**Study questions on Goldsmith 1976**[1]
due Tuesday, Nov. 19

**Notes**

**p. 26**   The * in (4) means that this H tone associates to the main stress. In this example, since there is only one syllable in the word, the L also ends up associated to the same syllable.

**p. 32**   An association line between two items on different "tiers" means that those items <u>overlap</u> in time (they don't necessarily start and end at the same time, though). For items on the same tier, left-to-right ordering encodes temporal precedence. If items are on different tiers, their vertical alignment (or lack thereof) is meaningless. Amount of horizontal white space is meaningless too.

As you can see in (10), not every item on a given tier has to be associated with something on another tier. Of course phonetically, the larynx has to be in some state during the articulation of [k] and [l], but the idea is that these segments have no tonal *target*—interpolation between surrounding targets is done in the phonetic module. In the phonological representation, only the vowels of this word are associated to tonal targets.

**p. 36**   It's been noted that (22b) follows from how we normally define precedence within a tier and how Goldsmith defines an association line: In (21), if H precedes L, *i* precedes *e* precedes *a* (the $2^{nd}$ *a* of the word), and H overlaps in time with *e*, then L can't overlap in time with both *i* and *a*.

**p. 37**   Maybe the first item in (25) was supposed to be *pen*?

**p. 38**   Orderings and properties of relations strike again! Remember that a strict total order (which is what this is—there's no reflexivity) is asymmetric, transitive, irreflexive, and total.

**p. 38**   $\pi_i(A)$ is the set of elements on Tier *i* that are associated to something on the other tier.

$\pi_i^{-1}(a)$ is the set of pairings between element *a* on Tier *i* and its associates on the other tier.

**p. 38**   By "connectedness" here, Goldsmith seems to mean contiguity.

**pp. 38-39**     If these pages are tough going, don't worry about it. It seems from the footnotes that they don't do exactly what Goldsmith wanted anyway, so you can just stick with the informal (22).

**p. 42**   "Solution 2 is explicitly global": i.e., either the tone-transfer rule has to <u>look ahead</u> in the derivation to see that vowel deletion is coming next, or right after the vowel-deletion rule a tone-changing rule has to look back to see what the deleted tone was. This is the issue of "global power"/derivational look-ahead/peeking again.

# You can skim from p. 50 through the middle of p. 57

**p. 60**   The vertical line over the vowel indicates mid tone, as in (68)'s áž̀u̅ (HM) and 'rotten' rė́ré ė́ré. You should view p. 60 using <u>greater magnification</u> than normal to see the diacritics properly.

**p. 63**   The examples in (74) omit a lot of nasalization diacritics. See the representations on p. 63 for which segments should be pronounced nasal.

**p. 64**   The C in (77) becomes a consonant like ᵐb or ⁿd: at first nasal, then oral

(question is on next page)

[1] Goldsmith, John. 1976. An overview of autosegmental phonology. *Linguistic Analysis* 2. 23–68.

**Question**

**1.** Although we haven't yet seen how to handle autosegmental representations in OT, give it a try. Give tableaux for *archipelago* and *balloon* (pp. 36-37) to derive the right pitch contours.

- Assume that the inputs are /archipélago, H* L/ and /ballóon, H* L/. That is, the stress is already in place (perhaps from a previous stratum) and the tones are part of the input, including the * diacritic on H.
- You'll probably need constraints of the form LICENSE(X,Y): count one violation for every X that is not associated to a Y (where you specify for each constraint in this family what X and Y are).
- You'll also need faithfulness constraints that treat tones as though they were segments rather than as features: e.g., MAX(T) and DEP(T)
- Include the constraints UNIQUE(T,V) (for every tone that is associated to *n* vowels, where *n*>1, count *n*-1 violations) and UNIQUE(V,T) (for every vowel that is associated to *n* tones, where *n*>1, count *n*-1 violations).
- Depending on what candidates you include, you may need to invent more constraints. Feel free to get creative.
- Be sure to draw the full autosegmental representation for each candidate (segmental tier and tone tier, plus association lines).