Baxoje-Jiwere Grammar Sketch

by Jill D. Greer

Introduction.

Baxoje-Jiwere belongs to the Mississippi Valley branch of the Siouan language family, and is the native language of the Plains/Prairie tribes known today as the Otoe-Missouria and Iowa (Goddard 1996:3,8). While their original homelands were in northern Missouri, southeastern Nebraska, and the state of Iowa, during the late 19th century, the two tribes relocated to a north-central portion of Indian Territory in an attempt to avoid Euro-Americans' increasing encroachment on their reservations, and the assimilation policies of the BIA. One segment of the Iowa chose to stay on a portion of their original reservation near the Missouri River in northeastern Kansas (Wedel 2001, Schweitzer 2001).

The following sketch is based upon fieldwork in central Oklahoma conducted mainly between 1987 and 1996 by the author while a graduate student and research assistant within a larger team, led by Dr. Louanna Furbee, and including Lori A. Stanley¹. The research was conducted with the permission of the 1987 Otoe-Missouria Tribal Council, among members of both the Otoe-Missouria and the Ioway Tribes living in an approximately 100 mile radius of Red Rock, OK. It was funded initially by a University of Missouri Faculty Development Grant, then generously supported by the National Science Foundation Documenting Endangered Languages Program, and the American Philosophical Society's Phillips Fund.

The native language spoken by these two tribes has frequently been called **Chiwere** in the existing literature (Whitman 1947, Marsh n.d., Wedel 2001, Schweitzer 2001). However, because this spelling makes it more likely for English speakers to mispronounce the first sound of the Otoe's self-name, the author prefers to use /j/ instead, because the voiced allophone is far less likely to be aspirated by language learners with English as their first language. GoodTracks also follows this orthographic shift.

In addition to the two contemporary communities centered in Red Rock and Perkins, Oklahoma respectively, there is also a Northern Ioway Nation located on their original Reserve in White Cloud, Kansas. Sadly, there are no L1 speakers of Baxoje-Jiwere, but a few individuals may be semi-speakers. Language renewal efforts are underway in each of the small communities, so there is hope that while yet sleeping, the ancestral tongue may still be awakened.

Many factors led to this particular effort to document Jiwere-Baxoje, but the original impetus was the collegial friendship between two University of Chicago linguists (both students of Eric Hamp), the late Robert L. Rankin and N. Louanna Furbee. These two scholars both 'landed' jobs in the Midwest, the former at KU in Lawrence, Kansas, and the latter just a few hours away at Mizzou. They remained in touch throughout the 1970s and 80s. As Bob adopted Siouan languages as his primary research focus, he saw the urgent need for more linguists. He would tease Louanna that since she was employed by the primary research university in the state that was named for this highly endangered Siouan language, it was her duty to start doing research on it.

His good-natured urging came to fruition in 1987, when a critical mass of graduate students interested in language study surrounded Louanna, and she offered a special seminar on Siouan languages. About nine eager students enrolled in the course, the author included. Bob came to Mizzou to give a beginning workshop to Louanna's class, with stacks of handouts full of concrete suggestions such as questions to ask, and topics to cover in the field.

¹ Stanley's 1990 Ph.D. dissertation includes a life history of Dr. Truman W. Dailey, one of the primary speakers and contacts within the Otoe-Missouria Tribe, available at the University of Missouri-Columbia Library.

His help did not end there, but continued throughout the years, giving feedback on papers, guiding our elicitation of forms for the Comparative Siouan Dictionary, reading much earlier versions of this draft, and countless other generous acts on his part. Thus, without the initial friendship between Robert L. Rankin and N. Louanna Furbee², there would have been no Missouri Jiwere Language Project grammar. This work is dedicated to them both. All errors are of course my own.

³I. Sound System (Phonology)

- 1) Stops. There are three sets of stops distinguished by these features:
 - a. aspiration p^h , t^h , $k^h \setminus$
 - **b.** glottalization p', t', k', k'
- c. plain (neither aspirated nor glottalized) \(\begin{align*} \be
- 2) Affricates. As with the stop series, there are three contrasts: plain affricates $[\check{c}/j]$, aspirated $[\check{c}^h]$, and glottalized $[\check{c}]$.
- 3) Fricatives. The plain series has a larger set of sounds than the glottalized versions.
 - a) Plain: $\backslash \Theta \ \delta \ s \ s \ x \ h \backslash$ b) Glottalized: $\backslash \Theta' \ s' \ x' \ \backslash$
- **4) Nasals:** The four nasal consonants include $[m n \eta \tilde{n}]$. The latter two phonemes \tilde{n} and \tilde{n} were significant as indices of tribal identity. Baxoje speakers favored $[\tilde{n}]$ in words where Jiwere speakers typically said $[\eta]$, such as 'horse': $[\tilde{sune}]$ in Ioway vs. [sune] in Jiwere. However, there are clear cases

² The essential role of Louanna Furbee as major professor, grant writer, P.I., fieldworker, editor, friend, and all around pillar of strength cannot be overemphasized. The MCLP original materials are archived at Luther College, Decorah, Iowa.

³ Various sources of funding have supported this work over the years, from the initial grants which made the author's graduate work possible as research assistant to Dr. N. Louanna Furbee [NSF"Documenting the Chiwere Language" BNS 88-18398 and #902-1337], APS "Chiwere Oral Traditions" [Jill D. Greer, P.I.], as well as linguistic consulting work with Jimm GoodTracks, P.I. for his dictionary project [NSF "Ioway-Otoe-Missouria Dictionary Project" BNS # 0553585].

⁴ That example also illustrates another common pronunciation difference between the distinct versions of this language, namely the plain [s] at the beginning of words for Otoe, where Ioway produces [s] instead.

of \tilde{n} in both dialects, such as the shared indefinite plural [- \tilde{n} e]. Word-initial \tilde{n} often palatalized to \tilde{n} before front high vowels \tilde{n} , \tilde{n} .

- **5) Liquids**. There has been some difficulty defining and representing the liquid sound in Baxoje-Jiwere. Phonetically, it has been described as resembling an unreleased 'flap' [d] like the medial sound in 'latter', the plain [r] found in Spanish, and a variation upon the [l] sound (Whitman 1947:235); Rankin also included [ð, n, y] as possible phonetic reflexes (Wedel 2001:346, Schweitzer 2001:447). For orthographic consistency, the symbol \(\nabla\)\(\nabla\) will be used.
- 6) Glides include \w\ and \y\.

B. Vowels

- 1) Oral vs. Nasal. There are both oral and nasal vowels in Baxoje-Jiwere. They include a i o u e and a i u. Frequently $a \$ would be realized as a nasalized schwa.
- 2) Vowel Allophones as Gender Indexicals. Phonetic vowel quality sometimes differs significantly in particular words used by female speakers especially; in those contexts, there is also an $[\varepsilon]$ and sometimes an $[\varpi]$. These variations are limited to a particular small domain of the overall vocabulary of the language, and serve a social-indexical function. [Cf. section E.2. on sentence final particles and interjections.]
- **3) Vowel length.** Robert Rankin transcribed long vowels from a recording of a key word list by a Jiwere speaker, but this author has been unable to perceive it on the same recording. No minimal pairs clearly establish phonemic significance to vowel length between etymologically unrelated words. Thus, at present there is scant evidence to support the idea of <u>phonemic</u> vowel length, although the revised Plains volume of the Handbook of North American Indians presents a list of long and short vowels, based on Rankin's analysis (Wedel 1996:432; Schweitzer 1996:447).

However, there are <u>very</u> prolonged vowels that occur when morphological boundaries have been 'blurred' during amalgamation. The greatly extended length preserves the mora from the contracted morpheme, and sometimes affects the stress pattern as well. It seems to be primarily a morphological rather than phonological process.

C. Stress /Accent Stress is both volume and pitch-based, with phonemic value in Baxoje-Jiwere, as in ráwe 'beaver' and rawé 'to count' (Good Tracks n.d.), or gísa 'to laugh at another (v.)' vs. gísá 'a knot (n.)' (Dorsey n.d.) When a root word with two syllables has additional affixes attached to it, the basic stress (and pitch) pattern can change, typically with primary stress shifting to the left in the case of

⁵ Amelia Susman's 1943 work on Hoçak (Winnebago) mentioned the same tendency in that very closely related Siouan language.

⁶ John Boyle's student presented a brief paper on this topic based on spectrographic analysis of MCLP recordings, but that paper has not been published.

prefixation, and addition of a secondary stress in the case of infixes or suffixes. An adequate prediction of stress patterns is beyond the scope of this grammar.⁷

<u>D. Syllable Structure</u> There is a strong tendency to end all syllables with a vowel⁸, thus (V) and (CV) are very frequent syllable shapes. Initial consonant clusters are allowed (CCV), but examples of CCCV have not been discovered, nor have (VCC). The following consonant clusters may begin a syllable:

```
a. stop + liquid:
                                      bra-'separated, spread in layers, sliced, flat'
                                      gru 'to curse'
                       gr-
                                      phyubra 'mint, mediciane tea, Indian perfume herb'
b. stop + glide:
                                      gwák'y 'to wipe off, scrape off, dry one's self (body)
c. fricative + stop:
                                      sdq 'to stop, cease, leave off'
                                      sga 'to be white, shiny'
                       šg-
                                      šguñi 'no; not; (does) not'
                                      \theta ga 'to be white' (old form)
                       \theta g-
                                      hga 'to be white' (Ioway)
                       hg-
d. fricative + liquid: sr-
                                      sroge 'to remove object from inside hole'
                                      Orije 'easily, softly, slowly'
                                      xra 'eagle'
                                      swahi 'to soften [flesh, leather, stale bread]
e. fricative + glide: sw-
                                      šwara 'soft (buckskin, flesh, cloth)'
                                      sni 'cold' (L.W. Robinson ms.)
f. fricative + nasal: sn-
                                      θni 'cold' (possibly archaic; Dorsey in Good Tracks n.d.)
                      θn-
```

E. Longer Sound Patterns / Prosody

For length constraint, phrase level prosody is included under the later section labeled Syntax.

F. Phonological Processes

1) Elision. One of the most common changes, elision is characteristic of rapid speech, such as the final vowels mentioned in Footnote 8 which frequently are deleted.

⁷ Cf. discussions of Dorsey's Law in Miner (1979) and Hale and White Eagle (1980).

⁸The few exceptions to the preference for vowel-final syllables would be represented as a CVC structure. However, such instances <u>only</u> appear in informal speech and seem to be elision. During quick speech, the final unstressed vowel disappears, yet speakers give the full "precise" pronunciation with final vowel if asked to repeat or clarify what they said. This seems to have been a major aspect of the historical sound changes separating Hoçak from Jiwere.

- **2) Vowel Harmony & Nasal Spread.** The nasal quality of a nasal vowel may "spread" regressively (from right to left) to nearby vowels. (Hoçak scholars have documented such 'nasality spread' not just to directly adjacent vowels, but also across the consonants /h/ and /w/ to the closest non-adjacent vowel (Helmbrecht 2010:7-8).
- 3) Vowel Ablaut. This well-known phenomenon within Siouan languages involves /a/ and /e/ which may alternate in a variety of settings, especially before particular verbs or certain suffixes, suggesting it is morphologically conditioned. Motion verbs are one set of verbs that trigger ablaut. Some verbs ending in -e such as ugwe 'to enter' and re 'to go' will also ablaut to final -a before -wi 'definite plural' as does the indefinite plural $\tilde{n}e > na$ before the definite -wi also . Conversely, verbal prefixes with final \a\will ablaut to \e\begin{align*} \ellow \begin{align*} \ellow \ello

```
Example A
               č<sup>h</sup>úgwá
                             -wi
               'House-enter (DEF.PL.) Imperative (male speaker).' [Marsh 'Giants' Bk2 LN49]
               [from \check{c}^h i 'house' + ugwe 'to enter + = wi 'definite plural' + re 'command (by man)']
               'Come in the house, you-all.'
Example B
               ...iwálà
                              <u>-wi</u>
               ...yonder go (DEF.PL) (Injunction). [Marsh The Twins LN65]
       [from i-'there'+ wa-'directional' + re 'to go'+ -wi 'definite pl.'+ ho 'Hortative' (male speaker)]
               'Let's go over there!'
                       grahi k<sup>h</sup>i.
Example C he-
               1p.Agt-love Declarative (female speaker)
              [ha-1p.Agt. + grahi 'love' khi Declarative (female speaker)]
               'I love him.'
```

II. Words / Morphology

A. Nouns. Many nouns can function fully as verbs, complete with the extensive system of prefixes and suffixes described later in the verbal template. Siouan languages are classified as strongly verb oriented, with very few prefixes or suffixes limited only to nouns. Certain verbal prefixes transform that state/action into something more noun-like, as in the following example, wherein the verb 'to eat' becomes 'something to eat upon': wairuje 'table' < wa- 'indefinite object' + a-'upon' + ruje 'eat'. Without the locative a- 'upon', the first vowel is not lengthened, and the stress remains on the second syllable: warúje 'something to eat, food.' Because there is a Ø 3rd person pronominal prefix, 'food' sounds identical to the 3rd person singular sentence 'He ate (something).'

1) Possessing: Inalienable vs. Alienable

⁹Helmbrecht 2002 gives an extended discussion of ways to distinguish between nouns and verbs in Hoçąk (Winnebago).

Native American languages often distinguish people (and things) extremely close to a person's identity and self (**inalienable**) versus other entities that separate more easily (**alienable**). The former category includes kinship terms and in Baxoje-Jiwere, the formal social ties of friendship and parenthood. The prefixes meaning **inalienable possession** are bound morpheme similar in shape to 1st and 2nd singular Patient person pronouns, but they differ in having an expressed 3rd person form (which is sometimes dropped in fast speech). (See Table 2 for personal pronominal prefixes.)

Kin term ¹¹	Inalienable Possessive Prefix			
	1st person sg.	2nd person sg.	3rd person sg.	
Father	<u>hj</u> -ka ' <u>my</u> Fa/FaBr' <u>hj</u> -daje(old) " "	<u>n</u> aje < <u>ri+</u> aje ' <u>vour</u> father'	<i>qje</i> < <u>i</u> - <i>qje</i> ' <u>his/he</u> r father'	
Mother	hi-hu* archaic " "	di-hu /ri-hu 'your Mo/MoZ'	<u>i-hy</u> 'his/her Mo/MoZ'	
Man's elder brother Woman's brother Grandfather	hi-yina 'my elder bro.' hi-zido 'my bro.(fem.) hi-l'uga 'my GFa'	ri-yina 'your elder bro.' ri-čido 'your (fem.) bro.' ri-t'uga 'your GFa'	i-yina 'his elder bro. i-čido 'her brother' i-i-huga 'his/her GFa'	

2) Address Form -o 'speaking to this one'/Address form

While *hit^hára* 'my friend' is the unmarked referential form, a person would switch to *hit t^háro* 'My friend (address form)' while speaking directly to the special friend (formally established as cultural role). ¹² Kin terms also take the same address morpheme when speaking directly <u>to</u> that person. The identical final vowel to [o] substitution happens to line-final words in songs as well (Davidson 1997). There is no vowel variation by gender for this morpheme.

3) Names. A proper name uniquely identifies someone, for both address and referential purposes. It also may encode key identity features (gender, clan membership, personal attributes/characteristics, or significant events relating to that person). Both dogs and horses were named also (Cf. Whitman 1936 for traditional Otoe-Missouria dog names).

¹⁰While body parts may be inalienably possessed in other languages, it is not the case in Jiwere-Baxoje. Frozen remnants of such a system are evidenced if one interprets the initial *i*- in the following body parts as representing the third person *i*- inalienable prefix found in kin terms, and other life-long social relationships like formal friendship and parenthood ['(his/her) child' *ičičipe* (O.), *ičičipe* (I.)]: *ihdóge* 'elbow', *iréje* 'shoulder', *isdq* 'eye'.

¹¹See Good Tracks dictionary for complete inventory.

¹²The friendship would have been initiated by parents of two children of the same sex, formalized with a ceremonial feast, and thereafter a lifelong bond of reciprocity and obligation existed between the two, to be recognized by this word -thara 'friend'. The ultimate duty came at the death of one friend, when the other would sit with the deceased's body for the duration of the wake, traditionally 4 days before burial would take place (Whitman 1936, Davidson 1997).

¹³The Reverend James Owen Dorsey collected names, their meanings, and clan identification during his brief fieldwork in the late 19th century. The Smithsonian Institution has his field notes, truly a rich resource for individuals interested in discovering more about names, now available in their digital archive.

Gender. Some names were identical for both genders within the same clan, but often a woman's form differed by the addition of $-m_{\tilde{i}}$ 'feminine' suffix. A nickname could be coined to tease someone, as when one elder told another they should call the author $Tosk\acute{e}-m_{\tilde{i}}$ 'Quick/Speedy-Woman,' because I had done something so quickly that it surprised them. While names for men were not specially marked, there was a masculine morpheme -do that occurs in words for male noun referents such as 'boy', 'bucks,' and 'bulls'.

Gender affixes: -do 'MASC'; -mj 'FEM'

```
    a) ič<sup>h</sup>idójñe 'boy-child'
    b) ič<sup>h</sup>imin(e) 'girl-child'
    c) t<sup>h</sup>ado 'buck, male deer'
    d) č<sup>h</sup>édo 'bull buffalo'
    i 'at/around' + č<sup>h</sup>i 'house' + -do 'male' + -ine small/DIM' [Otoe]
    c' 'a 'deer<sup>14</sup> + -do 'male'
    č 'hé 'buffalo, bison' + -do 'male'
```

<u>Diminutive Suffix</u> - *ine*, -*sine [O-M]; iñe*, siñe 'small /DIM [Ioway]'. There are also cases in Ioway tales where the protagonist's name is created from a verb + **Diminutive Suffix**, as in [V + DIM > Name]:

```
a) Bé -ñe -iŋe

Throw out-INDEF.PL-Little [One] 'The Outcast'

<'Little One(They)Threw Away' [Marsh 'The Outcast' Ln. 141]

b) Hịnú -šịŋe číla

MyFirstSon-small/DIM dear
'My dear Little-Son' [Marsh 'The Wanderer' Ln. 200]
```

- **4) Number.** Nouns do not inflect for plural or case; numerals may follow the noun to give an exact number, or verbal suffixes reveal plural information instead. Numbers may act as stative verbs, with patient inflection, as also happens in other Siouan languages such as Quapaw (Rankin 2008:481) and Lakota (Ullrich 2008:708).
- (a) <u>Numerals</u>. One through ten are the basics from which other numbers are expressed, ¹⁵ eleven through nineteen are formed using the formula 'X over ten' {lit. Ten-over-one'}: *grebrą agri (i)yąkhi*, ten over two, etc. Multiples of ten become 'two tens {lit. ten (be) two} *grebrą núwe*, two tens over one, up to ninety-nine. An interesting example of word coinage follows the large quantity 'One thousand'; it is expressed by the word *kóge* 'box or trunk', because shipments of money (presumably annuity payments from Washington, D.C.) arrived in packing boxes, each of which held one thousand dollars.

```
(b) Ordinal Numbers. Baxoje-Jiwere may use either a prefix i- or a suffix -ya.

(i) i- 'ordinal marker': (Marsh n.d. 'The Giant' Book 2)

LN 25 walúxawe i taha dahá?e [< i- 'ordinal marker'+tatha, 'five']

'Bundle fifth it is standing-that one'
```

¹⁴With white-tailed deer, a buck is clearly the "marked form" if the visible feature of antlers were the primary basis for assigning group membership.

¹⁵ 'Nine' sak^he contains a root shared with the Dhegiha languages as well as several Algonquian languages in the Great Lakes region, according to Rankin (2008:481).

```
LN 30 walúxawe išágwe dahá?e [< i- 'ordinal marker'+ šágwe 'six']

'Bundle sixth it is standing-that one'

LN 34 walúxawe išáhma, dahá?e [< i- 'ordinal marker' + s'ahma, 'seven']

'Bundle seventh it is standing-that one'

(ii) (i- 'ordinal marker') + -ya 'indefinite article' [Marsh 'The Wanderer']

LN 34 dáñíya utha?iwagi ašku,

'A third time he makes them appear to him, it seems.'

LN 35 hetále idóyadahági síge alé gú?wašku, [i=do{we}=ya, dahági]

'Then-it-is the fourth time-it is again it-is this-he do it-it seems.'
```

5) Compound Nouns¹⁶

Ullrich (2008:738) and Gracyzk 1991.

Jiwere-Baxoje compound nouns often have the modifying word precede the base noun, while other times the modifier(s) follow it.

```
'village' < \check{c}^h i 'house' + -na
a) č<sup>h</sup>ina
b) \check{c}^hina wanaxi
                        'cemetery' < č<sup>h</sup>ina 'village' + wanaxi 'spirit, ghost'
c) walúšge č<sup>h</sup>ina
                        'giant(s) village'
                                                        [Marsh n.d. 'The Wanderer' Ln 100]
d) hidúne-nàwu?šu
                        'mouse-paths indeed'
                                                        [Marsh n.d. The Wanderer' Ln 67]
e) wanaxi waxoñit<sup>h</sup>a 'spirit/ghost + be holy/sacred' [Davidson 1997].
f) máya uhàwe
                                    < 'land-(in) be bright [Davidson 1997; Good Tracks n.d.]
g) máya wàtahe
                        'Wanderer' < máya'land'+wa-'directional'+dahe 'be standing'
h) wánegíhi
                       'Chief/Headman'<waye'man'+ gi-'benefactive/Dat' +-hi 'CAUS.'
i) wa?kwás'ose
                        'warrior/veteran/soldier' < wane 'man'+was' ose 'brave' 17
j) wa?šige
                        'person' < wane 'man' + šige 'again'+/or -ge 'EMPH'
k) wa?ší k'uč'e
                        'man-hunter' < wq?šige 'person' + k'uč'e 'to kill'
I) t^h \hat{a} wa \theta lu
                         'deer-to roast'
                                                          [Marsh n.d. 'The Wanderer' Ln. 175]
                         '(menstrual) period' [literally 'be alone-house']
m) iśta č<sup>h</sup>i
```

These words can also include names, i.e. makha ruje 'medicine eaters' denoting those who participate in the religious traditions surrounding the sacred sacrament peyote.

16 In other Siouan languages, e.g. Lakota and Crow, there can be a greater degree of **noun incorporation**. See

an 7/6/2010 5:29 PM

Formatted: Font:12 pt

Jan 7/6/2010 5:29 PM

Formatted: Font:12 pt

Jan 7/6/2010 5:29 PM

Formatted: Font:12 pt

Jan 7/6/2010 5:26 PM

Formatted: Indent: First line: 0", Border:Bottom: (No border)

Jan 7/6/2010 5:29 PM

Formatted: Font:12 pt Jan 7/6/2010 5:29 PM

Formatted: Font:12 pt

 $^{^{17}}$ Whitman (1947) noted glottal stop marking morpheme juncture. It seems especially prevalent when the deleted sounds/syllable involves $/\eta$ /.

6) Culture Contact and Word Coinage

There was strong resistance to borrowing from European languages throughout Plains tribes in general¹⁸, so it is not surprising that Jiwere-Baxoje speakers also chose to coin new words, or extend the meaning of existing words. For instance, the Ioways chose the part of a bird that powers its motion to name that revolutionary object, wheel: ahu 'wing' > wheel (wagon/ car).¹⁹

- a. Wagon = námañi < na 'wood' + mañi 'moving/walking'
- **b.** Train = námañi dàk'o < námañi 'wagon' + dak'o 'thunder/fire'
- c. Photographs/pictures = ije wagaxe < ije 'face' + wagaxe 'writing
- d. Saturday = háwe uk^hiθre 'day half' < háwe'day' + uk^hiθre'half, be split into two' [because the Tribal Agency was open from morning to noon on Saturdays]
- e. Piano = nayawe 'wood sings' < na 'wood' + yawe 'to sing'

The existing word for 'metal' maŏe originally referred to copper, available from the Great Lakes region in particular, and found throughout late Woodland through Mississippian periods in the Mississippi River valley and tributaries. European silver and gold coins were called "white/light" or "shiny" metal, maŏé Θ ka. The different types of coins led to this unique descriptor for 'penny' < 'coin [white/shiny-metal]+ red' maŏé Θ ka šùje. This new unit formed a single compound noun, as shown by the phrase, maŏé Θ ka šùje iya 'a penny, one penny.'

7) Degrees of Noun Incorporation

Table 1 demonstrates various ways that the words now functioning as compound verbs are conjugated. The left-most column represents the least degree of noun incorporating into the verb, because the personal pronominal prefixes still attach directly to the verb, as in the left-most column [Noun [PRONOMINAL PREFIX+ VERB]]. Or a speaker might prefer to add an auxiliary verb to carry person/number inflections, rather than inflect the main verb. (See center column ['MIXED']) Finally, a fully fused/incorporated noun-verb lexeme accepts the pronominal prefixes attaching directly to the left-most edge of the word, as represented in the table's far right-hand column [PRONOUN + [NOUN +VERB]]. The table shows some variation, and speaker preference seems to have been involved. Forms with *ho* 'voice' (11-13) appear to be more fully fused than other nouns were.

There is an intriguing case from another Marsh text in which the noun seems strongly associated with a certain verb but it was in the 3^{rd} person $/\emptyset/$, so the conjugation pattern is unknown:

thá c'èhi mạñà 'he went deer-hunting' [Marsh 'The Wanderer' Ln.47]

¹⁸ Cf. Brown 1999, also Larson n.d.

¹⁹ Keith Basso described the Western Apache (Athabaskan) words for automobiles in similar ways, but in that case it was a hand/arm= front wheel and foot = rear wheel set extension (1990:17).

TABLE 1: Conjugating Different Verbs with Nouns Attached²⁰

Jiwére Gloss	E 1: Conjugating Differon N+ [PRONOUN-V]]	[N+V] PRONAUX	PRONOUN-[N+V]	•
1) hóθige 'to fish'	ho -he θige			•
['fish + split']	'I am fishing'			
2) nasje p ^h iskuñi	ną sje- hį- p ^h iskųñi			-
'to be unkind'	'I am unkind'			4
['heart be good-not']	_ " "			
3) pasje $p^h i$ 'to be kind'	nasje ri -p ^h i			
[heart be-good']	'You are kind'			
4) nat'uda	nat'ų -he -da			
'to pity'	'I pity him'			
5) irodaxra	Iro- hi -daxra	irodaxra <u>hi</u> ñjw i		4
'to have a fever'	'I have a fever'	'We pl. have a fever'		
['body-burn/be hot']	Iro- <u>ri</u> -daxra	[añj 'have]		
	' <u>vou</u> have a fever'			
*6) iroru⊖'a	<u>Wawa</u> roru⊖'a <u>wi</u>	roruθ'a <u>hịñ</u> iwi		
'to be shaken up,	'we're shook up <u>pl</u> .'	'we're shook up'		
excited'	(1 st response)	(2 nd response)		
['body be-pushed?']		roruΘ'ani		
		' <u>I</u> am shook up'	h	
7) įro⊖et ^h ą			i <u>ri</u> ro⊖et ^h ą	
'to abuse'			'you were abused'	4
['body + ? ']		· 1h h · 1 :~ ·	(1PSg & PL also),	
8) $irok^h up^h i$		<i>irok</i> ^h up ^h i <u>hiñ</u> iwi 'we look good'	<i>i-ri-rosk</i> ^h up ^h i ' you are handsome'	\blacksquare
'to be handsome' [body +?look+good']		[<añi 'to="" have']<="" td=""><td>(1PSg also)</td><td>+</td></añi>	(1PSg also)	+
			,	
9) rosje		Rosje- <u>ri-</u> ñe	<u>Wawa-rosjewi</u>	
'to sweat' [<'body+?']		'they made <u>you</u> sweat'	'we're sweating'	
10)		[CAUS.]	(1P Sg. also)	
10) dawe			Ha-dawe 'I awakened'	\blacksquare
'to awaken, open eyes'			awakeneu	-
$[\le isdq 'eye(s) + move?]$			D 1 1	
11) hohga 'to belch'			Ra-hohga 'you belched'	
[<ho 'voice'="" +="" sound<="" td=""><td></td><td></td><td>(1P Sg. & Pl. also)</td><td></td></ho>			(1P Sg. & Pl. also)	
symbolic <i>hgaJ</i>			Ha-hoxga mañi	
12) hoxga 'to hiccup' <ho 'voice'="" +="" sound<="" td=""><td></td><td></td><td>'I am hiccupping'</td><td>+</td></ho>			'I am hiccupping'	+
symbolic xga]			i am meeupping	
13) hoxu 'to cough'			Ha- hoxu	
			'I coughed.'	
[<ho 'voice'="" +="" sound="" symbolic="" td="" xu]<=""><td></td><td></td><td></td><td></td></ho>				

²⁰Note #12 is lexicalized, as is its Lakota cognate, relative to Biloxi, which treated 'cough' still as separable, inflecting after *ho* 'voice' (Rankin, Boyle, *et.al.* 2003:186).

Formatted	[1]
Jan 7/6/2010 5:55 PM	([1])
Formatted	[2]
Jan 7/6/2010 5:58 PM	
Formatted	[3]
Jan 8/6/2012 7:50 PM	
Formatted	[4]
Jan 7/6/2010 5:58 PM	
Formatted	[6]
Jan 7/6/2010 6:10 PM	
Formatted	[5]
Jan 7/6/2010 5:58 PM	
Formatted	[7]
Jan 7/6/2010 6:10 PM	
Formatted	[8]
Jan 7/6/2010 5:58 PM	
Formatted	[9]
Jan 7/6/2010 5:58 PM	
Formatted	[14]
Jan 7/6/2010 6:10 PM	
Formatted	[12]
Jan 7/6/2010 5:58 PM	
Formatted	[13]
Jan 7/6/2010 5:58 PM	
Formatted	[10]
Jan 7/6/2010 5:58 PM	
Formatted	[11]
Jan 7/6/2010 5:58 PM	
Formatted	[16]
Jan 8/6/2012 7:51 PM	
Deleted:	
Jan 7/6/2010 5:58 PM	
Formatted	[15]
Jan 7/6/2010 5:58 PM	
Formatted	[17]
Jan 8/6/2012 7:37 PM	
Formatted	[18]
Jan 7/6/2010 6:01 PM	
Formatted	
	[19]
Jan 7/6/2010 6:04 PM	[19]
Jan 7/6/2010 6:04 PM Formatted	[19]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM	[20]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted	
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM	[20]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted	[20]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM	[20]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted	[20]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM	[20]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted	[20]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM	[20]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM	[20]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted	[20]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM	[20]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted	[20]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM	[20]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted	[20]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM	[20][21][22][23][24][25][26]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted	[20][21][22][23][24][25][26]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:34 PM	[20][21][22][23][24][25][26][27]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2010 7:39 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 8/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:43 PM Formatted	[20][21][22][23][24][25][26][27]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:35 PM Formatted Jan 8/6/2012 7:35 PM Formatted Jan 8/6/2012 7:52 PM	[20][21][22][23][24][25][26][27][28][29]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:35 PM Formatted Jan 8/6/2012 7:52 PM Formatted Jan 8/6/2012 7:52 PM Formatted	[20][21][22][23][24][25][26][27][28]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:52 PM Formatted Jan 8/6/2012 7:57 PM Formatted Jan 8/6/2012 7:37 PM	[20][21][22][23][24][25][26][26][27][28][29][29]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:52 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:37 PM Formatted	[20][21][22][23][24][25][26][27][28][29]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:52 PM Formatted Jan 8/6/2012 7:57 PM Formatted Jan 8/6/2012 7:37 PM	[20][21][22][23][24][25][26][26][27][28][29][29]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:40 PM	[20][21][22][23][24][25][26][26][27][28][29][29]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:36 PM	[20][21][22][23][24][25][26][26][27][28][29][30]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:30 PM Formatted Jan 8/6/2012 7:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted	[20][21][22][23][24][25][26][26][27][28][29][29]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:36 PM	[20][21][22][23][24][25][26][26][27][28][29][30][31]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/7/2010 1:17 PM Formatted	[20][21][22][23][24][25][26][26][27][28][29][30]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:30 PM Formatted Jan 8/6/2012 7:30 PM Formatted Jan 7/7/2010 1:17 PM Formatted Jan 7/7/2010 1:17 PM Formatted Jan 7/7/2010 1:17 PM	[20][21][22][23][24][25][26][27][28][29][30][31][32]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:30 PM Formatted Jan 8/6/2012 7:30 PM Formatted Jan 7/7/2010 1:17 PM Formatted Jan 7/7/2010 1:17 PM Formatted Jan 7/7/2010 1:17 PM Formatted	[20][21][22][23][24][25][26][26][27][28][29][30][31]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:30 PM Formatted Jan 8/6/2012 7:30 PM Formatted Jan 7/7/2010 1:17 PM Formatted Jan 7/7/2010 1:17 PM Formatted Jan 7/7/2010 1:17 PM	[20][21][22][23][24][25][25][26][27][28][29][30][31][32][32]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 8/6/2012 7:52 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/7/2010 1:17 PM Formatted Jan 7/7/2010 1:17 PM Formatted Jan 7/7/2010 1:16 PM Formatted Jan 7/7/2010 1:16 PM Formatted	[20][21][22][23][24][25][26][27][28][29][30][31][32]
Jan 7/6/2010 6:04 PM Formatted Jan 7/6/2010 6:04 PM Formatted Jan 8/6/2012 7:39 PM Formatted Jan 8/6/2012 7:43 PM Formatted Jan 7/6/2010 6:30 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 7/6/2010 6:31 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:37 PM Formatted Jan 8/6/2012 7:36 PM Formatted Jan 7/7/2010 1:17 PM Formatted Jan 7/7/2010 1:17 PM Formatted Jan 7/7/2010 1:17 PM Formatted Jan 7/7/2010 1:16 PM	[20][21][22][23][24][25][25][26][27][28][29][30][31][32][32]

8) Nominalizing Prefixes

Certain prefixes commonly attach to verb stems to form a nominal. To illustrate, the following three prefixes all incorporate the basic wa- 'indefinite object' (sometimes contracted with a locative prefix also) to action word(s).

```
a. wa-
                    'paper' < wa=Indef.OBJ +gaxe 'to scratch, write'
       wagáxe
       waruwaha 'bundle' < wa=Indef.OBJ +ruwaha 'to show with hands'
b. wi-
                    'tool' < wa=Indef.OBJ+i-'at,to'+?u 'to do,make,create'
       wi:u
       wí:ró:ha
                   'kettle'
       wí k<sup>h</sup>ahi
                                                     [Marsh 'The Outsider' Ln. 65]
                    'bridle'
c. wo
       woč<sup>h</sup>exi
                   'difficult times, trials' < 'INDEF OBJ-in-be.cruel/stingy'
       wóyawe
                   'festivity' < wa='Indef.OBJ +u-'in' [Marsh 'The Outcast' Ln 160]
```

B. The Verb and Its Many Parts

1) The Verb Template

In Siouan languages, the most complex morphology involves the verb, which may include basic verb stem, plus up to ten "slots" or positions for a number of possible prefixes, as well as at least four positions for potential suffixes. **Figure 1** (opposite page) is the representation of all fourteen potential affix positions and which prefix/suffix can appear in each of those places.

Described in more detail, beginning at the front or left-most position of an inflected verb, the prefixes may occur as follows (Whitman 1947:246, Marsh n.d., also Hopkins and Furbee n.d.).

```
(-10) \underline{1}^{st} person Patient pronouns: hi_s =singular 'me' wa_I = dual 'us 2'
```

(-9) The second wa- set:

```
wa_{2a} 'them, something' Indefinitely extended object (also detransitivizes the verb) wa_{2b} 'toward, directional'
```

[precedes all person prefixes except hi, - 1st p. patient 'me']

Two examples of the first meaning wa-2a give an idea of that flexibility as both derivational and inflectional morpheme:

```
    a. Wanaxi 'spirit, ghost' < wa2a- 'indefinitely extended object' + naxi 'breath, life'.</li>
    b. Hinage wa-tha -naha waye:re na?
    Woman them-I see-those ones who-are-they Q? [wa-'them a-tha 'I see' (irreg. verb)]
    'Who are the women that I saw?'
```

Whitman considered directional wa- to parallel both gra- and gi- of template positions -3 and -4 in some functions. ²¹ The next case illustrates directional wa- frequently found in prayer songs.

 $^{^{21}}$ Cf. Boyle 2009 for a discussion of the wa- prefixes across the Siouan languages, quoting the late Carolyn Quintero on Osage wa-, which was especially interesting. Based on these analyses, it may be more elegant to conclude that in Baxoje-Jiwere there is only one wa- which does a wide variety of things to the verb, including the various functions within the different glosses given above. At present, it does not seem crucial to determine

```
Example: hi, yi, no wa- hi, -na -wi
```

'Our Elder Brother <u>DIR</u>-1p.Pl.Agt -Go -definite plural

'We're going toward Our Elder Brother (Jesus).' (Davidson 1997)

```
(-8) <u>Locatives:</u> a- 'on, upon, over',

u- 'in, within, into',

i- 'at, to, by' (Whitman 1947:241)
```

The locatives combine with the prefix wa_{2a} - (indefinitely extended object) to make a "heavy" syllable with a longer vowel, which usually attracts stress (Cf. nominal prefixes.)

```
wa: < wa_{I^{-}} + a- 'on'

wo: < wa_{I^{-}} + u- 'in'

wi: < wa_{I^{-}} + i- 'at, to, by'
```

(-7) Object/Patient Pronouns: wa-1b 'us (speaker & another, usually listener)'

```
ri- 'thee (2<sup>nd</sup> person singular)'
mi - 'me (1<sup>st</sup> person singular)'
```

(-6) Agent Pronouns (1st and 2nd person): ha-, he- 'I' / 1st p. singular Agent'

```
ra-, re- 'thou' / 2<sup>nd</sup> p. singular Agent'
a-, e-'3<sup>rd</sup> p. plural Agent with motion verbs only<sup>22</sup>
```

(-5) Reflexive $k^h i$ - '(to) one's self'

This prefix relates the event/state described by the verb back to the Agent, usually translated as 'one's self.' If $k^h i$ reduplicates, giving $k^h i$ $k^h i$, it adds the sense of reciprocal action 'to/with each other'.

(-4) Possessive gra- 'one's own'

The possessive prefix gives additional information about social relations between persons and things mentioned in the verb complex.

Excerpt from the Otoe-Missouria Flag Song:

```
e-gra-ña-gri-ñe <e- gra- añi +a- -gri -ñe
3<sup>rd</sup>p. Obj.[Ablaut] -possessive-to have +3<sup>rd</sup> p.PL- came back (home)-PL(INDEF)
'They brought it (the flag) back home.' (Greer 2008)
```

- (-3) Benefactive / Dative gi₁- 'for, to'
- (-2) Instrumentals (describing how an action was completed):

```
ba- 'by cutting'
bo- 'with a blow'
da- 'by heat or cold'
```

whether they are best described as two distinct morphemes *wa*-, or as a single *wa*- quite flexible in meaning. In the future, as more work on comparative Siouan *wa*- emerges, perhaps the issue can be resolved.

²² Whitman did not list the e-/a- prefixes within the ordering of preverbal elements, probably because they are limited to motion verbs. However, since motion verbs do occur frequently, it seems preferable to include them as possibly archaic forms. The two also occur in 3rd p. possessive pronouns *ethawe* 'his (singular)', *ethewi* 'theirs (definite pl.)', and *aré* 'it is' (independent pronoun that primarily serves as demonstrative now, loosely 'that').

```
gi-2 'with object away from the body, by pushing or striking with an object'
na,- with foot/feet
ra-2 'by mouth, teeth'
ri- 'with held object, toward the body, pulling with an object/tool'
ru- 'with hand, toward oneself, by pulling with the hand'
wa-3 'with hand > away, by pushing with the hand'
```

According to Whitman (1947:246), these nine prefixes transform a passive verb into an active one, or a stative verb into a transitive one (Rankin 2005:483). They make very specific distinctions in the world of human activity. 'Long horizontal object being cut in two' -*gruje* is an interesting yet abstract verbal root; someone or something must <u>do</u> the cutting, and the various ways that action is accomplished can be encoded very precisely (and concisely) with these prefixes, as in wa_3 - 'with hand away (from agent's body)' -*gruje* > wagruje 'to saw'. Siouan scholars have sometimes distinguished between 'inner' and 'outer' instrumentals, with the latter a smaller set consisting of 'by extreme temperature/heat', 'by cutting with a knife', and 'by shooting/blowing' (Rankin 2005:483-485); however, the author has not found data pertaining to that distinction in Jiwere-Baxoje thus far.

(-1) 2nd person s- Archaic form that stands for 'you' (2nd person) on a small number of specific verb stems. Siouan scholars have found related forms in the Mississippi Valley subgroup (e.g. Quapaw allomorph š-/ž-), even extending into Proto-Siouan, suggesting it is of ancient origins (Rankin 2005:479-480). Over time, it was probably replaced in less common verbs by the regular 2nd person forms ra-, ri-, but remained in very frequent verbs, which are more resistant to change.

Ex. Arastawi k^he 'You (all) see it.' (Final line, Otoe-Missouria Flag Song, Greer 2008)

```
x. Arastawi k"e 'You (all) see it.' (Final line, Otoe-Missouria Flag Song, Greer 2008) 
<a-'on'+ ra-'you(Agt)'+s 'archaic 2<sup>nd</sup> p.'-da'see' -wi pl.(definite)'+ k<sup>h</sup>e 'masculine declarative'
```

(0) Verb Root/Stem

(+1) <u>Post-positioned Person Affixes + Causative Suffix</u> -hi 'to make something happen, to cause something'

One way to form an active verb from a stative one is by adding the causative suffix -hi, as in \check{c} 'e 'to die' becomes \check{c} 'ehi 'to kill' (literally 'to cause to die'). Since the causative -hi occurs after the verb stem, personal pronoun affixes also come <u>after</u> the verb, but immediately before the -hi, rather than their usual pre-verbal positions. Sometimes the -hi itself is omitted (as in the following example), but the pronominals' marked position after the verb, plus the meaning 'to cause (something)' are still present.²³ The word *nayihi* 'to heal, cure' literally means 'to cause one to stand up, to stand X up.'

The chorus of a NAC song by Edward Small (Ioway) exemplifies an instance where -hi does not overtly appear. Still, the translation and the location of the PRO prefixes <u>after</u> the verb stem nayi, 'to stand' give evidence of the causative -hi having an underlying presence.

²³ One possible origin of this unusual case of pronominal prefixes shifting to the end is that *hi* was once truly an independent verb, and over time, the forms were re-analyzed by speakers later as single unified "words". Then the initial verb of the compound was no longer conjugated. In that light, it is interesting to note that there is another \hi\tau, the motion verb meaning 'arrive here' (Taylor 1976, Hopkins 1987). That would parallel English idioms such as 'to come to pass' for 'happen, take place', or 'go and X' as in 'Sam went and punched the man.'

```
Hiyino | Wakhada-yine | maya čegi wahire nayi -wa -ra na / 'Our elder Brother|God - son) | land this sick stand-them-you(make) and |.'(Davidson 1997)
```

Likewise, it occurs in this sentence from missionary scholars Hamilton and Irwin (1848:43, #53):

```
\check{c}'e-wa - hi k^he.
```

Kill-3rd person PL/indefinitely extended object [Ø3rdp.]-causative declarative(Male SPKR) 'He killed them'.

- (+2) Negation -skuñi 'not'
- (+3) General Plural suffix $-\tilde{n}e$ 'they/them'; Usually limited to 3^{rd} persons, Whitman (1947) called it an indefinite form; perhaps the term **general plural** is more appropriate.

```
(+4) <u>Definite Plural</u> –wi definite pl.; Usually 'we' or 'you-all', it may occur with any grammatical person (wa-wa...-wi, hi-... -wi, ra-...-wi, ri-... -wi, Ø...-wi).

(1p.Pat....-pl., 12p.Agt.-pl., 2p.Agt-pl., 2p.Pat.-pl., 3.p.. pl.)
```

Both suffixes can pluralize any personal pronoun, no matter if that pronoun is in the role of an actor, patient or object (direct or indirect). They only index number, and definiteness vs. indefiniteness. Specifically, it says there are more than 1 for 2nd and 3rd person forms, and 3 or more for the 1st person dual form. The two potential plurals above differ by whether the people or things being referenced represent given or new information.²⁴

Thus, they are not interchangeable. They reference the speaker's knowledge about the group, how specific group membership is, whether persons' identities are known, if they have already been mentioned in a story before this point or not, and so on. It makes sense for the definite plural to appear with the 1st person plural for pragmatic reasons. It is difficult to imagine a situation in which "we" might mean a group with unknown or uncertain membership. Second person plurals also usually take the definite plural, for the same reason, although some rare exception might occur. However, it is very possible to imagine situations involving 3rd persons to be either definite ("the gourd dancers from Red Rock, Oklahoma") or indefinite in nature ("everyone on Earth who knew my uncle"). Just as one might expect, zero 3rd person-inflected verbs occur with either plural suffix, depending on the meaning intended.

```
Ex. \underline{w \acute{o} w a} k' \underline{u n a w i} < \underline{w a} \underline{-0} - \underline{u} - \underline{w a} - k' \underline{u} - \underline{n} \underline{a} -\underline{w i} (12p.pat.\underline{-(it)} - gave - \underline{indef.pl} - \underline{us}') (Whitman 1947:240) [vowel ablaut to \underline{n} \underline{a} from indef.pl.-\underline{n} \underline{e} when before -\underline{w} \underline{i}] 'They gave it to us.'
```

²⁴ Think of the parallel indefinite article being used in the formula which begins many English fairy tales, 'Once upon \underline{A} time, there was \underline{A} princess...'

 $(+5)^{25}$ **Mood/Aspect** $-h\tilde{n}e$, -hna 'will, shall' The modal suffix seems similar to a future tense, but probably is more accurately expressed as 'an action that is not yet completed' according to Rankin (n.d.). The e- itself ablauts to a- with verbs of motion. ²⁶

(+6) Evidential & Gender Indexical Particle. It is not clear that these enclitics are actually part of the verbal complex, rather than serving as an audible coda indexing the gender identity of the speaker of an utterance and the degree of certainty of the speaker for the information given. The enclitics are not tied absolutely to the speaker's gender, but may also reflect the gender of a character during dialogue in a narrative, or original speaker's gender in reported speech/quotatives). They do not seem to function as truly 'free' morphemes, as they carry only secondary stress, and there is basically no pause between the verbal complex and the sentence-final particle, which tend to form a single prosodic contour. Because it is such a rich and complex set, with meanings that are not easy to gloss, these particles are listed in Table 8, rather than being included in the Verbal Template per se.

C. Auxiliary Verbs

The 'AUX' may appear alone, inflected with the full variety of verbal prefixes. When they are not the main verb, they will follow it (and any verbal suffixes attached to it). In 3rd person and inanimate subjects, the auxiliary verbs may not be inflected, but otherwise they would still bear 1st and 2nd p. PRO prefixes, which strongly tend to be animate for practical contextual reasons. The same pattern is found in most SOV languages (Rankin 2005:490).

1) Positionals/Modals. After the main verb, there is often a second verb expressing the action or position of the agent, or a distinct clause describing the activity/position of the speaker. If one witnessed an event, a proper Baxoje-Jiwere description would include whether someone was sitting, lying, standing, or moving around while it occurred.²⁷ Beyond clarifying the bodily orientation of the person or thing being described, there are also various aspectual meanings that may be conveyed. One such aspect is continuative as if the action takes place over an extended time frame, rather than occurring at a single moment or limited duration.²⁸ They include:

```
    máñi 'going around, moving (in the characteristic way for that creature)'
    mína 'sitting /dwelling'
    náŋe 'be in a sitting position'
    háŋe 'be in a lying or reclining position'
```

²⁵ While Rankin (n.d.) included auxiliary verbs, adverbial intensifiers, positionals, and more within his comparative Siouan post-verbal template, this analysis will not follow his template for those morphological elements at this time.

elements at this time.

26 Comparatively speaking, there is not yet an elegant historical explanation of ablaut across the various members of the Siouan language family (Rankin 2005;466-468).

²⁷ Davidson 1997 outlined the key role these auxiliary verbs played in creating vivid images in Native American Church songs composed by Otoe-Missouria and Ioway speakers.

²⁸ In addition to the continuative aspect, Rankin (2005:484-485) also distinguished a habitual ('always') aspect [Quapaw nq], an imperfective 'used to X' derived from Proto-Siouan/*20 / 'do', a potential 'will/would X' [Quapaw tte]. Negation, imperative, and narrative forms were grouped with the auxiliary aspects, too. More complex moods could be created with combinations of these forms, such as potential + continuative, or negative potential continuative 'To not go on X=ing'. However, I have grouped the imperative and narrative particles with the general sentence final enclitics, in Table 8.

dáhe 'be in a standing /upright position'
návi 'to stand something/someone up'

D. Pronominals

Baxoje-Jiwere has overt prefixes for 1st and 2nd persons, while 3rd person is represented by Ø morpheme. There are also three numbers expressed: one (singular), we two (dual inclusive), or more than 2 (distinguished by the plural suffixes discussed in section B). Each person's role is also identified relative to the action of the verb, as in Agent/Actor or Patient/Object. There is potential confusion caused by homophony between one allomorph of 1st p. singular Patient \hi_i -\ 'me' with the 1st person dual Agent \hi_i-\ 'we two'. The other allomorph for 1p.Pat. sg.\mi_i-\ mirrors the form in the independent 1st pronoun, as well as the independent possessive 1st person pronoun. The 1st person plural can only be expressed by addition of the definite plural suffix -wi (see #4 above), denoting the speaker, hearer, and one or more additional people as either agents hi- ...wi, or patients wa-wa- ...wi.

'You' is composed of 2^{nd} person singular agent ra_2 and patient ri_2 , and also 2^{nd} person plural agent and patient forms. See **Table 2** for further illustration.

	1 st person Singular 'I/me'	1 st person Dual 'we/us two'	1 st person Pl. 'we/us all'	2 nd Person Singular 'thou/thee'	2 nd person plural 'You'
Agent	ha-, he-*	hį-	hį- [+-wi]	ra-, re-*	ra-, [+ -wi] re-* [+ -wi]
Patient	mį-, hį-	wa-wa-	wa-wa- [+ -wi]	ri-	ri- [+ -wi]

Table 2: Personal Pronominal Prefixes

*The second form with final [e] is an example of the vowel change that takes place when the prefix is followed by certain derivational morphemes such as gra-'one's own (possessive), represented in the verb gra-hi 'to love, have pity on someone'. The agentive forms ha- 'I', ra- 'Thou' will become he-,re- in other complex verbs such as nat'uda 'to pity (someone/something)'. ²⁹ A potential origin for this word is nahie 'heart' plus u-gi-da 'be depressed toward' (Whitman 1946:243). If that analysis is correct, the benefactive prefix gi- 'for' would be the conditioning morpheme for that particular case. Another example is gi-t'a' (it) flies', despite the fact that the gi- prefix itself only is fully apparent in the plain 0 3rd person form (Whitman 1947:242).

Third person singular is typically marked by a zero morpheme, although an *e*- prefix may rarely occur, especially with the possessor prefix 'one's own', and with independent possessive 3^{rd} person $\underline{et}^h \underline{awe}$ 'his/hers (singular)' or $\underline{et}^h \underline{ewi}$ 'theirs'. The demonstrative form - 'e combines with many prefixes,

²⁹Whitman (1947) has the plain [u] here while the author heard it as a nasal [u], perhaps just spreading from the surrounding environment (Davidson 1997).

including 3^{rd} p. e-, resulting in e^7e 'it is that one.' Motion verbs provide an exception to that rule, with an \a-\ prefix in plural contexts.³⁰ Once again, the [a/e] alternation is likely another example of ablaut.

Independent pronouns appear for emphasis or clarity, but are not required grammatically to complete a sentence, provided that the verb is properly inflected.

Table 3: Personal Pronouns (Hamilton and Irvin 1848, Marsh n.d.)

Person	Indepen	dent Possessive
1 st p. Singular	mįre	mịt ^h áwe
1 st p. Dual Inclusive	hįre	hịt ^h áwe
1 st p. Inclusive Plural		hįt ^h éwi
2 nd p. Singular	rire	rit ^h áwe
2 nd p. Plural		rit ^h éwi
3 rd p. Singular	é?e	et ^h áwe
3 rd p. Plural	aré	et ^h éwi

E. Conjugating Verbs

1) Regular Verbs. A verb stem is considered "regular" if it follows the verbal template of prefixes in its ordering, and the stem itself does not change in form, regardless of any shift in person or number. Verbs are grouped according to whether they are active or stative, with the agentive pronominal prefixes inflecting the active verbs, and the patient pronominal prefixes forming the subject of stative verbs, as well as the objects of transitive verbs.

³⁰Marsh n.d., Taylor 1976.

TABLE 4: REGULAR VERB PARADIGM

PERSON	ACTIVE VERB	STATIVE VERB	TRANSITIVE VERB
1 p. Singular	ha-mąñį 'I walk/move'	hį-yą, mį-yą 'I sleep'	ha-k'e 'I dig (it)/ I dug (it)'
1 p. Dual Inclusive	hị- m <i>ą</i> ñį 'We 2 walk'	wawa-yą 'We 2 sleep'	hi-k'e 'We 2 dig (it)'
1 p. Plural (definite)	hị- mạñị-wi 'We-all walk (>2)	wawa-yą -wi 'We-all sleep'	hį -k'e-wi 'We-all dig (it)'
2 p. Singular	ra- mañ i 'You(sg) walk'	ri-yą 'You(sg) sleep'	ra-k'e 'You (sg)dig (it)'
2 p. Plural (definite)	ra-mąñį-wi 'You-all walk'	ri-yą -wi 'You-all sleep'	ra- k'e-wi 'You-all dig (it)'
3 p. Singular	Ø-mqñį 'He/she/it walks'	Ø-yą 'He/she/it sleeps'	Ø-k'e 'He/she/it digs (it)'
3 p. Plural (definite)	Ø-mqñi -w i 'They walk' (known)	Ø- yą-wi 'They sleep' (known)	Ø- k'e-wi 'They dig (it)' (known)
3 p. Plural (indefinite)	Ø-mąñį-ñe 'They walk'(unknown)	Ø- yą-ñe 'They sleep'(unknown)	Ø- k'e -ñe 'They dig (it) (unknown)

2) Irregular Verbs Stems in *D-*, *R-*, *W-*. All irregular verb stems begin with *d-*, *r-*, or *w-* sounds (Whitman 1946:243). Note that the **stem-**initial consonant defines the class, and determines which conjugation will be irregular; however, there may also be prefixes attached to that stem. When any of those prefixes come <u>before</u> the personal pronoun, they do not influence each other (no amalgamation). These irregular verbs share another anomaly; in 2nd p. agent forms, in addition to the expected *ra-*, the archaic Siouan 2nd p. \s\ also appears (Slot -1 on Verbal Template). Examples of irregular compound stems include³¹:

D- Stems [d becomes t in '1st P.;	2.; 2 nd P. Pronominal AND archaic 2nd P. s, š]	
a-da 'to see'	a <u>t</u> a	'I see (it/him/her)'
	ara <u>s</u> da	' <u>You</u> (sg) see (it)'
	<u>há</u> da	'We two (1st P. & 2ndP.) see (it,)'
	<u>há</u> dawi	'We (pl.) see (it,) ³²
	ada	'he sees her/it'
	a <u>ri</u> ta	'I see <u>you</u> '
	ą ra<u>š</u>da	'You(sg) see me'
	<u>hát</u> awi	'we (pl) see him'
	wawa dáwi	'(he) sees us (pl.) '

³¹ 20th century elicitations seem to exhibit a tendency toward including the regular pronominal prefixes, in addition to the verb stem changes. However, Dorsey's slip file only has one speaker who doubles the inflection on these forms; this tendency to move toward the regular pattern may reflect the decline in everyday language use, leading to a preference for the most familiar inflections to be added onto the irregular verb stem changes (Dorsey n.d.).
³²Stress shifted left to reflect a 'heavy' syllable resulting from two vowels coalesced together, *a*- plus *hj*- 1p.Pat.

R- Stems [r becomes d 'in 1st P.; 2nd P. Pronominal AND archaic 2nd P. s, š]

rumi 'to buy'

hadumi

rastumi

'You (sg) bought (it)'

hárumi

'We two bought (it)'

rumi

'He/she bought (it)'

W-Stems [w becomes p in 1st Person Sg. Agent AND

Ø regular 2nd p. Agt, archaic 2nd P. \s ,š \ <u>OR</u> 2nd p. Agt. AND archaic 2nd p. \s , š\] awáđo 'to point at, point to'

ápađo'I point at (it)'ašwáđo'You point at (it)'háwađowi'We (PL) point at (it)'awáđo'He/she/it points at (it)'

There may be exceptions to these general patterns, as in the verb re (Ioway) 'to go' / de (Otoe) 'to go'; while the stem appears to fit the stem-initial critera for an R-stem verb (at least in Ioway), there is a different consonant shift. The 2^{nd} person $\underline{s}re$ 'You (SG) go' follows the archaic 2^{nd} P.\s\ inflection, but instead of the predicted hate* 'I go' as one might expect, the correct form is \underline{haje} 'I go'. Perhaps the Otoe version (now archaic) as given by Dorsey (n.d.) reflects a more conservative form, and a different verb class historically. (*The asterisk in this case denotes an unattested form, which may be ungrammatical.)

3) Other Special Conjugation Patterns: Motion Verbs

Like all Siouan languages, the Baxoje-Jiwere system of motion verbs has a rich set of distinctions. One intriguing dimension is the vertitive, which allows a concise and powerful way of expressing the notion of leaving home or predicting a safe **homecoming.**³³ Otoe-Missouria Patriotic songs often have this powerful motion verb, poetically highlighting the fear involved when soldiers leave home, and joy when they return safely to their families.³⁴ Motion verbs are also distinguished by a 3rd person plural prefix awhich ablauts to e- in the same conditioning environments in which 1st and 2nd person prefix vowels also shift from /a/ to /e/, namely before the benefactive prefix gi- and the possessive gra-. (See Table 5).

Table 5: Jiwere Motion Verb Stems (Taylor 1976:293)

Destination:		g Motion titive / vertitive		Prior to Arrival itive / vertitive
here	jí	<u>gr</u> í	hú	gú
there	hí		rá	grá

Note the initial consonant cluster echoes the possessive prefix [*gra*-'one's own']; the shared phonological shape plus semantic congruity between vertitive and possesive is surely no coincident.

³³ While English lacks the motion verb equivalent to the vertitive, the compound noun 'homecoming' is perhaps the closest in meaning and emotional power.

³⁴ Scholars of related Siouan languages such as Assiniboine have also analyzed these verbs in terms of how they appear in traditional narratives, where the notion of "belonging"/ home location also can be used to mean the place where a person or animal was located at the beginning of the story (by the river/point A), versus where they ended up later on (inside a cave/point B) (Cumberland 2005).

F. Adverbials

There are basic adverbial morphemes that may combine to express a wide range of meanings, with parallels to the personal pronouns (both independent and bound) in recognizing not only a distinct 1st and 2nd persons (I vs. You), but also 'we two (you and I)' **dual inclusive**.

- 1) Spatial Elements.³⁵ Baxoje-Jiwere identifies five distinct places relating to the discourse context: 1) location of speaker 'my spot here' je-, 2) location of listener 'your spot' se- 36 , 3) shared area of persons conversing together 'our here' i- (location of both you and me), 4) 'there' ga-, beyond the immediate discourse zone, e.g. a distant but visible location, and 5) 'place beyond their sight (usually far away) hari- (similar to archaic English 'yonder'). These spatial elements combine with morphemes that distinguish between a fixed spot close at hand (-gi), a stationary spot slightly further off (-da 'at there'), and motion toward a location (-gu 'to'). The directional sense of the prefix wa- 'motion toward' may follow 1st or 2nd person forms to complete the variety of distinctions recognized. (See Appendix for a diagram representing the spatial aspects of these elements.)
- 2) Negatives. Two basic forms can negate the main verb, sku \tilde{n}_i 'not' and \tilde{n}_i ne '(be/have) nothing'. Thus, while the stative verb $p^h i$ 'be good' expresses a positive attribute, the opposite meaning results from adding sku \tilde{n}_i 'not', giving $p^h = sku\tilde{n}_i$ literally 'good-not'; 'no good, bad, ornery'. At the clausal level there can be additional ways to make it clear that something is false. (Cf. the section on syntax, especially the evidential enclitics in sentence final position.)
- **3) Time Elements.** While some Baxoje-Jiwere words for space do apply metaphorically to time, there are also specific temporal adverbs. They tend to occur at the beginning of the sentence, as in this verse from NAC prayer-song composed by the late George Washington Dailey (Otoe-Missouria):

Go:č^hi Hįyįno hį -ha -wi -yi-yi Now Our Elder Brother (male speaker) we-2 Agt. -Say-plural(definite)-Chant 'Oh, My Lord, we're calling upon Your name, now.' (Davidson 1997)

G. Other Morphological Processes

- 1) Sound Symbolism. In Jiwere-Baxoje, there are two characteristics of such mimetic words that attempt to recreate certain sounds or material aspects of the world:
- (a) often they use fricatives, which sometimes form sets of related words which vary only in the fricatives' place of articulation.
- (b) many also are stative verbs, especially ones related to topics of color shade, intensity of hue, or other changes in sense perception, as in volume of noise, or roughness of texture.

This phenomenon is common in all Siouan languages, and can create interesting semantic sets differing by a single consonant sound (Rankin 2005:468-469). The "lighter/less intense" word is usually associated with a front &/or upper place of articulation, while the greatest intensity of meaning is found

³⁵ The author's M.A. thesis details the system of deixis in Baxoje-Jiwere (Hopkins 1988).

³⁶ This form \se-\ that has an initial [s] representing the 2nd person is very likely related to the archaic 2nd person \s\ found in conjugations of some conservative (irregular) verbs also (Rankin 2005;480).

with the "deepest" back sounds. It has been documented for Hoçak and Dakota in particular. Baxoje-Jiwere sound symbolic vocabulary sets include:

šá-kh'e '(1) swishing sound made in water (2) sound made by hitting or dragging of a chain thá-kh'e '(probably th = θ) '1) rattling of a rattlesnake; 2) rattling of corn in granary or in pile outside' khó-kh'e 'ripping of calico, roar of falling water, sawing or scraping sound of tool on wood, and the whizzing of a whirled stick '(a bullroarer?) (Dorsey 1892:3)

to-tó-khe 'repeated sharp sounds, such as the crackling or snapping of twigs and small branches, or frequent gunshots'

tópě 'pattering sound', natótopě no gloss given (author posits 'the sound of dancing feet')

lé-ghe, kh'é-ghe, kh'á-ghe "the sounds of filing, grating, gnawing, or scratching on metal, bone,

hard wood, etc." (Dorsey 1892:4-6 for these form, his orthography for consonants retained here.) **ká-ghe** 'crow (bird, n.)' [initial syllable imitating crow's call] (Dorsey 1892:8)

Note also the terms for upper body noises with variation in the medial fricative:

hohga, 'to belch' [ho'voice' plus sound symbolic hga]

hoxga 'to hiccup' [ho 'voice' plus sound symbolic xga].

Although this is not an exhaustive list, let me add my personal favorite, *hé* 'ši 'sneeze', which beautifully imitates the sound of sneezing, and takes an active/agentive conjugation.³⁷

2) Reduplication

a. Adult / Standard Reduplication

Another kind of sound symbolism is reduplication, copying part (or all) of a particular word. If a stative verb such as a color is reduplicated, it means the color is scattered here and there (as in patches, spots, stripes), rather than in a continuous or "solid" distribution. For an active verb, it gives an iterative meaning, whereby *gis* 'é 'drip' becomes *gis* 'és 'e 'drip several drops'. For less concrete activity, the reduplication can convey that the verb's action is somehow partial or incomplete. For example, the form $up^ha'p^harehi$ 'understanding only bits and pieces, imperfectly comprehending' comes from up^harehi 'to understand, notice, investigate' ³⁸In Jiwere-Baxoje, reduplication seems to have been a very productive process.

b. Reduplication in Baby Talk

In addition to adult reduplication, there is also "baby talk" or caretaker speech, a simplified version of ordinary phonological forms. Based on the limited sample available, it appears to have involved producing an exact copy of a monosyllabic morpheme, such as CV-CV. If the word is polysyllabic, then everything after the first syllable would be deleted. Some of the morphemes have been so simplified that it's not always clear from which word the simplified "baby" form originated! However, the primary difference between adult reduplication vs. "baby talk" is semantic. The latter had no notion of something being repeated or scattered. Caretaker speech must have made it easier for little ones to learn to speak. Perhaps it originated as an adult imitation of the adorable way young children pronounce things themselves.

Jan 7/7/2010 1:28 PM

Formatted: Font:(Default) Times New Roman, Italic, Font color; Accent 1

Jan 7/7/2010 1:28 PM

Formatted: Font:(Default) Times New Roman, Italic, Thick underline, Font color:

Jan 7/7/2010 1:28 PM

Formatted: Font:(Default) Times New Roman, Italic, Font color: Accent 1

Jan 7/7/2010 1:28 PM

Formatted: Font:(Default) Times New Roman, 14 pt, Italic, Font color: Accent 1

Jan 8/6/2012 7:37 PM

Formatted: Font:(Default) Times New Roman, 12 pt, Not Bold

³⁷Dorsey gave Dhegiha hé-tchį 'sneeze' (Kwapa hĕ-shį), and 'snore' zhą-khdhú-de (1892:8).

³⁸ The latter example came from the late Rev. Arthur Lightfoot and Dr. Truman W. Dailey conversing about white missionaries' partial understanding of Indian beliefs (MCLP July 1992).

Examples: dáda 'something to eat'

jiji 'hot (to touch)'

nána 'something forbidden because of potential danger or pain'

bobo 'penis' abbreviated from buje 'acorn cap, penis'

Other items elicited include the repeated form + the normal diminutive suffix, -iñe 'little one': mamájñe 'baby' (Ioway), hahájñe 'baby colt, horsey' (Davidson 1998).

III. Word Order / Syntax

Baxoje-Jiwere is classified as an SOV language. However, for 3rd person forms, a "plain" (uninflected) verb may function as a grammatical sentence, ³⁹ since the independent pronouns are optional, and there is a Ø 3rd person pronominal prefix corresponding to 'he, she, it.'

A. Noun Phrases

1) Adjectival forms: The head noun should come first in the noun phrase, followed by everything that describes it in any way, including stative verbs showing shape, color or size (large, round, yellow...), which may also inflect as a main verb in other contexts, demonstrating they are not true adjectives.

2) Determiners, Demonstratives, Articles and More. Determiners identify which person or thing is being discussed, if it is a specific individual(s) or a generic one, how many there are, and so forth. They include quantifiers, demonstratives, and at least one definite article and an indefinite article, which all follow their "head". So 'a white horse' when spoken in proper Baxoje-Jiwere order would be 'horse white a' *šuņe ska iyq* Ioway / *sune Oka iyq* Otoe-Missouria. Quantifiers would begin with specific numerals, as well as other words relating to quantity of a group for countable objects and for animate beings (few, many, all, most, ...) or for quantities of mass nouns such as flour, soup, water and so forth (some, much, little, ...).

Article(s): -yq, -iyq 'a, one' An indefinite article, it is derived from the word for 'one' iyákhi. 40
-ge 'definite article' Gilbert-ge danine ... '(That) Gilbert was drunk (again)!'

While earlier researchers did not identify a definite article for Jiwere-Baxoje, it seems likely that this is an oversight, due to the relatively small amount of data collected, and its lack of frequency compared to the English definite article. There certainly needs to be further examination in this area, considering its complexity in other Siouan languages (Rankin 1977, 2005; Rood and Taylor 1996:455).

³¹There also needs to be a final particle that tells the gender of the speaker, as well as how certain the speaker is of the information being given, and the way the listener should respond (by listening and talking, by obeying what was said, by joining in with the speaker). These S-final particles are discussed in a later part of the grammar.

40 Lakota also utilizes the 'one' morpheme as an indefinite article (Ullrich 2008:755-756).

⁴¹Until <u>very recently</u> the author has followed Marsh's analysis of Jiwere-Baxoje, which included no definite article. I would like to thank Johannes Helmbrecht (2015 p.c.), and Iren Hartmann (2008 p.c.), whose wonderful work on Hoçak and excellent questions about possible cognates in Jiwere have forced me to reconsider the function of -ge. I cannot explain how it was overlooked, except that its representation in the data collected was too infrequent to attract notice. More review of the existing data is needed to confirm the current interpretation.

Interrogatives.

```
Those words that are used to ask questions about quantity or number fall into this category.
```

Ex. Tahéna 'how many, how much?' (tana in Hamilton and Irvin 1848)

```
bi -rawe tahena ra -gusta ja?
'moon-count how-many 2p.Agt.-want (irreg.verb 2p.\s-\) Q(fem)
'How many calendars do you want?'
```

Taheda 'how far?'

Danáha, danáhaje 'which?'⁴²

Indefinite Quantifiers. Such words give information as to scope, for instance which members of a collective group are included (or excluded) in the utterance.

```
Ex. dáhi, áhi 'each, every' bróge 'all'
```

Table 6 presents the demonstrative pronouns paired with the corresponding deictic directional prefixes. Note the latter's strong parallels to and semantic association with discourse participants/persons in the context of the speech event.

Table 6. Comparison of Demonstrative Pronouns to Deictic Directional Prefixes

Demo	emonstrative Deictic Directional Prefixes (Hopkins 1988)	
Pron	<u>ouns</u>	
je?e	'this one'	<i>je</i> - 1p. LOC 'near me', 'this here'
se?e	'this one	se- 2p. LOC 'near you' [also še- Ioway]
	[near you]'	
	_	<i>i</i> - inclusive 12p LOC 'here'
e?e	'it is he/	e- '3rd p. LOC 'near her/him/it'
	that one'	
are	'it is'	a-*Unattested; Possible ablaut form of \e\ _ re 'to go'
даге	'that one'	ga- 'there'

Aré 'it is' "points" back at something previously mentioned, and appears with great frequency in the texts collected by Gordon Marsh (Hopkins and Furbee n.d.) It can be paired with the emphatic bound morpheme-su 'indeed' [aré?su 'indeed!' (emphatic)], and even 'stacked' with the 1st person deictic prefix je- 'this (here)' to give járe 'this one-it is', and other additional complex compounds.

B. Subordinate Clauses

Main clauses normally occur sentence-finally, while subordinators(s) transform the first clause(s) into a supporting or modifying syntactic role, signaling duration, exact sequence of events, if events were actual

⁴²Cf. the similarity of sound shape in the cognate set found in Lakota (Rood and Taylor 1996:455-457).

or potential, etc. These subordinating particles include *-sge* 'if', *-da* 'when', *-sji* 'but, although', *nu?a* 'but'. The temporal particle fills that function as follows:

```
Hiyino|wo-waxoñitqrit^hawe urak^hi-ñe\underline{da} |'Our Elder Brother|ceremony-sacred your they-tell-about-indef. Pl. \underline{when}wa2u warup^hi Rire a-ne (h)nathe work-wonderful(it does)You 03rdp.-say-Indef.Pl. Imperfect.'
```

This complex sentence begins with a kin tem (addressed to Jesus), a subordinate clause indicated by subordinator -da 'when', then finally the main clause (Davidson 1997 Song #16). 43

a. Relative Clause as the object of the sentence:

```
John hinage atha naha ukhič'e khe
John woman I saw (her) that one (he)spoke-with-(each other) Masc. Decl.
'John spoke with the woman that I saw.'
```

b. Relative Clause as the subject of the sentence.

```
<u>Hinage</u> at a naha John uk ič'e k e.

<u>Woman I saw-that one</u> John (she) spoke with (him) Masc. Decl.

'The woman that I saw spoke with John.'
```

c. Relative Clause as the direct object of the verb phrase.

```
Sam <u>wawagaxe hapagaxe</u> <u>naha</u> araje k<sup>h</sup>e.
Sam <u>book I wrote it - that one</u> (he) read it Masc. Decl.
'Sam read the book that I wrote.'
```

Because the relative clause marker is optional, and the 3rd person pronoun is zero, it can be difficult to translate some sentences, even though the general meaning is clear.

C. Conjoined Clauses

The conjunction *heda* 'and' may occur at the beginning of the second sentence. Within more rapid speech sequences, it is common to instead have the particle -na 'and' occur at the end of the first main clause, separating it from the one to come.

⁴³ Edward Small (Ioway) composed this song after being healed during a NAC worship service.

⁴⁴ Dorsey (n.d.) gave *daha* as another potential relative clause marker, in an example sentence referring to an object rolling under a tent flap that was not fastened down: *t^hq gri were <u>daha</u>, ruθewi re 'That which* has gone outside, get ye' (spelling and punctuation adapted to modern conventions by author). Further study on Jiwere-Baxoje demonstratives' potential relationship to positional verbs in a classificatory system is very much needed (Cf. Rankin 2005: 469-475, 485-487).

D. Beyond Statements: Other Kinds of Sentences

1) Directives/requests/commands. These ways to "boss" others are linguistically interesting because many languages omit both 1st person and verb stating 'I am telling you' to do something. Sometimes 2nd person form is also omitted. The 'pragmatic skewing' occurs because overt 1st & 2nd person forms may be considered too direct, and thus rude (Heath 1998). This politeness pattern holds true with Baxoje-Jiwere directives. One speaks to children in a more direct manner than adults, since few question the authority of parents/elders to tell kids what to do. If speaking to an adult, it would be more polite to use a different form ne/ne. However, songs demonstrate expressing a plea with the stronger command particle re:

Hiyino wa-a-wa - da -wi <u>re</u>
Our/my Elder Brother 1p.PATIENT-look at-Def.PL [command/Male Speaker]
'Elder Brother, Look at us!' (Davidson 1997)

Finally, one may make a <u>very</u> polite request by using the dual/1st person inclusive plural form with **hortative** enclitic t^ho. 'Let us all call on the Creator's name', or 'Let's go to the handgame!'

- **2) Questions.** There are three ways to correctly form questions:
- a. Declarative Sentence + Sentence-Final Question Particle. Word order does not vary, it is an evidential ending particle that signals an answer is expected, because the speaker is **asking**, not **telling** something. As with many of these ending particles, the exact form varies by the speaker's gender: je 'Q? (male speaker)' ~ ja 'Q? (female speaker).
- b. By using interrogatives such as *wayé:re* 'who (is it)?' or *dagú:re* what (is it)?' The interrogative word receives the special question-sentence melodic contour, which includes lengthening the stressed vowel greatly and making its pitch higher, plus pronouncing the final syllable's pitch lower than usual.
- c. Finally, one can create a question by simply omitting all S-final particles, and using the interrogative intonation pattern. See (ii) below. In Ioway/Otoe-Missouria speech, the question pattern is made with a much longer (and slightly higher pitched) vowel in the penultimate syllable of the sentence, and a drop to a lower pitch in the last syllable.
 - (i) Wabúθga ra- gústa jà?
 Bread 2ndpSG-want(it) (Question marker)?
 'Do you want any bread?
 - (ii) Wabúθga ra- gú:sta?

 Bread 2ndpSG-want(it)?

 'You want some bread?'
 - (iii) Ra- gusta dagure?

 2ndpSG-want(it) what(is it)?

 'What (do) you want?' Or 'You want what?

IV. Variation in Speech By Social Group

A) Tribal Identity & Language Use.

The Otoe-Missouria and Ioway people spoke mutually intelligible dialects of one language. After a devastating enemy attack in the late 18th century, most surviving Missouria fled from their village in Missouri to the Otoe village in southeast Nebraska (Schweitzer 2001). Geographic separation between these two tribes ended about forty years before any language records exist. Although recognition of a leader "Missouri Chief" is documented in Indian Territory ca. 1885, ⁴⁵ there is no data on unique Missouria dialect features. ⁴⁶ At the phonological level, the following general tendencies have been noted (Table 7). It is not as simple as always substituting one sound for another, yet listeners certainly noticed the distinctions. ⁴⁷

B) Gender Marked Speech. Three distinct lexical sets signal speaker's gender.

1. Kinship. The first set is kin terms as outlined in Good Tracks' dictionary. Gender is distinguished not only of referent (mother vs. father, etc.) but certain terms vary by sex of speaker as well, especially siblings' words for each other and for one's in-laws. Birth order establishes seniority and thereby determines respect relationships, and is reflected in words denoting sons, daughters, and siblings, which served as familial address terms

⁴⁵C.f. the diary of Miss Emma DeKnight, who taught at the Otoe tribal boarding school at that time (DeKnight ms., University of Oklahoma Archives, Norman, OK).

⁴⁶ J. O. Dorsey identified a tiny bit of data as specifically Missouri, but it related to only a single speaker, so I prefer to avoid any discussion of the Missouri dialect at present.

⁴⁷ There has been intermarriage for a long time, so 100% dialect consistency for a speaker would be very unlikely, regardless of tribal membership. Dialects may be a matter of tendencies, rather than "always"/"never". Family members might use different speech within a household, such as Mr. and Mrs. Small, Ioway and Otoe respectively. The couple understood each other but didn't speak exactly the same (Marsh n.d.)

TABLE 7. DIALECT DIFFERENCES

I. Phonological Variation	Baxoje	Jiwere
A. Difference in Fricatives:	Daxoje	Jiweie
	rva	F.1
1. Word initially	[š]	[s]
	<u>š</u> úñe	<u>s</u> úŋe
	'horse'	'horse'
2. In consonant clusters		
a) before [g]	[sg~hg]	$[\Theta g]$
	wa <u>h</u> ge	wa O ge
	'dish/plate'	'dish/plate'
	<u>hg</u> a	⊕ ga
	'(be) white'	'(be) white'
b) before [j]	[ʔj̆~hj̆]	
/ 53		Las
	ną ² je, ną <u>h</u> je	na <u>s</u> je
	'heart'	'heart'
B. Difference in Nasal Consonants:		
1. Medial position, esp. before final –e	$[\tilde{\mathbf{n}}]$	[ŋ]
1 / 1		[0]
	č ^h idói ñ e	č ^h idói ŋ e
	'little boy'	'little boy'
II. Select Lexical Differences	110010	110110 005
A. Nouns:		
110 I (UIII)	mamáiñe	šúwe
	'little baby'	'little baby'
	Tittle baby	Tittle baby
B. Interjections:	sik'	darah
B. Interjections.	'Incredible!'	tan-rah [Marsh]
	morearere:	'Incredible!'
		moreatore.

2. Sentence Final Particles. The second set of gender-indexical terms distinguish between declarative statements, requests, commands, dubitatives, quotatives, and more. ⁴⁸ These important enclitics audibly punctuate the sentence, informing the listener how to interpret the speech segment.

⁴⁸Trechter (1993) presents a thorough analysis of gender enclitics, including the circumstances where a speaker's gender was not the determining factor, for various pragmatic and contextual reasons, including quoted speech.

(See Table 8 below. The list may not be exhaustive.) These enclitics occur in combination with each other, especially when expressing emphasis: $k^h e h u^a$ 'Indeed!' ('This I declare! male speaker').

Note that a narrator will use the character's gender marker during dialogue, rather than indexing his or her own identity. Based on the songs the author collected, while mixed gender singing does occur (females may join in during various worship and powwow songs), it is the men who traditionally begin the songs, and texts reflect that with male forms.

TABLE 8: Sentence Final Particles Showing Mood, Evidentiality & Gender

S-Final Particle Type	Male Speaker	Female Speaker
Declarative 1	k ^h e ⁴⁹	k ^h i
Declarative 2 Completed Action 'not continuing into present' (Dorsey)	k'a	hą
Inference (2nd hand source) 'I think'	no	na (?)
Command	re	re, ræ
Polite Command	ne	nε
Inclusive Request ⁵⁰ 'Let us' / 'Would that'	t ^h o , dáhò, hda?o	t ^h a
Question Marker (Optional)	jе	ja
Tag Question	?a	k?a
Narrative Marker 'It seems'	asgu	asgų
Quotative	?е	?ε
Emphatic	hų?	æ, ʔa, ʔi
Surprise/Excitement 'Exclamation point!' (Dorsey)	t'o	ťų:

⁴⁹ Dorsey's manuscripts gave the male declaratives as distinguished by tribe, with kei as the Otoe form and ke as Ioway, while he listed k^hi 'Ioway female declarative', but hq for Otoe women's equivalent.

⁵⁰Earlie scholars have often called this case the **hortative** marker, related to the rather old-fashioned word to "exhort" someone to do something.

3. Interjections. The final morpheme set indexes a speaker's gender, and is usually sentence initial. (See Table 9.) It is sometimes only a subtle difference, such as a final vowel shift, while other forms show little apparent derivational relationship between the two forms at all.

TABLE 9: Interjections Showing Mood and Gender

	Mala Garatan	
Interjection Gloss	Male Speaker	Female Speaker
'Oh, my!'	hé:hą	ε^{γ} inà:, hina:
(Pity, love, sympathy,		
compassion)		
'Say! Hey! (Change subject)	kàró	unknown
Joy, Happiness	íyà	íyà
(while singing or talking)		*Not traditionally female but
		some do now.
Greeting/Acknowledgement,	Ahó, hó	ahá, há
Thank you!		
Approval/ Sanction		
'Hmph! Aw, Heck!	$darepsilon^{\gamma}$	$h \varepsilon^{\gamma}$
(critical/doubtful;	(Both male & female	
prior speaker isn't telling it	forms =short vowel [E]	
right)		
'Well! (GT) Whew!	gwi, kwi	hí
(Almost!; something nearly		
happened, but didn't,		
either good OR bad)		
'Well, well [Whitman];	hé:hą	hára ⁹
Oh, my!'	·	[also glossed as doubting
(negative response, as in		truth]
niece/ nephew teasing		,
uncle/aunt too harshly;		
surprised in a bad way)		
'My goodness! Surely not!	bá?, huba?, hú? húba?	dó?, dó?ò
No way! (Negative	(L-R in order of	(greater emphasis)
response; surprise, shock!)	increasing emphasis)	ga: (Rankin n.d.)
'Yes' (Affirmative)	Hújè	Hújè
,	•	•=
'No' (Negative)	hiñégo	hiñéga

References Cited

- Basso, Keith H. 1990 "Semantic Aspects of Acculturation" In Western Apache Language and Culture: Essays in Linguistic Anthropology. University of Arizona Press: Tucson, AZ. Pp. 15-24.
- Boyle, John n.d. "The Indefinite Prefix [*wa-] in the Siouan Languages." Paper given at the 2009 Siouan and Caddoan Languages Conference, University of Nebraska, Lincoln, NE.
- Brown, Cecil H. 1999 Lexical Acculturation in Native American Languages. Oxford Studies in Anthropological Linguistics vol. 20, New York and Oxford: Oxford University Press. Bühler, Karl 1934 Sprachtheorie. Stuttgart: Fischer.
- Cumberland, Linda A. 2005 A Grammar of Assiniboine, A Siouan Language of the Northern Plains. Unpublished Ph.D. Dissertation, Indiana University, Bloomington, IN.
- Davidson, Jill D. 1997 'Prayer-Songs to Our Elder Brother': Native American Church Songs of the Otoe-Missouria and Ioway, Unpublished Ph.D. dissertation, University of Missouri-Columbia.
- 1999. "Reflections on Fieldwork", Practicing Anthropology, Reversing Language Shift In Indigenous America: Collaborations And Views From The Field, 20(2) (1999), 28-33.
- de Reuse, Willem 1994 "Noun Incorporation in Lakota (Siouan)", IJAL 60:199-260.
- Dorsey, James Owen 1880 "The Rabbit and the Grasshopper: An Oto Myth." The Antiquarian and Oriental Journal 3:24-27.
 - 1892 "Siouan Onomatopes." American Anthropologist 5(1): 1-8.
- n.d. Unpublished notes and slipfiles, Anthropological Archives, Smithsonian Institution, Washington, D.C.
- Goddard, Ives 1996 "Introduction," IN Handbook of North American Indians, Vol. 17 Languages, William C. Sturtevant, general editor, I. Goddard volume editor. Smithsonian Institution, Washington, D.C. Pp.1-16.
- Good Tracks, Jimm 1992 Ioway-Otoe-Missouria-English Dictionary. Unpublished m.s. available through the Center for the Study of Plains Languages, Boulder, CO; also online at URL wwwkhs.org/research/collections/documents/indexwww.iowayotoelang.nativeweb.org/
- Gracyzk, Randolph 1991 "Incorporation and Cliticization in Crow Morpho-syntax," Ph.D. dissertation, University of Chicago: Chicago, IL.
- Greer, Jill D. 2008 "The Otoe-Missouria Flag Song," Proceedings of the Mid-America Linguistics Conference, ed. by Jie Zhang. Lawrence, Kansas: University of Kansas, 2008.
- Hale, Kenneth and Josie White Eagle 1980 "A Preliminary Metrical Account of Winnebago Accent," IJAL 46:17-34.
- Hamilton, Rev. William and Samuel Irvin 1848 "An Ioway Grammar." Presbyterian Mission Press: Highland, KS.
- Heath, Jeffrey 1998 "Pragmatic Skewing in 1 <>2 Pronominal Combinations in Native American Languages," IJAL 64(2):83-104.
- Helmbrecht, Johannes 2002 "Nouns and Verb in Hocak (Winnebago)" IJAL 68 (1):1-27.
- and Christian Lehmann. eds. 2010 Hoçak Teaching Materials Volume 1:
 - Elements of Grammar/Learner's Dictionary, SUNY Press, Albany, NY.
- Hopkins, Jill D. & Louanna Furbee n.d. "Discourse Markers in Chiwere" Presented at 1989 Mid-America Linguistics Conference, OSU, Stillwater, OK.
- n.d. "The Chiwere Siouan Verb-Word," Presented at CAIL
 - - Session, Annual Meeting of the Am. Anthropological Association, Nov. 1991, Chicago, IL.

- Hopkins, Jill D. 1988 "Deixis in Chiwere." Unpublished M.A. thesis, University of Missouri-Columbia, Columbia, MO.
- ______ 1990 "Spatial Deixis in Chiwere," Kansas Working Papers in Linguistics, 15(2): 60-72.
- _____n.d. Fieldnotes & transcriptions from 1988-2012, Missouri Chiwere Language Project, University of Missouri-Columbia (archived at Luther College, Decorah, IA).
- Koontz, John 1985 "A Syncopating Conjugation *k- stem in Lakota." IJAL 51(4): 483-484.
- Larson, Rory n.d. "Loan Words" Paper presented at the Siouan and Caddoan Languages Conference, June 2004, Kaw Nation Tribal Center, Kaw City, OK.
- Marsh, Gordon n.d. Materials for a Study of the Ioway Language. Ms, American Philosophical Society Archives, Philadelphia, PA.
- Miner, Kenneth L. 1979 "Dorsey's Law in Winnebago-Chiwere and Winnebago Accent," *IJAL* 45(1): 25-33
- $Rankin,\,Robert\,L.\ \ 1977\ \ "From\,Verb,\,to\,\,Auxiliary,\,to\,\,Noun\,\,Classifier\,\,and\,\,Definite\,\,Article:$
 - Grammaticalization of the Siouan Verbs Sit, Stand, Lie." R.L.Brown, et al., eds.
 - Proceedings of the 1976 Mid-America Linguistics Conference, Minneapolis, 1977, pp.273-283.
 - 2005 "Quapaw" IN H. Hardy and J. Scancarelli, eds, *Native Southeastern Languages*, University of Nebraska Press, Lincoln, NE. Pp.454-500.
 - n.d. "The Siouan Verb Template Continued: Enclitics, A Comparative and Historical Survey," Presented at the Siouan and Caddoan Languages Conference, June 2009, University of Nebraska, Lincoln, NE.
- ______, John Boyle, Randolph Graczyk, and John Koontz 2003 "A Synchronic and Diachronic Perspective on 'Word' in Siouan." IN R.M.W. Dixon and Alexandra Y. Aikhenvald, eds. *Word: A Cross-Linguistic Typology*. West Nyack, NY, USA: Cambridge University Press, pp. 180-204.
- Rauh, Gisa 1983 "Aspects of Deixis; Tenses as Deictic Categories: An Analysis of English and German Tenses." *Essays on Deixis*, ed. by G. Rauh, pp. 9-60, 229-275. Tubingen Beitrage zur Linguistik 188. Tubingen: Gunter Narr Verlag.
- Robinson, Lila W. 1972 "An Iowa/Otoe-English Dictionary." Unpublished ms. University of Kansas, Lawrence, KS.
- Rood, David and Allan Taylor 1996 "A Sketch of Lakhota, A Siouan Language" IN *Handbook of North American Indians vol. 17 Languages*, I. Goddard, volume editor, Smithsonian Institution, Washington, D.C. Pp. 440-482.
- Schwartz, Saul n.d. "Who Wrote Whitman's Grammar?" Presented at the Siouan and Caddoan Languages Conference, May 23-25, 2014, University of Wisconsin, Madison, WI.
- Schweitzer, Marjorie 2001 "Otoe and Missouria", IN *Handbook of North American Indians* vol. 13(1) *Plains*, Raymond J. de Mallie, ed. Smithsonian Institution: Washington, D.C., Pp. 447-461
- Susman, Amelia 1943 "The Accentual System of Winnebago." Unpublished Ph.D. dissertation, Columbia University: New York, NY.
- Taylor, Allan 1976 "On Verbs of Motion in Siouan Languages," IJAL 42(4): 287-96.
- Trechter, Sara J. 1995 "The Pragmatic Functions of Gendered Clitics in Lakhota." Ph.D. dissertation, University of Kansas: Lawrence, KS.
- Ullrich, Jan 2008 *New Lakota Dictionary*, Lakota Language Consortium, Bloomington, IN, pp.738-760.

Wedel, Mildred W. 2001 2001 "Iowa", IN Handbook of North American Indians vol. 13(1)
 Plains, Raymond J. de Mallie, ed. Smithsonian Institution: Washington, D.C., Pp. 236-246.

 Whitman, William 1936 The Oto. Columbia University, New York.
 1947 "A Descriptive Grammar of Ioway-Oto" IJAL 13(4): 233-248.

APPENDIX A

Two Diagrams of Spatial Distinctions (Hopkins 1990)

Figure 3 presents the parallels between the deictic elements of person, time, and space as they relate to the context of the speech act, with Ego /1st person/here/now as the anchor or point of orientation, designated as *origo* by the German theorist Bühler (1934).

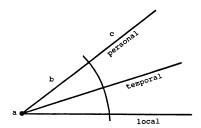


Figure 3. Model of Deictic Dimensions: a) point of orientation; b) related to/ near (a); c) not in contact with (a). (Rauh 1983:19)

Figure 4 presents Hopkins (1990) adaption of Rauh (1983) to Jiwere data, which has an additional category for the dual [12], and for visibility (in sight and out of sight).

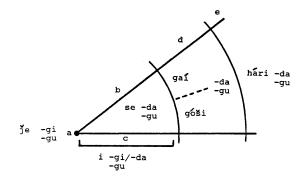


Figure 4. Spatial Deixis in Jiwere Presented in Schmid and Rauh Deictic Template (Hopkins 1990:68).

⁵¹ See Schwartz n.d. for persuasive evidence confirming many Siouanists' hunch, which is that Gordon Marsh is the true author of the 1947 Iowa-Otoe grammar in IJAL.