

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

A Report of the Stanford Phonology Archive

Compiled and edited by

John H. Crothers  
James P. Lorentz  
Donald A. Sherman  
Marilyn M. Vihman

	740 Delaware	740 Delaware	740 Delaware
			65
740	01 p <sup>01</sup> [p-aspirated-weak] <sup>60</sup> [b] <sup>03 61</sup>	11 x [x-long] <sup>07 64</sup>	55 schwa 56 schwa-long-nasalized <sup>30</sup>
740	02 p-long <sup>05</sup>	12 m	57 a
740	03 t <sup>01</sup> [t-aspirated-weak] <sup>60</sup> [d] <sup>03 61</sup>	13 m-long <sup>12</sup> 14 n [ɛŋ] <sup>68</sup>	58 a-long 59 u
740	04 t-long <sup>05</sup>	15 n-long <sup>12 13</sup>	60 u-long
740	05 k <sup>01</sup> [k-aspirated-weak] <sup>60</sup> [g] <sup>03 61</sup> [k-prevelar] <sup>62</sup>	16 l [l-half-voice] <sup>14 15 69</sup>	61 o-open 62 o-open-long
740	06 k-long <sup>05</sup>	17 l-long <sup>12 13</sup>	63 yod <sup>17</sup>
740	07 t/s-hacek <sup>01 06</sup> [d/z-hacek] <sup>03 61</sup> [t/s-hacek-aspirated-weak] <sup>60</sup>	18 h 19 h-long	64 w <sup>17</sup> [w-voiceless] <sup>18 70</sup> [w-half-voice] <sup>71</sup>
740	08 t/s-hacek-long <sup>05 06</sup>		65 w-long <sup>12 17</sup>
740	09 s [z] <sup>63</sup> [s-long] <sup>07 64</sup> [z-half-voice-long] <sup>08 65</sup>	51 i 52 i-long	66 i-long-nasalized <sup>30</sup> 67 ash-long-nasalized <sup>30</sup> 68 a-long-nasalized <sup>30</sup>
740	10 s-hacek <sup>06</sup> [z-hacek] <sup>63</sup> [s-hacek-long] <sup>07 64</sup> [z-hacek-half-voice-long] <sup>08</sup>	53 epsilon 54 ash-long	69 u-long-nasalized <sup>30</sup> 70 o-open-long-nasalized <sup>30</sup>
740	§a Delaware §b Lenape §d Algonquian §e Oklahoma §f under 100 §g Merritt Ruhlen §h Jim Bauman (review)		
740	§a Voegelin, C.F §b 1946 §c Delaware, An Eastern Algonquian Language §e Linguistic Structures of Native America, pp. 130-157 §f (Viking Fund Publications in Anthropology, No. 6) §g New York: Wenner-Gren Foundation §h informants		
740	§a OVER-SHORT NASALS §a OVER-LONG NASALS §A Nasals are over-short word-initially followed by a homorganic consonant, and over-long between a short vowel and a homorganic stop or affricate. (p.134)		
740	§a STRESS §A "A few words are distinguished only by a difference in stress.... Each word receives one stress.... The favorite position for stress is on the third mora from the end of the word. Accordingly, a two morae penult is stressed; but the antepenult would be stressed when the penult and the ultima each have the value of one mora. A less favored position for stress is on the second mora from the end of the word. Accordingly, a two morae ultima is stressed; but the penult would be stressed before a one mora ultima. A small class of words shows stress arbitrarily on the theme-final vowel, even when this vowel is the word-end mora." (p.137)		
740	§a SYLLABLE §A (C)(C)(C)V(:)(C)(C)(C) §A initial C: all but long C §A initial CC: /n, k, w/ + /t, t/s-hacek, s, s-hacek/; /m, k/ + /p/; /n/ + /k/; /n, k/ + /h/; /k/ + /x/; /k, h, x, m/ + /w/; /m, n, t, p/ + /h/; /l/ + /l/; /t, t/s-hacek, s, x, / + /k/; "and doubtless other clusters." §A final C: all but long C §A final CC(C): /x, s, n/ + /k, s, k.w/ (p.135)		
740	§a VOWELS §A Segment features for the vowels are inferred, since Voegelin only defines vowels in reference to English equivalents. [JB]		
740 01	§A "Stops in prevocalic word-initial are unaspirated and quite lenis even when preceding a stressed vowel.... A rather delayed release is audible after stops in word-final, but this release cannot be counted as aspiration." (p.131)		
740 03	§A The voiced stop allophone is not fully voiced when it occurs word finally or when a		

voiceless consonant follows. (p.132)

- 740 05 \$A The author's "ambisyllabic stops" are represented here as long consonants. [MRI "Ambisyllabic stops tend to be long and rather fortis after stressed vowels." (p.131) Voegelin describes the fundamental difference between "ambisyllabic stops" and "normal stops" as a feature of the vocalic on-glide. "The vowel before an ambisyllabic stop continues in full force until the stop is reached which appears to close the syllable, and belongs also to the following syllable. The vowel before a normal stop falls slightly in intensity before the stop is reached." (p.131)
- 740 06 \$A The tongue position for /t/s-hacek/ and /s-hacek/ is inferred from the symbols used.
- 740 07 \$A The long fricative allophones are "especially long after a stressed vowel." (p.132)
- 740 08 \$A [s-half-voice-long, s-hacek-half-voice-long] have "a voiced timbre, but [are] by no means fully voiced." (p.132)
- 740 12 \$A The long sonorants and glide are "distinctly long with one impulse of voicing." (p.133)
- 740 13 \$A /n-long, l-long/ are "relatively fortis and produced with a single impulse of voicing." (p.131)
- 740 14 \$A /l/ is slightly fronted word finally or before a voiceless consonant. (p.134)
- 740 15 \$A [l-half-voiced] "begins with a voiced on-glide but ends in a voiceless off-glide." (p.134)
- 740 17 \$A The articulatory values for the glides are inferred from the symbols used.
- 740 18 \$A [w-voiceless] "gives an aspirated effect." (p.131)
- 740 30 \$A Voegelin treats the long nasalized vowels as neutralized allophones of the corresponding long and short unnasalized vowels, conditioned by a following sequence /n.s/ or /n.s-hacek/. (p.132, 134, 136) However, since the /n/ is deleted the true phonetic environment, a following /s/ or /s-hacek/, requires that a phonemic contrast be recognized between nasalized and unnasalized vowels. [JBI]
- 740 60 \$A "As a prior member of a cluster, a stop is weakly aspirated.... In contrast to ambisyllabic (i.e. long-MRI) stops which do not occur in clusters, two identical normal stops may be juxtaposed, with the prior stop released and aspirated." (p.131)
- 740 61 \$A The stops and affricate are voiced after a homorganic nasal. (p.132) (In a very few morphemes, /t/ does not voice to [d] in this environment. (p.132))
- 740 62 \$A /k/ is prevelar after a long, high, front vowel. (p.130)
- 740 63 \$A /s, s-hacek/ are voiced after word initial /n/. (p.132)
- 740 64 \$A Fricatives are long intervocalically or before a consonant. (p.132)
- 740 65 \$A /s, s-hacek/ are long and half-voiced after a long nasalized vowel and before either another vowel or word final boundary. (p.132, 134)
- 740 68 \$A /n/ is realized as [ɛŋ] before /k/. (p.134)
- 740 69 \$A /l/ is half-voiced word finally or before a voiceless consonant. (p.134)
- 740 70 \$A /w/ is voiceless between /k/ and word boundary, between a word boundary and a following consonant, or between two voiceless consonants. (p.131, 134)
- 740 71 \$A /w/ is half-voiced between a preceding vowel and a following word boundary or consonant. (p.134)