

# Chickasaw

MATTHEW GORDON, PAMELA MUNRO\*, AND PETER LADEFOGED\*  
*UCSB Department of Linguistics, Santa Barbara, CA 93106*  
*\*UCLA Department of Linguistics, Los Angeles, CA 90095*

## 1. Introduction

Chickasaw is a Muskogean language spoken in south-central Oklahoma. Published descriptions of Chickasaw phonetics include Munro and Willmond (1994), Munro (to appear), and Gordon et al. (xxx). The following description is a summary of the principal phonetic aspects of Chickasaw drawn primarily from these works and an unpublished description of Chickasaw phonology prepared by Pamela Munro (1996). The description concludes with a transcribed version of the North Wind and the Sun.

## 2. Vowels

### 2.1. Oral vowels

Chickasaw has three phonemic short vowels and three phonemic long vowels, low central /a, a:/, high front /i, i:/ and mid rounded back /o, o:/. The short vowels are for many speakers slightly centralized relative to the corresponding long vowels. 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. Further description of the phonetic properties of Chickasaw vowels may be found in Gordon et al. (to appear). 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 and Ulrich 1984, Munro 1996, Munro to appear, Munro and Willmond 1994). e.g. the

second vowel in [pisa'li] *pisali* (underlying /pisali/) 'I look at him' is phonetically lengthened, indicated in this paper by a half-long symbol. Final vowels do not undergo this lengthening process even if other conditions for lengthening are met. In addition, there are morphological restrictions on this process.

In addition to the three phonemic vowel qualities, there are other surface vowel qualities. The sequence of /oj:o/ may be realized as a long high back rounded vowel [u:] or even as a high front rounded vowel [y:] (Munro 1996). The sequence /ia/ (typically derived from loss of intervocalic /h/) may also be realized as a lower mid front unrounded vowel /ɛ:/ (Munro 1996).

Vowel	IPA	orthography	gloss
i	pisa	<i>pisa</i>	'she looks at him'
iˑ	chipi'sa	<i>chipisa</i>	'she looks at you'
i:	piiniʔ	<i>piini'</i>	'boat'
a	paska	<i>paska</i>	'bread'
aˑ	saha'ʃa:	<i>sahashaa</i>	'I'm angry'
a:	saha'ʃa:	<i>sahashaa</i>	'I'm angry'
o	ofiʔ	<i>ofi'</i>	'dog'
oˑ	saʃo'wa	<i>sashowa</i>	'I stink'
o:	ihɔ:	<i>ihoo</i>	'woman'

*Nasalized vowels.* In addition to the oral vowels, Chickasaw has a set of phonemic nasalized vowels which basically correspond in quality to the long oral vowels. The nasalized vowels are long, however, both from a phonetic and phonological standpoint: /ĩ:/, /ã:/, /õ:/ (Munro 1996, Munro to appear, Munro and Willmond 1994).

Vowel	IPA	orthography	gloss
ĩ:	ĩ:sintiʔ	<i>ĩsinti'</i>	'her snake'
ã:	ipã:ʃiʔ	<i>ipãshi'</i>	'hair'
õ:	isõ:laʃ	<i>isõlash</i>	'tongue'

### 3. Consonants

Chickasaw has an inventory of sixteen consonant phonemes.

	Bilabial	Labio-dental	Dental/alveolar	Postalveolar	Labial-velar	Velar	Glottal
Stops	p b		t			k	ʔ
Affricates				tʃ			
Fricatives		f	s ʎ	ʃ			h
Resonants	m		l, n				
Glides			j		w		

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

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 dental/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. to appear 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 (Munro 1996). /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.

#### 4. 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 and 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 isolation 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, 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).

#### 5. Falammit Mahli Hashi' Táwwa'a “The North Wind and the Sun”

##### 5.1. Phonetic transcription

falam:it mahli hafi? táw:aʔa

falam:it mahli hafi? táw:aʔat anompa iʃtit:atʃapat:o:k || kanimpiho:t

itím:aj:aʔtʃaʔnikmat ithã:na ban:at:o:k || jahmihmã: hat:ak na:fkiʃto?

fala:ʔ foʔkhaho:t ã:at:o:k || itibat:ʃafiatʃa kanimpiho:t kilimpikat

itím:aj:aho:kmat hattak yammat na:fkiʃto? fala:ʔ ʃi:ʔfina pisa ban:at:ok ||

jahmihmã: mahlikat kal:ot:ok || mahlikat kanihkã: kal:ohmã: hat:akat

na:fkisʔo? fala:ʔ ilaʔboknohlit:o:k || ho:kya haʃiʔat to:mit:o:k palit:o:k ||  
 haʃiʔat to:mikat kanihkā: palihmā: hat:akat na:fkisʔo? fala:ʔ ʃiʔit:o:k ||  
 jahmihmā: falam:it mahlikat haʃiʔā: ima:tʃihmat || kilimpikat  
 is:am:aj:aʔtʃi || ima:tʃit:o:k

## 5.2. Orthographic version

Falammit Mahli Hashi' Táwwa'a

Falammit Mahli Hashi' táwwa'at anompa ishtittachapattook. Kanimpihoot

ittímmaya'cha'nikmat ithána bannattook. Yahmihma hattak naafkishto' falaa' fokhahoot

áattook. Ittibaachaffacha kanimpihoot kilimpikat ittímmayahookmat hattak yammat

naafkishto' falaa' shi'fina pisa bannattook. Yahmihma Mahlikat kallottook. Mahlikat

kanihka kallohma hattakat naafkishto' falaa' ilaboknohlittook. Hookya Hashi'at toomikat

pallittook. Hashi'at toomikat kanihka pallihma hattakat naafkishto' falaa' shi'fittook.

Yahmihma Falammit Mahlikat Hashi'a imaachihmat, "Kilimpikat issámmaya'chi,"

imaachittook.

## Acknowledgments

We thank Catherine Willmond and the numerous other Chickasaw speakers who have contributed so much to our understanding of Chickasaw. Also, we wish to thank the UCLA Department of Linguistics and the National Science Foundation for their generous support during our investigation of Chickasaw phonetics.

## References

- GORDON, M. (1999). The intonational structure of Chickasaw. *Proceedings of the XIVth International Congress of Phonetic Sciences*, 1993-6.  
 GORDON, M., MUNRO, P. AND LADEFOGED, P. (xx). Some phonetic structures of Chickasaw. *Anthropological Linguistics*.  
 MUNRO, P. (1996). *The Chickasaw sound system*. MS. UCLA.

- MUNRO, P. (to appear). Chickasaw. In H. Hardy and J. Scancarelli (eds.), *Native languages of the Southeastern United States*. Lincoln: University of Nebraska Press.
- MUNRO, P. AND ULRICH, C. (1984). Structure-preservation and Western Muskogean rhythmic lengthening. *WCCFL* **3**, 191-202.
- MUNRO, P. AND WILLMOND C. (1994). *Chickasaw: An analytical dictionary*. Norman: University of Oklahoma Press.