

Allomorphy in the Hiaki oblique relativizer -'/-'V:

a) Before a vowel-initial postposition: -? *Prediction*: If glottals are never consonants, any V?V sequence will count as [va'a-ta sika-'-u] monosyllabic kom =ne wee-vae down went-O.REL-to =1SG.NOM go-PROSP water-GEN bic, with onset glottal stop "I'm going to where the water went down." b) Before a consonant-initial postposition (allomorph of -u): ...sika-'a-wi ...went-O.REL-to Before another consonant-initial postposition **C)** ...sika-'a-po Any verb-final vowel can be copied: yeewe'epo 'where (they) play' > yeewe 'play' ...went-O.REL-at onset when possible *bwatu'upo* 'where (it) can be eaten' *>bwa'atu* 'be eaten'

If the postposition begins in a consonant, an 'echo' vowel appears, a copy of the final vowel of the verb

2. Copy vowel *not* a phonotactic repair of a [?.C] cluster

Prediction: If the 'echo vowel' is a V segment inserted to break up a [?C] consonant cluster, allowing the ? to surface as the onset of a ?V syllable, echo-vowel sequences should be **bisyllabic**

Fact: V_1 ? V_1 sequences followed by co kaate-ka-'-a-po kaa.te.**ka'a**.po sit.sg-PFV-O.REL-EV-at yee=mahta-wa-'-a-po yee.mah.ta.**wa** people-teach-psv-O.REL-EV-at paro'os-im pa.**ro'o**.sim hare-PL saka'a-vae sa.**ka'a**.vae

Conclusion: 'Echo vowels' not motiviated by the need to allow an underlying glottal stop consonant to be the onset of a syllable; they're not 'vowel insertion'. A Hiaki 'echo vowel' is a vowel with a floating [+glottal] feature attached to it.

References: Dell, François. 1985. Les régles et les sons. Paris: Hermann; Gerfen, Chip. 1999. Phonology and phonetics in Coatzospan Mixtec. Springer; Hagberg, Larry. 2000. Glottal stop in Mayo: consonant, or vowel feature? In Uto-Aztecan: Structural, Temporal and Geographic Perspectives: Papers in memory of Wick R. Miller by the friends of Uto-Aztecan, ed by. Eugene H. Casad and Thomas L. Willet, p. 91-100. Hermosillo: UniSon; Mei Tsu-lin, 1970 Tones and Prosody in Middle Chinese and The Origin of The Rising Tone, Harvard Journal of Asiatic Studies, vol.30, pp.86-110; Penner, Kevin. 2019. Prosodic structure in Ixtayutla Mixtec: Evidence for the foot. Doctoral dissertation, University of Alberta; Peterson, Tyler. 2004 Theoretical issues in the representation of the glottal stop in Blackfoot. Ms, UBC: https://pdfs.semanticscholar.org/1062/4f60ebd7aeaf91484090dc11db8f89587dff.pdf Pulleyblank, E.G. 1962. The consonantal system of Old Chinese. Asia Minor vol. 9 pp 58-144; Sagart, Laurent. 1999. The origin of Chinese tones. Proceedings of the Symposium/Cross-Linguistic Studies of Tonal Phenomena/Tonogenesis, Typology and Related Topics., 1999, Tokyo, Japan. pp.91-104.

Hiaki 'echo vowels' are motivated by phonotactics, but not the way we thought

Heidi Harley and Meg Harvey, University of Arizona WCCFL 38, University of British Columbia, March 7th, 2020

First pass: $...V_1? \rightarrow V_1?V_1 / _ C$ $\rightarrow V_1 ? V$

onsonants are counted as 4, not 5, syllables	one syllable: *kaa.te.ka.'a.po
a'a.po 5, not 6, syllabes	*yee.mah.ta.wa
3, not 4, syllables	*pa.ro.'o.sim
3, not 4, syllables	*sa.ka.'a.vae

3. Some surface glottals *are* onset consonants

ord-final	V# sequences	are syllat
'dance'	0. 'ou	'man'
'road'	сһии. 'и	'dog'
'big'	wo. 'i	'coyote'
	'ord-final a 'dance' 'road' 'big'	'ord-final ?V# sequences 'dance' <i>o.'ou</i> 'road' <i>chuu.'u</i> 'big' <i>wo.'i</i>

4. Hypothesis: Floating [+glottal] element surfaces as

- Mixtec, (Penner 2019))

5. More arguments against simple consonant [?] 1. Epenthetic [i] is not used to repair consonant cluster, as

elsewhere in Hiaki:

mochik 'turtle' + -m 'pl' \rightarrow mochikim yeps-+ -CV... \rightarrow yevihCV (plus lenition processes) $sika'+CV \rightarrow sika'awi, not *sika'iwi$ 2. Behavior of active voice suffix –e with Ci'i- stems. hamti- 'break' + -e 'Voice.act' = hamte *putti*- 'shoot' + -*e* 'Voice.act' = *putte yi'i*- 'dance' + *-e* 'Voice.act' = *ye'e* not **yi'e* If glottal was segmental, predicted form would be *yi'e* (N.B.: [i?e] sequence legit in other multimorphemic contexts, e.g. yi'i-'e'a, 'feel like dancing') Mayo Yori ~ Hiaki Yoi 'Mexican' Mayo *wiko'ori* ~ Hiaki *wiko'i*

3. Mayo intervocalic *r* drop in Hiaki cognates Predicted if glottal is vocalic feature in Mayo *wiko'ori*, since then [r] is intervocalic.

.'a.po



si.ka.'u 'to where (it) went' wi.ko.'i 'rifle, armament'

• Else glottalized preceding vowel ('echo vowel')

(Relevant cases? [+nasal] in French Dell 1985; [+rising tone] in Chinese (Pulleyblank 1962, Mei 1970, Sagart 1998), [+glottal] in Oto-Manguean (Gerfen 1999), [+glottal] in Mayo (Hagberg 2000)) Plus post-glottal vowel is strengthened word-finally (or possibly minimal foot requirements trigger strengthening as in Ixtayutla