

# Diphthongization of /Vn/ in Kom: a phonological analysis and corpus study

Ivo Forghema Njuasi, Nicholas Kamyu Mori & Matthew Faytak  
 University of Buea, University at Buffalo & University at Buffalo

**The phenomenon.** Kom (Grassfields Bantu, Cameroon) has several phonological processes which diphthongize monophthongal vowels, adding an element transcribed below as [j]. We focus on diphthongization before coda /n/, laid out in (1). Counter to prior analyses (Shultz 1993; Njuasi 2022), we treat the pattern as blocking of diphthongization by resyllabification of a coda /n/ as the onset of a following vowel. Before pause and consonants, underlying /Vn/ is produced as a diphthong [Vjn] (1a-b), but the process is typically blocked when a vowel follows (1c-d).

(1)	a. /Vn# Ø/	/fòn/	[fòjn]	‘chief’
	b. /Vn# C/	/fòn kóm/	[fòjn.kòm]	‘chief of Kom’
	c. /Vn# V/	/fòn átúm/	[fò.nà.tūm]	‘foreign chief’
	d. /Vn# V/	/fòn ĩdjên/	[fò.nĩ.djèjn]	‘chief of Noni’

**Present study.** In this study, we examine the realization of /Vn/ in spontaneous speech to enrich our understanding of diphthongization and to confirm the role of syllabification of /n/. Phonological processes dependent on a following context, such as /Vn/ monophthongization, are known to be sensitive to various speech processing factors (Kilbourn-Cerón et al 2020). Here, speakers may variably fail to block diphthongization if a /V/ which would otherwise constitute the following context is less available for the phonology to apply to resyllabification. This may be due to low-probability sequences (such as 1d, versus 1a-b), or disfluencies occurring between the /n/ and the following vowel.

**Preliminary study.** A corpus of Kom speech centered on Kom proverbs was manually transcribed, and word- and phone-level annotations were generated using the *Montreal Forced Aligner* (MFA). For all words containing /Vn/, two alternate pronunciations (as [Vjn] or [Vn]) were provided to the MFA, which automatically applied the more suitable transcription. We inspect the outcome of automatic classification for each /Vn#V/ sequence specifically: if diphthongization were consistently blocked, we would expect all to be classified as [Vn]. However, the results suggest unexplored variability: only about half of the observed tokens are monophthongal (Figure 1).

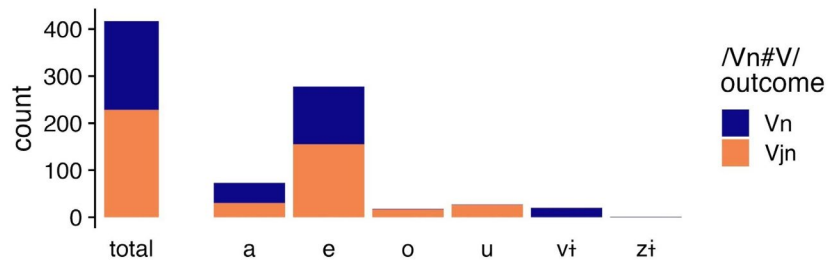


Figure 1: Count of monophthong (Vn) and diphthong (Vjn) realizations of /Vn#V/.

**Further analysis.** The authors plan to manually repeat the automatic analysis, adding the contexts /Vn#/ and /VnC/ and coding for the specific identity of following consonants and

vowels. The presence of following higher-level prosodic breaks (i.e., pauses) after /n/ will also be noted; it is expected these may artificially inflate the number of [Vjn] tokens shown in Figure 1. We also plan to explore the observation that many speakers do not appear to resyllabify /n/ as onset to following /i/, e.g. /fòn ikâ/ > [fò.nì.kfî] ~ [fòjn.ì.kfî] ‘chief of Oku’, which may contribute to observed variability.

#### References

- Kilbourn-Cerón, I. et al (2020). Predictability modulates pronunciation variants through speech planning effects. *Lab Phon* 11(1).
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