

## The Behavior of Laryngeals at the Phrasal Level in Copala Triqui

Laryngeals occur in Copala Triqui (Oto-manguean) both segmentally and suprasegmentally. In onset position and word-internally, it has been claimed that they occur as full consonants on the segmental tier, and word-finally they are said to be suprasegmental properties of the vowel (Hollenbach, 1984). This leaves the question of how these laryngeals are realized across a word boundary. The status of laryngeals in Copala Triqui word-internally when the word occurs in isolation has been previously studied (Hollenbach, 1984; Longacre, 1957), however, the issue has not yet been addressed when in the context of a phrase. This work investigates laryngeals in the context of the word boundary and provides evidence that before a vowel in a following word, laryngeals may in fact behave more similarly to onsets, than to a suprasegmental quality of the vowel.

It has been claimed that laryngeals may exist on the segmental tier, such as in Hawaiian (Davidson, 2021), the suprasegmental level, as in Coatzospan Mixtec (Gerfen, 1999) and Chalcatongo Mixtec (Macaulay and Salmons, 1995), or some combination of the two tiers, which is the distribution claimed for Copala Triqui (Hollenbach, 1984). This is also seen in Chichahuaxtla Triqui (Longacre, 1952) and Itunyoso Trique (DiCanio, 2008) in order to explain the different behavior of laryngeals in different environments. As glottal stops may occur in both the onset of syllables and word-finally as a part of the vowel in the language, it should be possible for it to be resyllabified as an onset. Similarly, the few loanwords beginning with [h] which have entered the language have led to the possibility of [h] being interpreted as an onset as well.

Using data collected from the author's recent fieldwork with speakers of the language, vowel length differences are employed to demonstrate that word-final laryngeal rimes pattern similarly with onset laryngeals when intervocalic within a phrase. Rime length and vowel length have previously been used to provide evidence for the phonological status of laryngeals in related languages Chichahuaxtla Triqui (Longacre, 1957), Itunyoso Trique (DiCanio, 2008), and Chalcatongo Mixtec (Macaulay and Salmons, 1995). In such languages, laryngeal rimes have been documented as containing shorter vowels, while modal vowels are lengthened. The current investigation finds that as previously claimed, the vowel length in laryngeal rimes is proportionally longer than in modal rimes occurring word-finally. However, when placed in a carrier phrase, the vowel in a laryngeal rime lengthens, and becomes closer in duration to modal vowels.

These findings lead to the question of whether in Copala Triqui such word-final laryngeals should continue to be viewed as a property of the vowel in the context of a phrase, or if in some instances it may resyllabify as an onset of a following vowel. I claim that this is evidence of a process of resyllabification. The phonological status of laryngeals has long been the subject of inquiry, and this is particularly true of Oto-manguean languages. This research therefore contributes not only to our understanding of syllable structure and the status of laryngeals in Copala Triqui, but to our understanding of the status of laryngeals in Otomanguean languages as well as in other language families.

## References

- Davidson, L. (2021). Effects of word position and flanking vowel on the implementation of glottal stop: Evidence from Hawaiian. *Journal of Phonetics*, 88, 101075.  
<https://doi.org/10.1016/j.wocn.2021.101075>
- DiCanio, C. T. (2008). *The phonetics and phonology of San Martín Itunyoso Trique* [ProQuest Dissertations Publishing]. <https://search.proquest.com/docview/304695398?pq-origsite=primo>
- Gerfen, C. (1999). *Phonology and phonetics in Coatzacoapan Mixtec*. Kluwer Academic.
- Hollenbach, B. E. (1984). *The phonology and morphology of tone and laryngeals in Copala Trique*. University of Arizona.
- Longacre, R. E. (1952). Five phonemic pitch levels in trique. *Acta Linguistica*, 7(1–2), 62–82.  
<https://doi.org/10.1080/03740463.1952.10415402>
- Longacre, R. E. (1957). *Proto-Mixtecan*. Indiana University Research Center in Anthropology, Folklore, and Linguistics.
- Macaulay, M., & Salmons, J. C. (1995). The phonology of glottalization in Mixtec. *International Journal of American Linguistics*, 61(1), 38. <https://doi.org/10.1086/466244>