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## CHOCTAW SUPPLETIVE VERBS AND DERIVATIONAL MORPHOLOGY

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Abstract: The Choctaw language possesses a large number of suppletive verb-stem alternations marking subject or object number and related categories. There are also many irregular derivational alternations which border on suppletion but which involve a common etymological root. Full presentation of these alternations touches on almost all aspects of Choctaw derivational verbal morphology, and also leads to several internal reconstructions of pre-Choctaw lexical and phonological structure bearing on comparative Muskogean linguistics.

### General

The Choctaw language of the Muskogean family is today spoken by a remnant population of about three thousand in Neshoba County in Mississippi and to some extent by a much larger population in eastern Oklahoma, descendants of the Choctaws who marched west under trying conditions around the turn of the century.

This paper and a previously published article on the coexistence of two case systems (Heath 1977) are based on fieldwork in Mississippi in several brief visits in 1972-73, supported by a small grant from the Phillips Fund of the American Philosophical Society. Other primary materials on Choctaw are early works by the missionary Cyrus Byington, of which the dictionary (1915) is most useful, and recent materials by Thurston Dale Nicklas (1974, 1975) from Oklahoma data.

I am mainly concerned here with presenting my own field material and will not attempt a discussion of Oklahoma material. My data are primarily from old men, some of whom are probably now dead. Major informants were Nick Bell of Pearl River and Frank Henry of Bogue Chitto. There are some local idiosyncracies of the Bogue Chitto dialect which will be noted here. I did not work with speakers from the Conehatta community who are said to have some special dialect features. Unless otherwise indicated, material presented here is based mainly on the speech of Nick Bell.

### Suppletion

By full suppletion I mean cases like -bohli-/-aša:či-. By partial suppletion I mean cases like -lapa:li-/-lapohli- where a common etymological root can be discerned but where the relationship is morphologically obscure; the borderline is sometimes fuzzy.

For some verbs, suppletion (including partial suppletion) is used to mark the number of subject (intransitive) or object (transitive). Numerals such as 1, 2, and 3+ are used to indicate the number value of individual stems. Some suppletive oppositions are simply 1 vs. 2+ (i.e. sg. vs. pl.), but others are 1 vs. 2 vs. 3+. Sometimes the 1 form is optionally used for nonsingular number, in which case I write 1+. Moreover, some verbs for which the 1 form is ordinarily used only for singular number can use it when the relevant subject or object noun is quantified by a numeral such as pokko:li 'ten'. In other words, a double indication of plurality is sometimes avoided.

Most often number-marking by verb suppletion is not redundant in this fashion. Nouns are not themselves overtly marked for number, hence hattak 'man; men'. Verbs contain cross-referring pronominal affixes marking pronominal category of subject and (for transitives) object, and often dative, but the third person pronominals are not specified for number. Indeed, other than verb suppletion, the only number-marking in Choctaw grammar is the use of preverb oklah (3+) and postverb toklah (2). These mark subject number (not object number), and in my material oklah is not used rigorously and toklah is almost never used. These elements are helpful, but the major load of number-marking is on verb suppletion.

It is in this light that the proliferation of types of full and partial suppletion in Choctaw should be considered. Moreover, it is the key to some fundamental features of Choctaw discourse structure. A fieldworker quickly notices that English simple clauses are often translated in Choctaw by the combination of a subordinated clause making the major predication and a semantically almost empty stance or perhaps motion verb, thus 'He sits thinking' or 'He comes thinking' where we would normally just say 'He is thinking' or 'He thinks'. I suggest that this is related to the fact that stance and motion verbs are richer in number-marking by suppletion than ordinary verbs like 'think', and that adding a stance or motion verb is used as a device for specifying singular number here (otherwise 'He thinks' and 'They think' would be indistinguishable).

In other words, we have a sort of fledgling auxiliary-verb system by which the semantic contribution of the stance or motion verb stem is less important in many contexts than its syntactic contribution (specifying the number of subject or object). For this to develop into a full-fledged auxiliary system such as that of Tunica, two additional historical developments would be needed. First, the auxiliary verb (i.e. the stance/motion verb) would have to become obligatory instead of merely very common. Secondly, and concomitantly, it would have to lose most of its residual semantic value in its auxiliary uses (and we would expect a reduction in the number of stems used). I have digressed on this point because I feel that Choctaw provides a rare glimpse into the functional dynamics of an incipient auxiliary system and may provide clues to understanding the origins of such systems in general.

Suppletion does not always mark number, however. Often the distinction is roughly describable as aspectual, with a 'simple' (unmarked) stem and a distributive and/or repetitive stem. The distinction between distributive and repetitive is not sharp, and we can think of a basic opposition between the unmarked 'simple' stem and a marked distributive/repetitive category, with the specific meaning of the latter partly predictable from lexical semantics of the verbs in question. For verbs predicating motion between two points, the 'distributive' sense usually involves back-and-forth motion.

There is one other notable general feature of suppletion, including the derivational alternations we are calling partial suppletion. This is that there are many groups of verbs which show similar morphological and semantic patterns of suppletion. What is most remarkable about Choctaw is that these 'verb class' groupings are based in most cases on lexical-semantic associations of a natural kind, rather than on phonological similarities or the like. Although much of this paper consists of expositions of formal features of these verb classes and displays of paradigms, I hope that readers will also pay some attention to the ways in which lexical-semantic patterns emerge from the verb class analysis. Some of the groupings suggest nuances of hierarchical lexical structure curiously reminiscent of patterns of lexical neutralization in special ritual languages or the like; cf. Dixon (1971) on Dyirbal mother-in-law language.

#### Background: derivational affixes

Since some of the morphemes found in fully or partly suppletive stems are also used as productive derivational affixes, it is necessary to begin by listing and describing these affixes.

##### Prefixes

-ok- 'water, liquid'  
 -(a)nok- 'head, mind'  
 -(y)os- 'head hair'  
 -a:- locative  
 -koča- 'out'  
 -kani- 'away'  
 -akka- 'down'  
 -aba- 'up'  
 -iba- 'with' (comitative)  
 -ittā- 'together'  
 -itti- reciprocal  
 -ili- reflexive

##### Suffixes

-a- mediopassive  
 -li- factitive  
 -či- causative  
 -li-či- variant of -či-  
 -li- intransitive

We begin with the suffixes. There are many stem-pairs showing alternations of mediopassive -a- vs. factitive -li-, though the l assimilates to some preceding consonants: /-kobaf-a-/ → -koba:fa- 'to be(come) broken off', /-kobaf-li-/ → -kobaffi- 'to break off'. See discussion of verb class C, below.

A distinct suffix -li- with no clearly discernible semantic contri-

bution can be detected in a number of intransitive forms, e.g. in some class B stems like -taka:li- 'to be hanging up'. Unlike factitive -li-, intransitive -li- normally follows a vowel.

The regular causative suffix is -ci-, hence -hi:li- 'to fly', -hi:li:ci- 'to cause to fly'. When added to intransitive -li- we get -li-ci-, or optionally simplified -ci-: -taka:li:ci- or -taka:ci- 'to cause to hang up'. For a few verbs not considered in this paper the causative form takes -li-ci- vs. zero in the intransitive. An unusual use of -ci- occurs in suppletive dual forms of motion verbs (class A, below) along with prefix itt- (either reciprocal -itti- or -itta- 'together'). Karen Booker has shown in a recent AAA talk that this -ci- is etymologically distinct from causative -ci-.

Of the derivational prefixes in the list above, we can group the first three together as specialized compounding initials somewhat similar to 'instrumental' prefixes in many Amerindian languages. The semantic value listed with the prefix applies to some but not all instances. Exx. of suppletive verbs containing such elements are -oškobo:li- 'to have grey hair' (class F) and -okfata:li- 'to cover (surface) again' (class I3).

Locative prefix -a:- occurs under conditions which have not been fully worked out in connection with a locational expression (sometimes covert) in the same clause. We are interested in its occasional occurrence in specialized suppletive forms of some motion verbs (A1 and A2 plural forms, cf. below).

Moving down the list of prefixes, we find several motional forms (-koča-, -kani-, -akka-, -aba-). Finally, there are voice-related prefixes indicating comitative, reflexive, reciprocal, and 'together'. The main interest of the voice-related suffixes is the above-mentioned occurrence of -itt- (from either -itti- or -itta-) in certain dual motion verbs (class A). The motional prefixes are not themselves subject to suppletion but do occur in some paradigms where the following stem is fully suppleted (classes L4 and L5).

We will briefly mention the major preverbs, aside from the plural preverb oklah mentioned earlier:

#### Preverbs

<u>ā:t</u> 'toward here'	<u>koča</u> 'out'
<u>ō:t</u> 'toward there'	<u>kani</u> 'away'
<u>pit</u> 'toward (object)'	<u>akka</u> 'down'
<u>i:t</u> 'going (along)'	<u>aba</u> 'up'
<u>išt</u> , <u>išit</u> instrumental	

The first four on the left are merely frozen gerundial forms of -ala- 'to arrive here', -ona- 'to arrive there', -pila- 'to throw', and -iya- 'to go'. Similarly, iš(i)t is a frozen gerundial from -iši- 'to take, pick up'. The four motional preverbs on the right are obviously identical to the homophonous and synonymous elements shown in the prefix list on the preceding page. The difference is that in the prefixal cases the old preverb has become frozen to the verb stem. Thus with 2Sg agent prefix iš- we get koča iš-VERB when koča is a preverb, but

iš-koča-VERB when -koča- has become a bound prefix. The avenue for the incorporation of preverbs as prefixes is the third person form which has  $\emptyset$ -agent prefix, so that it is fairly easy to reinterpret koča  $\emptyset$ -VERB as  $\emptyset$ -koča-VERB with subsequent analogical extensions. Such incorporation is also responsible for the two prefixes -ok- 'water, liquid' (cf. noun oka 'id.') and -(a)nok- 'head, mind, neck' (cf. an $\emptyset$ :ka 'inside'); K. Booker points to PM \*yos as source for -(y)os- 'head hair'. Incorporation is not a productive process in Choctaw.

#### Background: stem-gradation and ablaut

In addition to affixation, Choctaw derivational verb morphology involves a complex system of stem-grades. The analysis and terminology used here are based partly on Nicklas' system but involve some analytical modifications. In addition to the unmarked simple grade we get:

- N-grade (stative): -hiki:ya- 'to stand up' → -hiki $\dot{}$ :ya- 'to be standing'. With adjectival verbs indicates 'sort of' as in -losa- 'to be black' → -l $\emptyset$ :sa- 'to be sort of black'.
- L-grade (mediopassive): -hok $\dot{}$ ci- 'to plant' → -hollok $\dot{}$ ci- 'to be planted'.
- H-grade (instantaneous): -apa- 'to eat' → -ahpa- 'to gulp'.
- Y-grade (intensive): -apakfo:pa- 'to go around' → -apakf $\acute{o}$ yyo:pa- 'to go around with great difficulty'. With stance verbs indicates extreme prolongation: -bini:li- 'to sit down' → -b $\acute{i}$ nni:li- 'to sit for an inordinate length of time'.
- HN-grade (iterative or continuous): -ya:ya- 'to weep' → -yah $\acute{a}$ :ya- 'to keep crying'.
- RN-grade (agitated motion): -bini:li- 'to sit down' → -binin $\acute{i}$ :li- 'to shift around in one's seat, to be sitting or squirming agitatedly'.

Functionally, the L-grade is a voice marker and thus belongs with the voice-marking suffixes mentioned earlier, but formally it is part of the stem-gradation system. The stem-grades shown are all reasonably productive except that the H-grade is quite rare in the dialects investigated and that the RN-grade is limited to a handful of verbs. The labels such as 'Y-grade' are based on the most common and/or salient formal feature involved but there may be other concurrent changes and the most common feature may be missing in some exx. We omit a fuller discussion of the forms and functions.

There is also a conjunct-grade (Nicklas' 'lengthened grade') used before subordinators - $\acute{c}$ a: and -na: and apparently in connection with negative prefix k-. Thus from -pisa- 'to see' we get p $\acute{i}$ :sa- $\acute{c}$ a:, p $\acute{i}$ :sa-na:, and a-k-pi:so-h 'I don't see it'. The conjunct-grade has no semantic or other functional value so far as I can tell.

With this exception, the gradation system basically expresses aspectual distinctions, the precise set depending on the verb class or the particular verb. The gradation system is thus functionally complementary to the inflectional-suffix system and the stem-suppletion system.



Background: phonology

The phonemes themselves are fairly straightforward. The one area in which I question my own transcriptions is the matter of accent. I was not very alert to this during my fieldwork. Nicklas distinguishes a marked accent from the normal unmarked level accent (1974:11-12). He argues that it is distinctive at the lexical level and must be marked, but the exx. given involve nouns not verbs and I am not sure that he is claiming that there are any lexical accents in Choctaw verbs. I certainly heard a high accent in some of the stem-grade forms, notably in the Y-grade forms and in the conjunct-grade before -Ca: and -na:. Nicklas marks accent here and also in the N-grade and other non-simple grades. He is probably right, but I wonder if accent isn't automatic on nasalized vowels like a: and perhaps in some other phonologically defined environments. I will mark accent only where I clearly heard it and do not think it is predictable, though agreeing that more accents might have to be marked under further investigation.

Two types of phonological alternation that we will occasionally encounter are semivowel-epenthesis and consonant-cluster adjustments. When two vowels come together, they may contract into a single vowel under some conditions, but if they do not semivowel-insertion will apply, inserting y after a, a:, i, and i: and w after o or o:. Nicklas does not recognize the semivowel-insertion rule; instead, he puts the semivowel in base forms and has a deletion rule applying before l. This accounts for alternations involving mediopassive -a vs. factitive -li, e.g. -a<sup>o</sup>wa- vs. -a<sup>o</sup>li- from the root 'to sew' (Nicklas' -a<sup>o</sup>nw-). However, the epenthesis analysis works equally well here and also accounts for y in -a:yal- 'to arrive here 3+' and -a:yona- 'to arrive there' (roots -ala- and -ona-, apparently with locative -a:-). See class A, below.

We will not catalogue all consonant-cluster rules, but will note that -li- (especially factitive -li-) is often distorted. In forms like -kobaffi- 'to break' from /-kobaf-li-/ we find progressive assimilation, while in -palalli- 'to split' from /-palat-li-/ the assimilation is regressive. When -li- follows a geminate cluster the l is deleted, as in -caffi<sup>o</sup>ci- 'to chase away 1' from /-caff-li<sup>o</sup>ci-/.

There are three irregular vocalic quality changes in verbal morphophonemics. Before future a<sup>o</sup>ci:-, indefinite future a<sup>o</sup>hi:, and potential a<sup>o</sup>hi:la-, the stem-final vowel (or final vowel of an intervening suffix) becomes long -a:-. Thus contrast 1Sg agent suffix -li- (distinct from the two other -li- suffixes) in present ∅-pisa:-li-h 'I see him' (more often N-grade ∅-pi:sa-li-h) and future ∅-pisa:-la:-ci:-h 'I will see him'. On the other hand, the final vowel becomes o with prefix -(i)k- in its negative (but not hortative uses), hence a-k-pi:so-h 'I don't see him'. Finally, a change to i: (or to i with subsequent automatic lengthening) occurs in two or three combinations involving factitive suffix -li- (but

not 1Sg agent suffix -li- nor intransitive -li-). The best exx. are -sili:li- 'to dry (trans.)' from -sila- 'to be dry', and -tili:li- 'to chase away 2' from root /-tīla-/ (type L7, below).

#### Background: vowel length

There are some underlying long vowels which must be marked in dictionary entries. There are also some surface long vowels from underlying short vowels, due to an alternating-length rule. Nasalized vowels are automatically long; I indicate phonetic length with the colon with such vowels but the length is not distinctive.

As Nicklas realized, the basic rule for alternating length is that in a sequence of underlying short vowels, even-numbered vowels are lengthened going left to right (Nicklas 1975:242). I would add that consonant clusters interfere with the rule in that neither adjacent vowel can be lengthened secondarily (though the vowel just to the right of the cluster can be an underlying long vowel). In short, the rule applies to sequences of underlying short vowels in open syllables with some further restrictions.

A consequence of this alternating-length rule is that in a form like Ø-bali:li-h 'he runs' the long vowel is predictable. On the other hand, in a form like -itto:la- 'to lie down 1' the length is not predictable due to the consonant cluster tt, and indeed there is a minimal contrast with -ittola- 'to fall down 1'.

The transcriptions used here, except for the underlying forms shown with slashes /.../, are surface forms showing the most common allomorph of the stem.

#### Internal reconstruction of vowel length

For some Choctaw verbs, it is possible to demonstrate by internal reconstruction that what is now an underlying (i.e. invariable and unpredictable) long vowel was originally a pre-Choctaw and perhaps Proto-Muskogean short vowel. I digress on this point because suppletive verbs are involved and because this discussion may warn comparativists not to use synchronic Choctaw vowel-length uncritically in Proto-Muskogean reconstructions.

We have just mentioned the opposition of -itto:la- 'to lie down 1' (type B4, below) vs. -ittola- 'to fall down 1'. The two are not closely related any longer; cf. the distinct paradigms in B4 and L6, below. But the semantic connection is apparent and a common etymological source is a priori highly probable. In fact, it is probable that the two are divergent reflexes of reconstructed \*-ittola- with short vowels. We will disregard the semantic divergence (which is minor enough) and examine the mechanism behind the phonological divergence.

The stem -itto:la- 'to lie down 1' has a very common N-grade form -ittō:la- with stative sense; indeed, the N-grade is more common than the simple form. I suggest that there was originally an alternation

between \*-ittola- and N-grade \*-ittō:la-. Because the N-grade contains a nasalized vowel, this vowel is automatically phonetically long as indicated above. It is thus easy to see how \*-ittola- could have been analogically reshaped as attested -itto:la- with long oral vowel, restructuring the opposition so that nasalization is the only phonetic difference (as well as the only phonological difference) between the simple and N-grade forms. However, unlengthened -ittola- survives as a specialized stem meaning 'to fall down', lacking an N-grade and no longer closely linked formally with -itto:la-.

The same process appears to have occurred with -hi:li- 'to stand up 2' and with -ka:ha- 'to lie down 2'. Both have common N-grade forms, -hi:li- and -ka:ha-, which could have served as analogical sources for the long vowels. The stem -hi:li- is etymologically related to -hili:ci- 'to stand (something) up 2', though the synchronic connection is obscure, and this must reflect a prototype \*-hili-ci- with the initial vowel short (cf. causative suffix -ci-). See B5, below.

As for -ka:ha- 'to lie down 2', the corresponding 3+ form is -kaha-, both reflecting \*-kaha-, so in this case the reshaping of the dual form has permitted a number opposition. The reason why reshaping affected the 2 but not 3+ form is that the 3+ form -kaha- has a special N-grade -kahmā:ya- (originally a compound containing -mā:ya- 'to be 3+'), and there is thus no analogical proportion for converting -kaha- into -ka:ha- in the 3+ form. See B4, below.

This kind of historical development may have happened in many other Choctaw verbs which now have invariable long vowels, but there are not many cases where internal evidence for the old short-vowel form is still available synchronically. One additional ex. is -a:sa-, which can be used as a nonsuppletive stem meaning 'to be (said of mass or abstract noun) or sometimes 'to sit', and as a suppletive 3+ stem for 'to be, to stay, to live' (B1, below). In the nonsuppletive form there is an N-grade -a:sa- which is rather common, though in the suppletive function there is a suppletive N-grade -mā:ya-. The occurrence of the N-grade -a:sa- shows that a case can be made for a proto-type \*-asa- with later analogical lengthening, but the clincher is the occurrence of a frozen causative -asa:ci- (\*-asa-ci-), now 'to put down 2+' (L10, below).

#### Class A: verbs of motion

With this section we begin analysis of fully and partly suppletive paradigms. We distinguish classes A through L, some with several subsets (classes K and L are internally homogeneous and the term 'class' should be taken loosely). Stems which can be analysed are accompanied by a morphophonemic transcription in slashes. I do not claim by any means that this is a synchronically valid form; often the 'underlying' form is of etymological value only.

- A1. 'to arrive here'  
 1 -ala-  
 2 -ittala:či- /-ittV-ala-či-/  
 3+ -a:yala- /-a:-ala-/  
 A2. 'to arrive there'  
 1 -ona-  
 2 -ittona:či- /-ittV-ona-či-/  
 3+ -a:yona- /-a:-ona-/  
 A3. 'to go'  
 1 -iya-  
 2 -ittiya:či- /-ittV-iya-či-/  
 3+ -iiko:li-  
 A4. 'to go along'  
 12 -ā:ya-  
 3+ -ittano:wa- /-itta-no:wa-/

The first three of these, A1-3, constitute a closed, antonymic set of directionally specified motion verbs along with nonsuppletive -mī:ti- 'to be coming here'. Here the intersecting semantic features are [+centripetal] and [+completive]. A4 is not specified for direction, and commonly co-occurs with the others.

These paradigms show highly idiosyncratic uses of derivational affixes which occur elsewhere with other meanings. The combination of -ittV- prefix and -či- suffix forms the 2 (i.e. dual) form for A1-3. Although the final vowel of -ittV- disappears by phonological rule, it is most likely -itta- 'together' and not -itti- 'reciprocal' since -itta- appears to be a component of the 3+ A4 form -ittano:wa- (cf. -no:wa- 'to walk', nonsuppletive). The -či- suffix is perhaps synchronically associated with causative -či- but there is no semantic common ground, and, as noted above, Booker has shown that the two -ci- suffixes are probably unrelated etymologically. A prefix -a:- is found in 3+ A1-2 forms (the following y is epenthetic); this is apparently identical to locative -a:- prefix but the semantic connection escapes me.

3+ A3 -iiko:li- is common in my data and is supported by Byington's dictionary. Nicklas gives -aiko:li-, but in my notes and in Byington this is an unrelated stem meaning 'to wiggle'; I think that either Nicklas or his informants have gotten the two mixed up.

All motion verbs can be converted into transitive verbs of conveyance by the addition of instrumental išt, hence išt plus -iya- 'to take', išt plus -ala- means 'to bring here (completive)', etc. In this construction it is common to use the 1 (i.e. singular) form of the verb regardless of subject and/or object number; a combination like išt plus -iiko:li- (3+ A3) would be unusual.

Class B: verbs of stance

B1. 'to be, stay' (N-grade); 'to live' (simple grade)

simple: 1 -atta-  
2 -ašwa-  
3+ -a:ša-

N-grade: 1 -ātta- /-atta-N-/  
2 -ā:šwa- /-ašwa-N-/  
3+ -mā:ya-

B2. 'to be right-side up'

simple: 1 -tala:ya- /-tala-a-/  
2+ -talo:ha- /-tal-oh-a-/

N-grade: 1 -talā:ya- /-tala-a-N-/  
2 -talō:ha- /-tal-oh-a-N-/  
3+ -talohmā:ya- /-tal-oh-mā:ya-/

caus: 1 -tala:li- /-tala-li-/  
2+ -talohli- /-tal-oh-li-/

B3. 'to be hanging up'

simple: 1 -taka:li- /-taka-li-/  
2+ -takohli- /-tak-oh-li-/

N-grade: 1 -takā:li- /-taka-li-N-/  
2 -takōhli- /-tak-oh-li-N-/  
3+ -takohmā:ya- /-tak-oh-mā:ya-/

caus: 1 { -taka:liči- /-taka-li-či-/  
          { -taka:či-  
2+ { -takohliči- /-tak-oh-li-či-/  
      { -takohči-

B4. 'to lie down'

simple: 1 -itto:la-  
2 -ka:ha-  
3+ -kaha-

N-grade: 1 -ittō:la- /-itto:la-N-/  
2 -kā:ha- /-ka:ha-N-/  
3+ -kahmā:ya- /-kah-mā:ya-/

B5. 'to stand up' (causative: 'to erect')

simple: 1 -hiki:ya- /-hikiya-/  
2 -hi:li- /-hi:-li-/  
3+ -hiyohli- /-hi-oh-li-/

N-grade: 1 -hikī:ya- /-hikiya-N-/  
2 { -hī:li- /-hi:-li-N-/  
   { -hiyōhli- /-hi-oh-li-N-/  
3+ -hiyohmā:ya- /-hi-oh-mā:ya-/

## B5 (cont.)

caus: 12 -hili:či- /-hi-li-či-/  
 3+ { -hiyohliči- /-hi-oh-li-či-/  
 { -hiyohči-

## B6. 'to sit down'

simple: 1 -bini:li- /-bini-li-/  
 2 -či:ya- /-či:-a-/  
 3+ -binohli- /-bin-oh-li-/  
 N-grade: 1 -binī:li- /-bini-li-N-/  
 2 -čī:ya- /-či:-a-N-/  
 3+ { -binohmā:ya- /-bin-oh-mā:ya-/  
 { -binōhli- /-bin-oh-li-N-/  
 }

B2-6 along with some other verbs constitute a set of stance verbs (also indicating shape, etc.). Others are -bača:ya- 'to stretch out in a horizontal plane' (type B2); -lapa:li- 'to be against a vertical surface (e.g. wall)' (type B3). B1 constitutes a kind of suprageneric verb for this class and is less concrete than the others; its 3+ N-grade form -mā:ya- is used as a suffix in the corresponding forms of the other paradigms. Also in this semantic domain is nonsuppletive -a:ša- (often in N-grade -ā:ša-) 'to be (said of mass noun or abstract noun)', rarely 'to sit'. As previously noted, this -a:ša- is etymologically related to 3+ B1 -a:ša- and to -aša:či- in L10.

Since B1 is 'neutral' vis-à-vis the more specific stance verbs B2-6, in much the same way that A4 is neutral vis-à-vis more specific motion verbs, B1 may be added to another stance verb forming a complex syntagm. In this event B1 indicates continuous aspect and is regularly in the N-grade. In the full sense 'to live', the 3+ form -a:ša- is usually put in the Y-grade -āyya:ša-. This can be seen as a device to differentiate this -a:ša- from the nonsuppletive -a:ša- 'to be; to sit' just mentioned.

The comparison of -a:ša- with 2 B1 -ašwa- suggests a possible etymological analysis of the latter as \*-aš-wa- with dual \*-wa- or infixed \*-w-. My limited knowledge of other Muskogean languages prevents further speculation on this point.

The transcription of vowel length for nasalized vowels is to transcribe them as long vowels when heard as long or fairly long, and as short in a few cases when a following consonant cluster makes the nasalized vowel fairly short phonetically. This is not a phonemic matter; there are no vowel length distinctions for nasalized vowels.

Of B2-6, B2 and B3 are the paradigms which show some semblance of systematicity, while B4-6 show various idiosyncracies. The difference between B2 and B3 is that in B2 the simple grade ends in mediopassive -a-, while in B3 it ends in intransitive -li-. Hence the respective causative forms differ: B2 replaces -a- by factitive -li- (as in class C, below), while B3 adds causative -či- producing -li-či- which can be contracted to -či-. Both B2 and B3 show a nonsingular suffix -oh-, producing an opposition 1 vs. 2+ in the simple and causative forms; with the addition of 3+ -mā:ya- in the N-grade we get 1 vs. 2 vs. 3+.



B4-6 are similar to B2-3 but show additional irregularities. B4 involves an etymological opposition of 1 \*-ittola- and 2+ \*-kaha-. As noted earlier, \*-ittola- has become -itto:la- by analogy to the N-grade -ittō:la- where vowel length is automatic; this has not greatly affected the structure of the paradigm though it has led to a splitting off of a now unrelated stem -ittola- 'to fall down 1' (L6). However, the paradigm has been altered by the development of \*-kaha- into -ka:ha- in the 2 form, influenced by 2 N-grade -kā:ha-. This has produced differentiation of 2 -ka:ha- and 3+ -kaha- from a single etymon \*-kaha-; the 3+ form retains its archaic form since its own N-grade is -kahmā:ya-, which cannot provide an analogical basis for reshaping of the simple grade. (Incidentally, this suggests strongly that the use of -mā:ya- as 3+ N-grade suffix is fairly archaic within Choctaw.)

In B5 we have a root \*-hi- in the 2 and 3+ forms. If 1 -hiki:ya- can be analysed historically as \*-hiki- plus mediopassive -a-, we might regard \*-hi- as a truncated form of this \*-hiki- (for exx. of truncation see type I, below). This would be strongly supported if we could find a corresponding transitive form of the type \*-hiki:li-, since mediopassives in -a- normally have factitive forms in -li-. Unfortunately, B5 itself shows 12 causative -hili:či-, containing causative -či- and \*-hili- (the etymon for simple 2 -hi:li-). However, it is possible that the missing \*-hiki:li- shows up in the verb -apistiki:li- 'to make speeches', which I suggest is derived by contraction of \*apissa-t hiki:li-, which could be roughly glossed 'to cause to stand straight' (i.e. 'to set things straight').

Another feature of B5 is the occurrence of four N-grade forms including two synonyms for the 2 form. Note that 3+ -hiyohmā:ya- is the 'regular' form (i.e. is similar to 3+ N-grades for other stance verbs). The 2 N-grade variant -hiyōhli- is modeled on the type -takōhli- in B3 but is not closely related to its own simple grade counterpart -hi:li-; the other variant, -hī:li-, is of course directly derived from this -hi:li-. (Historically, though, simple -hi:li- from \*-hili- has undergone analogical vowel lengthening influenced by the N-grade form).

B6 involves a root \*-bini- in the 1 and 3+ forms, sandwiched around 2 forms based on a root \*-či:- or \*-či-. The analysis of -či:ya- as \*-či(:)- plus mediopassive -a- is confirmed by the existence of a root -či:li- 'to lay (egg)' which, though no longer related, continues the old factitive form \*-či:-li-. Although consideration of -či:ya- and its N-grade -či:ya- by themselves could point either to \*-či:- or \*-či- as the original root (if \*-či-, becoming \*-či:- due to the influence of the N-grade with automatically long vowel), the now unrelated -či:li- makes \*-či:- with already long vowel likely.

As with B5, B6 shows three forms in the simple grade and hence four in the N-grade (the nasalized forms of the simple grade plus the 3+ form with -mā:ya-). However, in B6 the form in -ōhli- is 3+, not 2 as in B5. My elderly informant stuck to his guns on this point; I did not check it with other informants.

A general pattern which can be seen in type B verbs is the tendency for the causative to diverge semantically (and formally) from the intransitive forms. Although the simple and N-grade forms have remained closely associated so that analogical processes (vowel length, etc.) have applied, the causative forms have tended to remain apart. Some of the old causative forms are so unrelated semantically that I have kept them out of these paradigms: *-aša:či-* 'to put down 2+', Former factitive *-či:li-* 'to lay (egg)' is likewise no longer relatable to the older intransitive forms from the same etymological source. The form *-hili:či-*, 12 causative of B5, is just barely sufficiently close to the intransitive forms to warrant inclusion in the paradigm, but has not been affected by the analogical generalization of the long-vowel form *-hi:li-* in the intransitive (the synchronically regular causative would be *\*-hi:li:či-*).

Class C: verbs of simple physical action

- C1. 'to break a long object'
- |              |          |             |                   |
|--------------|----------|-------------|-------------------|
| intransitive | simple   | -koba:fa-   | /-kobaf-a-/       |
|              | distrib. | -kobahli-   | /-kobaf-h-li-/    |
| factitive    | simple   | -kobaffi-   | /-kobaf-li-/      |
|              | distrib. | -kobahliči- | /-kobaf-h-li-či-/ |
- C2. 'to bend; to fold'
- |              |          |              |                   |
|--------------|----------|--------------|-------------------|
| intransitive | simple   | -łata:pa-    | /-łatap-a-/       |
|              | distrib. | {-łatahli-   | /-łatap-h-li-/    |
|              |          | {-ła:ya-     | /-ła:-a-/         |
| factitive    | simple   | -łatabli-    | /-łatap-li-/      |
|              | distrib. | {-łatahliči- | /-łatap-h-li-či-/ |
|              |          | {-ła:li-     | /-ła:-li-/        |
- C3. 'to split'
- |              |          |              |                   |
|--------------|----------|--------------|-------------------|
| intransitive | simple   | -pała:ta-    | /-pałat-a-/       |
|              | distrib. | {-pałahli-   | /-pałat-h-li-/    |
|              |          | {-pałła-     | /-pałł-a-/        |
| factitive    | simple   | -pałalli-    | /-pałat-li-/      |
|              | distrib. | {-pałahliči- | /-pałat-h-li-či-/ |
|              |          | {-pałłi-     | /-pałł-li-/       |
- C4. 'to roll up; to fold'
- |              |          |           |              |
|--------------|----------|-----------|--------------|
| intransitive | simple   | -poło:ma- | /-połom-a-/  |
|              | distrib. | -połła-   | /-połł-a-/   |
| factitive    | simple   | -połommi- | /-połom-li-/ |
|              | distrib. | -połłi-   | /-połł-li-/  |
- C5. 'to kick'
- |  |          |         |             |
|--|----------|---------|-------------|
|  | simple   | -habli- | /-hab-li-/  |
|  | distrib. | -hałłi- | /-ha-ł-li-/ |



## C6. 'to pull'

simple	-halalli-	/-halal-li-/
intensive	-halahli-	/-halal-h-li-/

## C7. 'to pull out; to pluck'

intransitive	simple	-tī:fa-	/-tīf-a-/
	distrib.	-tiha-	/-tīf-h-a-/
factitive	simple	-tīffi-	/-tīf-li-/
	distrib.	-tihi-	/-tīf-h-li-/

Type C, taken together, comprises many dozens of verbs of which the great majority denote simple physical events or actions which leave a tangible effect on a surface or object. The intransitive forms denote either an agentless event or the state resulting from the event or action. The causative is the corresponding transitive action verb. The terms 'mediopassive' and 'factitive' are most semantically appropriate for this class.

By far the predominant subclass is C1, which involves roots of the type /-CVCVf-/. The simple forms (intransitive and factitive) contain mediopassive -a- and factitive -li-. The corresponding distributive forms contain -hli- (before which a consonant is deleted); this appears to consist of -h- plus intransitive -li- though the combination is rather frozen. The factitive distributive in -h-li-či- does not seem to reduce to \*-h-či-, though in other classes the combination -li-či- optionally reduces to -či-.

A few roots of this general type are /-CVCVC<sub>3</sub>-/ where C<sub>3</sub> is not f. These are given here as C2-4. C2 and C4 consist solely of the single root given in each; C3 includes one /-CVCVf-/, /-čolaf-/, in addition to /-pa<sup>l</sup>at-/, both meaning 'to split'. The forms of /-čolaf-/ are -čola:fa-, -čolahli-, -čolla-, factitive -čolaffi-, -čolahliči-, -čolli-. Obviously the basis for this subclass is semantic; it is just another ex. of how class and subclass affiliation in the language is closely bound to semantic patterning.

The difference between C1 and C2-4 is that the latter have a second distributive type in addition to that in -h-li- also found in C1. The second type is characterized by a) truncation of the final -(C)VC- in /-CVCVC-/, and b) strengthening of the residual form of the root (lengthening of final vowel, or gemination of final consonant). The retention of the middle consonant occurs in C3-4, where this consonant is l (hence -CVll-); this consonant goes out with truncation in C2 where it is t (hence -CV:-). I know of no /-CVlVf-/ verbs in C1, so it may be that C3 and C4 represent the usual treatment of type C roots with medial l. The only difference between C3 and C4 is that C3 also has the 'regular' distributive in -hli-, while C4 has only the truncated type. It is possible that the factitive distributive type -CVll- reflects \*-CVl-li-, where \*/tl/ → ll, with the ll cluster then intruding analogically into the intransitive (\*-CVl-a- → -CVlla-).

C5 and C6 are anomalous types, each consisting of a single verb. The unusual distributive form -haññi- in C5 superficially resembles the -CVññi- forms in C3-4, suggesting a surface analogy whereby -ññi- in C3-4 has been extended into C5. In C6 the corresponding distributive (actually, 'intensive' is more apt semantically), -halahli-, appears to be related to intransitive distributives in -hli- (chiefly in C1), but in C1 the distributive/simple opposition is -hli- vs. (mediopassive) -a-, while here in C6 the opposition is -hli- vs. (presumably factitive) -li-. It is not clear whether C6 is a vestige of a formerly productive type or the result of an idiosyncratic, local analogy.

C7 appears to be the productive analogue of C1 for /-CVC-/ roots. I have lost my notes on this subclass but I recall that there were others in addition to 'to pull out'. From Byington's dictionary I can cite -pi:fa-, -piha-, -piñfi-, -pihli- 'to gather up, sweep' (here, as elsewhere, the gloss applies to the transitive forms); perhaps also -šā:fa-, -šaha-, -šāñfi- (and \*-šahli- ?) 'to shave, scrape'.

All of the types in class C we have considered are specialized subtypes of a larger class which is characterized by the opposition of mediopassive (intransitive) -a- and factitive -li-. Many verbs in this larger class have no special distributive (or intensive) morphological shapes and these are excluded from consideration here.

#### Class D: verbs of hitting

D1. 'to strike'	
simple	<u>-šoko:či-</u> / <u>-šoko-či-</u> /
repetitive	<u>-šokkø:ha-</u> / <u>-šokkø-ha-</u> /
D2. 'to slap'	
simple	{ <u>-lasa:liči-</u> / <u>-lasa-li-či-</u> / <u>-lasa:či-</u>
repetitive	<u>-lassā:ha-</u> / <u>-lassā-ha-</u> /

The most general verb 'to hit' is -isso-, repetitive -bo:li- (L9, below). The more dynamic nuances of hitting are expressed largely by a set of verbs belonging to class D. Subtype D1 has only a binary opposition of simple and repetitive forms, with invariant -či- in the simple form. The repetitive form is highly idiosyncratic, showing nasalization, gemination, and addition of an otherwise unattested suffix -ha-. Other verbs of this type are -saka:či-, -baka:či- (both 'to strike' or the like). In addition I can cite two defective class D verbs which occur only in the repetitive form: -tippi:ha-, -kabā:ha- 'to strike'. All of these 'to strike' verbs are inherently emphatic and imply strenuous or violent actions; I have not been able to differentiate among them semantically. Another verb, -miššø:ha- 'to rub', also appears to be a defective class D verb, but it is only marginally connected semantically to the mainstream of the class. Defective verbs lacking simple forms cannot be subclassed as D1 or D2.

D2 consists of -lasa:liči- and -pasa:liči- 'to slap', forming a

natural semantic and phonological set. The only difference between D1 and D2 is that the latter has, in addition to the regular D1 simple form in -či-, a longer variant in -li-či-. We have seen other exx. of the contraction of -li-či- to -či- (B3, B5, but not C1-3). In D2, the short type in -či- is rather more common than the form in -li-či-; some informants claim that the latter has repetitive connotations but the evidence for this claim is inadequate at this point.

Class D obviously shows another specialized use of -či-, not closely related to its usual causative sense.

Class E: verbs with \*-ho- or \*-oh-

- E1. 'to be big'  
 1 -čito-  
 2+ -ho:čito- /-ho:-čito-/  
 E2. 'to collide; to come or knock together'  
 simple -tiki:li- /-tiki-li-/  
 repetitive -tikohli- /-tik-oh-li-/  
 E3. 'to be young'  
 1 -himitta- /-himitt-a-/  
 2+ -himithowa- /-himitt-ho-a-/  
 E4. 'to be long'  
 1 -fala:ya- /-fala-a-/  
 2+ -ho:falo:ha- /-ho:-fal-oh-a-/

E1 shows prefixation of -ho:-, E2-3 show addition of suffix -oh-/-ho- immediately after the nuclear root, and E4 shows both. We have already seen suffix -oh- in several paradigms in class B.

The morpheme in question here is also found in the first and second person plural pronominal prefixes of various types, where we find a pluralizing element ha-/-ho-/-oh-/ho:-. With the first person it normally indicates 3+ plural, with the second person (otherwise undifferentiated for number) 2+ plural. In other words, it increases by a minimum of one the number of referents otherwise indicates (the first person already has a singular/nonsingular opposition before this morpheme is added). With pronouns, this pluralizer is optional, and in the dialects I know is used only sporadically, except that it appears to be obligatory in second plural imperatives.

Class F: verbs with -š-

- F1. 'to have grey hair'  
 1+ -oškobo:li- /-oš-kobo-li-/  
 2+ -oškobošli- /-oš-kobo-š-li-/

In other words, -š- is optionally inserted after the nuclear root to indicate nonsingular number (but the 1+ form can be used for

all numbers). The form with -š- seems to be going out of productive use. Booker argues elsewhere that -š- is related to dual -ši- (class A).

Verbs of class F are few in number. They have two major formal features in common: they end in -li-, and they begin with -ok- 'water, liquid' or -(y)oš- 'head hair' (discussed above under 'Background: derivational affixes'). These prefixes often no longer retain their etymological meaning and most of the combinations are quite frozen; -(y)oš- may even shift phonologically to -oš-. Exx. are -ošmila:li- 'to be bald', -yoškaba:li- 'to have short hair', -oskolo:li- 'to be short', -okšawā:li- 'to be pale-skinned' (-š- form -okšawāšli-). Note that -ok- in the last ex. has a watered-down meaning.

Class G: verbs with -o:- or -o-

G1. 'to return'			
intransitive	simple	-fala:ma-	/-falam-a-/
	distrib.	-fala:mo:wa-	/-falam-o:-a-/
	factitive	simple	-falammi- /-falam-li-/
		distrib.	-fala:mo:li- /-falam-o:-li-/
G2. 'to be full'			
intransitive	simple	-alo:ta-	/-alot-a-/
	distrib.	-alotto:wa-	/-alott-o:-a-/
	factitive	simple	-alo:tali- /-alot-a-li-/
		distrib.	-alotto:li- /-alott-o:-li-/
G3. 'to be mashed flat (e.g. tin can)'			
intransitive	simple	-takassa-	/-takass-a-/
	distrib.	-taka:sowa-	/-takas-o-a-/
		-takasso:wa-	/-takass-
	factitive	simple	-takassali- /-takass-a-li-/
		distrib.	-taka:soli- /-takas-o-li-/
		-takasso:li-	/-takass-o:-li-/
G4. 'to obstruct'			
	simple	-kata:pa-	/-katap-a-/
	repet.	-kata:po:li-	/katap-o:-li-/

Of these, G1 is the productive type, with -o:- inserted between the root and the derivational suffix (-a-, -li-). Typically the distributive form indicates back and forth activity for this subclass, hence -fala:mo:wa- 'to go back and forth'. Other exx. are -waka:mo:wa- 'to open and shut repeatedly (mouth)' from -waka:ma- 'to be open (said of mouth)'; -aša:tapo:wa- 'to spread out and retract repeatedly (e.g. wings)' from -aša:tapa- '(wing, etc.) to be spread out'. A more standard distributive sense occurs in -bana:po:wa- 'to be crooked in several places' from -bana:pa- 'to be crooked, warped'.

G2, limited to the verb shown above, is somewhat anomalous. If we look just as simple -alo:ta- and -alo:tali- we would be inclined to

take the root as /-a<sub>l</sub>o:ta-/ , forming an unsuffixed intransitive and a suffixed factitive with -li-. However, the distributive forms with -o:- suggest the usual opposition of mediopassive -a- and factitive -li-. Moreover, the distributive forms show consonant gemination.

G3 contains a number of verbs, mostly meaning 'to be flat'. The other exx. are -patassa- 'to be flat', -latassa- 'to be flat or mashed', and -fabassa- 'to be long and thin (like wire)'. My major informant reported -matassa- as a dialectal variant of -patassa-. The distributive type -takasso:wa-, -takasso:li- is structurally parallel to the G1 distributive forms. However, the type -taka:sowa-, -taka:soli- is unusual in that the -o- morpheme has a short vowel. Incidentally, my informant preferred the -taka:sowa- type to the more regular -takasso:wa-.

Since all G3 stems end in -ss-a-, etc., we might want to take the roots as /-CVCV-/ and recognize the -ss- (or -s-) as a special thematic element characteristic of this subclass.

G4, limited to one verb, is irregular in that the change from simple to repetitive is accompanied by an unexpected change of derivational suffix from -a- (mediopassive) to -li- (factitive). Since the verb is a transitive action verb the use of -a- here is logically inappropriate; we would expect \*-katabli- instead of -kata:pa- as the simple form. Apparently there has been some mixing here between the mediopassive and factitive paradigms; some of the missing forms can be found in Byington's dictionary.

#### Class H: verbs with -ka<sub>χ</sub>i-

- H1. 'to lie face-down'  
 intransitive 1 -hipi:ya- /-hipi-a-/  
                   2+ -hipka<sub>χ</sub>i- /-hip-ka<sub>χ</sub>i-/  
 factitive -hipi:li- /-hipi-li-/
- H2. 'to swing (e.g. vine)'  
 simple -faha:ta- /-fahat-a-/  
 repetitive -faha:ka<sub>χ</sub>i- /-faha-ka<sub>χ</sub>i-/
- H3. 'to bend over (e.g. tree)'  
 intransitive simple -bi<sub>χ</sub>o:ta- /-bi<sub>χ</sub>ot-a-/  
                   repetitive -bi<sub>χ</sub>o:ka<sub>χ</sub>i- /-bi<sub>χ</sub>o-ka<sub>χ</sub>i-/  
 factitive -bi<sub>χ</sub>olli- /-bi<sub>χ</sub>ot-li-/

The element -ka<sub>χ</sub>i- is semantically similar to -o:-, often implying repeated or back-and-forth cyclical activity, but is limited to intransitive forms (unlike -o:-). Etymologically, -ka<sub>χ</sub>i- may be bimorphemic; the -ka- could be a variant reflect of the \*-ka- which, according to Nicklas, is the etymon for mediopassive -a- (1974:62). The -χi- could be related to dual -χi- in motion verbs (class A) and to -s- in class F, which Booker derives from an ancient nonsingular morpheme; a connection with causative -χi- is improbable.

Examination of the exx. with -kač̣i- shows that truncation of the root (loss of final vowel or consonant) occurs before it. H2 and H3 are basically the same, the difference being that a factitive form was not elicited for H2 but was for H3. Note the close semantic affinity between the verbs in H2 and H3 (these are the only exx. I know of for these subclasses).

A stem -kolo:kač̣i- 'to rock (e.g. chair)' is probably a defective member of the type H2-3; I was unable to elicit a form of this root without -kač̣i-. Further exx. of -kač̣i- occur in class K.

#### Class I: truncating verbs

- I1. 'to bite'  
 simple -kopo:li- /-kopo-li-/  
 repetitive -kobli- /-kop-li-/  
 I2. 'to jump'  
 simple -tolobli- /-tolob-li-/  
 repetitive -tolli- /-tol-li-/  
 I3. 'to cover (surface) again'  
 simple -okfata:li- /-ok-fata-li-/  
 repetitive -okfalli- /-ok-fat-li-/

We have seen occasional exx. of truncation in one form or another in previously described classes: perhaps \*-hiki- vs. \*-hi- in B5, truncation plus gemination in C3-4, truncation plus vowel lengthening in C2, the exx. just discussed in class H, and the usual deletion of final vowels before -oh- in classes B and E. In I2 we can see truncation of a /-CVCVC-/ root to /-CVC-/ by loss of the last two phonemes in I1-2, and similar truncation of /-CVCV-/ to /-CVC-/ in I1 and I3. The exx. shown above are the only ones I have except for -bonolli- 'to roll up, fold', repetitive -bonni-, cf. N-grade mediopassive -bono:ta- (base forms /-bonot-li-/, /-bon-li-/, /-bonot-a-/). This conforms to the I2 type.

The verb in I3 has more concrete, contextualized meanings like these: 'to add (one quilt) on top of (another); 'to go over (lawn, with lawnmower) again'. The f is phonetically labialized, due presumably to the preceding rounded vowel. Note that this verb fits the pattern for class F (-ok- prefix, root, -li- suffix); we might have expected a 2+ form \*-ok-fata-š-li- but in fact this could not be elicited.

#### Class J: verbs with distributive reduplication

- J1. 'to be spotted'  
 simple -bako:wa- /-bako-a-/  
 distributive -bako:kowa- /-bako-ko-a-/



## J2. 'to be cut off'

intransitive	simple	-tapa- /-tap-a-/
	distrib.	-taptowa- /-tap-to-a-/
factitive	simple	-tabli- /-tap-li-/
	distrib.	-taptoli- /-tap-to-li-/

J1 also includes /-baso-/ 'to be striped' and thus forms a natural semantic subclass; the distributive form is -baso:sowa-. The pattern of reduplication can be described as repetition of the final syllable of the /-CVCV-/ root. In the light of J2, however, we might adopt the alternative of saying that the reduplication is -C<sub>2</sub>O-, where the o just happens to be the same as the final root vowel. On the other hand, if we prefer to connect the reduplication seen in the RN-grade of stance verbs (see 'Background: stem-gradation and ablaut', above), we could take the reduplication in J1 as -C<sub>2</sub>V<sub>2</sub>-.

J2 also includes -bohli- 'to throw at', distributive -bohpoli-. The preverb iŋt is obligatory, and no intransitive forms are attested. It is possible that the shift b → p is required after h (I do not recall any \*hb clusters).

Class K: some mixed types

## K1. 'to go around'

intransitive	simple	-apakfo:pa- /-apakfo:p-a-/
	repet.	{-apakfo:wa- /-apakfo:-a-/
		{-apakfo:kači- /-apakfo:-kači-/

## K2. 'to turn around'

intransitive	simple	-folo:ta- /-folot-a-/
	repet.	{-folo:to:wa- /-folot-o:-a-/
		{-folo:kači- /-folo-kači-/
factitive	simple	-fololli- /-folot-li-/
	repet.	-folo:to:li- /-folot-o:-li-/

## K3. 'to be punctured (e.g. balloon)'

intransitive		-ŋo:pa- /-ŋop-a-/
factitive	simple	-ŋobli- /-ŋop-li-/
	distrib.	-ŋo:liči- /-ŋo-li-či-/

Each of these is limited to the verb shown. K1 combines truncation (-apakfo:wa-) with use of -kači- in different forms in its repetitive complex. K2 is characterized by the use of -o:- and of -kači-. In K3 the forms -ŋo:pa- and -ŋobli- are a regular -a-/li- alternation; the form -ŋo:liči- is unusual in that it shows both use of -li-či- (instead of the more common -li-), and in truncation (loss of /p/).

Class L: full suppletion

- L1. 'to enter'  
 1+ -čokkowa-  
 2+ { -abi:ha- /-abih-a-/  
       {-aŋo-
- L2. 'to be inside'  
 1+ -fokka- /-fokk-a-N-/  
 2+ -aŋo- /-aŋo-N-/
- L3. 'to put inside'  
 1+ -fokki- /-fokk-li-/  
 2+ { -a:pitta- /-a:-pitta-/  
       {-ani-
- L4. 'to get down (e.g. from horseback)'  
 intransitive 1 -akkowa-  
               2+ -akkako:ha- /-akka-koh-a-/  
 causative 1 -akkowa:či- /-akkowa-či-/  
            2+ -akkakohli- /-akka-koh-li-/
- L5. 'to go out'  
 intransitive 1 -kočča- /-kočč-a-/  
               2+ -koča:wiha- /-koča-wih-a-/  
 factitive 1 -kočči- /-kočč-li-/  
            2+ -koča:wihli- /-koča-wih-li-/
- L6. 'to fall down'  
 1 -ittola-  
 2 -akkaha-  
 3+ -liwi:li- /-liwi-li-/
- L7. 'to run' (causative: 'to chase away')  
 intransitive 1+ -bali:li- /-bali-li-/  
               1 -čaffa- /-čaff-a-/  
               2 -tila:ya- /-tila-a-/  
               3+ -yili:pa- /-yilip-a-/  
 causative 1 -čaffiči- /-čaff-li-či-/  
            2 -tili:li- /-tila-li-/  
            3+ -yilibli- /-yilip-li-/
- L8. 'to sell'  
 1 -kã:či- /-kan-či-/  
 2+ -kã:pila- /-kan-pila-/
- L9. 'to hit'  
 simple -isso-  
 repetitive -bo:li-



- L10. 'to put down'  
 1 -bohli-  
 2+ -aša:či-
- L11. 'to pull off; to pick (fruit)'  
 1 -tabli- /-tap-li-/  
 2+ -amo-
- L12. 'to pick up'  
 1 -iši-  
 2+ -ayo:wa-
- L13. 'to fly'  
 1 -hika-  
 2+ -hi:li-
- L14. 'to be small'  
 1 -osi-  
 2+ -čipǫ:ta-
- L15. 'to be together'  
 2 -ittatoklo- /-itta-toklo-/  
 3+ -ittaho:ba- /-itta-hob-a-/

In L1, -čokkowa- may be related to the noun čokka 'house', though the morphological structure is obscure. A possible parallel is -akkowa- in L4, which definitely involves prefix -akka- 'down', though again the structure is obscure. Of the two 2+ forms in L1, -abi:ha- is not very common, and -aľo- is most common with mass nouns like words meaning 'water', 'sand', etc. It can, however, be used with plural nouns as well. All forms in L1 are regularly accompanied by directional preverbs like ǣ:t 'toward here' and ǫ:t 'toward there' (see above, 'Background: derivational affixes').

In L2, the 2+ form is simply the N-grade of -aľo- from L1. The 1 form is likewise an N-grade, cf. -fokki- without nasalization in L3. The distributional remarks about -aľo- just given apply to -aľo-.

In L3, -fokki- is a regular -li- factitive based on -fokka- in L2. The form -a:pitta- seems to contain locative prefix -a:-, and is functionally the causative/factitive of -abi:ha- in L1. Similarly, -ani- is the functional causative/factitive of -aľo-, and is thus used mainly with mass-noun objects.

As mentioned above, L4 -akkowa- contains -akka- 'down', but the form is frozen and difficult to analyse. That the /-owa-/ root presupposed by this analysis does not contain mediopassive -a- is suggested by the causative -akkowa:či-; if we were dealing with mediopassive -a- we would expect a factitive in -li- (\*-akkoli-) instead of the causative with -či-.

In L5 the forms involve variants of the prefix -koča- 'out', also used as a preverb. In the 2+ forms, as for L4, the morphology is most transparent; here the root /-wih-/ is related to an independently occurring verb -wiha- 'to move around excitedly (e.g. cattle, bees)'. The semantic connection is no longer close. In -koča:waha- and

-koča:wihli- the -wi- syllable is missing in the variants -koča:ha-, -kočahli- used by speakers from the Bogue Chitto community north of Philadelphia; here the connection with -wiha- is of course totally disguised. As for -kočca-, -kočči- in L5, obviously -koča- 'out' has been verbalized in some fashion but the exact historical mechanics are unclear.

In L6 we find the -ittola- mentioned earlier; we showed that it is etymologically identical to -itto:la- in B4 and reflects the original short vowel. The 2 stem -akkaha- contains -akka- 'down' but I cannot identify the -ha- component (a connection with -ha- in class D verbs of hitting is unlikely).

In L7, -bali:li- is more common than -čaffa- in the singular intransitive form. Because the 2 and 3+ forms are fairly common, -bali:li- is most common in the 1 form, but it can spill over into the 2 and 3+ categories. The forms -tiša:ya- 2 and -yiki:pa- 3+ tend to mean specifically 'to run away', and this may be true also of the uncommon -čaffa- 1. It is thus not surprising that these three roots, and not -bali:li-, are used in the causative, which normally means 'to chase away' (i.e. 'to cause to run away'). Note -li-či- in -čaffiči-, and the vocalic ablaut change in -tiki:li- from -tiša:ya-.

L8 contains directional -kani- 'away' in frozen and reduced form. In -kã:či- we find a reduced form of this plus causative -či-. (Incidentally, -kã:či- is also used, nonsuppletively, in the sense 'to ruin'.) The 2+ form -kã:pila- includes the same reduced form of -kani- plus the verb -pila- 'to throw'; the original construction, preverb kani plus verb -pila-, still occurs in the sense 'to throw away'.

In L9, -isso- is unanalysable. Repetitive -bo:li- may be related to -bohli- in L10, in which case the latter is the H-grade. The semantic gulf is considerable, but some intermediate forms can be detected. There is a combination of preverb išt (often instrumental) plus verb -bohli- meaning 'to throw at'. This is phonologically identical to L10 -bohli-, but is semantically closer to L9 -bo:li-, especially since the latter can mean 'to hit (with thrown object)' as well as 'to hit (e.g. with the fist)'. The correlation is not indisputable but seems probable to me.

L10 -aša:či- is etymologically the causative of -a:ša- (\*-aša-) in B1, as mentioned earlier.

L11 -tabli- represents a special usage of -tabli-, seen already in J2. The 2+ form -amo- is used in the sense 'to pull off; to pick' and is thus limited to L11 (it does not spill over into J2).

L12 -iši- is a special use of -iši- 'to take', N-grade -ī:ši- 'to hold, to have (in one's possession)'. 2+ -ayō:wa- means 'to pick up' only.

L13 1 -hika-, 2+ -hi:li- may be related to 1 -hiki:ya-, 2 -hi:li- (\*-hili-) 'to stand' (B5). Further details are unclear at this point.

L15 contains the prefix -itta- 'together', seen also in class A. The root -toklo- is the numeral noun/verb stem '(to be) two'. The root /-hob-/ is not found by itself in my data.

### Conclusion

This paper has been designed to fill a gap in the presently available literature on Choctaw, which has not gone deeply into derivational verbal morphology. My experience with Uto-Aztecan and other language families is that derivational verbal morphology is of great importance in comparative reconstruction, and although I am not presently qualified as a comparative Muskogeanist I hope that this material will be of value to others working in this area.

To repeat a point made earlier, what strikes me most about this material is the semantic basis for many of the classes and subclasses, excluding wastebasket categories like class L. Most of the classes characterized by clear, positive distinctive morphological patterns turn out to consist chiefly or entirely of a rather well-defined antonymic set or the like within a semantic domain. The comparative study of Muskogean derivational verbal morphology and suppletion patterns will, if Choctaw is any indication, have to deal squarely with the interplay between semantic patterns (often subtle and uncrystallized) and morphological arrangements.

### References

- Byington, Cyrus. 1915. A Dictionary of the Choctaw Language (Bureau of American Ethnology, Bulletin 46). Washington, D. C.: Government Printing Office. (posthumous; ed. by John R. Swanton and Henry S. Halbert)
- Heath, Jeffrey. 1977. Choctaw Cases. Proceedings of the Third Annual Meeting, ed. K. Whistler et al., 204-13. Berkeley: Berkeley Linguistics Society.
- Nicklas, Thurston Dale. 1974. The Elements of Choctaw. Ann Arbor: Xerox University Microfilms. (Identical to his 1972 Ph.D. dissertation, University of Michigan)
- . 1975. Choctaw Morphophonemics. Studies in Southeastern Indian Languages, ed. James M. Crawford, 237-250. Athens: University of Georgia Press.

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