decide that yourself.

Tibetan numerals: problem is from McCarthy/Halle and Clements

## Data

| d3u | 'ten' |
| :---: | :---: |
| d3ig | 'one' |
| d3ugdzig | 'eleven' |
| Si | 'four' |
| dzubsi | 'fourteen' |
| Jib ${ }^{\text {d }} \mathrm{l}$ | 'forty' |
| gu | 'nine' |
| dзurgu | 'nineteen' |
| gub $\overline{\text { du }}$ u | 'ninety' |
| ya | 'five' |
| dzuya | 'fifteen' |
| yabdzu | 'fifty’ |

## Directions

Provide an OT account of the Tibetan data that covers the following points, writing it up like a short paper.
a. Morpheme order: How does Tibetan form -teen $(\mathrm{X}+10)$ and $-t y(\mathrm{X} * 10)$ numbers?
b. Alternations.
c. Underlying forms: Give the underlying form for each morpheme (ten, one, four, nine, five). Just as in rule-based theories, a given morpheme has the same underlying form every time it's used!
d. Say which markedness constraint(s) force(s) the alternations you observe.
e. Think of various other ways that the markedness constraints could have been satisfied and say which faithfulness constraint(s) would be violated in those cases. You may find it helpful to use MAX-C/__v again ("don't delete a C that was underlyingly prevocalic")
f. Argue for constraint rankings. Remember that every word uses the same ranking (just as in 120A, where every word had the same rule ordering)!
g. Give tableaux for at least one plain numeral ( $10,1,4,9$, or 5 ), one - teen numeral $(11,14,19$, or 15 ), and one $-t y$ numeral ( 40,90 , or 50 ). Remember to include in each tableau (i) all your constraints, (ii) the winning candidate, (iii) the fully faithful candidate, and (iv) candidates that illustrate other ways of satisfying the markedness constraint(s).

