Choctaw

George Aaron Broadwell,
University at Albany, State University of New York

1. Background.

Choctaw is a Muskogean language that was originally spoken in Mississippi, Alabama, and Louisiana. Federal Indian policy in the 1830's forced the Choctaws, along with the Chickasaws, Creeks, Seminoles, and Cherokees, to give up their lands in the southeast and relocate in Oklahoma. While the majority of the Choctaws were moved to Oklahoma in 1831-33, a smaller number resisted removal and remained in Mississippi.

As a result of this separation, there are now two main groups of Choctaws: the Mississippi Choctaws, who live on a reservation near Philadelphia, Mississippi, and the Oklahoma Choctaws, who live primarily in southeastern Oklahoma. There are about 5000 Mississippi Choctaws, and more than ninety percent of them are speakers of the language. There are far more Oklahoma Choctaws, perhaps as many as 17,000. However, a smaller percentage of them, perhaps thirty percent, are speakers of the Choctaw language, giving a figure of about 6,000 for Oklahoma Choctaw (OK).

Dialect differences in modern Choctaw are fairly minor, and appear to be primarily restricted to a few lexical items. The Mississippi Choctaw reservation is divided into seven distinct communities, and there seem to be three primary dialects, based on the community of residence: Northern, spoken in the community of Bogue Chitto; Central, spoken in Pearl River, Standing Pine, Red Water, and Tucker; and Southern, spoken in Conehatta and Bogue Homa. These three dialects may reflect a much older organization of the tribe into three political groups.

A more recent influence on Mississippi Choctaw (MS) dialects is the establishment of Pearl River as the seat of the tribal government. Children from other communities attend high school at Pearl River, and there seem to be several words that are now characteristic of the Pearl River dialect. We might claim that Pearl River is a center of innovation among Mississippi Choctaw dialects.

Speakers of Mississippi Choctaw are highly conscious of dialect differences, and will often give examples of words that distinguish one Mississippi Choctaw community from another, as well as those that distinguish Mississippi Choctaw from Oklahoma Choctaw. Here are examples of some of the variants:

'to be small (pl.)'	[chipi̲ta]	Pearl River
	[chipõta]	others
'onion'	[na:koso:ma]	Bogue Chitto
	[šachonna]	other MS Choctaw
	[hatõfala:ha]	OK Choctaw
'tail'	[hali̲bis]	Pearl River
	[hasi̲bis]	others
'head'	[niškobo]	Bogue Chitto
	[noškobo]	others
'train'	[kochcha bali:li]	Bogue Chitto
	[pi:nih]	others
'to comb'	[ši̲fih]	Conehatta
	[šillih]	others
'wasp'	[chanaššik]	Bogue Chitto
	[chaššik]	others

The dialect situation for Oklahoma Choctaw is less clear. Although the political organization of the Oklahoma Choctaws after removal did recognize an organization into three groups, it is not clear whether there are identifiable regional dialects like those in Mississippi. Most variation in Oklahoma Choctaw appears to be idiolectal rather than regional in origin. However, Ulrich (1986) has discussed some distinctive features of a group of Choctaw speakers living in the Chickasaw Nation and has labelled their dialect Mississippi Choctaw of Oklahoma.

Some examples of idiolectal variation that does not seem correlated with community of origin are shown below. These variants seem to be found in both Mississippi and Oklahoma Choctaw:

(1)	`horse'	[issobah~sobah]
	`money	[iskali~skali]
	`one'	[achaffa~chaffa]

(2) `blood' [issiš~issis]

`to be short' [yoškolo:lih~yoskolo:lih]

(3) `Choctaw' [chahta~chatta]

`bag' [bahta~batta]

(4) `to be short' [kowa:šah~kawa:šah]

`to be short' [yoškolo:lih~yiškolo:lih]

The examples in (1) show that initial short vowels are dropped in some words. Example (2) shows alternations between /š/ and /s/ in syllable-final position. Example (3) shows a tendency of /h/ to assimilate to a following consonant, and example (4) shows some variation in short vowels in the first syllable of a word.

2. Orthography.

Choctaw has been written in a variety of orthographies, and the choice of a writing system has been controversial, with different groups favoring different orthographies. The orthographies vary from each other primarily in the way vowels are written and in the representation of /£/, /š/, and /ch/.[1]

[1] Because of difficulty with the fonts in this PDF version, I have used /£/ here to represent the voiceless lateral fricative, /ch/ to represent the alveo-palatal affricate, and underlined /i/ to represent a nasalized /i/.

2.1. Traditional orthography.

The earliest orthography, which we can call the *traditional orthography*, was that used by nineteenth century missionaries, who produced translations of many books of the Bible and other religious works.

The missionaries failed to recognize vowel length as significant in Choctaw, and designed an orthography that reflects tense/lax distinctions in vowel quality. In this orthography, vowel length can sometimes, but not always, be inferred from the spelling of a word. The vowel symbols, along with their phonemic interpretation, are shown below:

Orthographic symbol	Phonemic equivalent
a	/a/, /a:/
v	/a/
i	/i/, /i:/
e	/ii/
o	/o/, /o:/
u	/o/

Both short and long vowels tend to be tense in open syllables, while short vowels are usually lax in closed syllables. The orthography reflects this allophonic alternation, with the symbols <*v*> and <u> being used primarily in short closed syllables. Some examples showing uses of the traditional orthography are shown below:

(5)

Traditional	Phonemic	Gloss
nushkobo	/noškobo/	`head'
ohoyo	/oho:yo/	`woman'
ahalvlli	/a:halalli/	`handle'
peni	/pi:nih/	`boat'
kostini	/kosti:nih/	`to be obedient'
chekusi	/chi:kosi/	`very soon'

Vowel nasalization is sometimes indicated by underlining and sometimes by writing a homorganic nasal consonant.

The phonemes /š/ and /ch/ are written as digraphs <sh> and <ch> respectively, as shown in the preceding examples. The phoneme /£/ was written <lh> before a consonant and <hl> before a vowel, as in the following examples:

(6)

Traditional	Phonemic	Gloss
ilhkoli	/i£kolih/	`to go (pl.)'
a̲hli	/ã£ih/	`to be true'

Unfortunately, the spelling <hl> also represents the frequent cluster /hl/ in Choctaw, e.g. <mvhli> /mahli/ `wind', and thus some words in the traditional orthography can be difficult to interpret.[1]

A final noteworthy feature of the traditional orthography is

its practice of breaking long words up into shorter orthographic units, for example:

(7) <*Vlla chipunta yvt vm vla hi a hvsh im ahni...*>

/Alla chipõta-yat am-al-ahii-yã

child small:PL-NOM 1sIII-come-IRR-DS

haš-im-ahni.../

2pI-III-allow

`Suffer the little children to come unto me...' (Matt 19:14)

As this example shows, the orthographic units do not always correspond to morphemes.

2.2. Mississippi Choctaw orthography.[2]

A second orthography was designed by the staff of the Bilingual Education program of the Mississippi Band of Choctaw Indians in the mid 1970s, and was used in producing many of the materials used in the reservation schools.

The Mississippi Choctaw orthography uses the phonetic symbols <š>, c-hacek, and slashed-l for /š, ch, £/ and uses hooks to represent vowel nasalization. Vowel length is somewhat

[2] Because this PDF version does not display phonetic characters properly, it was necessary to use c^ to represent the c-hacek character and V, to represent the vowels with nasal hooks in the excerpt below.

irregularly indicated by either an acute accent or a macron. The following sentence is written in Mississippi Choctaw orthography:

(8) <*Alla c^ipo,ta amalahíya, hašimahni...*>

/*Alla chipõta-yat am-al-ahii-yã*
child small:PL-NOM 1SIII-come-IRR-DS

haš-im-ahni.../
2PI-III-allow

`Suffer the little children to come unto me...' (Matt 19:14)

2.3. Modified traditional orthography.

The orthography used through the remainder of this chapter is an example of what we may call *modified traditional orthography*. This orthography is the one most frequently used by linguists in discussions of the language. It uses the digraphs <sh> and <ch> as in the traditional orthography, and consistently uses <lh> for /ɬ/ (so that <hl> always represents a cluster). The modified traditional orthography also uses underlining to represent vowel nasalization, but uses only three of the vowel symbols: <a>, <i>, and <o>, which are doubled when long.

Word divisions in the modified traditional orthography reflect those found in spoken Choctaw. The following sentence is written in modified traditional orthography:

(9) *Alla chipo̲tayat amalahiiya̲ hashimahni...*

/Alla chipõta-yat am-al-ahii-yã
child small:PL-NOM 1SIII-come-IRR-DS

haš-im-ahni.../
2PI-III-allow

`Suffer the little children to come unto me...' (Matt 19:14)

2. Text.

The following story was told by Henry Willis, of Moore, Oklahoma during the summer of 1993. Mr. Willis grew up in the area of Stratford, Oklahoma, and he is a speaker of Oklahoma Choctaw. The text shown here was not produced spontaneously, but was carefully prepared by Mr. Willis, and repeatedly revised to arrive at the version below.

The text is first presented in modified traditional orthography, and is followed by a second line showing the morphological analysis of each word. The third line shows a

morpheme by morpheme gloss, while a fourth gives a free translation in English.

An additional line of analysis is added when compound words in Choctaw correspond to a single word in English. The first gloss line shows the literal sense of the compound, while the second gloss line shows the usual single word translation in English. An example of this is shown for the word `west' in sentence (1) below.

Each sentence of the text is numbered separately. In the grammatical discussion later in the chapter, words and sentences from the text are indicated (T#), where # is the number of the sentence.

My first days in school

by Henry Willis

[1]*Siallah*	*momaka*	*aki*	*anoti*
Si-alla-h	*moma-ka*	*a-ki*	*anoti*
1SII-child-TNS	still-COMP:DS	1SIII-father	and

hashkiyat	*kowi toklo*	*mahlimma*	*kowi*
ha-ishki-yat	*kowi toklo*	*mahli-imma*	*kowi*
1SII-mother-NOM	mile two	south-towards	mile

toklo hashi okattolimma tamaaha bilika

toklo *[hashi* *okattola]-imma* *tamaaha* *bil<u>i</u>ka*

two [sun go:down]-towards town near

two [west]-towards town near

hohchifokat *Stratfordak<u>o</u>* *ashwattook.*

hohchifo-kat *Stratford-ak<u>o</u>* *ashwa-ttook.*

named-COMP:SS Stratford-CNTR:ACC live:DU-DPAST

When I was a child, my father and mother lived two miles west and two miles south of a town called Stratford.

[2]*Nittak ámmoona* *holisso* *aapisa*

Nittak *ámmoona* *[holisso* *aa-pisa]*

day first [book LOC-see]

day first [school]

ibaachaffalik<u>a</u> *n<u>a</u>na* *ilikh<u>a</u>nakat* *pihohchifoak<u>o</u>*

ibaachaffa-li-ka *nana* *il-ikh<u>a</u>na-kat* *pi-hohchifo-ak<u>o</u>*

enter-1SI-COMP:DS thing 1PI-learn<NGR>-COMP:SS 1PII-name-CNTR:ACC

ilaachaach<u>i</u>h *miyah<u>o</u>* *ilikh<u>a</u>nattook*

il-aachi-aach<u>i</u>-h *miya-h-<u>o</u>* *il-ikh<u>a</u>na-ttook.*

1PI-say-IRR-TNS say-TNS-PRT:DS 1PI-learn<NGR>-DPAST

The first day that I went to school, what we learned was how to

say our names.

[3]*Ámmoonaka* *holisso* *pisaachi* *ya*

Ámmoona-ka *[holisso* *pisa-chi]-ya*

first-COMP:DS [book see-CAUS]-ACC

first-COMP:DS [teacher]-ACC

imikhanalifihnakiiyokiya *ánnopa* *tikbaka*

im-ikhana-li-fihna-kiiyo-kiya *ánnopa* *tikba-ka*

III-understand-1sI-really-not-although word first<NGR>-COMP:DS

nana *ponaklokat,* *"Wakaayachah* *chihohchifo* *makaachih!"*

nana *ponaklo-kat,* *"Wakaaya-chah* *chi-hohchifo* *makaachi-h*

thing ask-COMP:SS stand:up<LGR>-SS 2sII-name say-TNS

aachittook.

aachi-ttook

say-DPAST

Although I didn't understand the teacher, the first thing she said was, "Stand up and say your name!"

[4]*Imikhanalifihnakiiyokiya* *aholisso*

Im-ikhana-li-fihna-kiiyo-kiya *a-[holisso*

III-understand-1SI-really-not-although 1SIII-[book

III-understand-1SI-really-not-although 1SIII-[class

ittibaapisa *alhiihayat* *oklah* *siapiilattook.*

itti-ibaa-pisa *alhiiha]-yat* *oklah* *si-apiila-ttook*

RCP-COM-see group]-NOM PL 1SII-help-DPAST

mates]-NOM PL 1SII-help-DPAST

Although I didn't understand her, my classmates helped me.

[5]*Oklah* *amikhanakilittook* *naahollo* *anopa*

Oklah *am-ikhana-akili-ttook* *[naahollo* *anopa]*

PL 1SIII-know<NGR>-indeed-DPAST [white:people language]

PL 1SIII-know<NGR>-indeed-DPAST [English]

anopolilahiikiiyoka.

anopoli-li-ahii-kiiyo-ka

speak-1SI-IRR-not-COMP:DS

They knew that I didn't speak English.

[6]*Holisso pisaachiyat* *hikiiyalaachiho*

[*Holisso pisa-chi]-yat* *hikiiya-li-aachi-h-o*

[book see-CAUS]-NM stand-1SI-IRR-TNS-PRT:DS

[teacher]-NOM stand-1SI-IRR-TNS-PRT:DS

aponaklohma holisso sabaapisa

a-ponaklo-hma [holisso sa-ibaa-pisa]

1SIII-ask-when:DS [book 1SII-COM-see]

1SIII-ask-when:DS [my classmate]

achaffakat ibbak aba wakiilit

achaffa-kat ibbak aba wakiili-t

one-COMP:SS hand up raise-SS

hikiiyalaachiho imikhanat hikiiyalittook.

hikiiya-li-aachi-h-o im-ikhana<NGR>-t hikiiya-li-ttook.

stand-1SI-IRR-TNS-PRT:DS III-know-SS stand-1SI-DPAST

When the teacher asked me to stand up, one of my classmates lifted her hand, and I understood that I was to stand up, and I stood.

[7] *Ahma híkkiyat naa sayoppattook.*

A-hma híkkiya-t [naa sa-yoppa-ttook]

be-when stand<GGR>-ss [thing 1sII-happy-DPAST]

be-when stand<GGR>-ss [I was happy]

I stood up proudly.

[8]*Holisso pisaachiyat sihohchifo makaalaachihoo*

[Holisso pisa-chi]-yat si-hohchifo maka-li-aachi-h-o

[book see-CAUS]-NOM 1SII-name say-1SI-IRR-TNS-PRT:DS

[teacher]-NOM 1SII-name say-1SI-IRR-TNS-PRT:DS

ponaklottook.

ponaklo-ttook

ask-DPAST

The teacher asked me to say my name.

[9]*Alla alhiiha ilakat hohchifo*

Alla alhiiha ila-kat hohchifo

child group other-COMP:NOM name

imaka haklolittook.

ima-ka haklo-li-ttook.

give-COMP:DS hear<*NGR*>-1SI-DPAST

I had heard the other kids give their names.

[10]*Aatoko anakkia nokshopah*

Aa-tok-o ano-akkia nokshopah

be-PT-PRT:DS I-too afraid<NGR>

chóyyohmihoosh sihohchifo lohmat anoolilittook.

chóyyohmi-h-oosh si-hohchifo lohma-t anooli-li-ttook.

sort:of<YGR>-TNS-PRT:SS 1SII-name quiet-SS tell-1SI-DPAST

So I also said my name, timidly and softly.

[11]*Ahma holisso pisaachiyat atoklat*

A-hma [holisso pisa-chi]-yat atokla-t

be-when [book see-CAUS]-NOM again<NGR>-SS

be-when [teacher]-NOM again<NGR>-SS

sihohchifo aachittook.

si-hohchifo aachi-ttook.

1SII-name say-DPAST

And then the teacher repeated my name.

[12]*Hichah biniililaachiho makattook.*

Hi-chah biniili-li-aachi-h-o maka-ttook.

do-SS sit-1SI-IRR-TNS-PRT:DS say-DPAST

And she told me to sit down.

[13]*Naa yoppahoosh bínnililittook.*

Naa yoppa-hoosh bínnili-li-ttook.

thing happy-PRT:SS sit<GGR>-1SI-DPAST

I was happy to sit down.

[14]*Nittak atoklahma, ofi hohchifo anoti*

Nittak atokla-hma, ofi hohchifo anoti

day second<NGR>-when:DS dog name and

kanimma attaka ilanoolaachih miyaho

kanimma atta-ka il-anooli-aachi-h miya-ho

where live-COMP:DS 1PI-tell-IRR-TNS say-PRT:DS

makaachinah oklah ilanoolittook.

makaachi-nah oklah il-anooli-ttook.

say<LGR>-DS PL 1PI-tell-DPAST

The second day, she said we were supposed to say the names of (our) dogs and where they lived, so we said them.

[15]*Anoolilaachih miyaka onahma,*

Anooli-li-aachi-h miya-ka onа-hma,

tell-1SI-IRR-TNS say-COMP:DS arrive-when:DS

ilittibaapisa alhiihayat siapiilanah anoolit

[il-itti-ibaa-pisa alhiiha]-yat si-apiila-nah anooli-t

[1PI-RCP-COM-see group]-NOM 1SII-help<LGR>-DS tell-SS

[my classmates]-NOM 1SII-help-DS tell-SS

lhopollilittook.

lhopolli-li-ttook.

through-1SI-DPAST

When the time came that I had to say it, my classmates helped me and I got through it.

[16]*Yak michiish anoolilittook.*

Yak michi-hoosh anooli-li-ttook.

this do-PRT:SS tell-1SI-DPAST

This is how I told it.

[17]*Alla alhiihayat ofi hohchifo makaachikma,*

Alla alhiiha-yat ofi hohchifo makaachi-kma,

kid group-NOM dog name say-IRR:DS

hohchifo kanimma achokmalilikmat sanoshkobo

hohchifo kanimma achokmali-li-kmat sa-noshkobo

name whatever like-1SI-IRR:SS 1SII-head

akoshchonnolilittook.

akoshchonnoli-li-ttook.

nod-1SI-DPAST

When the other kids said a dog's name, I nodded my head at whatever name I liked.

[18]*Anoti kanimma imma kanimma*

Anoti kanimma imma kanimma

and whatever toward where

atta pit bilhiblikma, achokmalilikmat,

atta pit bilhibli-kma, achokmali-li-kmat,

live DIR point-IRR:DS like-1SI-IRR:SS

akoshchonnolilittook.

akoshchonnoli-li-ttook.

nod-1SI-DPAST

And when they pointed towards a direction where it lived, I nodded if I liked it.

[19]*Nittak atóchchiinahma holisso aapisayat lowat*

Nittak atóchchiina-hma [holisso aa-pisa]-yat lowa-t

day third<GGR>-when:DS [book LOC-see]-NOM burn-SS

day third<GGR>-when:DS [school]-NOM burn-SS

taahanah falaamat akiiyokiittook.

taaha-nah falaama-t ak-iiy-o-kii-ttook.

complete<LGR>-DS return-SS 1SN-go<LGR>-NEG-NEG-DPAST

On the third day, the school burned down, so I didn't go back.

3. Phonology.

3.1. The phonemic structure of the language.

Choctaw has the following phonemic inventory of consonants:[2]

Labial	**Alveolar**	**Alveo-palatal**	**Velar**	**Glottal**
p	t	ch	k	
b				
f	s, £	š		h
m	n			
	l			
w		y		

As mentioned in the section on orthography, /£, š, ch/ are written <lh, sh, ch> in this chapter.

/lh/ is a voiceless lateral fricative. Some younger speakers of Oklahoma Choctaw have shifted from a lateral to an interdental articulation for this sound, which is then theta. This pronunciation seems much less common among Mississippi Choctaws.

The vowel inventory is as follows:

I, ii, o, oo, õ

a, aa, ã

Note that there is no length distinction for nasal vowels.

The vowels vary allophonically in tenseness. Both short and

long vowels in open syllables tend to be tense. Short /i/, /a/, and /o/ in closed syllables often appear as lax small cap /i/, schwa, and lax small cap /u/ respectively.

Nasal vowels are probably derived from underlying sequences of a vowel plus a nasal consonant by rule. They are phonetically long, and rules that distinguish between heavy and light syllables (e.g. rhythmic lengthening, discussed in section 3.2.1) treat syllables with a nasal vowel as heavy syllables.

Choctaw also has pitch accent, indicated by the acute accent below. Accent is usually predictable in verbs, falling on the final syllable of underived verbs, and on the penult or antepenult of a verb in one of the aspectual grades. Accent is not predictable in nouns, however, occurring either on the last syllable or the penult.

3.2 Some phonological rules.

3.2.1. Rhythmic lengthening.

Choctaw has a pervasive rule of rhythmic lengthening that lengthens even-numbered non-final CV syllables, as in the following examples:

(10) /salaha+tok/ --> [sala:hatok] `He was slow.'
/nokowa+h/ --> [noko:wah] `She is angry.'

As several analysts have noticed, the Choctaw rule of rhythmic lengthening is similar to rules which assign alternating stress in other languages, though the realization of metrical prominence

in this language is vowel length rather than stress.

However, there are several complications in the statement of this rule. Since the rule affects even-numbered non-final CV syllables, it is necessary to determine where the syllable count begins. And it is also necessary to determine the domain within which vowels are judged as final or non-final.

The rhythmic lengthening rule distinguishes some prefixes as being within the scope of the rule, while others are outside the scope. The II pronominal prefixes (discussed in section 4.1.1 below) are within the scope of the rule:

(11) *sa-salaha-tok* --> [sasa:laha(:)-tok][3]
1SII-slow-PT

`I am slow.'

However, I prefixes (used with subjects of transitives and active intransitives) and most III prefixes (used with datives) are not within its scope:

(12) *ish-achifa-tok* --> [išachi:fatok]
2SI-wash-PT *[iša:chifatok]

`You washed it.'

(13) *im-achifa-tok* --> [imachi:fatok]
III-wash-PT *[ima:chifatok]

`He washed it for her.'

At the right edge of the word, there is variation in what counts as the end of the word. Recall that the rule of rhythmic lengthening affects only syllables that are non-final in some domain. For some speakers of Choctaw, the tense suffix /-tok/ is outside the scope of this rule, and an even-numbered CV syllable will not be lengthened before it:

(14) *nokowa-chi-tok* --> [noko:wachitok]
angry-CAUS-PT

`He angered her.'

Other speakers do allow rhythmic lengthening before /-tok/:

(15) *nokowa-chi-tok* --> [noko:wachi:tok]
angry-CAUS-PT

It is difficult to generalize about the distribution of these two patterns, but the latter seems more frequent with Mississippi Choctaws. Oklahoma Choctaws show both patterns.

Another area of variation in rhythmic lengthening is whether the rule applies to nouns. For some speakers, the rule is not applicable in cases like the following:

(16) *sa-hat<u>a</u>bish* --> [sahatãbiš]
1sII-navel

`my navel'

However, other speakers do allow rhythmic lengthening in this context:

(17) *sahat<u>a</u>bish* --> [saha:tãbiš]

Once again, the latter form seems to be more common among Mississippi Choctaws, while Oklahoma Choctaws show both patterns.

3.2.2 Consonant assimilations.

Choctaw verbs frequently occur in active-stative pairs like the following:[4]

(18) *bashlih* `to cut' *bashah* `to be cut'

The verb root in this example is /bash-/, which must be followed by one of two suffixes — /-li/ `active' or /-a/ `stative'.[5]

The suffix /-li/ assimilates to the preceding consonant when it is /b, f, m, n, w, lh/:

(19) *itahobbih* /itahob-li-h/ `to gather'
pichiffih /pichif-li-h/ `to squeeze'
shimmih /shim-li-h/ `to split into shingles'
ashannih /ashan-li-h/ `to twist; to lock'
tiwwih /tiw-li-h/ `to open'
palhlhih /palh-li-h/ `to split'

When the final consonant of the verb root is /p/, it assimilates in voicing to a following /-li/, e.g. /tap-li-h/ *tablih* `to cut off'. Root-final /t/ totally assimilates to a following /-li/, e.g. /palhat-li-h/ *palhallih* `to split'.

Some verbs show an /-l-/ infix in the stative, in addition to or instead of the /-a/ suffix. The /-l-/ infix occurs primarily with verbs beginning with /a-/ and /ho-/:

(20) *alwashah*

a<l>wash-a-h

fry<STAT>-STAT-TNS

`to be fried'

(compare *awashlih* `to fry')

This /-l-/ assimilates in voicing to a following voiceless consonant:

(21) *alhpiisah*

a<lh>piisa-h

measure<STAT>-TNS

`to be measured; correct'

(compare *apiisah* `to measure')

/-l-/ changes to /h/ when the following consonant is /h/ or /ch/: *ahchifah*

a<h>chifa-h

wash<STAT>-TNS

`to be washed'

(compare *achifah* `to wash')

hohchifoh

ho<h>chifo-h

name<STAT>-TNS

`to be named'

(compare *hochifoh* `to name')

4. Morphology.

4.1. Verbs.

Choctaw verbs display a wide range of inflectional and derivational morphology. In Choctaw, the category of verb may also include words that would be categorized as adjectives or quantifiers in English. Verbs may be preceded by up to three prefixes and followed by as many as five suffixes. In addition, verb roots may contain infixes that convey aspectual information.

4.1.1 Verb prefixes.

The verbal prefixes convey information about the arguments of the verb—how many there are and their person and number features. The prefixes can be divided into three sorts: agreement markers, applicative markers, and anaphors (reflexives and reciprocals). These prefixes occur in the following order:

Agreement-Anaphor-Applicative-Verb Stem

The agreement prefixes are shown in the following chart:

	I	II	III	N
1st sg.	(-li)	sa-	am-/a-	ak-
2nd sg	ish-	chi-	chim-/chi-	chik-
1st pl.	il-/ii-	pi-[6]	pim-/pi-	kil-/kii-
2nd pl.	hash-	hachi-	hachim-/hachi-	hachik-
unmarked[7]	Ø	Ø	im/i-	ik-

When two forms are separated by a slash, the first is used before a consonant and the second is used before a vowel.

I, II, and III are neutral labels for the three person marking paradigms. Some other authors have called them Actor/Patient/Dative or Nominative/Accusative/Dative.

The 1sg I agreement marker is /-li/, the only suffix among the agreement markers. It is discussed in this section along with the other agreement markers.

I, II, and III agreement are conditioned by various kinds of arguments. Transitive active verbs show the most predictable pattern. With a typical transitive active verb, the subject will take I agreement, the direct object will take II agreement, and the indirect object will take III agreement.

As the chart above shows, there is no person-number agreement for third person arguments. Consider the following paradigms:

(22) *Pisa-**li**-tok.* `I saw him/her/it/them.'

Ish-*pisa-tok.* `You saw him/her/it/them.'

Pisa-tok. `She/he/it/they saw him/her/it/them.'

Ii-*pisa-tok.* `We saw him/her/it/them.'

Hash-*pisa-tok.* `Y'all saw him/her/it/them.'

Sa-*pisa-tok.* `She/he/it/they saw me.'

Chi-*pisa-tok.* `She/he/it/they saw you.'

Pisa-tok. `She/he/it/they saw him/her/it/them.'

Pi-*pisa-tok.* `She/he/it/they saw us.'

Hachi-*pisa-tok.* `She/he/it/they saw y'all.'

Am-*anoli-tok.* `She/he/it/they told me.'

Chim-*anoli-tok.* `She/he/it/they told you.'

Im-*anoli-tok.* `She/he/it/they told him/her/it/them.'

Pim-*anoli-tok.* `She/he/it/they told us.'

Hachim-*anoli-tok.* `She/he/it/they told y'all.'

The following examples come from the text:

(23) ... *ilikh<u>a</u>nattook.*

***il**-ikh<u>a</u>na-ttook*

1PI-learn<NGR>-DPAST

`... we learned.' (T2)

(24) ... *oklah siapiilattook.*

*oklah **si**-apiila-ttook*

PL 1SII-help-DPAST

`...(they) helped me.' (T4)

(25) ... <u>a</u>ponaklohm<u>a</u> ...

***<u>a</u>**-ponaklo-hm<u>a</u>*

1SIII-ask-when:DS

`...when she asked me...' (T6)

When a transitive verb occurs with more than one agreement prefix, I prefixes precede II and III prefixes:

(26) *Iichip<u>i</u>satok.*

***Ii-chi**-p<u>i</u>sa-tok.*

1PI-2SII-see<NGR>-PT

'We saw you.'

(27) *Ishpimanoolitok.*

Ish-pim*-anooli-tok.*

2SI-1PIII-tell-PT

'You told us.'

The III agreement triggered by an object occurs before the II agreement triggered by an object:

(28) *Ichitokcholilih.*

I-chi*-tokcholi-li-h.*

III-2sII-tickle-1sI-tns

'I tickled you for her.'

Transitive verbs whose subjects trigger II and III agreement show a more complex ordering of prefixes discussed in detail by Davies (1986).

Intransitive verbs show more complicated patterns of agreement. For intransitive verbs, the subjects of active verbs typically trigger I agreement, the subjects of stative verbs typically trigger II agreement, and III agreement is found with the subjects of some psychological verbs.

The following examples show verbs from each class:

Active intransitive verbs with I subjects

(29) *Baliililitok.*

Baliili-li-tok.

run-1sI-PT

`I ran.'

(30) *...akoshchonnolilittook.*

...akoshchonnoli-li-ttook.

nod-1sI-DPAST

`... I nodded.' (T18)

Intransitive stative verbs with II subjects

(31) *Saniyah.*

Sa-niya-h.

1sII-fat-TNS

`I am fat.'

(32) ... *naa sayoppattook.*

naa sa-yoppa-ttook.

thing 1sII-happy-DPAST

`... I was happy.'[8] (T7)

There are no intransitives with III subjects in our text. However, an example of such a verb is *iponnah* `to be skilled':

(33) *Aponnah.*

A-ponna-h.

1SIII-skilled-TNS

`I am skilled.'

Other verbs taking a III subject include *imihakshih* `to forget', *itakobih* `to be lazy', and *imachokmah* `to feel well'.

While there are some clear semantic generalizations about the kind of agreement a verb receives, there are lexical exceptions, and agreement does not appear to be entirely predictable from the semantics. Occasionally verbs with similar semantics fall into different agreement classes, For example, the verb *anokfillih* `to think' receives I agreement, while *yimmih* `to believe' receives II agreement, and *imahobah* `to guess, suspect' receives III agreement.

The set of agreement markers labelled N above is used with negatives and hortatives. There are two kinds of negation in Choctaw, which we might call internal and periphrastic. Internal negation is multiply marked, requiring that an agreement marker from the N set replace the ordinary I agreement, the verb appear in the lengthened grade (see 2.3 below), and that the suffix /-o(k)-/ follow the verb, with deletion of the preceding final vowel[9].

The optional suffix /-kii/may be added after /-o(k)-/. Consider the following example:

(34) Akiiyokiittook.

Ak-iiya-o-kii-ttook.

1sN-go<LGR>-NEG-NEG-DPAST

`I didn't go.' (T19)

Compare this with the affirmative counterpart:

(35) *Iyalittook*

Iya-li-ttook.

go-1sI-DPAST

`I went.'

To make (36) negative, the 1sI suffix /-li/ is replaced by the 1sN prefix /ak-/; the verb root *iya* is lengthened to *iiya*; the suffix /-o/ is added, the final vowel of *iiya* is deleted; and the suffix /-kii/ is added.

Periphrastic negation is simpler. The affirmative form of the verb is unchanged, and only the negative auxiliary *kiiyoh* is added, as in the following examples:

(36) *...Imikhanalifihnakiiyokiya ...*

Im-ikhana-li-fihna-kiiyo-kiya

III-understand-1sI-really-not-although

`Although I didn't really understand her ...' (T3)

(37) *...naahollo anopa anopolilahiikiiyoka*

naahollo anopa anopoli-li-ahii-kiiyo-ka.

white:people language speak-1sI-IRR-not-COMP:DS

`... that I didn't speak English.' (T5)

An additional use for the N set of prefixes is with hortatives (first and third person imperatives). Hortatives do not show the lengthened grade or suffixes found in negatives:

(38) *Ikiyah!*

Ik-iya-h!

N-go-TNS

`Let her go!'

Choctaw has six applicative prefixes that add various oblique arguments to the clause. They are /aa-/ `locative', /isht-/ `instrumental', /on-/ `superessive', /ibaa-/ `comitative', /imi-/ `benefactive', and /imaa-/ `ablative'. The first four of these are also used extensively in derived nominals, and this is where all the examples of applicatives in the text occur. Some examples follow:

(39) *holisso aapisa*

holisso aa-pisa

book LOC-see

`school' (lit. `where one sees or reads books') (T2)

(40) *holisso ittibaapisa*[10]

holisso itti-ibaa-pisa

book RCP-COM-see

`classmates' (lit. those who read books with each other)(T4)

Some additional examples of applicative prefixes follow:

(41) *Holissoyat aaipa otalayah.*

holisso-yat [aa-ipa] o-talaya-h.

book-NOM [LOC-eat] SPR-lie-TNS

book-NOM [table] SPR-lie-TNS

`The book is lying on the table.'

(42) *Ibbak ishtipatok.*

Ibbak isht-ipa-tok.

hand INST-eat-PT

`They ate with their hands.'

(43) *Illipa kaniimika lowak apakna*

Illipa kaniimi-ka lowak apakna

food some-COMP:DS fire top

aanonaachitok

aa-nonaachi-tok.

LOC-cook-PT

`She cooked some food on the fire.'

The third group of verbal prefixes are the reflexive /ili-/ and the reciprocal /itti-/, as in the following example and (40) above:

(44) *Ilipisalitok.*

Ili-pisa-li-tok.

REFL-see-1sI-PT

`I saw myself.'

3.1.2 Verbal suffixes.

While the verbal prefixes indicate relations between the verb and its arguments, the suffixes cover a wider semantic range, including information about valence, modality, tense and evidentiality. The suffixes appear in the following order:

Verb root - valence - causative - {1sg I, negative}- modal - tense - {evidentiality, illocutionary force,

complementizers}

Closest to the verb root are the suffixes that alter the number of arguments that the verb takes. With many verb roots, active /-li/ and stative /-a/ (and/or /-l-/) alternate to form transitive and intransitive verbs, as discussed in section 2.3.2. These valency alternations must be regarded as a part of the derivational morphology of the language, however. The class of verbs showing such alternations is closed and lexically specified.

A more productive way of increasing valence is the addition of the causative suffix /-chi/, as in the following examples:

(45) *nokoowah* `to be angry' *nokoowachih* `to anger'
pisah `to see' *pisaachih* `to show'
hilhah `to dance' *hilhaachih* `to make dance'

Nearly every verb in Choctaw may take a causative suffix. Note that the addition of a causative suffix often provides input for the rhythmic lengthening rule (section 3.2.1).

The verb root plus its valence and causative suffixes form the verb stem, which is important in the formation of the aspectual grades (discussed in section 3.1.3 below).

Immediately following the verb stem come the 1sgI agreement suffix /-li/, and the negative /-o(k)-/. These morphemes never cooccur.

(46) *Pisaachilitok.*

Pisa-chi-li-tok.

see-CAUS-1sI-PT

`I showed it to him.'

(47) *Akpisaachotok.*

Ak-[pisa-chi]-o-tok.

1sN-[see-CAUS]<LGR>-NEG-PT

1sN-[show]<LGR>-NEG-PT

`I didn't show it to him.'

Next in the order of suffixes are the modals. /-aachi/ and /-ahii/ are markers of irrealis. /-aachi/ is typically translated `will, going to' and /-ahii/ as `must' or `is supposed to'. /-ahila/ and /-aana/ both mean `can, could, might'. Like other vowel initial suffixes, the modal suffixes trigger deletion of a preceding short vowel:

(48) *Baliilih.*

Baliili-h.

run-TNS

`She runs.'

Baliilaachih.

Baliili-aachi-h.

run-IRR-TNS

`She will run.'

Next in the sequence of verbal suffixes come the tense markers. There are three common members of this set: /-ttook/ `distant past', /-tok/ `past', and /-h/ `unspecified', and use of one of the tense markers is obligatory.

The distant past is appropriate for events approximately a year or more ago, although usage varies considerably. Most of the text "My First Days in School" is in the distant past, since it describes events that took place in the speaker's childhood. The ordinary past tense is appropriate for events that have taken place relatively recently.

However, tense markers in Choctaw are used somewhat differently from tense markers in a language like English. Past tense is often omitted in situations where its use would be required in English, as in the following example:

(49) *Kobaffilih.*

Kobaf-li-li-h.

break-ACT-1sI-TNS

`I broke it.'

In such sentences, speakers often use the default tense marker /-h/ `unspecified tense'. This tense is nearly always used in present and future tense sentences as well:

(50) *Tamaaha iyalih.*

Tamaaha iya-li-h

town go-1sI-TNS

`I'm going to town.'

Tamaaha iyalaachi̲h.

Tamaaha iya-li-aachi̲-h

town go-1SI-IRR-TNS

`I will go to town.'

The factors that trigger overt past tense morphemes in a text are not well understood, but factors like the remoteness of the event, shifts in tense, and the presence of explicit temporal adverbs seem to play a role. Influences from the organization of discourse may also be involved.

Tense markers are optionally followed by one of a few adverbial morphemes, such as /-fihna/ `really' and /-aki̲li/ `indeed', for example:

(51) *...Imikhanalifihnakiiyokiya ...*

Im-ikhana-li-fihna-kiiyo-kiya

III-understand-1SI-really-not-although

`Although I didn't really understand her ...' (T4)

The final group of verbal suffixes are the markers of evidentiality and illocutionary force (in root clauses), and the complementizers (in embedded clauses). Evidentials show a speaker's confidence in or evidence for the proposition being uttered:

(52) *Nipi awashlihlih.*

Nipi awashli-hlih

meat fry-FIRST:HAND

`She fried the meat.' (I saw/heard/smelled her do it.)

(53) *Nipi awashlitok<u>a</u>shah.*

Nipi awashli-tok-<u>a</u>shah

meat fry-PT-GUESS

`She fried the meat.' (I guess)

Markers of illocutionary force may indicate, among other things, that the sentence is a question, an exclamation, or a command:

(54) *Awashlitok<u>o</u>?*

Awashli-tok-<u>o</u>

fry-PT-Q

`Did she fry it?'

(55) *Chahta siahokiih!*

Chahta si-a-h-okiih

Choctaw 1sII-be-TNS-EXCL

`I'm Choctaw!' or `I certainly am a Choctaw!'

(56) *Hoklihoh!*

Hokli-h-oh

hold-TNS-IMPT

`Hold on to it!'

Markers of evidentiality and illocutionary force are mutually incompatible with each other, and are only found in root clauses. The same position in embedded clauses is filled by the complementizers, which are discussed in section 4.3 below.

3.1.3. Grades.

Choctaw verb stems undergo various segmental and accentual modifications to indicate their aspect. These stem variants are traditionally referred to as `grades' in the Muskogeanist literature.[11]

Three grades appear in the text under consideration, the l-grade, the g-grade, and the y-grade. The l-grade is formed by lengthening the penultimate vowel of the stem, if it is in an open syllable. Otherwise, there is no change in the stem.

The l-grade has no independent semantics, but is triggered by the occurrence of other morphemes—the negative /-o(k)/ and the complementizers /-chah/ and /-nah/ (see section 4.3 below).

(57) *Wakaayachah chihohchifo makaachih!*
Wakaaya-chah chi-hohchifo makaachi-h
rise<LGR>-SS 2SII-name say-TNS
`Stand up and say your name!' (T3)

(58) ... *lowat taahanah falaamat*
lowa-t taaha-nah falaama-t

burn-SS complete<LGR>-DS return-SS

akiiyokiittook.

ak-iiy-o-kii-ttook

1SN-go<LGR>-NEG-NEG-DPAST

`... (the school) burned down and I didn't go back.'

(T19)

Since the morphemes that condition its appearance are very common in Choctaw, the l-grade probably occurs more frequently than any other grade.

Note that grades are formed on the verb *stem*, which includes suffixes like the causative. Consider the following examples:

(59) *Ikpiisotok.*

ik-piisa-o-tok

N-see<LGR>-NEG-PT

'He didn't see her.'

(60) *Ikpisaachotok.*

ik-[pisa-chi]-o-tok

N-[see-CAUS]<LGR>-NEG-PT

'He didn't show her.'

Recall that the l-grade lengthens the penultimate vowel of the verb stem. (59) shows lengthening of the /i/ and (60) shows lengthening of the /a/ because the addition of the causative suffix has made the verb stem one syllable longer.

The g-grade is formed by lengthening the penultimate vowel

of the stem, accenting the antepenultimate vowel, and geminating the consonant that follows the antepenult.

In isolation, verbs in the g-grade are generally translated `finally VERB-ed' in English.

(61) *Taloowah.*

Taloowa-h

sing-TNS

`He sang.'

Tálloowah.

Tálloowa-h

sing<GGR>-TNS

`He finally sang.'

There are several examples of the g-grade in the text, where it seems to be used on verbs when the action they describe takes place after a pause in the action flow of the narrative. Consider the following typical passage:

(62) ... *holisso pisaachiyat atoklat*

holisso pisaachi-yat atokla-t

teacher-NOM again<NGR>-SS

sihohchifo aachittook. Hichah

si-hohchifo aachi-ttook. Hi-chah

1sII-name say-DPAST do-SS

biniililaachihoo *makattook.*

biniili-li-aachi-h-o *maka-ttook*

sit-1sI-IRR-TNS-PRT:DS say-DPAST

Naa yoppahoosh *bínniililittook.*

Naa yoppa-h-oosh *bínniili-li-ttook*

thing happy-TNS-PRT:SS sit<GGR>-1sI-DPAST

`... the teacher repeated my name. And then she told me to sit down. I was happy to sit down.' (T11-13)

In this passage, the use of the g-grade emphasizes that the narrator had been standing up for a while and finally got to sit down.

The y-grade is formed by the insertion of /Vyy/ before the penultimate vowel of the verb stem.[12] Like the g-grade, it is generally translated 'finally VERB-ed':

(63) *Bashah.*

Basha-h

be:cut-TNS

`He got cut.'

Báyyashah.

Báyyasha-h

be:cut<YGR>-TNS

`He finally got cut.'

The n-grade is formed by nasalizing the penultimate vowel of the verb stem. It is associated with the semantics of duration:

(64) *Bashlih.*

Bashli-h

cut-TNS

`He cut it.'

Bashlih.

Bashli-h

cut<NGR>-TNS

`He keeps cutting it.'

(65) *...hikiiyalaachihо imikhanat ...*

hikiiya-li-aachi-h-o im-ikhana<NGR>-t

stand-1sI-IRR-TNS-PRT:DS III-know-SS

'I understood that I was supposed to stand up.' (T6)

Verbs of perception and cognition (such as *pisah* 'to see', *hakloh* 'to hear', and *ikhanah* 'to know, understand') frequently appear in the n-grade.

Two other grades are occur, though they do not appear in the

text. They are the hn-grade and the h-grade.

The hn-grade is formed by the insertion of /hV/ after the penultimate vowel of the verb stem (where /V/ indicates a nasalized copy of the preceding vowel). It indicates a repeated or prolonged action:

(66) *Obatok.*

Oba-tok

rain-PT

`It rained.'

Ohóbanah nittak pókkooli oshtattook.

Ohóba-nah nittak pókkooli oshta-ttook

rain<HNGR>-DS day ten four-DPAST

`It kept on raining for forty days.'

The h-grade is formed by inserting /h/ before the penultimate vowel of the stem. Verbs in the h-grade are typically translated `just VERB-ed' or `VERB quickly':

(67) Nosih.

Nosi-h

sleep-TNS

`He slept.'

Nóhsih.

Nóhsi-h

sleep<HGR>-TNS

`He took a quick nap.'

3.2. Nouns.

Nouns may occur with various prefixes and suffixes, which appear in the following order:

(Possessive Prefix) - Noun Stem - (Determiners) - (Case Markers)

3.2.1. Possessive prefixes.

Some of the agreement markers already seen in the verbal agreement system are also used on nouns to indicate agreement with the possessor. Agreement markers from class II are used on a lexically specified closed class of nouns, which includes many (but not all) of the kinship terms and body parts. This is the class that is generally labelled *inalienable*.

(68) *sanoshkobo* `my head' (T17)

sa-noshkobo

1SII-head

chinoshkobo `your head'

chi-noshkobo

2sII-head

noshkobo `his/her/its/their head'

noshkobo

head

(69) *hashki* `my mother' (T1)[13]

ha-ishki

1sII-mother

chishki `your mother'

chi-ishki

2sII-mother

ishki `his/her/its/their mother'

ishki

mother

A few nouns outside these semantic classes also take II agreement. They are mostly what might be called `pseudo-body parts', for example, *hohchifo* `name' and *shilop* `soul, ghost':

(70) *si-hohchifo* `my name'[14] (T8)

si-hohchifo

1SII-name

pihohchifo `our names' (T2)

pi-hohchifo

1PII-name

chihohchifo `your name' (T3)

chi-hohchifo

2SII-name

ofi hohchifo `a dog's name' (T17)

ofi hohchifo

dog name

Nouns that are not lexically specified for II agreement use the III agreement markers:

(71) *a̲ki* `my father' (T1)

a̲-ki

1SIII-father

(72) *amofi* `my dog'

am-ofi

1sIII-dog

chimofi `your dog'

chim-ofi

2sIII-dog

imofi `his/her/its/their dog'

im-ofi

III-dog

Although systems of this type are generally described with the terms *alienable* and *inalienable,* these term is not particularly appropriate for Choctaw, since *alienability* implies a semantic distinction between types of nouns. The morphological distinction between nouns taking II agreement and III agreement in Choctaw is only partly congruent with the semantic notion of alienability.

In the examples above, note that the term for `mother' takes II agreement while `father' takes III agreement. This shows words with similar semantics may take different sorts of agreement. Though there may be diachronic explanations for some of these irregularities, the system is synchronically opaque.

3.2.2 Determiner suffixes.

Noun phrases may be followed by various determiner suffixes. Some of the more common are /-ma/ `that', /-pa/ `this', and

/-akoo/ `contrast':

(73) *alla naknimat*

alla nakni-ma-t

child male-that-NOM

`that boy (nominative)'

(74) Hoshiit itti chaahamako obiniilih.

Hoshi-it itti chaaha-m-ako o-biniili-h

bird-NOM tree tall-that-CNTR:ACC SPR-sit-TNS

`The bird is sitting on that tall tree.' (Not on the short one.)[15]

As these examples show, determiners follow the noun plus any modifiers, and are followed by the case markers.

4. Syntax.

This section discusses Choctaw basic word order and case marking, as well as two areas of Choctaw syntax that have attracted some attention by linguists: the correlation of agreement morphology with grammatical relations and the switch-reference system.

4.1. Word order and case marking.

The simplest sentences in Choctaw consist of a verb and a tense marker, as in the following examples:

(75) *Obatok.*

Oba-tok

rain-PT

`It rained.'

(76) *Niyah.*

Niya-h

fat-TNS

`She/he/it is fat.'

`They are fat.'

(77) *Pisatok.*

Pisa-tok

see<NGR>-PT

`She/he/it/they saw her/him/it/them.'

As these examples show, there are no obligatory noun phrases in a Choctaw sentence, nor is there any verbal agreement that indicates a third person subject or object. There is no indication of grammatical gender, and for third person arguments there is no indication of number. (There are, however, some verbs with suppletive forms that indicate the number of a subject or object, e.g. *iyah* `to go (sg.)', *ittiyaachih* `to go (du.)', and *ilhkolih* `to go (pl)'.)

When there is an overt subject, it is obligatorily marked with

the nominative case /-at/.[16] Subjects precede the verb:

(78) ...*holisso aapisayat lowat taahanah...*

holisso aapisa-yat lowa-t taaha-nah

school-NOM burn-SS complete<LGR>-DS

`...the school burned down and ...' (T19)

(79) *Hoshiyat apatok.*

Hoshi-yat apa-tok

bird-NOM eat-PT

`The birds ate them.'

Case-marking is phrase-final in Choctaw:

(80) ...*aki anoti hashkiyat...*

a-ki anoti ha-ishki-yat

1sIII-father and 1sII-mother-NOM

`... my father and mother...' (T1)

(81) ...*a-[holisso ittibaapisa] alhiihayat ...*

a-[holisso itti-ibaa-pisa] alhiiha-yat

1sIII-[book RCP-COM-read] group-NOM

1sIII-[classmates]

`...my classmates...' (T4)

Object noun phrases also precede the verb and are optionally marked with the accusative /-a/:

(82) ... *chihohchifo makaachih!*
chi-hohchifo makaachih!
2SII-name say
`... say your name!' (T3)

(83) ... *naahollo anopa anopolilahiikiiyoka.*
naahollo anopa anopoli-li-ahii-kiiyo-ka.
white:people language speak-1SI-IRR-not-COMP:DS
`... that I didn't speak English.' (T5)

The conditions under which the overt accusative appears are not well understood, but it seems more frequent with noun phrases that contain determiner suffixes. In the following example, the noun phrase *pi-hohchifo-ako* `our names' contains the determiner /-akoo/, which introduces a new topic into the story:

(84) ... *pihohchifoako ilaachaachih miyaho ...*
pi-hohchifo-ako il-aachi-aachi-h miya-h-o
1PII-name-CNTR:ACC 1PI-say-IRR-TNS say-TNS-PRT:DS
`... for us to say our names.' (T2)

In sentences with both an overt subject and object, the subject usually precedes the object, thus the language is SOV:

(85) *...holisso pisaachiyat atoklat sihohchifo*

holisso pisaachi-yat atokla-t si-hohchifo

teacher-NOM again-SS 1sII-name

aachi-ttook.

aachi-ttook

say-DPAST

`... the teacher said my name again.' (T11)

(86) *Alla alhiihayat ofi hohchifo makaachikma...*

Alla alhiiha-yat ofi hohchifo makaachi-kma...

child group-NOM dog name say-IRR:DS

`When the other kids would say a dog's name...' (T17)

When the object is nominal, OSV and SVO sentences are very uncommon, and none occur in the text. When the object is clausal, however, both these orders are possible. SVO tends to occur more often with complement clauses, while OSV is more common with verbs of saying:

(87) *Oklah amikhanakilitok [naahollo anopa*

Oklah am-ikhana-akili-tok [naahollo anopa

PL 1sIII-know<NGR>-indeed-PT white:people language

anopolilahiikiiyoka.]

anopoli-li-ahii-kiiyo-ka]

speak-1sI-IRR-not-COMP:SS

`They knew that I didn't speak English.' (T5)

(88) *[Billat iyaachiho] Maryat makatok.*

[Bill-at iya-aachi-h-o] Mary-at maka-tok.

Bill-NOM go-IRR-TNS-PRT:DS Mary-NOM say-PT

`Mary said that Bill would go.'

Some other categories show a word order consistent with a head-final order:

(89) *ofi hohchifo* [Gen + N]$_{NP}$

ofi hohchifo

dog name

`a dog's name' (T17)

(90) *tamaaha bilika* [N + Postposition]$_{PP}$

tamaaha bilika

town near

`near a town' (T1)

Relative clauses do not fit neatly into a head-final or head-initial pattern, since their logical head is contained within the phrase, as in the following examples:

(91) *[Maryat paska chapoli ikbitoka]*

[Mary-at paska chapoli ikbi-toka]

Mary-NOM bread sweet make-PT:COMP:DS

apalitok.

apa-li-tok

eat-1SI-PT

'I ate the cake that Mary made.'

In this example, *paska chapoli* `cake' is contained within the relative clause that modifies it. Such relative clauses are labelled *internally headed* in the typological literature.

In another departure from what might be expected in a head-final language, adjectives and quantifiers follow the noun:

(92) *ofi homma* [N + Adj]$_{NP?}$

ofi homma

dog red

`a red dog'

(93) *kowi toklo* [N + Q]$_{NP?}$

kowi toklo

mile two

`two miles' (T1)

It is unclear whether adjectives and quantifiers ought to be regarded as the heads of the phrases they appear in. The analysis of these phrases is made problematic by the fact that adjectives and quantifiers share many properties with verbs in Choctaw. In particular, both adjectives and quantifiers occur in derived grade forms and take verbal agreement:

(94) *hattak chíyyito*

hattak chíyyito

man big<YGR>

`a very big man'

(95) *hattak móyyoma*

hattak móyyoma

man all<YGR>

`all the men'

(96) *Sachaahah.*

Sa-chaahah

1sII-tall

`I'm tall.'

(97) *Iim<u>o</u>makat* *iliyatok.*

Ii-m<u>o</u>ma-kat *il-iya-tok*

1PI-all-COMP:SS 1PI-go-PT

`We all went.'

As this last example shows, quantifiers are also often followed by complementizers and switch-reference markers.

Although the order of adjectives and quantifiers seems to favor treating phrases like `red dog' and `two miles' as AdjPs and QPs, the fact that such phrases have the semantics and syntactic distribution of ordinary noun phrases is difficult to explain.

One possible solution is to treat `red dog' and `two miles' as internally headed relative clauses, along the lines of `the dog that was red' or `the miles which were two'. This treatment would be compatible with the verb-final property of relative clauses in general.

However, if we consider words like *hommah* 'to be red' and *tokloh* 'to be two' to be ordinary verbs, then we must explain why they do not assign nominative case like ordinary verbs. Recall that subjects of uncontroversial verbs must appear in the nominative case. This is not possible for the putative subjects of adjectives and quantifiers:

(98) *Hattakat iyatokm<u>a</u>* *p<u>i</u>salitok.*

Hattak-at iya-tok-m<u>a</u> *p<u>i</u>sa-li-tok*

man-NOM go-COMP-that:ACC see-1SI-PT

'I saw the man who went.'

(99) *Hattak chaahama pisalitok.*

Hattak chaaha-ma pisa-li-tok

man tall-that:ACC see-1SI-PT

'I saw the tall man.'

**Hattak-at chaahama pisalitok.*

While adjectives and quantifiers share many properties with uncontroversial verbs, case-marking is one area that distinguishes them.

A final departure from head final order is found with determiners:

(100) *hattak yamma* [N + Det]$_{NP/DP?}$

hattak yamma

man that

`that man'

However, some recent theories of phrases structure recognize the possibility of determiner phrases (DPs), and such an analysis of Choctaw phrase structure seems promising.

4.2 Agreement and grammatical relations.

The agreement system discussed in section 3.1.1 can be called morphologically *active.* Active languages are typologically distinct from nominative-accusative and ergative-absolutive languages.

In a nominative-accusative system, the grammar groups transitive and intransitive subjects together for the purposes of certain rules. An ergative-absolutive language groups transitive objects and intransitive subjects together. Active languages split intransitive subjects into two groups: subjects of active intransitives are grouped with transitive subjects, and subjects of stative intransitives are grouped with transitive objects.

Choctaw verb agreement is active because I agreement is used for most transitive subjects and subjects of active intransitives, while II agreement is used with objects of transitives and subjects of stative intransitives.

However, we have seen above that case on noun phrases works on a nominative-accusative basis in Choctaw. This leads to an intriguing situation in which an overt noun phrase marked for nominative case triggers the verb agreement typical of an object:

(101) *Anakoosh* *sanokowah.*
Ano-akoosh *sa-nokowa-h.*
I-CNTR:NOM 1SII-angry-TNS
`*I* am angry.'

The apparent disparity between nominal and verbal morphology in such cases has given rise to unaccusative analyses in

relational grammar and government-binding theory. Such analyses have not gone unchallenged, however, with other analysts suggesting that verbal agreement is either lexically specified or determined on the basis of verbal semantics.

4.3. Switch-reference.

4.3.1. Basic properties.

Choctaw switch-reference markers are verbal suffixes that indicate whether the subject of a verb in a subordinate clause is the same as the subject of its matrix clause.

The marker of same-subject is /-t/ or /-sh/, while the marker of different-subject is nasalization of the final vowel of the verb. Consider the following two examples:

(102) *Kaah sabannahaatokoosh, iskali ittahoblilitok.*
Kaah sa-banna-haatokoo-sh, iskali ittahobli-li-tok
car 1SII-want-because-SS money save-1SI-PT
`Because I wanted a car, I saved money.'

(103) *Kaah bannahaatoko, iskali ittahoblilitok.*
Kaah banna-haatoko, iskali ittahobli-li-tok
car want-because:DS money save-1SI-PT
`Because he wanted a car, I saved money.'

In example (102), the verb *sabannahaatokoosh* `because I wanted' ends in the same-subject marker because `I' is the subject of both the subordinate clause and the matrix clause. However, in

example (103), the verb *bannahaatoko* ends with the different-subject marker because the subject of the subordinate clause is `he', while the subject of the matrix clause is `I'.

In examples like (102), it is apparent from the differing subject agreement that the subjects of the two clauses must be different. However, switch-reference marking may also distinguish sentences with third person arguments which would otherwise be ambiguous:

(104) *Pisachokmakat ikhanah.*
Pisachokma-kat ikhana-h
handsome-COMP:SS think<NGR>-TNS
`He$_i$ thinks that he$_i$ is handsome.'

(105) *Pisachokmaka ikhanah.*
Pisachokma-ka ikhana-h
handsome-COMP:DS think<NGR>-TNS
`He$_i$ thinks that he$_j$ is handsome.'

Nearly every subordinate clause in Choctaw ends in a switch-reference marker, which is suffixed to the complementizer of the clause. The chart below shows the same-subject and different-subject forms of some common complementizers:

Gloss	Same-subject	Different-subject
`that'/`when'/ COMP	-kat	-ka
`that'/ `for'/ PRT	-oosh	-o
`because'	-haatokoosh	-haatoko
`when'	-hmat	-hma

`if'	-kmat	-kma
`although'	-ohmakoosh	-ohmako
`but'	-hookakoosh	-hookako
`and then'	-chah	-nah

Table 2: Common switch-reference markers in Choctaw

The following are some examples of switch-reference markers from the text:

(106) ... *amikhanakilittook* *[naahollo*

am-ikhana-akili-ttook *[naahollo*

1SIII-know<NGR>-indeed-DPAST white:people

anopa *anopolilahiikiiyoka.]*

anopa *anopoli-li-ahii-kiiyo-ka*]

language speak-1SI-IRR-not-COMP:DS

`... they knew that I didn't speak English.' (T5)

(107) *Wakaayachah chihohchifo makaachih!*

Wakaaya-chah chi-hohchifo makaachih

rise<LGR>-ss 2SII-name say

`Stand up and say your name!' (T3)

(108) ... *[sihohchifo makalaachihoo]*

[si-hohchifo maka-li-aachi-h-o]

1sII-name say-1sI-IRR-TNS-PRT:DS

ponaklottook.

ponaklo-ttook.

ask-DPAST

'... she asked me to say my name.' (T8)

4.3.2. Switch-reference in discourse.

The switch-reference markers that appear on the verbs of subordinate clauses can almost all be accounted for strictly in terms of the grammatical relation *subject*. It is generally the case that the Choctaw switch-reference markers signal changes in subject, not changes in agent, topic, or some other notion.

However, there are some cases where switch-reference seems to function in a less strictly syntactic way. Such cases are found with the sentence-initial pro-verbs.

In the text under consideration here, and in most spontaneous texts, the majority of sentences begin with one of the pro-verbs /hi-/, /mi-/, or /a-/. These pro-verbs are typically translated `and then' or `so' in English, but they are more syntactically and semantically complicated in Choctaw. The basis for choosing one pro-verb over another is not well

understood, but it is clear that these pro-verbs are followed by switch-reference markers, as in the following examples:

(109) *Ahma* *holisso pisaachiyat* *atoklat* *sihohchifo*
A-hma *holisso pisaachi-yat* *atokla-t* *si-hohchifo*
be-when:DS teacher-NOM again<NGR>-SS 1sII-name

aachittook. *Hichah* *biniililaachiho* *makattook.*
aachi-ttook. *Hi-chah* *biniili-li-aachi-h-o* *maka-ttook*
say-DPAST do-SS sit-1sI-IRR-TNS-PRT:DS say-DPAST

`(I said my name timidly and softly) and then the teacher said my name. And then she told me to sit down.' (T11-12)

If we assume that the understood subject of a pro-verb is identical to that of the preceding sentence, then the switch-reference markers on pro-verbs can be interpreted as markers of same-subject or different-subject. The different-subject pro-verb *ahma* is used because the subject of the preceding sentence is `I' and the subject of the following sentence is `the teacher.' Similarly, the same-subject pro-verb *hichah* is appropriate because `the teacher' is subject of both the preceding and following clauses.

However, there are some examples where this analysis will not work. Consider the following:

(110) *Alla alhiiha ilakat hohchifo imaka*

Alla alhiiha ila-kat hohchifo ima-ka

child group other-COMP:SS name give-COMP:DS

haklolittook. Aatoko anakkia nokshopah

haklo-li-ttook. Aa-tok-o ano-akkia nokshopah

hear<NGR>-1sI-DPAST be-PT-PRT:DS I-also afraid<NGR>

chóyyohmihoosh sihohchifo lohmat

chóyyohmi-h-oosh si-hohchifo lohma-t

sort:of<YGR>-TNS-PRT:SS 1sII-name quiet<NGR>-SS

anoolilittook.

anooli-li-ttook

tell-1sI-DPAST

`I heard the other kids give their names. So I also said my name, timidly and softly.' (T9-10)

In this example, the different-subject pro-verb *aatoko* is used, even though `I' is the subject of both the preceding and following clauses.

Changes in topic may be important to understanding the switch-reference marking in passages like this. While the

grammatical subject of the first sentence is `I', the topic of the sentence seems to be 'the other kids'. The topic of the second sentence is 'I', and it is apparently the change of topic that is responsible for the use of the different-subject marker.

Instances in which switch-reference markers show continuity of topic rather than continuity of subject seem to be confined to the sentence initial pro-verbs. Sentence internal switch-reference markers far more reliably depend on strictly syntactic notions of subject. Still, the interplay between switch-reference marking and topic continuity needs more careful study.

Bibliography

1. Background. For basic descriptive overviews of the language, see Nicklas (1974) and Broadwell (1990). Ulrich (1986) is the most extensive source on Choctaw phonology and morphophonology, and Davies (1981, 1986) offers detailed analysis of grammatical relations within the framework of Relational Grammar. The most extensive lexical resource on the language is Byington (1915).

2. Phonology. Ulrich (1986) and Nicklas (1974) are the primary sources for Choctaw phonology. The rhythmic lengthening rule of section 2.3.1 is discussed in more detail in Munro and Ulrich (1984).

3. Morphology. The analysis of the verbal agreement system given in 3.1.1 here follows Munro and Gordon (1982). The verbal

suffixes in 3.1.2 are treated most extensively in Broadwell (1990). Nicklas (1974) and Ulrich (1986) are the primary sources for the verb grades of section 3.1.3

4. Syntax. Davies (1981, 1986) provides extensive information on the grammatical relations and agreement morphology of the language. Broadwell (1990) discusses constituency and switch-reference in some detail.

References

Broadwell, George Aaron

1990 Extending the Binding Theory: A Muskogean Case Study. Ph.D. thesis. University of California, Los Angeles.

Byington, Cyrus

1915 A Dictionary of the Choctaw Language. Edited by John R. Swanton and Henry S. Halbert. Bureau of American Ethnology Bulletin 46. Washington: Government Printing Office.

Davies, William

1981 Choctaw Clause Structure. Ph.D. thesis. University of California, San Diego.

1986 Choctaw Verb Agreement and Universal Grammar. Dordrecht: D. Reidel Publishing.

Lombardi, Linda and John McCarthy. 1991. Prosodic circumscription in Choctaw morphology. Phonology 8: 37-72.

Munro, Pamela

1985 Chickasaw Accent and Verb Grades. *In* Studia linguistica diachronica et synchronica: Werner Winter sexagenario anno MCMLXXXIII, ed. by U. Pieper and Gerhard Stickel. Amsterdam: Mouton de Gruyter.

Munro, Pamela and Lynn Gordon

1982 Syntactic Relations in Western Muskogean: A Typological Perspective. Language 58: 81-115.

Munro, Pamela and Charles Ulrich

1984 Structure-Preservation and Western Muskogean Rhythmic Lengthening. *In* Proceedings of the Third West Coast Conference on Formal Linguistics, edited by Mark Cobler, Susannah MacKaye, and Michael T. Wescoat. Stanford: Stanford Linguistics Association.

Nicklas, T. Dale

1974 The Elements of Choctaw. Ph.D. thesis. University of Michigan.

Ulrich, Charles H.

1986 Choctaw Morphophonology. Ph.D. thesis. University of California, Los Angeles.

Notes

Grateful acknowledgment is given to Henry Willis, and to the late Josephine Wade and Gus Comby, who provided all the Choctaw examples not otherwise attributed. Thanks are also due to Heather Hardy, Charles Ulrich, and two anonymous reviewers for their comments on an earlier version of this chapter.

1. To complicate matters even more, the editors of Byington (1915) changed several aspects of the traditional orthography. They indicated nasal vowels by a superscript *n* (e.g.<a^n>), and replaced Byington's <*v*> with <a>. Furthermore, they replaced all instances of <hl> with barred-l, despite the fact that most medial instances of <hl> represent the sequence /hl/, and not /£/, introducing more difficulties into the orthography.

This yields an unfortunate situation in which the largest dictionary of Choctaw (Byington 1915) is written in an orthography which does not match any of the orthographies in general use.

2. Glottal stop has a quite limited surface distribution in most Choctaw dialects: it only appears in word-final position after a vowel. However, Ulrich (1986) argues that positing a glottal stop phoneme with a wider distribution in underlying forms yields a more insightful analysis of Choctaw phonology.

3. As discussed below, speakers vary in whether rhythmic lengthening applies before /-tok/.

4. The label `active-stative' is preferable to `active-passive' since there is no necessary implied agent with the stative member of the pair. Ulrich (1986) discusses some cases where the semantics diverge from what might be expected.

5. Verbs must be followed by some tense marker. In this chapter they are conventionally cited with the suffix /-h/, marker of

unspecified tense, discussed in section 3.1.2.

6. There is also a prefix /hapi-/, meaning roughly `we many' or `all of us' that contrasts with /pi-/ `we few' or `some of us'.

7. The "unmarked" form is used in the cases where the verb fails to agree—forms with third person subjects, imperatives, and infinitives.

8. *Naa yoppah* is an idiom meaning 'be happy'.

9. The suffix /-o(k)-/ is /-o/ before a consonant; /-ok-/ before a vowel.

10. Three different Choctaw phrases are translated by the English `my classmate(s)'. These three phrases are *aholisso ittibaapisa,* literally `my (those who read books together)'; *holisso sa-baa-pisa,* literally `the one who reads books with me'; and *ilittibaapisa*, literally `we read with each other.' It appears that Mr. Willis has not lexicalized a form for `classmate', and freely nominalizes verb phrases as needed.

11. The number of distinct grades is somewhat controversial, depending on what counts as a grade. Munro (1985) argues that the Chickasaw stem pattern cognate to the l-grade is a type of stem modification distinct from the grades. Nicklas (1974) combines the g-grade and the y-grade. See Ulrich (1986) for discussion.

12. See Ulrich (1986) and Lombardi and McCarthy (1991) for alternate formulations of the y-grade.

13. The noun *ishki* `mother', may irregularly take the 1sII prefix /ha-/ rather than the expected /sa-/, thus the form *hashki*. However, the regularly formed *sashki* is also an acceptable variant.

14. For many speakers this would be *sa-hohchifo*, since the general rule for the use of the 1sII prefix is /sa-/ before a consonant and /si-/ before a vowel. However, Mr. Willis uses the form /si-/ before both V-initial and h-initial stems. He also recognizes *sahohchifo* as possible in this context.

15. Recall that orthographic <-ako> represents [-akõ:]. All nasal vowels are phonetically long, but in the orthography used here they are conventionally written with single vowel. There is thus no phonemic length difference between the final vowels in /-akoo/ and /-ako/.

16. The case ending is /-at/ after a consonant. After a vowel, there are several possibilities — /-yat/ and /-Vt/ (where V is a copy of the preceding vowel) are the most common. A few speakers also use /-at/ separated from the preceding vowel by a glottal stop. Thus, the nominative case of *hoshi* `bird' can be *hoshiyat*, *hoshiit*, or *hoshi'at*.

The nominative case appears as /-sh/ after a determiner ending in /o/, e.g.

hoshiyohmakoosh

hoshi-yohmakoo-sh

bird-even-NOM

`even the birds (nom.)'