

DESCRIPTIVE GRAMMAR OF IOWAY-OTO

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0. Ioway is one of a group of three close dialects, Ioway, Oto, and Missouri, which

¹ Deceased; the author's original manuscript, listed as Ms 5 in Index to the Franz Boas Collection of Materials for American Linguistics, Language Monograph 22 (1945), is now in the Library of the American Philosophical Society where it may be consulted. The last manuscript page includes a phrase, 'Added to the passive . . .', which suggests that a statement on the distribution of the suffix -hi had been made; we conclude that the manuscript available to us for publication is a fragment of a larger manuscript.

For a somewhat different treatment than that accorded to person markers in Section 15 of this paper, see C. F. Voegelin, *A Problem in Morpheme Alternants and Their Distribution*, Lg. 23. No. 3 (1947).

form in reality one single language consistent in phonological and morphological structure with but slight lexical divergencies. In the last quarter of the last century J. Owen Dorsey of the Bureau of American Ethnology recognized the linguistic community of these three dialects and named that language the Chiwere or Teiwere, a word which we will transcribe in our present phonetic system as *ǰíwele*. This is properly the name for the Oto (the Ioway calling themselves *Báxoje* and the Missouri *Nútači*), but being numerically the largest of the three groups and reportedly having absorbed the Missouri branch entirely they perhaps have a good claim for giving their name to the whole language community. The material contained in the present study is partly Ioway and partly Oto, but an attempt has been made to specify each where there are known differences. The author spent three months in the summer of 1936 at the home of Robert Small, an Ioway Indian, and his wife Julia Small, an Oto, which was one of the homes in the Ioway settlement near Perkins, Oklahoma, comprising about 75 Indians. Linguistically this settlement was as much Oto as Ioway, there being no Indian there all of whose parents were Ioway. However, there were those who claimed to speak Ioway, of whom Mr. Small was one, and those who claimed to speak Oto, of whom Mrs. Small was one, plus a few from other linguistic groups. All the traditional tales collected by the author were given him by Mrs. Small, the last survivor of the Ioway Medicine Lodge (cf. William Whitman—*The Oto*, *CUCA v. XXVIII*, p. xvi, entry J.S.), who died in the winter of 1937. These are Oto in dialect. The author's grammatical notes, vocabulary lists, and colloquial texts were obtained from Mr. Small and are essentially Ioway in form. The differences between Ioway and Oto seem to be only in the pro-

nunciation or form of a few words, and these will be noted where known.

The jíwele language (comprising the Ioway, Oto, and Missouri) is of the Siouan linguistic family, and those acquainted with other Siouan tongues will recognize certain common features here. The present study is designed to be a purely descriptive grammar, and hence no comparative and very few historical observations will be included, though the material is so arranged as to bring out common Siouan linguistic characters.

The following signs and abbreviations current in linguistic literature will appear in this monograph:

+ indicates the addition or combination of phonetic or morphological elements.

= indicates the equivalence of two sets of elements where there has been no change in combining the one to give the other.

> means *develops into, becomes, gives*, and indicates a change or alteration in the direction of the point.

< means *from, comes from, develops out of*, and indicates an altered form analysed back into component elements or historical antecedents.

~ indicates two phonological variants of the same morphological element which alternate under given circumstances; sign usually means *alternating with*.

[] in the grammatical discussion or notes enclose a phonetic notation which is not phonematic; in the body of the texts enclose a word, words, or portion of a word, which is to be deleted as not being part of the original text, that is something which the observer noted down but which the informant probably didn't say, such as a repeated phrase or sentence.

< > in the body of the texts enclose a word, words, or a part of a word, which in the author's opinion is to be added as part of the original text, that is something that the informant probably gave but the observer failed to notice.

() in the translations of the texts enclose

passages which have no correspondent in the text but were given to the author at the time of the analysing of the texts with one of his informants.

* before a word indicates a hypothetically reconstructed historical form or ancestor of a present-day word; after a word indicates a modern form not attested but constructed according to existing patterns.

1. Phoneme inventory:

	stop	spirant	nasal	semivowel	liquid
labial:	b p p̣		m	w	
dental:	d t ṭ	θ θ̣	n		l
palatal:	ʃ č č̣	- s ś	ñ	y ý	
guttural:	g k ḳ	- x x̣	ŋ		
glottal:	ʔ	h			

Nasal vowels:

ĩ, ʉ, ɤ

Oral vowels:

i, u, a, e, o

2. Phonetic and phonological description:

There are three stop phonemes in each but the glottal position; viz., a lenis which begins voiceless and ends voiced and is unaspirated, a media which is voiceless throughout and aspirated, and a fortis which is glottalized but with only moderate pressure. In the spirant classes outside the glottal the same tripartite phonematic correlation exists, but only the dental class is complete since the palatal and guttural each lack the lenis member.

The spirants are placed under a heading by themselves separate from the stops because Ioway possesses the common Siouan mechanism (but no longer productive) of using the spirants of the respective positions from the front of the mouth to the back to express increasing degrees of intensity in roots signifying breaking and the emitting of sounds and noises. The spirant series do not all correspond in point of articulation with the stop series opposite them in the above table. The dental stops are articulated with the tip of the tongue against the base of the upper teeth, but the dental spirants are inter-

dental though with less extrusion of the tongue than in the American English th-sounds and more like Castillian Spanish *z* and *-d-*. The palatal stops are a little farther forward than the English *ch-* sound in that the tip of the tongue touches the base of the upper teeth during the contact and hold of the stop. The palatal spirants are made with the tip of the tongue just behind the edge of the lower teeth and the blade of the tongue hunched up near the prepalate with the air escaping through a slight depression in the center of the blade and rubbing against the alveolar ridge. This type of sibilant occurs in Polish, written *ś*, in some dialects of Dutch and Spanish, and elsewhere. Many of the younger Ioway speakers replace this prepalatal sibilant with alveolar *s*. By rights the *y* ought to be the lenis phoneme of the palatal spirant series. However, the existence of a fortis *ý* puts it in a separate category. This *ý* is found only in words where it exists beside variants with *ś* and *ʔ*, thus: *luśáge* ~ *luýáge* ~ *luʔáge* *to fail, be unable, can't*, *waśá* ~ *waýá* ~ *waʔá* (*ipe*) (*little*), *old man*. These are the only words in which *ý* has yet been recorded.

The glottal stop and the glottal spirant are both full-fledged consonants and can both occur in initial, medial and morpheme-final position as well as first members of consonant clusters (see 3, below).

The nasals do not require much comment. The phoneme *ŋ* is limited to medial position after a nasal vowel. After *ɨ* the *ŋ* is palatalized and in the diminutive ending *-yɨŋe* this *ŋ* has passed over to the phoneme *ɲ* in the speech of Mr. Small, my Ioway informant. In the speech of Mrs. Small, my Oto informant, the guttural *ŋ* remained. In Mrs. Small's speech the *ŋ* after *ɨ* was very pronouncedly rounded. The *ɲ* is the palatal *ñ* of Spanish.

The realization of the phonemes *w* and *y* is like those of English, viz., as continuants without any friction. In the realization of the *ý* the affect of the glottal closure is naturally heard before the continuant; during the

period of that closure the tongue is in the position for making *y*.

The phoneme *l* constitutes the only liquid in Ioway. It is produced by a rapid contact and withdrawal of the extended tip of the tongue against the base of the upper teeth, during which contact the air escapes over the sides of the tongue. The contact is so short and the withdrawal so rapid that between vowels and after stops one is apt to get the impression of a single-tap *r*. In initial position it may be mistaken for the phoneme *ʃ* because of its dental articulation and almost stop quality, and after a spirant it could be mistaken for *d*. All these mistaken impressions have been received by the present and former observers. However, the proof that this phoneme is a lateral exists in the fact that it can be prolonged in slow pronunciation, when the lateral vibrations become clearly perceptible. The voicing of this sound starts before the actual articulation, which in consonant combination gives the impression of a slight break or a very short *ə* before the *l*. A transcription like *b.l, g.l, etc.*, has been used for a similar condition in other Siouan dialects, but since this realization is automatic, universal, and non-phonematic in consonant combinations with *-l* in Ioway, it will not be further noted in this grammar or in our texts.

The vowel phonemes require no special description. Although in the vicinity of nasal consonants nasal vowels appear most frequently, yet oral vowels can be found near nasal consonants (*mamáɲe* *baby*, *xláɲɨ* *to be hungry*), and at least one pair of words can be found which is distinguished by an oral vowel in one and a nasal vowel in the other word, viz., *náwe* *leaf* and *náwe* *hand*. In words without nasal consonants many pairs can be found distinguished only in this fashion *áje* *to gather*; *áje* *his father*; *igú* *to fetch*; *igú* *thus*; *hí* *to arrive going*; *hí* *fur, hair, etc.*). The phoneme *ɔ̃* is realized as a nasalized *ʌ* (as in English but, such): in accented position before *ŋ* (*naŋe* *to be in a sitting position* and *naŋe* *to run*); before consonant com-

ination (nágwa-naǰe *ferce, terrible*); in the word *big, large, great* xáǰie (Ioway form) and xáǰe (Oto form), and always in unaccented position following the accent (naǰtúda *to pity*, hiǰtúga *my grandfather*, ʔúna *he did it and*, and so always -na *and*).

3. Phoneme combinations. Consonant clusters in word-initial and word-medial:

Stop + stop. (ǰd): no word-initial example, áǰda (*and*) *then*.

Stop + spirant. (ʔθ): ʔθúʔθu *mussel-shell*, lóʔθi *armpit*; (ʔs): ʔsáke *nine*, uʔsúʔsu *wrist*; (ʔh): ʔhaʔhaʔ *boo-hoo* (sound of crying).

Stop + semivowel. (dw): udwá *cat*; (gw): dó-gwèhi *turnip*, ugwé *to enter*.

Stop + liquid. (bl): blóge *all*, glébla *ten*; (gl): glé *go back*, aglí *plus*.

Spirant + stop. (θg): θgá *to be white*, bláθge *to be flat*; (sd): isdá *eye*; (sǰ): sǰéda *to be heavy*, máǰe *hot weather*; (sg): sgáǰe *to play*, wósga *habit*; (xd): iblǰxdo *blackbird*; (hd): hdá *to be discolored*, ihdóge *elbow*; (hǰ): náǰe *heart*; (hg): hgá *to be white*, bláǰe *be flat* (newer pronunciation for θg, cf. above).

Spirant + nasal. (hm): sáhma *seven*; (hn): láhnuwe *calumet*; (hñ): -hñe suffix of future.

Spirant + semivowel. (θw): ǰwe *axe*; (sw): swála *to be soft*, baswá *to cut piece off*; xw: uxwáǰi *to fall*; (hw): húhwa *well, well* (interjection).

Spirant + liquid. (θl): θléǰe *be long, tall*, waθlú *to spit, roast*; (sl): slásla *to be round*, sǰsla *opossum*; (xl): xlósga *to be empty*, xámoxla *flower*.

It is possible that when more Ioway material has been collected there will be examples of some of those consonant combinations not yet attested in initial position. The combinations ʔh and hw are attested only in interjections and onomatopoeic words. It is interesting that the Ioway ʔh and hw though probably extra-phonematic do fill out the phonological patterns of the language. The combination θg is in process of being replaced by hg. I encountered a few old Oto speakers who used the forms with θg, but the

majority of Ioway and Oto speakers that I heard had only hg. Hamilton on the other hand records only θg (in 1848). The combination xd in iblǰxdo *blackbird* is probably a mistake for hd.

There are very few sequences of vowel phonemes in Ioway. Before another morphological element beginning with a vowel, i and ǰ are pronounced shorter than ordinarily and tend to approximate y, while u and ʊ tend to approximate w.

4. Phonological neutralizations. There are certain situations in the Ioway language when the oppositions that distinguish various phonemes are removed or neutralized. The most common is in compound words. The next most common is vowel harmony.

In compounding words the final -e of the first stem is commonly dropped and the consonant immediately preceding this -e undergoes certain changes.

In such circumstances all of the consonants of the guttural position (g, k, ǰ, x, ǰ, ǰ) are replaced by ʔ: ihdóʔ-páǰi *Sharp-Elbows* < ihdóge *elbow* + páǰi *sharp*; hiǰnáʔ-sǰǰe *little old woman* < hiǰnáge *(old) woman* + sǰǰe *little*; úǰiʔ-θú *wild beans* < úǰiǰe *bean* + θú *seed*; hiǰúʔ-sǰǰe *mouse* < hiǰúǰe *mouse, rat* + sǰǰe *little*; wayǰiʔ-súǰe *chicken* (Oto form) < wayǰǰe *bird* + súǰe *red*; miʔ-sǰǰe *duck* < miǰe *water fowl* + sǰǰe *little*; miʔ-θéwe *black goose* < miǰe *water fowl* + θéwe *black*; wáʔ-wasóse *a brave* (Hamilton) < wáǰe *man* + wasóse *brave*; (there are no examples of this for k, ǰ, or ǰ).

There is one example of ǰ being replaced by ʔ in composition before a spirant, viz., wadúʔθage *loose corn* derived from wadúǰe *corn*.

In composition before a stop there is one example of x being replaced by h, viz., miǰ-gúǰe ǰǰe *mud-hen* < miǰe *water fowl* + gúǰe *to dive* + -ǰǰe diminutive ending.

There is one example of ǰ being replaced by ʔ before an added element beginning with a vowel, which is not usual: gláʔàsǰu *he married her, it seems* = gláǰàsǰu.

In the word tóh-glèǰleǰe *woodpecker* (spot-

ted) the -h of the first element probably replaces some other consonant but the first element has not yet been identified with any other stem. A number of examples may be adduced of various consonant phonemes being replaced by h in composition before nasals: péhñi-hgàñje *alcohol* < péje *fire* + ñi *water* + hgá *white* + -ñje diminutive suffix; aháhnahè *he was on it* < aháta *on top of* + nahé *he was*; dagúhñje *there was nothing* < dagú(le) *what, something* + ññje *to be not, have not* (it is possible that this is an example of the phenomenon mentioned in the next paragraph). Other examples of h replacing various consonant phonemes are: kíhje *to fight, battle* derivative of kíða *to fight, struggle*; ibúh-čè kè *he's dying of thirst* < ibúđe *to be thirsty* + čé *he is dying* + kè particle.

I have collected a number of examples of words in which an h appears when elements are added on without there being any explanation for the presence of this h. There are: egláhda *he sees his own* < a + gla + da (verb adá *to see*), hñwéglahda *we 2 see our own ones* < hi + wa + a + gla + da (and so regularly h appears in the verb adá after the prefix gla-); egláhdaŵe *to watch, take care of* (lit: *to watch on one's own*) < a + gla + dáŵe *to wake, watch*. The form dagúhñje *there was nothing* probably belongs here, since one would expect it to be compounded of dagú + ññje and not dagúle (see under Pronouns) + ññje. If the etymology of tóh-glè-gleđe *woodpecker* of tó *blue, color* + glégleđe *spotted, striped* given by my informant (Mr. Small) is to be credited, then the h in this word is another case in point.

One other case of neutralization of a consonantal phonematic opposition is to be seen in the form hñnáʔ-siʔ *little old woman* where the final ʔ replaces an original ŋ (cf. hñnáʔ-sñje above).

The instances of neutralization of the opposition between vocalic phonemes are all of the type that might be termed vocalic harmony. The number of these is not very large. They are: bé-líhiásgu *he threw it, it seems* < bé *to let go* + lé *to go* + -hi causa-

tive + -ásgu narrative, evidential; bé-líhi *he threw it, hñbé-líhi we 2 threw it* (but habé-léha *I threw it*); wéwsdaŵenawina *they tempted us* < wáwe-; eléglasda *thou sees thy own* < a-lé-gla-sda; welégláʔa *thou carries thy own ones* < wa-lé-gla-ʔa; weléka *thou tells stories* < wa-léka; wéweglawá ho' *you must call us 2 (your own)* < wáweglawá ho'.

5. Phoneme changes. In the speech of my Oto informant Mrs. Small a tendency to replace dental stops by palatals was quite pronounced. These can hardly be called phonological neutralizations because there were no particular or regular conditions which produced this replacement. In fact these phoneme replacements must be considered part of a process of linguistic change taking place predominantly in the Oto dialect and in the same general line in which Winnebago has already proceeded much farther. The following examples come from the texts: čjǝñje *boy* = čjǝdǝñje; -jała *very* = -dała; héjále *then it is* = hédále; čáñi *soup* = táñi; hñčágwa *my grandson* = hñtágwa.

6. Syllabification. In Ioway practically every syllable falls into one of the three following types: V, CV, CCV (where V stands for any vowel and C for any consonant phoneme). The only syllables which do not fit this pattern are those ending in glottal stop (ʔ) or h. As we saw above (4), the syllables which end in ʔ and h occur only in morpheme combination. We may therefore take syllables ending in ʔ and h as phonological signs of morpheme junction. There are a few other cases of syllables ending in ʔ, and these can also be taken as signs of morpheme junction. These cases are all word-final. In the first instance the last syllable of the last verb in an interrogative sentence ends in ʔ when the interrogative particle je' is omitted, that is, in place of this particle; aléhgáʔ *is it so?* for alé ihgá je'; etc. In the second instance the finality sentence-characterizing particle ʔä, used by women, is often reduced to ʔ, thus: čéhiásguʔ *he killed her, it seems*

(completion of thought) = čéhiàsgu ?ã' (woman telling story).

Out of this one makes a general rule that all syllables end in a vowel, and in certain cases a -ʔ or -h is admitted at the point of a morpheme junction.

7. Primary and secondary accent. The Ioway language has a free primary accent on one of the first two syllables of a word. It is of the type of a rather light stress accompanied by slight lengthening of the accented vowel. It is capable of distinguishing otherwise identical words, e.g., ańĩ *he has*, áńĩ *I have*; wańĩ *meat*, wáńĩ *he has them*; ańásgu *he had it, it seems*, áńásgu *they said it, it seems*. The primary accent is indicated by an acute accent mark (´) over the vowel of the accented syllable. There is regularly a shift of accent from the first to the second syllable of a two syllable stem in word composition when there is amalgamation (see below) at the point of junction: maķóblasge *sternum* < máǵe (< *máǵe) + ublásge; siťupaǰe *hips* < siǵe (< *siǵe) + upáǰe.

Ioway has two types of secondary accent. The first is rhythmically determined by the position of the primary accent and falls on the third syllable after the one bearing the primary accent. Since this accent is not capable of characterizing words and is automatically determined, it is ignored in our transcription. The second type of secondary accent is free in position with relation to the primary accent. It can fall on any syllable following the one bearing the primary stress. It is indicated here by a grave accent mark (˘) over the vowel of the accented syllable. It occurs in compound words, and its place represents either the position of the original primary accent of the second member of the compound or a new position to which it has been drawn by an amalgamation (cf. under 9 below) of two vowels at the point of junction. Examples of secondary accent on various syllables following the primary accent are: ná-hùǵe *tree stump* < ná *tree* + hùǵe *base*; čí-ahàdajńe

little out-house < čí *house* + aháda *outside* + -ińe diminutive suffix; agúǵekeńe *moccasin* < agúǵe *footwear* + ukéńe *common* (with amalgamation).

8. Signs of morpheme junction. The syllables ending in ʔ and h which are signs of a junction between two morphological elements have already been mentioned. There is also another phonological phenomenon in Ioway which serves to indicate a morpheme junction. This is a long vowel in unaccented position in the syllable immediately preceding the junction. Examples are: léxē-blásge *kettle lid*; nápoĩne *little-finger* < nápo *finger* + -ińe diminutive suffix; ítā-mińa *he there sits*; náǵwā-naǵe *to be fierce, terrible*. This is a very common mechanism in the Ioway language and will be indicated where noted though the author does not believe that the long vowels in this position are phonematic but rather that this lengthening is a prosodic characteristic like the syllables ending in glottal consonants.

9. Vowel sandhi. In Ioway there are often various phonetic changes at a junction between two morphological elements involving the final vowel of the first element and the initial vowel of the second. This coming together of two vowels or vowel sandhi can be divided into three types, elision, amalgamation, and liaison.

When two words or two other morphological elements come together, the final vowel of the first element may be dropped before an initial vowel of second element. Examples of elision are: tadá *where* + alé *it is* > taďalé *where is it? where it is*; wa- *something* + igúǵe *indicate by* > wíǵuǵe *a measure, mile*; dagúle *what* + ańĩ *to have* > dagúlańĩ *property*; wéńiǵle *wander* + unáne *to run in* > wéńiǵlunáne *to run hither and thither*; čí *a dwelling* + akílu?ǰa *bent over to meet* > čákílu?ǰa *wigwam*; čí *house* + uǵwáwile' *come (pl.) in!* > čuǵwáwile' *come into the house!*; ní *lóǰa a lot of water* + úyu *ke'*

it fills it > *ñí lóhúyu ke' there's a lot of water in it.*

When two words or two other morphological elements come together, the final vowel of the first element may combine with the initial vowel of the second element to produce a single vowel of different quality from either of the original words. Examples of amalgamation are: *wa- something + ugláŋe put on the head* > *wógláŋe headdress*; *ná wood, iwágluŋe cut with by pushing with the hand* > *néwagluŋe a saw*; *ná wood + ugwá a pile* > *nógwá woodpile*; *agúŋe footwear + ukéŋe common* > *agújókéŋe moccasin*; *hi- we 2 + añí have* > *háñí we 2 have*; *hí hair, fur + uólá bunch* > *hóólá bunch of hair*; *hi- we 2 + ixá live* > *híxá we 2 live*; *másu feather + ugláŋe put on the head* > *másūgláŋe feather bonnet*; *náŋdo + igláŋe (?)* > *náŋdwégláŋe raspberry (analysis uncertain).*

When two words or two other morphological elements come together, the final vowel of the first is replaced by a consonant before an initial vowel of the second element, the replacing consonant being the one of all the consonant phonemes which has the most phonetic characteristics in common with the replaced vowel. This process is limited to u and ū which are replaced by w before another vowel. Examples of liaison are: *dagú what + isá je' do you say?* > *dagwisa je' what did you say?*; *éwa-?ú he is one who does it + -àsgu evidential, narrative suffix* > *éwa-?wàsgu he was the one who did it, it seems.*

10. Consonant sandhi. In word or morpheme junction certain consonants may undergo replacement or disappearance.

There may be loss of the final vowel of the first element before an initial consonant of the second element with resultant contact of two consonants. In such cases the two contiguous consonants are replaced by a single third consonant which possesses all the phonetic characteristics which the two replaced consonants have in common. Ex-

amples are: *glaxáčiŋe very largish* < *glavery + xáj(e) large (Oto form) + síŋe small (used as diminutive ending)*; *lásŋlájhe he calls me by name* < *láy(e) name + hílájhe he calls me*; *inákí to set down* < *i- + náŋe to be sitting + -hi causative suffix*; *aháčŋŋahe we 2 are on top of it* < *ahát(a) on top of + hŋŋahe we 2 are.*

There may be loss of the final vowel of the first element before an initial vowel of the second element with resultant contact between consonant and vowel. In such cases the consonant is replaced by the fortis phoneme of the same mouth position. Examples are: *wayŋkihjè bird's egg* < *wayŋe bird + ihjé egg*; *ičilò flesh of the cheeks* < *ij(e) face + iló body, flesh*; *isda-mašòuglájhe spectacles* < *isdá eye(s) + mašò(é) iron, piece of metal + ugláŋe to put on*; *léxisgagle bucket-pole* < *léx(e) bucket + isgágle to bind to*; *sótùyu smoky* < *sój(e) (< older *šóde) + úyu to fill.*

In certain cases a morpheme-initial h and a morpheme-initial g (before i) are dropped after a preceding vowel with subsequent elision or amalgamation of the first vowel with the vowel following the h- or g-. Examples are: *čŋhi we 2 kill* < *čé-(h)j-hi*; *átáwe I jump over* < *a-(h)á-táwe*; *ŋlákū thou gave it to me* < *u-(h)ŋ-la-kū*; *hétā I fly* < *ha-(g)í-tā*; *hítāwi we fly* < *hi-(g)í-tā-wi*; *wégluŋe he cut them* < *wa-(g)í-gluŋe.*

11. Morphophonological changes. Certain phonetic changes taking place before certain morphological elements are here called morphophonological changes. There are three groups.

Before the directional prefix *gla-*, indicating that the object of a verb reports back to the subject, all other prefixes ending in a change their a for e. Thus, *egláñí he has his own one* < *a-gla-ñí (añí to have)*; *wéglábe she leaves her own ones* < *wa-gla-be (wa- them)*; *wéweglawá ho' call us 2 (who are thy own)!* < *wáwa-gla-wá (wáwa- us 2)*; *welégla?á thou carries thy own ones* < *wa-*

la-gla-ʔa (wa- *them*, la- *thou*); uhégwexa *I blow at mine* < u-há-g(la)-wexa (ha- *I*). This same change of a to e appears in the verb udwáñi *to fail to reach, come up to*, thus uhédwañi *I fail to reach, uhédwañi thou failest to reach*.

Certain verb stems terminating in -é and a few in -e replace their final e by a before the following suffixes and postverbal particles: -ñe indefinite plural, -wi definite plural, -na *it is* (used to set off nouns and verbs in sequence and hence translated *and*), le' ~ le' particle characterizing imperative sentences (men, women), je' particle characterizing interrogative sentences. The suffix -ñe, indefinite plural, appears as -na before -wi and je' and -či, causal subordination, and the suffix -hñe, future, appears as -hna before -či and je'. The particle je' is often omitted in sentences, but the -a of the final verb form indicates that the sentence is interrogative. Examples: é *he says*, áwi *they (def.) say*, áñe *they (indef.) say*, ána *he said*; ké *he digs*, káwi *they (def.) dig*, káñe *they (indef.) dig*, kána *he dug*, ká le' *dig!*, ká je' *did he dig?*; će' *he dies*, táwi *they (def.) die*, táñe *they (indef.) die*, luče *he crosses*, lutáwi *they (def.) cross*, lutáñe *they (indef.) cross*; táči *because he was dead* (čé *to die, be dead*); háñawi *they (def.) are lying (there)* (háñe *to be in a lying position*); náñawi *they (def.) are sitting (there)* (náñe *to be in a sitting position*); wówaḱunawi *they (indef.) gave it to us* < wá-u-wa-ḱu-ñe + wi; čéwahinači *because they were killed* (lit. *because they killed them*) < čé-wa-hi-ñe + či; glíhnači *because he is about to arrive back* < glí-hñe + či; sléhna je' *will thou be going?* < slé-hñe + je'; umíña-ñaháda *where she was sitting* < -ñahé + da; líhada *where they were* (líhe *they are*); wéglañada *when I took my own ones* < wa-a-(h)a-gla-ñi + da (añi *to have*, the only word noted that changes -i to -a).

In composition of verbal stems the -e of the first stem in certain verbs changes to -a. Examples: ugwá-giglásgu *he fell in,*

it seems (ugwé *to enter*); yáwe-láhe ke' *he was going along singing* (lé *to go* + -he *to be*); lutá-láwásgu *they (def.) went across, it seems* < lučé + lé + w(i)-ásgu; uwámáñi *he went by walking* (uwé *to go along in* + máñi *to walk*); tá-hàñe *she was lying dead* (čé *to be dead* + háñe *to be in lying position*); (once čé-háñe *he was lying dead*); ihá-náhe ke' *I was saying it* (ihé *I say* + náhe *I am*); itá-ḱiglé ke' *he was talking* (ičé *he talks* + ḱiglé *he becomes*); ñaháslašgalé *if he is alone then* (ñahé *he is* + -slá *alone, only, but* + -sge *if* + alé *it is*); ígī-dahàʔe *the one standing here* (dahé *to be in standing position* + -ʔe *it is that one*).

There are a few examples of a change of -e to -a in the same verbs as above without the addition of a following morphological element. Thus, ḱíweledénaha *those from the Oto* (ḱíwele *from the Oto* -da *at* + hínahé *they (def.) are*); taḱá aháña *where they are lying* (aháñe *they (indef.) are in a lying position*). It will be noticed that both of these examples are nominal clauses, from which we suggest that the morphophonological change of -e (and the one example of -i) to -a was originally nominalizing in function in all the cases where it takes place. However one must remark that this process is no longer active since the majority of the verbs in the language which end in e do not undergo this change to -a, or else it must be considered that the -e of these verbs is not original but a recent addition. To support this one may note that all the verbs but two (háñe and náñe) which change -e (or -i) to -a end in -é (or -i), many being monosyllabic, which would point to the primitiveness of their -e as over against the rest of the verbs in the language in -e which are accented on the root. The two cases lučéwásgu *they (def.) crossed, it seems* and čé-háñe *he was lying dead* show that this morphophonological change of -e to -a is tending toward elimination through the analogical influence of the numerous verbs which do not undergo this change.

12. Expressive changes. There are two types of phonetic changes which we will call expressive.

To make a word carry better in calling or singing its final a or ą is often replaced by -o. This is most common in terms of address. Examples: *hįko oh my father!* (< *hįka*); *hįtųgo oh my grandfather* (< *hįtųga*); *waýó oh old man* (< *waýá*); *laįno you eat* (end of a line in a song) (< *laįna*); *haįno I eat* (end of song line) (*haįna*).

The accented vowel of a word is often overlengthened in dwelling on the word in various expressive or emphatic situations. This extra long vowel is marked with a following plus sign (+). Examples: *mį + le is it my turn?* (*mįle ke' it's me, it's my turn*); *dú + je is it done?* (*dúje it is burnt, cooked, ripe*). Expressive particles are very often lengthened: *hį + nį ilógleńe ga' Well . . . they must have found water!* (surprise) (woman speaking), *he + hįtágwajņēhēi Ah . . .* (pleasure), *very nice little grandson* (man speaking).

The final o of our first type above is often lengthened, and so too in calling or singing is the particle le'-ie' which characterizes imperative sentences.

13. The verbal complex (verb stem plus affixes) is the most important part of the Ioway sentence because it contains the elements expressing the syntactic relations of the subject, object and indirect object, and can thus form a complete sentence in itself.

In addition to the verb stem or a compound of verb stems, the verbal complex contains preverbal and postverbal affixes. The preverbal affixes express various notions of location of the action with regard to a position not that of the subject or object; various instruments or means by which the action is performed; the pronominal elements of the subject, object and indirect object; the general plural of verbs of motion.

The postverbal affixes include the causatives; modal elements.

All the verbs in Ioway fall into one of two types, active or passive. With the active verbs the subject performs the action. With the passive verbs the subject is acted upon or affected by a certain state. The pronominal prefixes are divided into agent (acting) and patient (affected) forms. By various processes passive verbs can be made active, but the reverse is not true. The great majority of the verb stems in the language are passive.

14. Positional prefixes. The three positional prefixes form the first class of elements making up the verbal complex. They locate the action of the verb with reference to a third point not that of the subject or object. They are: a- *on, upon, over, u- in, within, into, i- at, to, by* and any general locative not covered by the concepts of the first two positionals.

Examples with active verbs are: *yá lie down, ayá bed (lie on), uyá lie in, iyáya be lying down; bé throw, let go, abé throw on, ubé throw in; táwe jump, atáwe jump over, utáwe jump in; gú be coming back, agú fetch back, igú (go to) fetch; ?ú do, make, use, i?ú do to, make for, make with; yáwe sing, uyáwe sing about, song, iyáwe sing; háje dream, iháje dream about; lumį buy (Hamilton), ilumį sell (Hamilton); lúje eat, wáluje table (eat on), wóluje feed, ilúje eat up; gúđe point out, show, igúđe measure; yáwe pierce, stick, iyáwe cactus (yíyawe fork).*

Examples with passive verbs are: *bláhge be flat, abláhge be level, ubláhge be flattened; búđe be dry, ibúđe be thirsty; tá?i be visible, showing, utá?i appear; lóha be much, plenty, ulóha a flock, herd; ři be yellow, uři be rusty; xáje be big, large (Oto), uxáje be very large (Oto); xláňi be hungry, uxláňi be very hungry.*

15.0 Pronominal prefixes appear in second position in the verbal complex although

certain forms take first position even preceding the positional prefixes.

Ioway by its pronominal forms distinguishes three persons: the speaker or first person (*me*), the addressed or second person (*thee*), the pair of speaker and addressed or inclusive person (*the pair of us*). Our so-called third person (*he, she, it, they*) is not expressed by any pronominal forms in Ioway. The simple verb form expresses the third person subject and object.

The plural is a function of the whole verbal complex expressed by suffixes and as such will be treated under the post-verbal elements. Our notion of *we* (*I and he, I and they, I and you all*) is shown in Ioway by the plural suffix *-wi* with the inclusive personal pronoun prefix, and *you* is shown by the suffix *-wi* and the pronominal prefix of the second person. Since the third person is not characterized by pronominal prefixes, the verb form plus one of the plural suffixes expresses our notion of *they* (for the notion *them* see 15.3 below). In translating Ioway into English the forms *thou* and *thee* will be used for the second persons singular, and *you* for the second person plural only.

For each of the three persons in Ioway there are two forms, an agent form (indicating the subject performing an action), and a patient form (indicating the subject being acted upon or affected by a certain condition). The agent forms are used as subjects of active verbs, while the patient forms are used as objects of active verbs and as subjects of passive verbs. The forms are as follows:

	AGENT	PATIENT
<i>I, me</i>	ha-	mĭ- ~ hĭ-
<i>thou, me</i>	la-	li-
<i>we 2, us 2</i>	hĭ-	wa-wa-

The patient form of the first person mĭ-

	yáwe <i>sing</i>	glĭ <i>arrive</i>	gláhi <i>love</i>	gitá <i>fly</i>	nayĭ <i>stand up</i>
<i>I</i>	hayáwe	haglĭ	hegláhi	hétá	hanáyĭ
<i>thou</i>	layáwe	laglĭ	legláhi	letá	lanáyĭ
<i>we 2</i>	hĭyáwe	hĭglĭ	hĭgláhi	hĭtá	hĭnáyĭ

is apparently more archaic than hĭ-. The following examples of its use have been noted: as a direct object with a third person indirect object, amʃbe ke' *he left me on it*; as an indirect object with a third person direct object, mĭʔuluyákiñe *they couldn't do it to me*; as the object of the causative with a third person subject, udámĭ *she spared me*, čémĭhñe ga' *he will surely kill me*, ixámi *he saved my life*, lémi *he sends me* (but lĭla < l[e]-[h]ĭ la-[hi] *thou sends me*); in inúmĭ *with me*; as subject of several ancient passive verbs, mĭnáhe *I am* (+ adjective), máne *I am in lying position* (< mĭ-[h]áñe), mĭhgalé *that's what I'm like* (mĭhge + alé); and for forming the independent pronoun forms of the first person.

The agent form hĭ- of the inclusive person always appears in first position in the verbal complex. It amalgamates with the positional prefix a- giving há-, with u- giving hó-, and with i- giving hĭ-. The patient form wawa- of the inclusive person is written wa-wa- because in the verbal complex the two parts can be separated by the positional prefixes giving with a-, wáwa-; with u-, wówa-; with i-, wíwa-.

When the pronouns of two persons (one as subject and one as object) appear in the verbal complex the following table gives the combinations in which they occur:

	<i>I</i>	<i>thou</i>	<i>we(pl.)</i>
<i>me</i>		hĭla-	
<i>thee</i>	li-		hĭli—wi
<i>us (pl.)</i>		wáwala—wi	

15.1. Active verbs fall into two main types of conjugation: those with la- as the subject pronoun in the second person; those with s- in the second person (and usually without la-). The largest number of the active verbs falls into the first type, paradigms of which follow:

The verbs which take s- in the second person all begin with d-, l-, or w-. In these verbs in the first person the initial consonants d-, l-, w- undergo changes according to the following table; examples follow.

Verbs in:	d-	le-, li-	la-, lu-	w-	
<i>I</i>	ha-t-	ha-ʃ-	ha-d-	ha-p-	
<i>thou</i>	(la-)sd-	sl-	sl-	sw-	
	adá <i>see</i>	lé <i>go</i>	lixú <i>drain</i>	láʒe <i>name</i>	lúðe <i>take</i>
<i>I</i>	áta (a-há-ta)	hajé	hajixu	hadáʒe	hadúðe
<i>thou</i>	alásda	slé	slíxu	sláʒe	slúðe
<i>we ʒ</i>	háda (hí-áda)	hílé	hílixu	híłáʒe	híłúðe
	adá <i>see</i>	liłlúhqu <i>drag</i>	láʒe <i>name</i>	lúðe <i>take</i>	
<i>I—thee</i>	alíta (a-lí-ta)	liʒíłlúhqu	lidáʒe	lidúðe	
<i>thou—me</i>	álasda (a-hí-lasda)	híslíłlúhqu	hísláʒe	híslúðe	
<i>we—thee</i>	háłidawi (hí-á-li-)	híłliłlúhquwi	híłilajewi	híłliłlúðewi	
<i>thou—us</i>	wáwalasdawi (wá-a-wa-)	wáwasliłlúhquwi	wáwaslajewi	wáwasluðewi	
		awáðuje <i>push down</i>			
	<i>I—thee</i>	alípaðuje (a-lí-paðuje)			
	<i>thou—me</i>	áswaðuje (a-hí-swaðuje)			
	<i>we—thee</i>	háłiwaðujewi (hí-á-li-)			
	<i>thou—us</i>	wáwaswaðujewi (wá-a-wa-)			

There are a number of active verbs which follow special paradigms. The verbs nałúda *to pity* takes the pronominal prefixes in the middle: nałúheda *I pity him*, nałúleda *thou pities him*, nałúłida *I pity thee* (probably = nałú-gi-da < nałhe *heart* + u-gi-da *be depressed toward*). It will be noticed in some of the paradigms given below that the second half of the verb is conjugated along with the first half:

	é <i>say</i>	ańí <i>have</i>	lúʒe <i>eat</i>	dahé <i>be standing</i>	gúla <i>want</i>
<i>I</i>	ihé	áńí (a-há-ńí)	hají	hadáhe	hagúda
<i>thou</i>	isé	aslí	łají	ladáʒe	lagúsla
<i>we ʒ</i>	híhe	háńí (hí-áńí)	híłúʒe	hídáhe	higúla
<i>they</i>	áńe	ańíńe	lućéńe	hidáhe	gúlańe
		hiwé <i>reach a lying position</i>		*hiʒé <i>reach a standing position</i>	
<i>I</i>		hahiwe		*hahíʒe	
<i>thou</i>		lahiswe		*lahisʒe	
<i>we ʒ</i>		híhíwe		*híhíʒe	
<i>they</i>		*hiáwawáńe (hiáwawáńe)		*hiádafé (hiádadańe)	

15.2 Regular paradigms of passive verbs are as follows:

	pi <i>be good</i>	hgá <i>be white</i>	ihgé <i>be like, thus</i>
<i>I</i>	hípi	híhgá	íhge (i-hí-hge)
<i>thou</i>	lipí	lihgá	ilíhge (i-lí-hge)
<i>we ʒ</i>	wáwapi	wáwahga	wíwahge (wa-í-wa-hge)

Most of the passive verbs take the patient form hí- as subject. However the verb lóðañi *be healthy*, signalized by my inflections as archaic, takes the form mi- and takes it in medial position, lómiðañi *I am healthy*. This verb is to be analysed

as a compound of ló *body* + ðañi *be whole, intact*.

The following verbs have special paradigms which are a mixture of active and passive:

	nałhe <i>be (sitting)</i>	háne <i>be recumbent</i>
<i>I</i>	míńáhe	máʒe (mí-háʒe)
<i>thou</i>	sláʒe	swáʒe

<i>they</i> def.	[náḡawi] (from háḡawi náḡe <i>be sitting</i>)	
<i>they</i> indef.	hínaḡe aháḡe -naḡháḡe (once)	

15.3. The prefix *wa-*, which is preceded in the verbal complex only by the agent pronoun *hi-* *we* (inclusive or plural), expresses the idea of indefinitely extended object and is translated in English by *them* or *something* according as our notions require.

With the positional prefix *a-* it amalgamates into *wá-*, with *u-* into *wó-*, and with *i-* into *wí-*. It is used to express our third person plural object or indirect object of a transitive verb: *walóki* *he fries, bakes them*, *wáñi* (*wa-á-ñi*) *she has them*, *wíslogle* (*wa-i-*) *thou found them*, *wóḡaḡe* (*wa-ú-*) *they boil them*, *wagiwaxuḡe* *they sacrificed it (poured it out) to them*, *wókítanaḡ* *she spoke to them and*, *wigiḡe* *he talks to them*, *inḡwalàsḡu* *he went with them*, *it seems*.

Often the prefix *wa-* is better translated *something*, or else it is used to make a transitive verb intransitive and is not translated: *walúḡàsḡu* *she took something, it seems*, *wápagaxe* *I write something, I get credit* (*wa-á-pagaxe*; *awáḡaxe* *to scratch on by hand*), *wóhi* *to win something, win (a race, game)*, *walúḡe* *to eat (food, meal, something)* (*lúḡe* *to eat it*), *wólage* *to tell a story, tell about something* (*uláḡe* *to tell about it*), *wékaḡ* *to discuss, swap yarns* (*giká* *to shake*), *wawáḡuḡe* *to sew (things, something)* (*wabúḡe* *to sew it*), *wáluxe* *to marry, take a husband* (*alúxe* *to marry him*), *wílesganaḡ* *having tied him with something* (*ilésge* *to bind it with*), *hiḡwáligiloxiwi* *we make a request of you*, *iḡwá* *we ask something of you* (*lóxi* *to ask for it*).

These verb forms with *wa-* are widely used as nouns; in fact, the prefixing of *wa-* is the general method for forming nouns from verbs: *wakí* *a pack* (*kí* *to pack, carry on the back*), *walúḡe* *food* (*lúḡe* *to eat*), *walúxawe* (*sacred*) *bundle* (*luxáwe* *to peel, skin*), *wílesge* *a string* (*ilésge* *to bind with*), *wíyawe*

a fork (*iyáwe* *to pierce with*), *wóḡlaḡe* *a headdress, hat* (*ugláḡe* *to put onto the head*), *wóḡami* *a (female) cook* (*wóḡa* *to cook, boil things* + *mi* *female*), *wólage* *news, story* (*uláḡe* *to tell about*), *wáluḡe* *a table* (*alúḡe* *to eat on*), *wáwagaxe* *a writing, letter, book* (*awáḡaxe* *to scratch, write on*).

The indefinite object prefix *wa-* is used also with passive verbs, where it acts as subject and is best translated *something*. These forms are also used as nouns: *wadúḡe* *corn (in bulk)* (*dúḡe* *to be burnt, ripe*), *wabúḡge* ~ *wabúḡhe* *wheat, flour, bread* (derivative of *búḡe* *be dry*), *wasí* *fat meat, pork* (*sí* *to be fatty*), *máya-waḡlèḡe* *land-partitioning* (*ḡlèḡe* *to be split*).

There are a number of passive verbs which commonly appear with *wa-*, in which the *wa-* has no apparent meaning in English: *waláwelaki* *a few*, *wasóse* *to be brave* (*walísose* *thou art brave*), *waxóñitaḡ* *to be holy*, *waxwátaḡ* *to be poor*, *wilósitaḡ* *to be shamed*, *woḡéxi* *to be difficult*, (*ḡéxi* *to be adverse, bad, mean*), *wóse* *to be well supplied (with meat)*.

15.4. The reflexive is expressed by the prefixed element *ki-*: *ákiḡda* *I see myself* (*a-há-ki-*), *alákiḡda* *thou sees thyself*, *ihákiḡloḡi* *I struck myself (with my implement)*, *híkiḡloḡi* (*hi-i-ki-*) *we 2 struck ourselves*, *kilfluka* *to strip oneself naked* (*luká* *be naked*), *lakíḡe* (*la-kí-gi-ḡe*) *thou hurt thyself* (*giḡé* *to hurt*), *walúkiḡgiḡeḡe* *they are bound together* (lit. *they bind them together*), where the reflexive expresses the idea of a reciprocal to each other, *kikú* *he made himself into*.

There are many verbs which take the reflexive prefix without any particular reflexive notion in English. Such are: *kínagle* *to go hunting*, *ukíḡe* *to address oneself to, speak to*, *kixíla* *to think one is unable*, *akída* *to expect, wait for*, *kída* *to look after, care for*, *ukínaxwe* *to hide (oneself) from*.

Many of the verbs which take the reflexive prefix express the idea of *mutuality, together, meeting*: *kigó* *to hold a feast, assembly*, *kíḡa* *to fight, struggle*, *kíḡe* *to fight*,

battle, akípa to meet, encounter, akilage to contest, hold a contest, akílu[?]θa bend over to meet, akiwenu a horse-race, kíluka apart, ikíglasgi near each other, kíwa[?]θe to be between, ékipa to meet, connect, ékilutaðe matted together, ékiða to fight over, ukílusamí to scuffle, wrestle.

When doubled or accompanied by reduplication of the verb stem the prefix ki-expresses the idea of reciprocity: ukíkitawàsgu they (def.) talked it over, it seems, ukíkisa to help each other, akíkípa to meet each other, húkíkílusamí we 2 were scuffling, ulákíkílusamí you were scuffling, kiyáya-weñena they kept stabbing each other.

16. There are three prefixes which, although they don't occupy the same relative position in the verbal complex, have sufficiently similar functions to warrant their being treated as a single class. These prefixes are here called directional prefixes since the action of the verb moves toward or refers to a certain point in the situation spoken about. In our grammatical terms these prefixes may be said to indicate an indirect object.

The prefix wa- indicates that the action moves away from a third point not that of the speaker nor the addressed: wahu to start coming, come from, taða-waláhusge wherever thou may come from, taðawanáhekalé where can it be from, ída wáduðe kè (wa-há-) I got it from there (hadúðe I get it), Mr. Morrison ída wáduðe kè I got it from Mr. Morrison, wáhgòyu ída wahu kè it came from the cupboard, June ída wajílè kè it began in June, hélodada wajílana háhe ilógle from morning till night (lit. in the morning it start from and night it come up to), mágligü wahuná kúwa ilógle from top to bottom, from the top down (lit. from above it start coming and down below it come to), ahádagü-wahù (coming) from outside, éidā-wahù (coming) from the house, gaidā-walè (going) from that point on, máglida wahu ke' (wa-há-hu) I come from above, walánahada where he had started (going) from,

wáguñàsgu they started (coming back), it seems (wa-á-gu-ñe-àsgu), wánígli he brought it back from (wa-áñi-gli).

The prefix gi- indicates motion toward or reference to a third point and is used to express the idea of to, for, concerning: higíyawe he sang it for me, hílagiyawe thou sang it for me, ligítobge he lies to thee (Hamilton has higítobge he lied against me), wágíuseñe they open it for them, wígíðe (wa-í-) he talks to them, híwáligíloxíwi we request something of you, wáwalagíslagwawida when you nibble it off for us, úlagíslage (u-hí-la-gi-) thou told it to me. This prefix often indicates that the object of action belongs to some other person than the subject: híglúðe he took mine, hagíduðe I took his, áligita I see thine, or with passive verbs: θi hígípi kè my foot is better (lit. foot it is good to me), náwe ligíðewe kè thy hand is black; without gi-: hú híñíðe kè my leg hurts (lit. leg I am sore). There are a number of verbs that regularly take gi-: gípi to like habitually (lit. to be good to, for), gígúðe to show to, to teach (to), gí[?]θú to think about, remember, gisdáke to tempt, ugísá to help, give aid to.

The prefix gla- indicates that the action reverts back toward the subject as a third point; it is used to express the notion that the object belongs to or refers to the subject: glá[?]a he carries his own one (gi[?]á to carry), alé xlóge gláke ke' he digs himself a ditch (lit. he digs his own ditch), uglákičásgu he spoke to him (his own), wóglage églata I see my hat (áta I see), eléglasda thou sees thy own one (alásda thou sees), wéglawana he called to his own ones (wa-gí-gla-wa-na giwá to call to), egláhdawewi they (def.) watched over their own one (adáwe to watch over), hóliglasatahñe kè we will help you (our own ones) (hí-ú-li-[gi]-gla-sa-ta-hñe, ugísá to help). The prefix gla- amalgamates with the following l- to give gl- and with a following w- to give gw-: glúðe he takes his own one (gla + lúðe), wíheglogle I found my own ones (wa-í-ha-g[la]-logle, ilógle to come upon, find), wégluhgíjeñàsgu

they bound their own ones on, it seems (wa-á-g[la]-lu-), ígwahunasgu she knew me (her own one), it seems (i-hí-g[la]-wa-), wígwahupe he knew his own ones (iwáhupe to know), ulégwexa thou blew thy own one (u-lá-g[la]-wexa).

The directional prefix wa- precedes the pronominal prefixes (except hí-) and the positional prefixes within the verbal complex. The two prefixes gi- and gla- follow the pronominal prefixes.

17. There are nine prefixes which indicate the means or instrumentality by which the action is performed. These prefixes make passive verbs active. They are: wa- by means of a motion with the hand away from the body, by pushing with the hand, gi- by means of a motion with a held object away from the body, by pushing or striking with an object, lu- by means of a motion with the hand toward the body, by pulling with the hand, li- by means of a motion with a held object toward the body, by pulling with an intermediary object, na- with foot, feet, la- with mouth, teeth, bo- with a blow, ba- by cutting, da- because of heating or freezing. All the verbs formed with da- are intransitive and must be made transitive by the addition of the causative suffix, but the verbs made with the other instrumental prefixes are all transitive. Examples follow:

-gluʃe cut in two a long horizontal object, waglúʃe to saw, gíglúʃe to chop a lying object, líglúʃe to cut in two by pulling a hook on a cord, líglúgluʃe to cut in strips by drawing a knife along, baɡlúgluʃe to cut to pieces.

-doye break a long object, wadóye to break by pushing, gidóye to break in two by hitting with something, lidóye to break (a stick held in the hand), nađóye to break by foot, ladóye to break with the mouth, bódoye to break with a shot.

-blaðe rent, torn, burst (membrane, cloth, etc.), lubláðe to tear by hand, dáblaðe it burst from heat.

bláhge be flat, náblahge to trample flat.

-bliye curl, bend limply, lubliye to curl (something), lubliska curled, curly, gíblíbliye to wag (tail), dábliye to wilt.

ðéwe be black, bóðewe to blow out a lamp (make black with a blast), dáðewe to become black in the fire.

séna disappear, be used up, bósená to blow (ashes) away, dásenahi to burn up (things) (make disappear by fire).

-θluʃu slide a long object along lengthwise, gíθluʃu to slide along on its side, líθluʃu to pull along with a rope (lead horse, tow boat).

-bluʃe make a crunching noise, naʃluʃe to crunch (snow) with the feet, labluʃe to crunch (bones) with the mouth.

dákala to congeal, freeze, dákalahi to make freeze, freeze (things).

-ʃige stroke, wipe (clean), streichen, gíʃige to sweep, líʃige to rake.

bé let go, throw (away), abandon, ulúbe to scatter, strew in.

sla be bare, smooth, bald, luslá to pick (flowers), baslá to mow (grass).

-sda stop, cease, leave off, lUSDá to finish, stop (doing), náSDá to halt, come to a stop, lasdá to finish speaking.

18. With all verbs of motion (go, come) and a few others appears a prefix a- which indicates general plural; it is used regularly with the third person plural and in certain cases with the other persons in the plural: aʃíne they have come (ʃí), agúne they are coming back (gú), aglíñásgu they have come back, it seems (glí), aláne they are going (lé), hó-gíθige-ahíne ke' they have gone fishing (hí), ahúñehne they will be coming (hú), egláñahíne they have taken their own one (a-glá-ñ[i]-a-hi-ñe, añhi to take, reach having), añgíaglañe they went by with him (añí to have + gíglé to have gone by), ahí-ñahésge they got there and lo!, adáhásgu they (def.) were standing, híádadañe they stand up, rise up here and there (híjé ~ hidá to reach a standing position), gliànahà?e those who have come back home, aglíñahà?e those who have come back home (glí to arrive back (coming) + nahé to be), úda alénahà?e

those who went away (*lé go*), *ígi-aslâŋe* you who are here (*nâŋe to be sitting*), *lamâŋiaslâse* you are traveling about (*mâŋi to walk + nahé to be*), *uláŋawi-aswâŋada* where you are lying (*uyâ to lie down in + hâŋe to be recumbent*), *aslâsewi* you were, *yâ-hiawaŋe* they lay down (*yâ to lie down + hiwé to reach recumbency*), *taďá ahâŋa* where they were lying.

19. The above paragraphs describe all of the elements which precede the verb stem in the verbal complex. The following table gives the order of these elements. When they occur, the elements succeed each other in the order listed, 1 to 9.

(1) *wa-* us, *hi* we 2; (2) *wa* indef. obj., *wa* dir. prf.; (3) *a* on, *u* in, *i* at; (4) *-wa* dual, *li* thee, *hi* ~ *mi* me; (5) *ha* I, *la* thou; (6) *ki(ki)* reflexive; (7) *gla* dir. prefix; (8) *gi* dir. prefix; (9) instrumental prefix.

20. Form of verb stems. The verb stems are mono-, di- and poly-syllabic. There is no formal feature which distinguishes the stems of active from those of passive verbs. A few examples follow.

Active monosyllabic: *ʔú* do, make, use, *ké* dig, *bé* let go, throw, *é* say, *yâ* lie down, *wâ* call (out), *tú* have, possess, *glé* put, place.

Active disyllabic: *gúďe* indicate, show, *kíʔi* try, gamble, *lóki* fry, bake, *mâŋi* walk, *dóta* go on warpath, *háďe* flee, run away, *ťáwe* jump (down), *gláhi* love, like.

Active polysyllabic: *mâlage* threaten (? plan), *mánuŋi* get lost, *máluće* travel, *naťúďa* take pity on, *haʔégi* hurry.

Passive monosyllabic: *hgá* be white, *čé* be dead, *pí* be good, *ní* be, exist, *ďí* be yellow.

Passive disyllabic: *théje* be long, tall, *máʔsi* be high, above, *śáge* be aged, old, *śisa* be divided up, *níŋe* be not, have not.

Passive polysyllabic: *ʔsácala* be cracked, *dóťuŋu* be leader, the best, *xâŋiŋe* be tired, weary, *wasóse* be brave, *lóďani* be healthy.

Many of the polysyllabic stems may be suspected of being compounds. This is

indicated in the cases where the pronominal prefixes appear in medial position: *naťúli-glaďa* I took pity on thee (my own one), *walisose* thou is brave, *lómiďani* I am healthy.

In addition to this a possible analysis can be given for a number of these polysyllabics: *naťúďa* to pity < *nâŋe* heart + *ʔudá* turn toward, *máluće* to travel < *mâ* earth + *ʔalúće* to cross on, over (*luće* to cross), *xâŋiŋe* to be tired < *ʔxâ* be lively, have vitality (*ixâ* to live, be alive) *níŋe* to be without, have not, *lóďani* be healthy < *ʔló* body (*iló* body, self, cf. Winnebago *ró* body) + *ʔďani* to be whole, intact (cf. Dakota *taźani* to be healthy < *ťá* body + *zani* to be whole, well).

21. Stem reduplication is a very common process. It expresses distribution notion. When a disyllabic stem is reduplicated, there are only two recorded examples with the accent on the second syllable: *tuťúxe* brittle, *poťóye* be soft (like grass); all the other cases have the accent on the first syllable. The following are the recorded examples: *hgá* be white, *hgáhgá* be white in spots; *-slâ* only, alone, *slâslâ* be round, circular, globular; *xíxi* be wrinkled; *xúxu* be pimply, pocked; *búďe* be dry, *búbuďe* be dry here and there; *théwe* be black, *théwe* be black in spots; *śúje* be red, *śúśuje* be red here and there; *xóje* a hole, *xóxoje* be holey; *śósoge* be lumpy, bumpy; *pápaje* be spongy, rubbery; *poťóye* be soft (like sand, carpet); *slúsluje* be smooth, slippery; *poťoge* be strewn about; *pípixe* be soft (like thick carpet).

A number of other examples of verbs with prefixes and reduplicated stems have been noted: *baswâswâŋasgú* they cut him to pieces, it seems, *waʔsâʔsa* zigzag, *walúblabla* paper (lit. something separated into sheets), *luháhaye* up and down, *dásďsď* to sparkle, *waláxuxuge* he cracked them (bones) with his teeth, *wadódoxàsɡu* he punched her full of holes, *kilála* various, diverse, *ikilála* of different kinds, varied, *kiyáyaweŋe* they stab each other.

Some compound verbs reduplicate only the second stem, as: *hidáda* beside *jidáda* to stand up here and there, *hilála*, *ɣilála* to depart now and then, *hiwáwa* to lie down here and there, *hinánaɣe* to be sitting here and there, *iláwedada* to go round and round in circles, *idalála* in rows, *géhɣilála* to stagger,

careen, *hikúku* to go back and forth, *blílala* to be weak.

22. The causative is formed with the suffixed element *-hi*. It expresses the triple notion of causal (to cause to be) factitive (to make do), concessive (to let do).