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# **Glyph Dwellers**



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## Phonological Variation in the Maya Codices

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Examples of phonological variation in the Maya codices provide evidence that the same processes that characterize speech were also occasionally represented in the hieroglyphic script. This in turn suggests that the script recorded in the codices reflects certain features of the spoken language, or vernacular, of the population inhabiting the Maya lowlands during the Postclassic period.

One of the phonological processes that operates in the modern Yucatecan languages is nasal assimilation, such that syllable-final /n/ optionally becomes [m] before a labial and [ng] before a velar (Blair and Vermont-Salas 1965:15; Hofling 1991:8). Examples include k-in b'in  $\sim k$ -im b'in (INC 1sg-go) in Yucatec and Itzaj. This type of alteration is common in the Ch'olan languages as well.

I have documented several examples in the Madrid Codex of word-final /n/ occurring in contexts where /m/ would be expected in the contemporary Yucatecan languages. The first example, at D1 on Madrid 64b (fig. 1), appears to be a spelling of the word <code>kum</code> 'olla, jar' (<code>kùum</code> in the Hocabá dialect of Yucatec).¹ This interpretation receives support from the picture associated with the text caption, which shows the death god seated in front of what appears to be one or more pottery vessels. The word <code>kum</code> is spelled phonetically in the accompanying text as <code>ku-ni/ne</code>, suggesting either that T116 could alternate between <code>nV</code> and <code>mV</code> in value (i.e., reflecting the same variation seen in the spoken language), or that the word for 'olla' was pronounced <code>kun</code> in this context. This pronunciation could be the result of nasal assimilation in this specific environment; alternatively, it is possible that this word was originally pronounced <code>kun</code> and that the shift to <code>kum</code> in the spoken language occurred after this text was written.

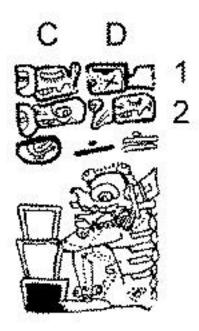


Figure 1. Madrid 64b, frame 2. After Villacorta C. and Villacorta 1976: 352.

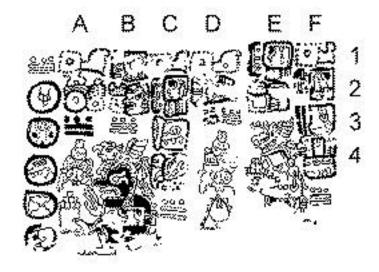


Figure 2. Madrid 109c-110c. After Villacorta C. and Villacorta 1976: 442, 444.

In another context occurring in the same manuscript (e.g., at A1 on Madrid 109c-110c; fig. 2), the word *mom*, meaning 'solidified honey; sugar', is spelled with T116 (**mo-ni/ne**). Here, we see the merchant deity (God M) carrying a beehive over his shoulder and a container with what I interpret as honeycomb in his hand. Note that a bee hovers over the scene. The *mom/mon* spelling is followed by the phrase *u kab*', which may be a reference to God M's bees or their honey. Álvarez (1984:103) translates *mom kab*' as 'azúcar de miel de abejas'. The same spelling occurs in the following three frames of the almanac (at C1, D1, and F1). Again, these data may be

subject to one of several possible interpretations: (1) T116 could alternate in value between **nV** and **mV**; (2) the word for 'solidified honey' was pronounced *mon* at the time that this passage was drafted; or (3) *mon* and *mom* alternated in usage, depending on their environment.

The name phrase of God A' may provide another example of the alternation between /m/ and /n/ in the codices. A substitution occurring on page 12c of the Dresden Codex suggests that the name phrase T15.1042 may be transcribed as  $ah \ kim(il)$ , 'dead person' (Vail 1996:251). The same appellative occurs at C2 on Dresden 5b-6b with an infixed T23 (na) grapheme (fig. 3). The presence of T23 in this example may indicate that kim and kin were variants at the time this text was drafted, or the /n/ of T23 may have assimilated to /m/ in this context.



Figure 3. Dresden 5b-6b, frame 2. After Villacorta C. and Villacorta 1976: 20, 22.

Another process occurring in the spoken languages that may be represented in the codices involves the shift between /l and /h in word-final position. This reflects free variation, rather than a phonologically-motivated shift, such that  $mix\ b$ 'à'al 'nothing' alternates with  $mix\ b$ 'à'ah (Blair and Vermont-Salas 1965:9). Data from Itzaj suggest that the contrast is between /h/, /l/, and  $\emptyset$ ; e.g.,  $hun\ tuul\ winik$  'one ANIM man' alternates with  $hun\ tuuh\ winik$  and  $hun\ tuu\ winik$  (Hofling 1991:8).

In the Maya codices, the T186 grapheme seems to exhibit the same pattern of variation when it occurs in word-final position. Several sets of substitutions suggest that this element represents a syllable beginning with /1/; I have argued specifically that T186 be read as le, since it resembles a noose and the word le' means 'noose' in Yucatec (Macri and Vail n.d.). This reading is supported by various substitutions in the Dresden and Madrid codices. In the compound commonly read as lob'al (or lob'b'a'al) 'evil (thing)', for example, T186 substitutes for T140 on several occasions (e.g., compare B2 and F2 on Dresden 10c-11c; fig. 4). Elsewhere, we see the same substitution (T186 in place of T140) in the  $ah\ kimil$  'dead person' compound (compare E2 on Madrid 49c-50c with C2 on M. 79b; fig. 5).

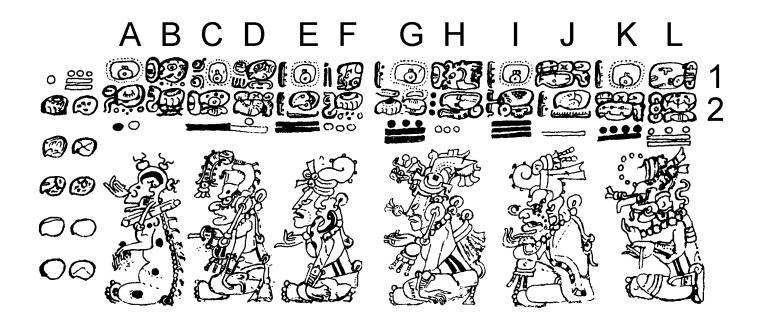


Figure 4. Dresden 10c-11c. After Villacorta C. and Villacorta 1976: 30, 32.

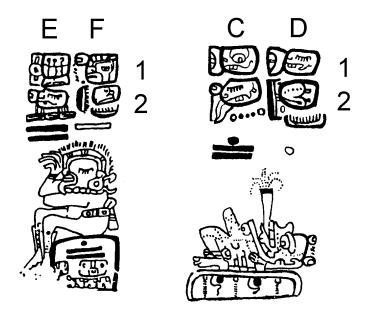


Figure 5. Madrid 49c-50c, frame 3 [left]; Madrid 79b, frame 2 [right]. After Villacorta C. and Villacorta 1976: 322, 324, 382.

In another group of examples, T186 appears to represent the syllable **hV** rather than **le**. These include spellings of the phrase 'on the road' ( $ta\ b$ 'ih in the Ch'olan languages; ti'b'eh in Yucatec; e.g., L1 on Madrid 10c-11c; H1 on Dresden 40c-41c; fig. 6). It is possible, then, that the compounds cited in the previous paragraph do not all end with the sound /1/, but rather serve as examples of the alternation between /1/ and /h/ in word-final position (e.g., lob' b'a'al  $\sim lob$ ' b'a'ah and  $ah\ kimil$   $\sim ah\ kimih$ ). This would provide evidence of the sort of free variation reflected in the Mayan languages spoken today.

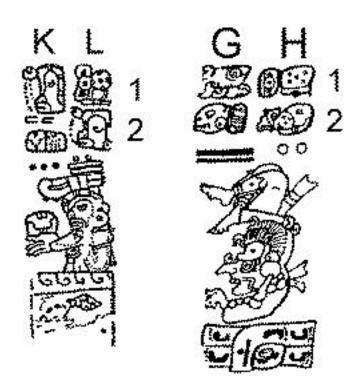


Figure 6. Madrid 10c-11c, frame 6 [left]; Dresden 40c-41c, frame 4 [right]. After Villacorta C. and Villacorta 1976: 90, 92, 244, 246.

By demonstrating that the same linguistic processes evident in the spoken Mayan languages are also apparent in the script, these examples provide a starting point for the study of the underlying pronunciation of morphemes represented phonetically in Maya texts. Further research with the Maya Hieroglyphic Database will undoubtedly uncover additional examples of phonological variation in the codical and inscriptional corpus.

#### Notes:

- 1. Spellings of words represented in the codices are after Barrera Vásquez et al. (1980), with the exception that their /b/ is replaced with /b'/. Other spellings follow the conventions used by the authors who are cited.
- 2. Whereas *b'eh* and *b'èel* are both attested spellings of the word 'road' in Yucatec (Bricker et al. 1998: 29-30), *b'èel* occurs as the possessed form, suggesting that *b'eh* is the spelling intended in this context (J. Storniolo, personal communication 1999).

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