

Juncture epenthesis in Filomeno Mata Totonac: Prosodic and syntactic generalizations

In Filomeno Mata Totonac, there are juncture epenthesis that take place at certain word boundaries. When two consonants come together at a word boundary, a vowel is often inserted (1); and when a vowel and an oral stop come together at a word boundary, there is often an insertion of a nasal homorganic to the oral stop (2).

- (1) ‘your frog isn't here’ /laatiʔanán miwánqen/ → [laatiʔanán **i** miwánqen]
 (2) ‘because she's sick’ /špaalakáta tatatlámaa/ → [špaalakáta **n** tatatlámaa]

However, these segmental conditions are not enough to predict when these epenthesis rules will apply. Word boundaries that create one of the described transitions do not always trigger a juncture epenthesis. For example, both (3) and (4) create similar word boundaries, but only the word boundary in (3) triggers a juncture epenthesis.

- (3) ‘a tree’ /aqatím kíwiʔ / → [aqatím **ɪŋ** kíwiʔ]
 (4) ‘one year’ /aqtím káata/ → [aqtím **∅** káata]

The main research question is what exactly determines the application of juncture epenthesis or the absence thereof. In previous descriptions of juncture epenthesis, both in Filomeno Mata Totonac (McFarland, 2009) and in other Totonac languages with similar phenomena (Román Lobato, 2008; Levy, 2015, 2020; Levy & Hernández-Green, 2018, 2021), junctures are attributed mainly to prosody and are analyzed through the Prosodic Hierarchy (Selkirk, 1980; Nespor and Vogel, 2007; Hayes, 1989). The most developed analyses go so far as to propose that juncture phenomena demarcate a prosodic domain larger than the Prosodic Word and smaller than the Intonational Phrase (Levy, 2020).

To evaluate the adequacy of a prosodic analysis and the accuracy of its predictions in Filomeno Mata Totonac, I analyzed a corpus of spontaneous speech of 2805 words by annotating it to mark its prosodic units and basic syntactic relations. It contained a total of 672 juncture epenthesis. After examining the distribution of juncture epenthesis and their relation to prosodic domains, it becomes evident that while they do have prosodic tendencies and constraints, there are strong non-prosodic factors determining their application. Of the examined junctures, 84% occur at the boundaries of Prosodic Words that are non Intonational Phrase final, and the other 16% occur at the boundaries of Intonational Phrases. Of the Intonational Phrase internal word boundaries that create one of the relevant segmental transitions, 51% show juncture epenthesis and 49% do not. More importantly, what the word boundaries constituting that 49% have in common is mostly of lexical and syntactic nature. I also evaluate the possibility that juncture distribution corresponds to a prosodic domain of its own and argue that there is no conclusive evidence yet to support such a hypothetical prosodic domain in Filomeno Mata Totonac, as there appear to be no other prosodic phenomena associated with it, and the distribution of junctures is sensitive to very specific syntactic information that cannot be captured by a prosodic domain alone.

This is not to say juncture epenthesis are unrelated to prosody. They are constrained not to occur inside the Prosodic Word or at Utterance boundaries; they tend not to occur at Intonational Phrase boundaries (although this tendency is occasionally overridden by syntactic structure); and their absence can be read as an Intonational Phrase boundary when other acoustic cues are weak. However, they cannot solely be predicted by prosodic constraints and are highly conditioned by syntax.

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