

HANDBOOK OF PHONOLOGICAL DATA
FROM A SAMPLE OF THE WORLD'S LANGUAGES

A Report of the Stanford Phonology Archive

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	800 Chontal	800 Chontal	800 Chontal
800	01 p ⁰¹ [p-aspirated] ⁶⁰ [p-unreleased] ⁶⁰ (free)	19 m 20 n [ɛŋ] ⁶²	[a-voiceless] ⁶⁴ (free) [a-creaky voice] ⁶⁵ (free)
800	02 p-ejective ³⁰	21 l	55 u [u-voiceless] ⁶⁴ (free) [u-creaky voice] ⁶⁵ (free)
800	03 b [p-glottalized] ^{02 61} [p-unreleased-glottalized] ^{02 61}	22 r-flap ³⁴ 23 r-trill ³⁵ (limited)	56 o-mid [o-mid-voiceless] ⁶⁴ (free) [o-mid-creaky voice] ⁶⁵ (free)
800	04 t ⁰¹ [t-aspirated] ⁶⁰ [t-unreleased] ⁶⁰ (free)	24 glottal stop ³⁶ 25 h [x] ⁶³ [x-uvular] ⁶³ [x-prevelar] ⁶³	57 yod [j-fricative] ⁶⁶
800	05 t-ejective ³⁰		58 w [v] ⁶⁷ [v-velarized] ^{04 68} [v-labiovelarized] ⁶⁸
800	06 d ³¹		
800	07 k ^{01 03} [k-aspirated] ⁶⁰		
800	08 k-ejective ³⁰	51 i [i-voiceless] ⁶⁴ (free) [i-creaky voice] ⁶⁵ (free)	59 i-long-nasalized ⁶⁹ (surface)
800	09 ɣ ^{03 31} (limited, loan)		60 e-mid-long-nasalized ⁶⁹ (surface)
800	11 t/s ³²	52 e-mid [e-mid-voiceless] ⁶⁴ (free) [e-mid-creaky voice] ⁶⁵ (free)	61 schwa-long-nasalized ⁶⁹ (surface)
800	12 t/s-ejective		62 a-long-nasalized ⁶⁹ (surface)
800	13 t/s-hacek ³²		63 u-long-nasalized ⁶⁹ (surface)
800	14 t/s-hacek-ejective	53 schwa [schwa-voiceless] ⁶⁴ (free) [schwa-creaky voice] ⁶⁵ (free)	64 o-mid-long-nasalized ⁶⁹ (surface)
800	15 ʃ ³³ (loan)		
800	16 s		
800	17 s-hacek	54 a	

- 800 \$a Chontal \$d Mayan \$e SE Mexico (E Tabasco) \$f 15,000 \$g Merritt Ruhlen \$g Jim Lorentz (review) \$g John Crothers (editor)
- 800 \$a Keller, Kathryn C. \$b 1959 \$c The Phonemes of Chontal (Mayan) \$d IJAL 25:1.44-53 \$q informants \$r "several years"
- 800 \$a HALF-VOICE VOWELS (NON-DISTINCTIVE) \$A "Utterance final vowels may be followed by slight aspiration of the same quality as the vowel. This aspiration is much lighter than that which is interpreted as final phonemic /h/." (p.45)
- 800 \$a INTONATION \$A "There are two length features, the emphasis feature...and the hesitation feature.... The emphasis feature is manifested by a combination of length and high pitch occurring on a stressed syllable.... The hesitation feature is manifested by a combination of length and non-high pitch...with fade-off and sometimes laryngealization." (p.52-53)
- 800 \$a PHONOLOGICAL WORD \$A C is required utterance initially, but utterance medially word-initial V are found. Syllable-initial CC are restricted to a few morphemes. (p.49)
- 800 \$a STRESS \$A "Stress is phonemic...; in the neutral intonational contour, the stressed syllable is higher in pitch than the unstressed syllables." However, "in a question contour, pitch is excluded as a conditioning factor for stress.... Stress shifts occur on some words. The stress may be phonemically on either of two syllables, yielding alternate pronunciations of the same word." (p.52)

- 800 \$a SYLLABLE \$A (C)(C)V(C)
- 800 01 \$A "Before vowels, the aspiration in general is slight [in stops], but tends to be heavier in emphasized syllables. Also, the amount of aspiration varies somewhat with different speakers.... Light aspiration occurs when /p/, /t/, or /k/ are followed by a consonant." (p.45)
- 800 02 \$A [p-glottalized] is articulated "with superimposed glottal closure," [p-unreleased-glottalized] sounds "a bit swallowed." (p.46) This sound may actually be a voiceless implosive. Such sounds have been reported for other Mayan languages. [JHC]
- 800 03 \$A "The velar stop is influenced in its tongue position by vowels which occur in the same syllable with it; it is farther front before front vowels or when it closes a syllable containing a front vowel than it is before back vowels or when it closes a syllable containing a back vowel." (p.45)
- 800 04 \$A [v-velarized] frequently has a voiceless offglide before pause. (p.47)
- 800 30 \$A Ejective stops contrast with "clusters of voiceless stops plus /glottal stop/." (p.46) Phonetically, aspiration occurs after the voiceless stops in the cluster sequences.
- 800 31 \$A "In words which appear to be of native origin /d/ only occurs before /a/ [and] /g/ occurs in one word only, before /o-mid/." (p.49) The source adds that "the phonemes /d/ and /g/ are extremely rare in Mayan languages." (p.49) See source for additional comments.
- 800 32 \$A Affricates contrast with clusters of stop plus fricative "in that in the clusters there is open transition (aspiration), syllable division, morpheme division, and potential pause between the stop and the sibilant." (p.46)
- 800 33 \$A /f/ "occurs only in a few Spanish loan words...; monolingual speakers usually substitute 'h' or 'hw' for the 'f' of Spanish loans." (p.47)
- 800 34 \$A /r-flap/ does not occur word-initially.
- 800 35 \$A /r-trill/ "occurs in only two native morphemes, and both these are onomatopoeic.... In borrowed words it is unstable, some speakers using a trill and others a flap." (p.48)
- 800 36 \$A The /glottal stop/ is "somewhat unstable." (p.46) "Word initially within the utterance the /glottal stop/ may be completely lost." (p.48)
- 800 60 \$A The stops are heavily aspirated before pause; /p, t/ (/k/ not mentioned) may be unreleased before a consonant at the same place of articulation. (p.45)
- 800 61 \$A /b/ is realized as [p-glottalized] in syllable-final position, and as [p-unreleased-glottalized] before pause. (p.46)
- 800 62 \$A /n/ is realized as [ɲ] before velar stops and pause, and before /w/, bilabials and glottals "in slow deliberate speech." In fast speech, the nasal merges with the previous vowel producing slightly lengthened nasalized vowels. (p.47)
- 800 63 \$A /h/ is realized as [x] before /schwa/, as [x-uvular] before pause, and as [x-prevelar] in the environment of /i/ in the same syllable. (p.47)
- 800 64 \$A Vowels may be devoiced between /s/, /t/s-ejective/, or palatoalveolar affricates and a following aspirated voiceless stop or /h/. (p.45)
- 800 65 \$A Vowels may have creaky voice in the environment of ejectives, /glottal stop/, and [p-glottalized] or [p-unreleased-glottalized] (syllable final allophones of /b/). This is "more pronounced between two such consonants than when contiguous to just one." (p.45)
- 800 66 \$A /yod/ is realized as [j-fricative] before vowels. (p.47)
- 800 67 \$A /w/ is realized as [ʋ] before front vowels (except in Spanish loans). (p.47) ("In the neighboring town of Tres Pueblos, the sound before /i/ and /e-mid/ in corresponding words is a palatalized fricativized dental stop." (p.47))
- 800 68 \$A Before a following consonant or pause, /w/ is realized as [v-velarized], and after /o-mid/, /w/ is labialized as well. (p.47)
- 800 69 \$A The sequence /vowel.n/ is contracted to a half-long (treated here as long), nasalized vowel (1) before /s-hacek/, (2) before /w/, bilabials and glottals "in faster speech." (p.47)