

ILLUSTRATIONS OF THE IPA

Chickasaw

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Chickasaw is a Muskogean language spoken in south-central Oklahoma. Published descriptions of Chickasaw phonetics include Munro & Willmond (1994), Munro (to appear), and Gordon et al. (2000). The following description is a summary of the principal phonetic aspects of Chickasaw drawn primarily from these works.

Consonants

	Bilabial	Labio-dental	Alveolar	Post-alveolar	Labial-velar	Velar	Glottal
Plosive	p b		t			k	ʔ
Affricate				tʃ			
Fricative		f	s ʃ	ʃ			h
Nasal	m		n				
Lateral			l				
Glide				j	w		

p	paska	<i>paska</i>	‘bread’	ʃ	ʃipa	<i>lhipa</i>	‘it is dry’
b	balaʔ	<i>balaʔ</i>	‘bean’	ʃ	ʃantiʔ	<i>shantiʔ</i>	‘rat’
t	topa	<i>topa</i>	‘bed’	h	hika	<i>hika</i>	‘she stands up’
k	koni	<i>koni</i>	‘skunk’	m	mahli	<i>mahli</i>	‘wind’
ʔ	ofiʔ	<i>ofiʔ</i>	‘dog’	n	nitaʔ	<i>nitaʔ</i>	‘bear’
tʃ	tʃa:ha	<i>chaaha</i>	‘she is tall’	l	lapiʃ	<i>lapish</i>	‘horn’
f	fala	<i>fala</i>	‘crow’	j	jala	<i>yala</i>	‘locust larva’
s	sintiʔ	<i>sintiʔ</i>	‘snake’	w	wa:kaʔ	<i>waakaʔ</i>	‘cow’

The voiced stops are typically fully voiced, and may undergo lenition to voiced fricatives in intervocalic position. Unaspirated stops have some aspiration, particularly in word-initial position. In addition to the bilabial and alveolar nasals, a phonetic velar nasal [ŋ] occurs before velar stops as well as in certain morphologically derived environments. All of the consonants occur geminated except for glottal stop and the phonetic velar nasal. The geminates are in general about 1.5 times as long as the corresponding single consonants (see Gordon et al. 2000 for measurements). Virtually all of the consonants may occur as either member of a biconsonantal cluster. An epenthetic vowel of variable quality is often inserted in more rapid speech to break up clusters consisting of an /h/ or /k/ followed by a sonorant. /k/ followed by an epenthetic vowel is typically voiced: e.g. [hagəlo] *haklo* ‘she hears’. /h/ preceding any voiced consonant underlyingly may be followed by an epenthetic vowel on the surface.

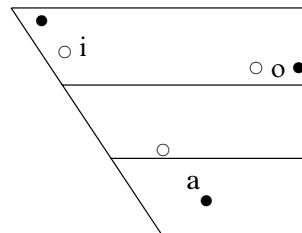
Vowels

Oral vowels

Chickasaw has three phonemic short vowels, shown on the chart with open circles, and three phonemic long vowels, shown by solid points. (This chart is based on acoustic analyses of 13 speakers.) As shown on the chart, the short vowels are centralized. In addition to the phonemically short and long vowels, there is a third set of vowels, which may be described as intermediate in phonetic duration between the phonemic short and long vowels, though the duration of these phonetically lengthened vowels appears to vary greatly as a function of environment and speaker. These phonetically lengthened variants of the phonemic short vowels occur in the second of a sequence of even-numbered open syllables containing a phonemic short vowel (Munro & Ulrich 1984, Munro & Willmond 1994), e.g. the second vowel in [pisaˑli] *pisali* (underlying /pisali/) ‘I look at him’ is phonetically lengthened, indicated here by a half-long symbol. There are morphological restrictions on vowel lengthening and final vowels do not undergo lengthening even if other conditions are met. All three sets of vowels are illustrated below. Further description of the phonetic properties of Chickasaw vowels may be found in Gordon et al. (2000).

In addition to the three phonemic vowel qualities, there are other surface vowel qualities. The sequence /oj:ɔ/ may be realized as a long high back rounded vowel [u:] or even as a high front rounded vowel [y:]. The sequence /ia/ (typically derived from loss of intervocalic /h/) may also be realized as a lower mid front unrounded vowel /ɛ:/.

i	pisa	<i>pisa</i>	‘she looks at him’
iˑ	tʃipiˑsa	<i>chipisa</i>	‘she looks at you’
i:	piˑniˑ?	<i>piiniˑ</i>	‘boat’
a	paska	<i>paska</i>	‘bread’
aˑ	sahaˑˑfaˑ	<i>sahashaa</i>	‘I’m angry’
a:	sahaˑˑfaˑ	<i>sahashaa</i>	‘I’m angry’
o	ofiˑ?	<i>ofiˑ</i>	‘dog’
oˑ	safoˑˑwa	<i>sashowa</i>	‘I stink’
o:	ihɔˑ	<i>ihoo</i>	‘woman’



Nasalized vowels

In addition to the oral vowels, Chickasaw has a set of phonemic nasalized vowels (shown in the list of examples below) which correspond phonetically in quality and length to the long oral vowels and are long from a phonological standpoint (Munro & Willmond 1994).

ĩ:	ĩ:sintiʔ	<i>ĩsinti'</i>	'his snake'
ã:	ipã:ʃiʔ	<i>ipãshi'</i>	'hair'
õ:	isõ:laf	<i>isõlash</i>	'tongue'

Prosody

Although Chickasaw is not a tonal language, in certain morphological forms termed 'grades' there is often a syllable in the word which receives a high pitch accent (see Munro & Willmond 1994 for discussion). These pitch accents are indicated by an acute accent over the relevant accented vowel. Phonemic long and phonetically lengthened vowels in Chickasaw tend to be more prominent than other syllables. In isolated words lacking phonemic long vowels and phonetically lengthened vowels, the final syllable tends to be marked by the greatest amplitude and highest fundamental frequency. Statements are generally marked by rising fundamental frequency and questions by a fundamental frequency peak near the end of the word followed by a sharp fall to the end of the utterance (see Gordon 1999 for discussion of Chickasaw intonation).

Transcription of 'The North Wind and the Sun'

The following transcription reflects non-contrastive length on nasalized vowels and derived vowel lengthening as discussed above.

falam:it mahli hafiʔ táw:aʔa

falam:it mahli hafiʔ táw:aʔat anompa iʃtit:atʃa'pat:o:k || kanimpiho:t
 it:ím:aj:aʔtʃaʔnikmat ithá:na ban:at:o:k || jahmihmã: hat:ak na:fkiftoʔ
 fala:ʔ fokhaho:t á:at:o:k || it:ibartʃaf:atʃa kanimpiho:t kilimpikat
 it:ím:aj:ahokmat hat:ak yam:at na:fkiftoʔ fala:ʔ ʃĩ:ʔfina pisa ban:at:o:k ||
 jahmihmã: mahlikat kal:ot:ok || mahlikat kanihkã: kal:ohmã: hat:akat
 na:fkiftoʔ fala:ʔ ila'boknohlit:o:k || ho:kya hafiʔat to:mit:o:k pal:it:ok ||
 hafiʔat to:mikat kanihkã: pal:ihmã: hat:akat na:fkiftoʔ fala:ʔ ʃĩ:fit:o:k ||
 jahmihmã: falam:it mahlikat hafiʔã: ima:tʃihmat || kilimpikat
 is:ám:aj:aʔtʃi || ima:tʃit:o:k

Orthographic version

Falammit Mahli Hashi' Táwwa'a

Falammit Mahli Hashi' táwwa'at anompa ishtittachapattook. Kanimpihoot ittímmaya'cha'nikmat ithána bannattook. Yahmihmã hattak naafkishto' falaa' fokhahoot áattook. Ittibaachaffacha kanimpihoot kilimpikat ittímmayahookmat hattak yammata naafkishto' falaa' shi'fina pisa bannattook. Yahmihmã Mahlikat kallottook. Mahlikat kanihkã kallohmã hattakat naafkishto' falaa' ilaboknohlitook. Hookya Hashi'at toomikat pallitook. Hashi'at toomikat kanihkã pallihmã hattakat naafkishto' falaa' shifitook. Yahmihmã Falammit Mahlikat Hashi'a imaachihmat, 'Kilimpikat issám-maya'chi,' imaachitook.

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