In this talk, I will present the phenomenon of Glottal Coalescence (GC) in Capanahua, an endangered Panoan language spoken in the Peruvian Amazon. In Capanahua, underlying glottal stops coalesce with the preceding vowel in unstressed syllables. In contrast, in stressed syllables, coalescence is inhibited. See data in (1).

\[(1) \begin{align*}
a. & /\text{tuʔ}k\text{-}t\alpha/ \rightarrow (\text{tuʔ}.k\text{.}t\alpha) & \text{‘frog’ (evidential)} \\
b. & /\text{tuʔ}k\text{-}t\alpha\text{-}k\iota/ \rightarrow (\text{tuʔ}.k\text{.}(t\alpha\.k\iota)) & \text{‘it is a frog’} \\
c. & /\text{ʔuʔ}d\iota\text{-}t\alpha\text{-}k\iota/ \rightarrow (\text{ʔuʔ}.d\iota\.t\alpha\.k\iota) & \text{‘it is a dog’}
\end{align*}\]

Furthermore, GC can optionally be inhibited in unstressed initial syllables. See (2).

\[(2) \begin{align*}
a. & (\text{baʔ}.k\iota) \sim (b\alpha\.k\iota) & \text{‘tomorrow, yesterday’} \\
b. & (\text{paʔ}.n\nu\) \sim (p\alpha\.n\nu) & \text{(species of frog)} \\
c. & (k\iota\.j\iota) \sim (k\iota\.j\iota) & \text{(species of lizard)}
\end{align*}\]

It will be argued that coalescence in Capanahua is triggered by the metrical system of the language (that is, by the set of constraints in charge of determining foot-headiness, foot-size, syllable weight and the distribution of heavy syllables). The inhibition of GC is due to a positional effect, which motivates the existence of a markedness constraint that bans non-modal vowels in prominent/privileged positions.

The analysis presented will shed light on the feature geometry of glottal stops. In particular, Capanahua supports the analysis that glottal stops should lack a CPlace node (i.e. consonantal place), which makes them vulnerable to undergoing coalescence as opposed to other consonantal segments which do have CPlace.
Finally, I will examine Loos (1969)'s work on Capanahua glottal stops, which points to the existence of speakers for whom the [constricted glottis] feature of glottal stops does not surface in unstressed syllables. See data in (3) from Loos (1969:183), the foot structure presented comes from my own work.

(3)  

a. /ʔuʔčiti -taʔ -ki / → (ʔuʔ.či.)(ti.ta).ki

‘it is a dog’

b. /ʔuʔčiti -raʔ -taʔ -ki / → (ʔuʔ.či.)(ti.ra)(taʔ.ki)

‘it is probably a dog’

c. /ʔuʔčiti -ma -raʔ -taʔ -ki / → (ʔuʔ.či.)(ti.ma)(raʔ.ta).ki

‘it is probably not a dog’

For both the speakers in (1) and (3), coda glottal stops surface in stressed syllables. However, in unstressed syllables, whereas the speakers in (1) coalesce glottal stops with the preceding vowel resulting in the occurrence of creaky vowels; the speakers in (3) do not leave any trace of the glottal stop. Although Loos (1969) describes the phenomenon as “glottal stop deletion”, I will argue that the data in (3) should not be analyzed as deletion but as a case of “vacuous” coalescence (e.g. /V₁ʔz/ → V₁₂).