ON RECONSTRUCTING THE PROTO-MUSKOGEAN WORD FOR WATER

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In an attempt to establish broad genetic relationships among diverse North American Indian language families, the historical linguist has at times relied on rather tenuous correspondences among a small number of vocabulary items. The word 'water', for example, has been used to suggest various external relationships for Muskogean, a family of languages formerly spoken in the southeastern portion of what is now the United States. Not only have these languages been related to several isolates spoken in the same geographical area, i.e. the Gulf isolates (Haas 1951). but they have also been included in much larger genetic groupings, e.g. Hokan-Coahuiltecan (Haas 1954) and Algonquian-Gulf (Haas 1958), based in part on this one lexical item. A re-examination of the Muskogean cognates for 'water' supports a different reconstruction for Proto-Muskogean (PM), one which corresponds less favorably with its equivalents in the Gulf isolates.

The Muskogean languages² all have at least two morphemes which refer to water. In addition to the independent nouns, certain prefixes, which in most cases are etymologically related to the noun roots, are added to a verb to indicate a location below ground level, usually in the water. Using the data in (1), Mary R. Haas (1951) has reconstructed PM *<u>ak'i</u> 'water' and the two incorporated forms *<u>ak'</u> - and *<u>ok</u>-. The root *<u>ak'i</u> subsequently evolved into the variant forms $\frac{3}{2} \frac{ak}{ak}$ in Western Muskogean and *<u>oki</u> in the Eastern languages.

(1)	Ch.	oka ok-	water in the water
	·Ap.	ok-	water
	A./K.	oki	water
	К.	o:-	in the water (< $*ok-$)
	н.	ok(1)- ⁴	water
	Cr.	óy-wa ak-∼akk- /_V	water (< *ok(1)-wa) in the water

PM

 $ak^{W}i > ako \sim *oki$ water * $ak^{W}- \sim *ok-$ in the water

She claims "the variant reconstructions are necessary to explain the development of the word in the various Muskogean languages" (Haas 1951:73). The normal Muskogean sound changes would predict that PM *<u>ak'</u>1 would evolve into <u>abi</u> and <u>ab</u>- in Choctaw, Alabama/ Koasati, and Hitchiti, and <u>aki</u> and <u>ak</u>- in Creek, since the PM labio-velar *<u>k'</u> regularly becomes <u>k</u> in Creek and <u>b</u> in the other languages. The only obvious cognate of PM *<u>ak'i</u>, then, is the Creek prefix <u>ak</u>. To derive the other modern reflexes, Haas must resort not only to variant reconstructions, but also to problematical sound changes involving labialization, delabialization, and a dubious kind of metathesis. All such tactics can be avoided, however, if one reconstructs instead *<u>oka</u>, a form identical to the Choctaw root. Before attempting to justify this alternative reconstruction, it is necessary to examine Haas' argumentation and note a few difficulties in her derivations.

In Choctaw (2), the $*\underline{1}$ of PM $*\underline{ak^{W}}\underline{1}$ absorbs the rounding of the preceding $*\underline{k''}$. The consequent delabialization of $*\underline{k''}$ results in the intermediate Western form $*\underline{ako}$. The vowels then undergo metathesis to yield the modern Choctaw <u>oka</u> 'water' and the pre-fixed ok- 'in the water'.

(2) PM *ak^Wi > *ako > Ch. oka 'water', ok- 'in the water'

In the Eastern languages, PM $*ak^{\underline{W}1}$ becomes *oki (3). The assimilation of the rounding is regressive in these languages, changing the initial *a to *o with concomitant delabialization of $*k_{\underline{W}}$.

(3) PM *ak^Wi > *oki > A./K. oki, H. ok(i)-, Cr. oy-wa 'water'

The resulting *oki directly accounts for both the independent roots and the bound forms in Alabama/Koasati and Hitchiti. It also explains the Creek noun <u>óy-wa</u>, which is assumed to have developed from *<u>oki</u> plus the suffix <u>-wa</u>. The dialect forms <u>ów-wa</u> and <u>owi:-wa</u> (personal field notes) support this conclusion.

The one modern reflex which cannot be derived from the intermediate proto-form "oki is the Creek ak-. Haas claims that this prefix is a reflex of PM "ak" - and represents the "most archaic form preserved anywhere in Muskogean" (Haas 1951:74), since it retains the "a of the proto-type in initial position. In other words, Haas' reconstruction of "ak"i is motivated primarily by

this one Creek prefix.

While Haas succeeds in reconciling the initial <u>a</u> of Creek <u>ak</u>with the final <u>a</u> of Choctaw <u>oka</u> as well as explaining the final <u>i</u> in the Eastern noun roots, the twists and turns of her etymology leave some doubts about the validity of her reconstruction. First of all, there is the questionable status of the vocalic metathesis in Western Muskogean (2) which changes the intermediate <u>*ako</u> into Choctaw <u>oka</u>. Although Haas (1951:73) states that metathesis is "a not uncommon feature of the Muskogean languages," the fact remains that all other cases of Muskogean metathesis involve at least one consonant. Three types of metathesis have been noted: the first involves the transposition of two adjacent consonants (4a); the second affects the position of two consonants separated by a vowel (4b); the third permutes a contiguous consonant and vowel (4c).

(4) a. $C_1 C_2 > C_2 C_1$ (Haas 1945) Ch. colkan, Cr. acoklan spider b. $C_1VC_2 > C_2VC_1$ (Haas 1945) Cr. haloniski vs. hanoliski devil's shoestring (herb) Ch., K., patha, Cr. tapk-1: wide CV > VCc. <u>Creek</u> (personal field notes)⁵ $\frac{1}{I}$ am tall. \overline{I} am happy. ca-ma:h-1:-s ac-a:fack-i:-s ca-hihc-i-s He saw me. ac-akk-ay-s It bit me. PM *či 'causative' > Ch. -ci, A. -ci, M. -:c(i), Cr. -ic (Booker 1980)

A second complication concerns the fact that the proposed assimilation appears to be sporadic within a given language. It is progressive in the Choctaw noun root, i.e. $\frac{*ak''}{2} > \frac{*ako}{2k-6}$ (>Ch. <u>oka</u>), but regressive in the prefix, i.e. $\frac{*ak''}{2} > \frac{*ak-6}{2k-6}$ In Creek, the labialization is assimilated in the independent noun, i.e. $\frac{*ak''}{2} > \frac{*ak}{2k-1}$, but not in the prefix, i.e. $\frac{*ak''}{2} > \frac{*ak}{2k-2}$. Also,

there is some question as to the status of this assimilation. Is it a common feature in Muskogean or is it a highly restricted phenomenon?

The crucial problem with Haas' reconstruction of ${}^{*}ak^{W}_{1}$ is the fact that it cannot accommodate the proto-form ${}^{*}oka$, which additional data show to be reconstructible in the Eastern branch of the family. In llitchiti/Mikasuki, for example, the prefix which refers to a location in the water or below ground level is ka:-.

(5) Hitchiti (Swanton 1921-22)

<u>ka</u>-pi:lba-li-s

I throw into water (or in a hollow). (cf. pi:łba-li-s 'I throw away.')

He was sitting in (water)...

<u>ka-coko-li-n</u>

Mikasuki

ka:-folo:k-om

He's in the water. (cf. folo:k-om 'He's around.') (personal field notes)

(cf. coko-li-n 'He sat there...')

lal-ot ka:-yoli-:c-om

ka:-ayy-om

notes) m There are fish in there. (cf.

yoli-:c-om 'They are around.') (personal field notes)

> He went about in the water. (West 1974)

However, Maria Derrick de Mescua (personal communication) finds an <u>o</u>- prefix in Mikasuki: <u>o-ca:1-om</u> 'stand in' (probably a contraction of *<u>o-haca:1-om</u>; cf. <u>haca;1-om</u> 'He stands.'). Since Alabama/Koasati contracts <u>ok</u>- to <u>oi-</u>,' it would not be unexpected to discover instances of <u>ok</u>- in Mikasuki as well. Although my Mikasuki data is limited, I have noted an initial <u>ok</u> in some words with an implied reference to water (6a). Furthermore, Gatschet's Hitchiti lexicon (1888) contains the suspicious entries in (6b).

(6) a. <u>Mikasuki</u> (personal field notes)

oko:ba-ci It's going to rain.

oksa:1-ik-sa: Wash it!

 okł-i
 sofkee (cf. Ch. okłacii:ko 'muddy')

 b.
 <u>Hitchiti</u> (Gatschet 1888)

 oká:s-i
 spring of water

 <u>ók</u>b-i
 hole, aperture, orifice

 okófk-i
 muddy

The Hitchiti/Mikasuki branch of the family presents an interesting situation, one in which two distinct prefixes, i.e. ok- and <u>ka</u>:-, are found. The natural assumption is that both prefixes are derived from an earlier *<u>oka</u>, a hypothesis supported by the fact that David West (1974) lists the locative morpheme as (o)ka:-, with an initial o.⁹

Although Haas (1951) mentions only two Creek morphemes which refer to water, i.e. the independent noun $\underline{oy-wa}$ and the prefix $\underline{ak} - \sim \underline{akk} - / V$, the Creek dictionary (Loughridge and Hodge 1890) has a number of entries beginning with \underline{ok} which refer to water or to some other liquid. Some of these are readily segmentable (7a), while others are not (7b).

(7)	a.	<u>ok</u> -ni:ha	gravy, sop (cf. ni:ha 'fat, grease		
		ok-om-ita	to be soft, limp (cf. óm-ita 'to be')		
		<u>ok</u> -ol-a	the sap (cf. ol-ita 'to come')		
	b.	<u>ok</u> kos-ita	to wash		
		<u>ok</u> lawa:hi:	slime, pit, mudhole		
		<u>ok</u> taha	sand (cf. Ch. tah-a 'to end, finish')		

Even the earliest Creek grammar (Buckner 1860:73) lists <u>ok</u>as a prefix meaning 'down or into'.

The Creek situation closely approximates the one noted in Hitchiti/Mikasuki. While <u>ak</u>- (corresponding to the use of Hitchiti/Mikasuki <u>ka</u>:-) is the productive prefix, instances of <u>ok</u>-, the same prefix found in Alabama/Koasati and Choctaw, are present as well. Moreover, the two Hitchiti/Mikasuki affixes, <u>ka</u>:- and <u>ok</u>-, suggest an earlier $\frac{*}{0}$ ka, a form identical to the Choctaw independent noun root. Thus, there is evidence for the recon-

struction of a proto-form *<u>oka</u> 'water' in both the Western and Eastern branches of Muskogean.

If one assumes the obvious, that the PM word for 'water' should be reconstructed as $\frac{*}{0ka}$, what problems, if any, does this create in the derivation of the modern reflexes? As for the independent nouns, PM $\frac{*}{0ka}$ survives unchanged as Choctaw <u>oka</u>, but the Eastern noun roots are derived from an earlier $\frac{*}{0ki}$, with a final $\frac{*}{1}$. It is not uncommon to find lack of agreement between the final vowels of Eastern and Western noun cognates. The Western 1, Eastern <u>o</u> correspondence was discovered quite early (Haas 1941: 45).

(8) PM * $\Theta a \Theta \underline{1/o}$ > Ch. nan<u>i</u>; K., Cr. lalo fish

PM *pakti/o > Ch. pakti; K. pakto mushroom

In a later article, Haas (1947:135) adds an $\frac{1}{a}$ vowel alternation to the PM phonological inventory.

(9) PM *ah<u>i/a</u> > Ch. ah<u>i</u>; A. ah<u>a</u>, Cr. ah<u>a</u> potato
 PM *sawi/a > Ch. šawi; A. sawa raccoon

While a final $\frac{*a/i}{a}$ alternation is not quite as common, it is by no means non-existent.

(10) PM *hahča/i > Ch. hacca; M. hahc-i, Cr. hacci river

PM *hina/i > Ch. hina; A. hini, Cr. nini road

Since this phenomenon is so restricted in its distribution, i.e., it affects only final vowels of noun roots, it is represented as an alternation rather than a separate sound correspondence set (Haas 1947:135).

If the proto-form is taken to be $\frac{*}{0}$ then the extant prefixes in Choctaw, Alabama/Koasati, and Hitchiti/Mikasuki can be easily explained. Depending on the dialect, either the initial $\frac{*}{0}$ or the final $\frac{*}{a}$ was dropped. The deletion of the initial vowel accounts for Hitchiti/Mikasuki <u>ka</u>:-; final vowel loss results in the extant <u>ok</u>- in Choctaw, Alabama/Koasati, and Creek. The only aberrant prefix, then, is Creek <u>ak</u>-9 for which there are two plausible explanations.

The productive Creek prefix could be the metathesized form

of Hitchiti/Mikasuki <u>ka</u>:-. As noted in (^{4}c), CV ~ VC motathesis is not unheard of in Creek either historically or synchronically.

Appeal to metathesis is avoided, however, if \underline{ak} - can be related to a proto-form other than $\underline{*_{0ka}}$ 'water'. The required evidence is provided by Choctaw \underline{akka} 'down, below'. Although \underline{akka} has been analyzed as an independent Choctaw root, it often combines with verbs to add locative reference in much the same way that \underline{ok} - specifies a watery location. The examples in (11) are taken from Byington (1915).

(11)	akka-boli	to lay down (cf. boli 'to lay')		
	akka-nowa	to walk, travel on foot (cf. nowa 'to walk')		
	<u>akka</u> -latab-li	to pour, spill, scatter (cf. l atab-li 'to pour, spill')		
	akka-ona	to go down; to be abused (cf. ona 'to go')		

Creek <u>ak</u>- could well be a contraction of an earlier $\frac{*akka}{a}$ meaning 'down'. Such an explanation would account for the fact that the Creek prefix can be interpreted either as 'in the water' or 'down in/under'. The dual meanings result from the semantic contamination of two formerly distinct proto-forms.¹⁰

Were it not for the fact that West (1974) lists the Mikasuki prefix as ($_0$)ka:- with an initial $_0$, it might be suggested that the Hitchiti/Mikasuki bound form is also derived from $*_{akka}$. Where Creek preserves the initial VC of the root, Hitchiti/Mikasuki retains the final CV. This hypothesis would not substantially affect the proposed PM reconstruction for 'water' since it would require only the replacement of the final vowel of $*_{oka}$ with the *a/i vowel alternation illustrated in (10).

To recapitulate, the reconstruction $\frac{*}{2}$ is preferable to $\frac{*}{2}$ because it eliminates the problems of an unattested type of metathesis and the seemingly sporadic nature of the assimilation within an individual language. It also allows for a reconstructible $\frac{*}{2}$ oka in the Eastern languages. It appears rather unlikely that the closely related languages of the Muskogean family should have evolved in such a way that this one basic lexical item 'water' now shows so little resemblance to the proto-form. The two difficulties associated with the *oka reconstruction present

no real problem. The different root final vowels in the Eastern and Western independent nouns are characteristic of other Muskogean noun cognates, and the aberrant Creek prefix <u>ak</u>- is accounted for either by metathesis or by the more likely hypothesis that it is derived from a different Proto-Muskogean source, namely, the root <u>*akka</u> 'down'.

When "oka is compared to its semantic equivalents in the Gulf isolates as listed in Haas (1951:74), the correspondences are suggestive, but hardly impressive.

(12)	Natchez	kuN	water			
	Tunica	wiši	water			
	Chitimacha	ku2, ku:n-,	ak-, ni-		water	
	Atakapa	(Western Di	vision)	ak	juice,	sap
		(Eastern Di	vision)	ak akon(st)	water river	

These items, taken with PM $\frac{*ak^{W}i}{water'}$, permit Haas to reconstruct Proto-Gulf $\frac{*ak'in}{in}$, $\frac{*ak'ini}{ak''ini}$ 'water'. PM $\frac{*oka}{oka}$ would prove more difficult to reconcile with these purported cognates.

It is widely accepted that the Southeast, particularly the Gulf Coast area, was a region of great linguistic diversity in late prehistoric times (e.g. Haas 1979:299). The superficial similarity among the words for 'water' in the languages spoken in the area could well be attributed to contact rather than to genetic relationship. Until such tentative correspondences are substantiated by persuasive sets of recurrent sound correspondences,11 the Gulf-Muskogean relationship must remain merely an interesting hypothesis.

NOTES

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²The Muskogean family is divided into a Western and Eastern branch, Choctaw/Chickasaw being the sole representative of the Western Division with the other languages comprising the Eastern division. Apalachee and Hitchiti are now extinct.

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Proto-Muskogean

Western

Eastern

Choctaw/Chickasaw Alabama/Koasati Hitchiti/Mikasuki Creek/Scminole Apalachee

³The language abbreviations used in the data are: Ch. = Choctaw, Ap. = Apalachee, A. = Alabama, K. = Koasati, H. = Hitchiti, M. = Mikasuki, Cr. = Creek.

⁴The final -<u>i</u> which appears in the citation form of all Hitchiti/Mikasuki nouns is a separate morpheme. Haas (1951:74) assumes that the root final Hitchiti vowel is an underlying <u>i</u> since it surfaces as such in compounds.

⁵The exact distribution of the Creek allomorphs is unclear. The VC allomorph seems to be restricted to the first person singular patient prefix when it occurs before the vowel <u>a</u>. Mikasuki is reported to have CV \sim VC allomorphs for all the patient prefixes (West 1974); the CV allomorph appears before a consonant, while the VC alternant precedes vowels.

⁶The discrepancy could, of course, be justified if the assimilation could be shown to have occurred at different historical stages, but such an attempt would most certainly involve some complicated chronology. Or, it might be hypothesized that the modern Choctaw prefix \underline{ok} - is indeed derived from the intermediate $\underline{*oka}$, implying that the older prefix $\underline{*ak}^{W}$ - was replaced by the assimilated form. To suggest otherwise would be to conclude that the incorporation of the noun as a prefix took place after the breakup of Proto-Muskogean and developed independently in each branch of the family.

⁷Swanton (1922-23) finds <u>o</u>-, <u>oy</u>-, and <u>ok</u>- in Alabama. <u>o</u>-maci He threw it into the water. (cf. maci 'to <u>oy</u>-i:li-t to drown (cf. i:li 'to die') <u>ok</u>-pala-toha It was on top of the water. (cf. palkici 'high')

The apparent distribution is <u>oy</u>- before a vowel, <u>o</u>- preceding a resonant, and <u>ok</u>- when an obstruent follows. Historically, <u>ok</u>-is, of course, the most archaic form.

 8 I assume the parenthesis around the initial <u>o</u> means that it can be optionally deleted.

⁹Recall that this is precisely the reflex which Haas (1951) claims is the most archaic.

¹⁰Internal reconstruction on the allomorphs of the Creek prefix, i.e. <u>ak-~ akk-</u>, would suggest that the form with the geminate is the older, thereby providing further evidence of relationship to an earlier *<u>akka</u>. However, gemination is a widespread phenomenon affecting several Creek morphemes, e.g. <u>oh-~ ohh-</u>, <u>tak-~ takk-</u>, etc. One might suspect that Creek has adopted gemination as a general strategy to deal with following vowels in much the same way as Choctaw uses epenthesis. Nevertheless, one morpheme with a geminate allomorph can be shown to have developed from an earlier consonant cluster. The present Creek instrumental <u>is-~ iss-</u> is derived from an intermediate *<u>ist-</u> (cf. A. <u>is-</u>/ C ~ <u>ist-</u>/V). The ultimate source of the morpheme is PM *<u>isi-</u>t, the verb 'take' (Booker 1980). The alternation of <u>ak-</u> and <u>akk-</u> may indeed provide evidence for an earlier consonant cluster, <u>i.e.</u> the one found in *<u>akka</u>.

¹¹Ives Goddard (1975:255) has suggested that even stricter criteria should be applied to word-comparisons among languages of questionable genetic relationship than are used for comparison of languages known to be related, since borrowings also exhibit regular phonological correspondences. He concludes that the strongest evidence of genetic relationship is grammatical correspondences, which, when present, make word-comparisons superfluous.

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