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

A Report of the Stanford Phonology Archive

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005 Shilha

005 01 b
[b-unreleased][60]
(free)
[b-half-voice][61]

005 02 b-tense-long

005 03 t[03 09]
[t-unreleased][63 64]
(allo,free)

005 04 t-tense-long[03]

005 05 t-pharyngealized[05]
[t-unreleased-pharyngealized][60]

005 06 d[03]
[d-unreleased][60 63]

005 07 d-tense-long[03]

005 08 d-pharyngealized[05]

005 09 k[09]
[k-palatalized][10 68]
[k-labialized][69 70]
(free)

005 10 k-tense-long
[k-tense-long-labialized][70]
(free)

005 11 k-pharyngealized
[k-labialized-pharyngealized][70]
(free)

005 12 g[33]
[g-labialized][70]
(free)

005 13 g-tense-long
[g-tense-long-labialized][70]
(free)

005 14 f[14]

005 15 f-tense-long[14]

005 16 s[03]

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17 s-tense-long[03]

18 s-pharyngealized[05]

19 z[03]

20 z-tense-long[03]

21 z-pharyngealized[05]

22 s-hacek[14]

23 s-hacek-tense-long[14]

24 z-hacek[14]
[d/z-hacek][71]
(allo,free)

25 z-hacek-tense-long[14]

26 x
[x-palatalized][68]
[x-labialized][34 70]
(free)

27 x-tense-long
[x-tense-long-labialized][70]
(free)

28 gamma
[gamma-palatalized][68]
[gamma-labialized][70]
(free)

29 gamma-tense-long
[gamma-tense-long-labialized][70]
(free)

30 pharyngeal-voiceless

31 pharyngeal-voice[35]

32 m
[m-syllabic][21 72]

33 m-tense-long[22]

34 n
[n-syllabic][21 72 74]
[eng][75]

35 n-tense-long[22]

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36 l[03]
[l-syllabic][21 72]

37 l-tense-long[03 22]

38 l-pharyngealized[25]
[l-pharyngealized-syllabic][76]

39 r-trill[26]
[r-approximant][27 77]
[r-trill-syllabic][28 72]

40 r-trill-tense-long[22]

41 r-trill-pharyngealized

42 h[37 42 43]

43 pharyngeal-voiceless-tense-long

51 i
[iota][44 78]
[iota-bar][44 79]
[i/yod][80]
(free)

53 a
[ash][45 81]
(allo,free)
[epsilon][45 82]
[alpha][46 83]
[a-fronted][84]

54 u
[upsilon][45 85]
[o][45 86]
[u/w][87]
(allo,free)

55 schwa[47 88]
(transitional)

56 yod[36]

57 w[36]

005 $a Shilha $b Agadir $d Berber $e SW Morocco $f 4 million $g Merritt Ruhlen $g Jim Lorentz (review)

005 $a Applegate, Joseph R. $b 1958 $c An Outline of the Structure of Shilha $f (Program in Oriental Languages, No. 11) $g New York: ACLS $q informants $r unknown

005 $a **INTONATION** $A Applegate sets up two intonation patterns, one a falling tone on the last vowel of an utterance, the other high tone on the last two vowels of an utterance. No meaning is given. (p.6)

005 $a **LONG AND TENSE CONSONANTS** $A There is a large set of "fortis" consonants in Shilha which are distinguished by "increased tension" and a "lengthening of the period between closure and release" as well as "increased aspiration." (p.6) Spectrographic analysis showed that the period between closure and release was approximately doubled for fortis consonants. (p.13) It is not really clear whether these consonants should be considered primarily long or primarily tense and so these features are considered to be of equal weight and the consonants are

005 27 $A The values for [r-approximant] are inferred from a symbol. It might actually be "fricative," cf. Block & Trager's (p.26) interpretation of this symbol.

005 28 $A "The syllabic quality of [r-trill-syllabic] is due to [schwa] which always occurs with it. This [schwa] sometimes seems to be whispered and may be overshadowed by the trill." (p.4)

005 33 $A /g/ "does not occur frequently." (p.2)

005 34 $A "The labial release [of [x-labialized]] is not so clear as in [k-labialized] or [g-labialized]." (p.3) "Often the release is not detectable, so that this sound appears to vary freely with [x]." (p.3)

005 35 $A /pharyngeal-voice/ "apparently occurs only when preceded or followed by a vowel." (p.3)

005 36 $A /yod/ and /w/ are treated by Applegate as allophones of the vowels, occurring before other vowels. He says there are two variants of each, a glide, and a very short vowel followed by a homorganic glide. (p.4-5)

005 37 $A /h/ "does not occur frequently." (p.3)

005 42 $A Segment values for /h/ inferred from symbol.

005 43 $A In consonant clusters, /h/ patterns with voiced rather than voiceless obstruents.

005 44 $A [iota, iota-bar] "may be lowered slightly so that...[they] approach...the upper mid vowels." (p.4)

005 45 $A Height value inferred from symbol for [ash, epsilon, upsilon, o].

005 46 $A Segment values for [alpha] inferred from symbol.

005 47 $A Tongue height and position of /schwa/ vary according to preceding consonant.

005 60 $A /b/, /t-pharyngealized/, /d/ are unreleased before word boundary.

005 61 $A /b/ is half-voiced before voiceless consonants and after /s/, before vowels.

005 63 $A Dental stops are unreleased before nasals.

005 64 $A [t-unreleased] "may also occur as an alternant of [t] before other consonants in a long sequence of rapid speech." (p.1)

005 68 $A Velar fricatives and voiceless velar stops are palatalized before /i/.

005 69 $A [k-labialized] may vary freely with [k].

005 70 $A Velars may be labialized before /u/.

005 71 $A /z-hacek/ is realized as [d/z-hacek] in word initial position and optionally in word final position after /n/.

005 72 $A Sonorants become syllabic when they occur between a word boundary and a consonant.

005 74 $A /n/ becomes syllabic between consonants.

005 75 $A /n/ is realized as [eng] before plain, velar stops. (This rule might also apply before fortis and pharyngealized velar stops, however the source is unclear on this point. [JL])

005 76 $A /l-pharyngealized/ is syllabic after consonants.

005 77 $A /r-trill/ is realized as [r-approximant] before fricatives and nasals, and also before word boundary if there is a drop in tone.

005 78 $A /i/ is lowered to [iota] before two consonants or between consonants.

005 79 $A High or lower-high front vowels are realized as [iota-bar] before velar fricatives, /h/, or a pharyngealized consonant. (It is possible that an /i/ which follows any of the above conditioning consonants is also lowered and backed to [iota-bar], however the source is unclear on this point. [JL])

005 80 $A /i/ may be realized as [i/yod] before a morpheme boundary followed by a consonant. (There is also an example of this variant occurring after a vowel, before word boundary. (p.7))

005 81 $A /a/ is realized as [ash] before a non-pharyngeal consonant, but varies with [a] after word boundary, before non-pharyngeal consonants.

005 [82] $A [ash] is raised to [epsilon] before tense consonants or a consonant cluster.

005 [83] $A /a/ is backed to [alpha] when it occurs in the same syllable as a pharyngeal consonant.

005 [84] $A /a/ is realized as [a-fronted] before vowels.

005 [85] $A /u/ is realized as [upsilon] between consonants.

005 [86] $A /u/ and [upsilon] are lowered to [o] if they occur in the same syllable with a pharyngealized consonant.

005 [87] $A Applegate gives [u/w] as a variant of /u/ but does not say where it occurs. (But cf. [i/yod].)

005 [88] $A /schwa/ is inserted between any two consonants which may not form a consonant cluster, for example, between stops.