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ARAPAHO DIALECTS

BY

A. L. KROEBER

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## PART I

## DIALECTS OF THE ARAPAHO GROUP

## THE DIALECTS

According to the latest authority, Dr. Truman Michelson,<sup>1</sup> the languages of the great Algonkin family fall into four primary, substantially co-ordinate, but very unequal groups. Three of these are Blackfoot, Cheyenne, and Arapaho. The fourth, or Eastern-Central, comprises all the other dialects of the family. The Blackfoot, Cheyenne, and Arapaho were buffalo hunters in the open plains. The other tribes with scarcely an exception were timber people. It is erroneous, however, to look for an exact repetition of this primary cultural cleavage in the linguistic organization of the family. The Blackfoot, Cheyenne, and Arapaho tongues are as distinct from one another as from the remaining languages. This fact had indeed been asserted, in so far as the imperfect evidence permitted opinion, before Dr. Michelson's exact comparative studies, and has long rendered very improbable, at least as regards the Blackfoot and the Arapaho, the prevailing assumption, which is still largely current, that all the Plains Algonkin tribes are recent offshoots from the main body of the stock in the wooded region. It cannot be emphasized too strongly that wherever these tribes may originally have lived, they were not, for a long time past, close relatives and perhaps not even neighbors of the Cree, Ojibwa, or any other known Algonkin division. The recent brilliant discovery of Dr. E. Sapir that the far-away Yurok and Wiyot languages on the Pacific Coast of California are Algonkin proves that the history of this great assembly of tongues cannot be deduced by any off-hand inference from recent habits of life or distribution of the Indian tribes involved. The writer believes that the Arapaho have been separated from the Central and Eastern Algonkins for more than a thousand years.

The Arapaho recognize five former divisions of their people. As placed by them in order from south to north, these were the Nā<sup>n</sup>waθi-nāhā'na<sup>n</sup> or South-?-people, the Hā<sup>n</sup>anaxawūne'na<sup>n</sup> or Rock-people, the Hinana'e'ina<sup>n</sup> or Arapaho proper, the Bāsa<sup>n</sup>wūne'na<sup>n</sup> or Wood-

<sup>1</sup> *Science*, xxxv, 675, 1912, and Bureau of American Ethnology, Twenty-eighth Annual Report, Washington, 221-290, 1912.

house-people, and the Hitōune'na<sup>n</sup> or Begging-people. The last are the tribe that calls itself Ha'ā'ninin and has long been known as Atsina or Gros Ventre of the Prairie. The Arapaho proper have for a considerable time been divided into a northern and a southern branch. As the language of these two halves scarcely differs even dialectically, the distinction, however important historically, may be disregarded in the present connection.<sup>2</sup> The three other tribes have long since coalesced with the Arapaho. The Bāsa<sup>n</sup>wūnena, whose dialect was very similar to that of the Hinana'ēina<sup>n</sup>, are still to be found among them in some numbers, though without any identity as a separate group. A very few people remembering something of the Nā<sup>n</sup>waθināhāna<sup>n</sup> dialect were living in 1899. From one of these was obtained the brief vocabulary given below. This dialect is more divergent from Arapaho proper than either Bāsa<sup>n</sup>wūnena<sup>n</sup> or Gros Ventre, and, at least superficially, shows some resemblance to Cheyenne. No one was found who remembered the speech of the Hā<sup>n</sup>anaxawūnena<sup>n</sup>, which is said by the Arapaho to have been the most different from their own. One of their submerged dialects, probably this Ha<sup>n</sup>anaxawūnena<sup>n</sup> tongue, some Arapaho declare to have been intermediate between their own speech and Blackfoot. The statement is here made only on Indian authority. It is not impossible that some specimens of this speech may yet be recoverable by careful search among the Arapaho.

A brief comparative vocabulary of the four dialects on which material could be obtained is appended. This is unfortunately badly selected, and the phonetic perception and rendering are no doubt inadequate even for Arapaho and Gros Ventre, which the author had ampler opportunity to hear. Further, the words in the two other dialects were obtained from people who no longer habitually used them, perhaps had never done so. Still, the lists contain new information, which may never be duplicated, and are therefore given with all their imperfections.

<sup>2</sup> Mr. James Mooney (Bur. Am. Ethn. Ann. Rep., xiv, 954, 1896, and Bur. Am. Ethn., Bull. 30, 73, 1907), gives the five Arapaho subdivisions differently, apparently through identifying the Nā<sup>n</sup>waθināhāna<sup>n</sup> with the Na<sup>n</sup>wuina<sup>n</sup>, the southern half of the Arapaho proper. He therefore virtually omits the former and exalts the southern branch of the Arapaho into a distinct division. Politically this may be correct for recent centuries, but the existence of a markedly separate Nā<sup>n</sup>waθināhāna<sup>n</sup> dialect, as discussed below, necessitates the recognition of this people, instead of the southern Arapaho proper, as one of the five divisions, from the point of view of language and earlier history. The only alternative is to assume the specimens of speech obtained as Nā<sup>n</sup>waθināhāna<sup>n</sup> to be not Na<sup>n</sup>waθināhāna<sup>n</sup>, but Hā<sup>n</sup>anaxawūnena<sup>n</sup>, a proceeding which would reconcile all conflicting statements, but which would be arbitrary.

## COMPARATIVE VOCABULARY

English	Arapaho <i>Hinana'eina<sup>n</sup></i>	Southern People <sup>1</sup> <i>Nāwathinähāna<sup>n</sup></i>	Wood-lodge People <sup>2</sup> <i>Bāsa<sup>n</sup>wūnena<sup>n</sup></i>	Gros Ventre <i>Ha'āninin</i>
1	tcāseix	tcā <sup>n</sup> cilaha <sup>'s</sup>	nānisetci	tcā <sup>n</sup> θeity
2	nisi	nisāhā <sup>'</sup>	nānisehi <sup>'</sup>	nī <sup>n</sup> ā
3	nāsa <sup>n</sup>	nahaha <sup>'</sup>	nānāsei	nā <sup>n</sup> θā <sup>'</sup>
4	yein <sup>1</sup>	niabaha <sup>'</sup>	yānānei	yāni
5	yā <sup>n</sup> θan <sup>1</sup>	niotanāhā <sup>'</sup>	yana <sup>n</sup> θan <sup>1</sup>	yātani
6	nita <sup>n</sup> tax <sup>u</sup>	neix <sup>n</sup> θi <sup>n</sup>	nītcātax	neityā <sup>n</sup> tos
7	nisa <sup>n</sup> tax <sup>u</sup>	niciota <sup>n</sup>	nīsa <sup>n</sup> tax	nī <sup>n</sup> θā <sup>n</sup> tos
8	nāsa <sup>n</sup> tax <sup>u</sup>	nexiotāhāhā <sup>n</sup>	nānāsā <sup>n</sup> tax <sup>u</sup> eit	nā <sup>n</sup> θā <sup>n</sup> tos
9	θi <sup>'n</sup>	ciotāhāhā <sup>n</sup>	ciotaxahei	ā <sup>n</sup> hābetā <sup>n</sup> tos
10	bātātāx <sup>u</sup>	maxtoxtahāhā <sup>n</sup>	bātcātoxe	betā <sup>n</sup> tos
man	hinen <sup>1</sup>	hiten	hini	hineni
woman	hisei	hihi <sup>'i</sup>	hisāna <sup>n</sup>	hi <sup>n</sup> ā
child	teia <sup>n</sup>	hakutsa <sup>'</sup> anāhā <sup>4</sup>	teia <sup>'</sup> nih <sup>'i</sup>	teia <sup>n</sup> nā
white man	nih <sup>'</sup> ā <sup>n</sup> θa <sup>n</sup>	matsōhu <sup>n</sup> θa	ni <sup>'</sup> ā <sup>n</sup> s <sup>5</sup>	nix <sup>'</sup> ā <sup>n</sup> t
father	neisana <sup>n</sup>	hi <sup>n</sup> θextin	hisanānin <sup>*</sup>	nī <sup>n</sup> θina <sup>n</sup>
mother	neina <sup>n</sup>	hāictin	neinah <sup>*</sup>	neina <sup>n</sup>
elder brother	nāsāhā <sup>'</sup>	nixtsia <sup>n</sup>	nih <sup>'</sup> sa <sup>*</sup>	nā <sup>n</sup> āhā <sup>'</sup>
son	neihā <sup>'</sup>	neictā <sup>'</sup>	neihā <sup>'</sup> *	neihā <sup>'</sup>
daughter	natane	naxtānāhā	natānā <sup>*</sup>	natan
grandfather	nābāci <sup>n</sup> bā	(h)amacim	nābāci <sup>n</sup> bāhā <sup>'</sup> *	nābeseip
grandmother	neibāhā <sup>n</sup>	(h)ih <sup>'i</sup> im	neibāhā <sup>n</sup> *	niip
grandchild	neici	ni <sup>'</sup> icitāhā <sup>n</sup>		niisā
eye	bāci <sup>n</sup> sā	masixsan	hicisā	besō <sup>θ</sup>
nose	beic	maic	hi <sup>n</sup> θeā	beicā
mouth	bāti	matin	hiteinā	betyi <sup>'</sup>
tooth	beitci <sup>θ</sup>	meitcixta	hiniteic	bitsit <sup>1</sup>
tongue	bei <sup>n</sup> θan		hinī <sup>n</sup> θan	biitani
ear	wanatana <sup>'</sup>		hinatana <sup>'</sup>	wanotan
neck	bāsona <sup>n</sup>		hisa <sup>n</sup>	wā <sup>n</sup> θana
belly	wanot	moxta <sup>n</sup> , monoxta <sup>n</sup>	hinot <sup>*</sup>	wanot <sup>o</sup>
hand	bāt <sup>n</sup> cet		hitcet	bātyetyi
foot	wa <sup>'</sup> ā <sup>n</sup> θ <sup>1</sup>	mo <sup>'</sup> oxts	hi <sup>'</sup> ā <sup>n</sup> c	wa <sup>'</sup> ā <sup>n</sup> ts
house	nina <sup>n</sup>	mī <sup>'</sup> in	nina <sup>n</sup> , ni <sup>'</sup> in <sup>*</sup>	nin, nīn <sup>n</sup>
house	ha <sup>'</sup> ā <sup>n</sup> wu	hā <sup>'</sup> axamun <sup>θ</sup>	ha <sup>'</sup> ā <sup>n</sup> wu <sup>*</sup>	
bow	bātā	ma <sup>'</sup> axta	bātā <sup>*</sup>	bāt
arrow	ho <sup>θ</sup> <sup>1</sup>	hot	ho <sup>n</sup> ci <sup>*</sup>	hotsi
sun, luminary	hicis	hicihā <sup>n</sup>	hicis <sup>*</sup>	hisōs
star	ha <sup>n</sup> θa <sup>'</sup> ā <sup>n</sup>		ha <sup>n</sup> θa <sup>'</sup> aha <sup>'</sup> ā <sup>n</sup>	hatou
water	netc <sup>1</sup>	netc	netsi <sup>*</sup>	nets, nits
river	nīte <sup>n</sup> ye	tite	nīte <sup>n</sup> ye <sup>*</sup>	nītsā <sup>n</sup>
stone	haha <sup>'</sup> anā <sup>n</sup> kā <sup>n</sup>	haxta <sup>n</sup>	haha <sup>'</sup> anā <sup>n</sup> kā <sup>n</sup>	axa <sup>'</sup> anā <sup>n</sup> tyā <sup>n</sup>
earth	bīta <sup>'</sup> ā <sup>n</sup> wu	mixta <sup>'</sup> amu	bīta <sup>'</sup> awu	bīta <sup>'</sup> awu
fire	icitā <sup>n</sup>	ih <sup>'</sup> citā <sup>n</sup>	hixt, ih <sup>'</sup> tā <sup>n</sup> *	isōtā <sup>n</sup>
wood	bāc <sup>1</sup> , bāx-	ma <sup>'</sup>	bāci <sup>*</sup> , bāx	bis
metal	beitci <sup>n</sup> θei	māhi <sup>'</sup> itsitā	beitci <sup>n</sup> θei <sup>*</sup>	beitsit
road	ba <sup>'</sup> ā <sup>n</sup>	mihia <sup>n</sup>	ba <sup>'</sup> ah <sup>*</sup>	
tree, cottonwood	hahā <sup>n</sup> t <sup>1</sup>	hoxtoxt	hahā <sup>n</sup> tei <sup>*</sup>	hahā <sup>n</sup> tina <sup>n</sup> (pl.)
grass, medicine	waxu <sup>'</sup>	maxsou	waxu <sup>'</sup> , <sup>*</sup> waxuina <sup>n</sup> (pl.)	wasiina <sup>n</sup> (pl.)
horse	hiwaxuhā <sup>n</sup> x-ābi (pl.)	masoutihem	hiwaxuhā <sup>n</sup> θa <sup>*</sup> , hi- waxuha <sup>n</sup> xeb (pl.)	hiwas <sup>'</sup> hā <sup>n</sup> θ
dog	he <sup>n</sup> θ-ābi (pl.)	hatam	hā <sup>n</sup> θā <sup>*</sup> , hā <sup>n</sup> θabiha <sup>n</sup> (pl.)	hote
buffalo bull	hanā <sup>n</sup> tcā <sup>n</sup>	hitā <sup>n</sup> mō <sup>n</sup>	hānā <sup>n</sup> tcā <sup>*</sup>	hānā <sup>n</sup> tyei
buffalo (herd)	hi <sup>n</sup> θeina <sup>n</sup>		hīcinan	hītā <sup>n</sup> nan
deer	bihi <sup>'</sup> i	mixtihi	bihi <sup>'</sup> i <sup>*</sup>	bihi <sup>'</sup> i
antelope	nisitcā <sup>n</sup> , na <sup>'</sup> sitcā <sup>n</sup>	teasitea <sup>n</sup>	nīctcā <sup>*</sup>	na <sup>'</sup> sity
elk	hīwax <sup>u</sup>	himaxsout	hiwax <sup>u</sup> *	hiwasō <sup>n</sup>
mountain sheep	hotā <sup>'</sup>	hoxtāhā <sup>n</sup>	hotā <sup>'</sup> *	hote

English	Arapaho <i>Hinana'eina</i> <sup>n</sup>	Southern People <sup>1</sup> <i>Nā'wawānāhāna</i> <sup>n</sup>	Wood-lodge People <sup>2</sup> <i>Bāsa'wūnena</i> <sup>n</sup>	Gros Ventre <i>Ha'āninin</i>
beaver	hābāc	hamaha'	hābāc*	hābes
rabbit	na <sup>n</sup> k <sup>u</sup>	mā <sup>n</sup> kut	na <sup>n</sup> k**	na <sup>n</sup> tse
bear	wox <sup>u</sup>	mahom	wox <sup>u</sup> *, waxuina <sup>n</sup> (pl.)	was
wolf	hā <sup>n</sup> xei		hā <sup>n</sup> xē*	hā <sup>n</sup> θei
skunk	xouhu	saoθ	xouhu*	θouu
eagle, bird	ni'ihī	tcāsei	ni'ix	ni'ihī
crow	hou	hahāha'	hou	ouu
magpie	wa'uei	mouxtiā <sup>n</sup>		wouxei
turtle	bā'āna <sup>n</sup>	ma'āna <sup>n</sup> hā <sup>n</sup>	bā'ān*	bā'ānou
supernatural	nānābā'āna <sup>n</sup> , bātāna <sup>n</sup>	nānamātit	tanānābā'āna <sup>n</sup>	bātā-
large	bānāsa <sup>n</sup>	mānacie	bānāsa <sup>n</sup>	bāsōu
white	na <sup>n</sup> k-	wanātsiā <sup>n</sup>	na <sup>n</sup> k-*	nanā <sup>n</sup> tsa
black	wa'otā <sup>n</sup>	moxtsiā <sup>n</sup>	wa'otā <sup>n</sup> *	wa'otā <sup>n</sup> ya <sup>n</sup>
red	bā-	maoxtaheini		baxa'a <sup>n</sup>
yellow	niha <sup>n</sup> ya <sup>n</sup>	hītianie	niha <sup>n</sup> ya <sup>n</sup> *	niha <sup>n</sup> ya <sup>n</sup>

## NOTES ON VOCABULARY

<sup>1</sup> From Tall Bear.

<sup>2</sup> Unmarked words from the wife of Row-of-Lodges; starred words from Tall-Bear.

<sup>3</sup> An l was recorded, but seems doubtful, as the Arapaho ordinarily are unable to pronounce this sound. The word for "rain" in the same dialect was, however, recorded both as hā<sup>n</sup>sivaxta and hā<sup>n</sup>silaxta.

<sup>4</sup> "Small." Evidently contains the diminutive suffix, as does the Bāsa<sup>n</sup>wūnena<sup>n</sup> form.

<sup>5</sup> The manuscript record may be read either with final s or θ.

## Additional Words—Arapaho Proper

young man	hanaxa'aha	mountain	hā <sup>n</sup> 'āni'
young woman	hīteiya <sup>n</sup>	night	bīka <sup>n</sup>
old woman	bātābi(ā)	moon	bīkōsīs
old	bāhā'ei, behi'i	sky, cloud	hana <sup>n</sup> '
human being	hinēnitā <sup>n</sup>	thunder	baxa'a <sup>n</sup>
ghost	θik <sup>u</sup>	fog	bā'āna <sup>n</sup>
head	haku <sup>n</sup> hā <sup>n</sup>	creek	kaha'a <sup>n</sup> wu
hair	beiθe'ā	snow	hī
throat	beita <sup>n</sup>	tent pole	hakā <sup>n</sup> x
bone	hixu	robe	hou
heart	bātā <sup>n</sup>	awl	bei
arm	bānec	dress	bixūti
elbow	bātie	bed	hā <sup>n</sup>
sinew	haotā <sup>n</sup>	boat	θiwu
milk, breast-water	bāθenetc <sup>1</sup>	meat	haseinou
penis	haθā <sup>n</sup>	pipe	== rib
testicle	bāθās	tobacco	cīsā <sup>n</sup> wa <sup>n</sup>
vagina	hāhātc	corn	beekatāna <sup>n</sup>
tail	bātihi'i	fruits	bīna <sup>n</sup>
rib	hītea <sup>n</sup>	bush	bīc
liver	hic	coyote	ka <sup>n</sup> 'a <sup>n</sup>
kidney	hitiθiθ	buffalo cow	bii
blood	bā	fly	noubā <sup>n</sup>
excrement	bā, bi-hiθ	louse	bātei
shadow	bātāθa <sup>n</sup>	worm	bīsā <sup>n</sup> , hīsā <sup>n</sup> na <sup>n</sup>
shaman	bātāt	fish	nawat

Some of the more readily noted correspondences in sound between Arapaho and the other Algonkin languages, and within the Arapaho dialects, will now be given. There is no pretense that these observations are complete. The material used in the comparisons is familiar to students of the subject in the works of Baraga, Jones, Lacombe, Hayden, Rand, Petter, besides many others whose efforts have not been drawn upon. For this reason the Indian forms of the words referred to in English have not been given. The few who may follow up the present suggestions can verify them with ease, and will be at least as familiar with the material as the writer. The following abbreviations have been used to designate groups, languages, and dialects:

E-C	Eastern-Central Algonkin
Mi	Micmac
F	Fox
O	Ojibwa
Cr	Cree
Ch	Cheyenne
Bl	Blackfoot
A	Arapaho group of dialects
Ar	Arapaho proper
GV	Gros Ventre
B	Bāsa <sup>n</sup> wūnena <sup>n</sup>
N	Nā <sup>n</sup> waθināhāna <sup>n</sup>

Of the symbols used, *c* is š or sh as customary in American philology, *θ* is the same as English surd th, *x* is a surd fricative approximately in *k* position, *ä* is a as of "bad" in American English, *ä<sup>n</sup>* and *a<sup>n</sup>* are nasalized vowels, *ö* is somewhat as in German, but probably unrounded, and ' is the glottal stop.

#### EXTERNAL PHONETIC CORRESPONDENCES OF THE GROUP

##### K

Assuming the Eastern-Central group of dialects, in which are included the great majority of those belonging to the family, to be most representative of the original or former condition of Algonkin, it is clear that original *k* is but rarely retained in the Arapaho division. It appears most commonly as *s* or *h*, or is entirely lost or represented only by a glottal stop.

- k* > *k*: wolf. Ch, Bl, A.
- k* > *t*: black, E-C, *k*; Ch, *xt*; A, *t*.
- k* > *tc*: metal. Ch, *k*; Bl, *ks*; A, *tc*.
- k* > *s*: neck, nose, eye, woman, antelope, one. Ch shows *k*, *x*, *ts*. GV usually has *θ* for *s*.
- k* > *h*, *x*: beaver, deer, bone, bear, sun, skunk. E-C has *k* or *sk*; Bl, usually

k; Ch is variable.

k>'—: bow, turtle, red, star, eagle, foot, nine. E-C again shows sk as well as k, also kw. Ch usually agrees with Arapaho, while Bl oftener retains k, but is variable.

#### T

Algonkin dental stops seem to be of two kinds. One appears with but little variation as t in all dialects, including Arapaho. The other varies between t, d, n, and l in the Eastern-Central group, is t in Cheyenne as in Gros Ventre and Nā<sup>n</sup>waθināhāna<sup>n</sup>, but θ in Arapaho proper and Bāsa<sup>n</sup>wūnena<sup>n</sup>.

t>t: bow, heart, fire, night, daughter, buffalo bull, ten, reflexive suffix. Bl has some inclination toward ts or st, N toward xt.

t, d, n, l>θ: tongue, tooth, foot, star, metal, dog, five. Mi, t, d, l; O, d, n; Bl, tʔ, kʔ; Ch, Na, GV, t; Ar, Bā, θ.

t>tc: pipe, mouth, six. E-C, t; Bl, —; Ch, ʔ; Bā, GV, tc; Ar, t, tc.

#### P

Original labial stops begin to be lost or altered as soon as the Eastern-Central division is left behind, and seem to have disappeared entirely from the Arapaho group.<sup>3</sup>

p, b>k: rabbit, white, sit, sleep. E-C, p, b; Bl, p, k; Ch, k, x; Ar, Na, Bā, k; GV, ts. These are the principal occurrences of k in Arapaho that the author can account for by any phonetic rule.

p, b>tc: tooth, water, night. E-C, p, b; Bl, Ch, p w; A, tc.

#### N

N usually recurs unchanged in all Algonkin groups, though in some stems the sound varies between n and y. There may be two distinct original sounds involved.

n>n: bone, man, daughter, turtle, one, two, three, six, sing, water, fish, drink. In the last three stems m sporadically supplants n.

n, y>n, y: tongue, mouth, neck, wolf, four, five, sleep. All dialects except Mi and O have y in some of these stems. F and Na show ny.

#### M

M of original Algonkin seems to be retained quite regularly in Eastern-Central, in Blackfoot, in Cheyenne, and in the Nā<sup>n</sup>waθināhāna<sup>n</sup> dialect of Arapaho. In the three other Arapaho dialects it is entirely lacking, and replaced by b and w. As between these two

<sup>3</sup> E. Sapir, *American Anthropologist*, n. s., xv, 538, 1913.

sounds, the rule is that *b* occurs before the front vowels *i*, *e*, *ä*, *ä<sup>n</sup>*, and *w* before the back vowels *u*, *o*, *a*, *a<sup>n</sup>*.<sup>4</sup> This is a consistent phonetic law of Arapaho; even within the dialect the same stem changes from *b* to *w* if the vowel becomes a back one. Compare Ar *neibähä<sup>n</sup>*, my grandmother, and *hiniwaha<sup>n</sup>*, his grandmother. It is also illustrative that in trying to say the English word "buffalo," the Gros Ventre, whose idiom follows the same law, speak *waθanou* instead of *baθanou*. All Arapaho labial sounds seem to be derived from original *m*.

*m* > *b* (*i*): eat, defecate, give, dog, deer, earth.

*m* > *b* (*e*): metal.

*m* > *b* (*ä*, *ä<sup>n</sup>*): blood, red, bow, wood, turtle, beaver, ten, drink.

*m* > *w* (*a*, *a<sup>n</sup>*, *o*): bear, fish, grass, black.

In a few words *m* changes to *n* in Arapaho. In these Cheyenne has *n* also.

*m* > *n*: eagle, house.

#### W

A more remarkable change is that of original *w* to Arapaho *n*. This probably represents the transition *w* > *m* > *n*.

*w* > *n*: buffalo herd, antelope, rabbit, white; perhaps also ear. Ar, Bā, GV, regularly *n*; Na, sometimes *m*; Ch, Bl, E-C, *w*.

#### S

Eastern-Central *s*, like *t*, sometimes recurs in Arapaho, sometimes becomes *θ*. There is thus the possibility that eastern *s*, with which *c* (*sh*) has been included, represents two sounds originally distinct.

*s* > *s*: sun, fire, wind, rain, tobacco, two, three. Bl, Ch, and Na show —, *h*, or *x* frequently. GV alone has *θ* sometimes: tobacco, two, three.

*s* > *θ*: hair, nine, eat, defecate. E-C, *s*, *tc*, *dj*; Ch, Na, *s*; Ar (and Bā?), *θ*.

*s* > *h*: stone, yellow. A dialects have *h*, except Na *t*. Perhaps allied to the change *k* > *s*, *h*.

#### VOWELS

The vowels of Arapaho also evince fairly regular correspondences with those of other dialects, though the cause of their most marked peculiarity, the frequent nasalization of *ä* and *a*, is not clear to the writer. Counting *ä<sup>n</sup>* and *a<sup>n</sup>* for the present with *ä* and *a*, four principal equivalences are noticeable.

<sup>4</sup> *bā'a<sup>n</sup>*, road, and *baha'a<sup>n</sup>*, thunder, are exceptions noted in simple stem words.

	Mi	F	Cr, O	Bl	Ch	Na	Ar, Bā, GV
Type 1	i	i	i	i	i	i	i
Type 2	var.	ä, e	i	(i)	(i)	a	ä, e
Type 3	a, o, u	a	a	a, o	o	a	a
Type 4	var.	a	a	var.	o, u	o, u	u

It is evident that there is a special similarity between Fox and the Arapaho group, at least under the orthographies that have been employed; that Nā<sup>a</sup>waθinähāna<sup>a</sup> leans towards Cheyenne; that the latter favors a sound usually written o,<sup>5</sup> and Blackfoot the vowel i.

*Type 1*—i>i: nose, eye, tooth, sun, fire, water, eat, defecate, give, two, reflexive suffix. GV alone several times has ö, which in most its occurrences in that dialect seems to replace Ar i.

Subtype 1*a*—i, e>i: woman, pipe, six. F, e; Cr, O, Bl, Ch, i, e, a; A i, sometimes ei.

*Type 2*—i, ä>ä: heart, bow, wood, dog, beaver, turtle, red, drink, two, three, four, ten. Mi, ?; F, ä; Cr, O, i; Bl, Ch, i often, but not always; Na, ä, oftener a; Ar, Bā, GV, ä.

Subtype 2*a*—i, e>e: hand, man, water, metal. Mi, ?; F, e; Cr, O, i; Bl, i; Ch, a back vowel; Na, e, ä; Ar, Bā, GV, e.

*Type 3*—a>a: daughter, wolf, buffalo, rabbit, turtle, fish, star, stone, pipe, yellow, jump, sleep. Mi, back vowels, possibly only variant orthographies for a; F, Cr, O, a; Bl, a or o; Ch, o; A, a, a<sup>a</sup>. GV occasionally shows ou.

Subtype 3*a*—Same, except Bl i, A sometimes ä: tongue, neck, beaver, dog, five, ten.

Subtype 3*b*—Same, except Ar, and sometimes other A dialects, open o for a: neck, bear, black, sit.

*Type 4*—a>u: bone, bear, skunk, rabbit, grass.

#### INTERNAL PHONETIC CORRESPONDENCES OF THE GROUP

##### BASA<sup>a</sup>WUNENA<sup>a</sup>

Within the Arapaho group, Bāsa<sup>a</sup>wūnena<sup>a</sup> differs little from the principal dialect. S or c sometimes appears for θ, as in tooth, foot, white man. This is not a reversion to original s which Arapaho θ at times represents, but a further specialization, since Arapaho θ in these words stands for original t. On the other hand, Arapaho s, or c, becomes θ in Bāsa<sup>a</sup>wūnena<sup>a</sup> in the word for nose, and x in fire and wood. In other stems Arapaho θ, s, and c recur unchanged in Bāsa<sup>a</sup>-wūnena<sup>a</sup>. T occasionally appears as tc: tree, mouth, six, ten.

All the Bāsa<sup>a</sup>wūnena<sup>a</sup> body-part terms obtained from both informants begin with the possessive prefix of the third person hi-, instead of the indefinite wa-, bā-, of Arapaho, which elsewhere in the family is represented by ma-, mi.

<sup>5</sup> Petter, Mem. Am. Anthr. Ass., 1, 448, 1907, denies that Cheyenne properly possesses the vowels i and u.

## GROS VENTRE

Gros Ventre presents greater changes.

Ar  $x > GV$  s: grass, elk, bear, eight, ten. GV evidently clings to the older sound which Ar has altered.

Ar  $x > GV$   $\theta$ : wolf, skunk. GV apparently has specialized.

Ar  $\theta > GV$  t: tongue, white man, dog, buffalo, buffalo herd, star, metal, five, "nephew" (when not called "son"), father-in-law, son-in-law, brother or sister-in-law of opposite sex.<sup>6</sup> Comparison shows Gros Ventre to be the more conservative, as the Ar sound stands for original t.

Ar  $\theta > GV$  ts, tc: foot.

Ar t  $> GV$  tc, ty: mouth, hand, six. B $\ddot{a}$  shows a similar tendency. In many other words, on the other hand, such as ear, belly, fire, mountain sheep, black, eight, ten, both Ar and GV have t.

Ar s, c  $> GV$   $\theta$ : eye, neck, woman, tobacco, two, three, seven, eight, father, older brother, "niece" (when not called "daughter"), daughter-in-law, wife.<sup>6</sup> In some of these words Ar s represents original s or h, in others original k. In other instances Ar s of both origins remains s in GV.

Ar tc was usually heard as either ts, or ty, nearly ky, in Gros Ventre.

Ar k  $> GV$  ts: rabbit, white.

Ar i  $> GV$   $\ddot{o}$ : eye, sun, fire.

N $\ddot{a}$ <sup>n</sup>WU $\theta$ IN $\ddot{a}$ H $\ddot{a}$ NA<sup>n</sup>

N $\ddot{a}$ <sup>n</sup>wu $\theta$ in $\ddot{a}$ h $\ddot{a}$ na<sup>n</sup> not only departs farthest from Arapaho proper but stands nearest of the known Arapaho dialects to Cheyenne and Eastern-Central. It presents enough peculiarities, however, to be more than a mere transition.

N $\ddot{a}$ <sup>n</sup>wu $\theta$ in $\ddot{a}$ h $\ddot{a}$ na<sup>n</sup> agrees with Cheyenne in retaining m which Arapaho has converted to b and w; in fact the dialectic pronunciation of "Washington" was given as mo<sup>n</sup>cten. It agrees with Cheyenne and Ojibwa in having w, or b, in certain words which possess n in Arapaho. Like these two dialects, it shows n as the initial of the words for four and five, where Arapaho has y. In all these points it departs from the Arapaho group of dialects in the direction of the Central and Cheyenne groups.

As regards s and h sounds, correspondences of all three types, s  $>$  h, x  $>$  s, s  $>$  s, are found between Arapaho and N $\ddot{a}$ <sup>n</sup>wu $\theta$ in $\ddot{a}$ h $\ddot{a}$ na<sup>n</sup>. Arapaho x is probably an h with partial stricture rather than a true palatal fricative. In place of it N $\ddot{a}$ <sup>n</sup>wu $\theta$ in $\ddot{a}$ h $\ddot{a}$ na<sup>n</sup> sometimes has s, sometimes a sound written xs. In "bear" h equals x.

Arapaho  $\theta$  was usually rendered by t, once or twice by s and ts, in the N $\ddot{a}$ <sup>n</sup>wu $\theta$ in $\ddot{a}$ h $\ddot{a}$ na<sup>n</sup> words obtained. Three words in this dialect

<sup>6</sup> Bull. Am. Mus. Nat. Hist., xviii, 9, 1902.

were recorded with  $\theta$ , but the sound does not agree regularly with any Arapaho sound in these cases, and must be considered doubtful.

Arapaho ä was sometimes rendered by ä in Nā<sup>n</sup>wuθinähāna<sup>n</sup>, sometimes by a. Ei becomes e.

The x or h so frequently written before t, ts, and s in Nā<sup>n</sup>wuθinähāna<sup>n</sup> causes the suspicion that the informant was exaggerating a real or imaginary greater degree of aspiration, either of vowels or of consonants, than he believed Arapaho to possess. It seems somewhat doubtful whether full xt, xts, and xs were really spoken. Cheyenne, however, shows a similar parasitic x or h before t, as well as before k. Yurok also has xk, and Fox 'k.

## PART II

## SKETCH OF ARAPAHO PROPER

## PHONETIC ELEMENTS

It is fourteen years since the writer has heard Arapaho or Gros Ventre. At that time his understanding of the nature and formation of spoken sounds was vague. Some experience with and much interest in the two languages have, however, left many distinct motor impressions of words; and a comparison of variant orthographies makes other points clear which inability of interpretation rendered baffling at the time. The following notes may therefore still have some value.

Arapaho vowels are:

- u, ü, open.
- o, very open, often confused with a<sup>n</sup>; long, ou.
- a<sup>n</sup>, ä<sup>n</sup>, nasalized, possibly spoken with the tongue slightly more raised than in the following.
- a, ä.
- A, less clear than a, was often written, but not regularly, and has been omitted from the present orthography.
- ä, ä, as in American English "bad."
- ä<sup>n</sup>, ä<sup>n</sup>, nasalized.
- e, very open, sometimes resembling ä; long, ei.
- i, ī, open.

Gros Ventre adds to these a mixed vowel ö, sometimes heard as almost o, sometimes as ü. This is a derivative from i. Arapaho ei was sometimes heard with an approach to the quality of öi.

The extreme openness of most of these vowels, as well as the presence of ä, are conspicuous resemblances to the phonetics of Yurok, now that Dr. Sapir has shown the connection.

Long vowels are more or less doubled. See text III, note 1.

Final vowels, unless long or accented, are surd or whispered. The nature of surd vowels was not understood by the author at the time his notes were recorded; they were therefore sometimes omitted, sometimes written as sonant, sometimes indicated by small superior characters. So far as it could be restored with what seemed reasonable safety, the latter orthography has been employed in this paper. The writer is strongly of the impression that no word in Arapaho really ends in a consonant, a final surd or sonant vowel being always present;

but proof or disproof of this belief must be left to future investigators. Gros Ventre may furnish an exception in the case of final surd *n*; but this sound seems to owe its quality to the surdness of the preceding vowel. In Gros Ventre, also, the surdness of final vowels seems more complete than in Arapaho.

Vowels followed by a glottal stop (') show usually, perhaps always in distinct speech, an echo. *Nähä* and *nähää*, this, were written indiscriminately for *nähä''ä*, perhaps more exactly *nähä''ä*. The orthography *nähä'* should be sufficient.

#### Arapaho consonants:

*k*, *t*, and *tc* (English *ch*) are probably sonant during part of the explosion, as in so many Indian languages. The *g* mentioned by Dr. Michelson was not observed. When final, these stops seem to be entirely surd, and their explosion takes on a vowel color.

In Gros Ventre, *tc* is replaced by two sounds: *ts*, the general equivalent of Arapaho *tc*, and *ty*, which often stands for Arapaho *t*. The two are however not as different in articulation and sound as the orthographies might indicate. *Ty* seems to be a very posterior *t*; it is sometimes heard as *ky*, and the Arapaho so render it in trying to reproduce Gros Ventre.

*b* is a full sonant, as would be indicated by its origin from *m*, and by its alternation, both in Arapaho and Gros Ventre, with *w*.

*w*, *y*, and *n* need no discussion. Gros Ventre surd *n* has been mentioned in connection with the surd vowels.

*s* and *c* (*sh*) are difficult to distinguish. They were very much confounded by the writer, though he is inclined to consider them two sounds.

*x* and *h* were also much confused. It seems that *x* is really an *h* with considerable stricture, and that *h* is fainter than in English, so that *h* and ' might have been better orthographies. If this is the case, the nature of the two sounds is the same as in Yana, Mohave, and other Californian languages.<sup>7</sup> In Gros Ventre initial *h* is particularly faint, and was often not heard. Final *h* or *x*, that is, *h* followed by a surd vowel, is strong in both languages.

*θ* is a surd dental fricative like English *th* in *thin*.

Vocalic changes are illustrated throughout the grammatical and textual material presented below, but are very complex. Changes proceed from stem to suffix, from suffix to stem, and from stem to prefix; they are sometimes in the direction of assimilation, at other times of contrast. Consonant alterations, especially between *b* and *w*, follow the vowel changes. Here again the similarity of process to Yurok is marked.

Consonantal changes are also somewhat obscure, but it is of note that in part at least they follow the interdialectic equivalences between Arapaho and Gros Ventre.

<sup>7</sup> Present series of publications, x, 62, 1911.

## COMPOSITION

The intricate subject of word composition is too little plain in Arapaho to allow of more than a listing of some of the principal forms which word compounding has been observed to take. These comprise nouns containing two or more elements used also as independent words, a few words containing elements occurring only as "prefixes," and a larger number ending in elements which are always "suffixes." Verbs consisting of two verb stems, or of a verbal and an adverbial stem, are more conveniently considered in connection with the subsequent section treating of the structure of the verb.

## A. NOUNS COMPOUNDED OF TWO SEPARATE WORDS

Noun and noun, the first determining the second:

hā<sup>n</sup>-n-isei, "Bed-Woman"  
 heθa-bic, dog bush  
 heθa-w-a<sup>wu</sup>, dog lodge  
 hi-tce'äox-a<sup>wu</sup>, club lodge, club dance  
 bisä<sup>n</sup>-n-ox<sup>n</sup>-ina<sup>n</sup>, worm weeds  
 waxu-sei-na<sup>n</sup>, bear, women  
 nitei<sup>he</sup>-hinen, Kiowa (niteiye, river)  
 nih'ä<sup>n</sup>θ-ousei, white-man woman, American woman  
 ciciyē-n-axu, snake weed, snake medicine

Verb with a noun as its object, which can also be used as a separate, independent substantive:

wan-isei-nä-hiθi, they go after women, burrs  
 notī-sei-n-ä<sup>t</sup>, looks for a wife  
 hi-netci-bī-niθ<sup>i</sup>, the giver of water, he who owns the waters

It will be seen that the noun comes before as well as after the verbal element. It is not certain how far these examples are to be interpreted as being verbs or as being nouns. Hence the term "incorporation" is avoided for them.

Noun with following verb or adjective stem, the former determining the latter, but the entire word being nominal. It will be seen that the majority of the forms are proper names. Compare the verbal suffix -ni.

ha'āti-n-aha<sup>n</sup>kä<sup>n</sup>, "Lime Crazy"  
 wax-teiyei, "Bear Creeping" (cici, creep)  
 wax-kukatäni, "Bear Spotted (Is)"  
 hā<sup>n</sup>xä-ba'äni, "Wolf Red (Is)"  
 hisei-waotä<sup>n</sup>ni, "Woman Black (Is)"  
 icitä<sup>n</sup>-küθa<sup>n</sup>, fire drill

## Verb, adjective, or adverb preceding and determining a noun :

h-axā<sup>θ</sup>-inenina<sup>n</sup>, funny men, name of a band (axā<sup>t</sup>-ēhi, laughable)  
 na<sup>n</sup>wu-nenitāna<sup>n</sup>, south people  
 hawah-a<sup>n</sup>wū, many houses, town  
 ha<sup>n</sup>wā<sup>n</sup>-ū-n-anaxa'ahā, praying young man  
 häbät-ä<sup>θ</sup>, large dog (he<sup>θ</sup>)  
 häbät-ä<sup>n</sup>xe, large knife (wā<sup>n</sup>xe)  
 häbä<sup>θ</sup>-inen<sup>t</sup>, large man  
 häbä<sup>θ</sup>-i-waxū, large bear (wox<sup>n</sup>)  
 hätcax-ä<sup>n</sup>xe, small knife  
 hätcäc-inen<sup>t</sup>, small man  
 kaha'ū-ci-nin, half a day  
 haseihi-n-axucitana<sup>n</sup>, sacrifice (sun dance) paintings  
 niha<sup>n</sup>-n-ouha<sup>n</sup>, yellow buffalo calves (wou)  
 waotä<sup>n</sup>-n-ou, black crow (hou)  
 kā<sup>n</sup>ku-na<sup>n</sup>tinei, "One-eyed Sioux" (ka<sup>n</sup>kou-iya<sup>n</sup>, patch on)  
 ka<sup>n</sup>kuiy-ä<sup>θ</sup>äbi, scabby dogs  
 hä<sup>n</sup>t-etc<sup>t</sup>, large water, ocean (netc<sup>t</sup>, water)  
 cīcī-nä-waxu, lasting weed (cīcīcī, stretch)  
 tcäyataw<sup>n</sup>-inenitā<sup>n</sup>, untrue person, spirit  
 θawa<sup>θ</sup>-inenitā<sup>n</sup>, real person, human being

## B. NOUNS AND VERBS FORMED WITH PREFIXES

## wot-i-, in fire, into fire.

woti-tan-ēhi, fire-starter  
 wot<sup>t</sup>-tanā-tanā-na<sup>n</sup>, they burn it  
 hä<sup>n</sup>'ix-woti-θ-a<sup>n</sup>, they put him in the fire  
 wotī-ka<sup>n</sup>hu-na<sup>n</sup>, they ran into the fire  
 woti-tanā<sup>n</sup>, added wood to the blaze

## sä'ä-, sä'i-, flat.

sä'ä-bäxa<sup>n</sup>, flat wood, boards  
 sä'ei-tea'a<sup>n</sup>, "flat" (straight tubular) pipe  
 sä'ä-hi<sup>θ</sup>i, flat ones, bedbugs  
 tah<sup>n</sup>-sä'i-ci, after she lay  
 sä'ä-beitciä, flat metal, spade  
 sä'i-ce-θāna<sup>n</sup>, roof  
 sä'ä-sana<sup>n</sup>, sliced meat  
 hä<sup>n</sup>'ix-sä'ä-se'esī, then cut them into slices  
 sä'i-θi-xa-h-u<sup>θ</sup>en<sup>t</sup>, I peg you out flat  
 sä'i-θi-xa-h-un, the crucified one, Christ  
 sä'i-ci-w-anaxa'ä, "Lie-abed-long Young-man"

## nä-, relating to clothing.

nä-tā<sup>n</sup>nei, take off moccasins  
 nä-tatahä<sup>n</sup>, take off leggings  
 nä-θibi, take off clothes  
 nä-ya<sup>n</sup>-un, dress!

kaka-, relating to mental action.

kaka'-uθetca<sup>n</sup>-na<sup>n</sup>, thoughts  
kako-xa'änäta<sup>n</sup>, think about it.

#### C. NOUNS AND VERBS FORMED WITH SUFFIXES

-i-n<sup>i</sup>, on measures of time. Compare the suffix -in<sup>i</sup> on the numerals 11 to 19, which is no doubt the same.

kahaū-cī-ni-n, half a day  
tihi'-sī-ni, yesterday  
tayū-ni-n<sup>i</sup>, tatayou-ni-n<sup>i</sup>, autumn (tai, cold)  
tcätcē-n<sup>i</sup>, winter, year  
isibi-ta-ni-ni, bedtime, time for lying down  
xä<sup>n</sup>täei-ni-n<sup>i</sup>, shortly after, sometime later  
tah<sup>a</sup>-tcäni-bihiya<sup>n</sup>-ni, when it was late in the night

-ätit<sup>i</sup>, on names of ceremonial acts. The last part of this suffix is almost certainly an ending denoting the third person.

tcä'-ätit<sup>i</sup>, welcoming  
tceita<sup>n</sup>-h-ätit<sup>i</sup>, ear piercing  
tiaxa<sup>n</sup>-n-ätit<sup>i</sup>, foot touching, an invitation  
tcäteei-n-ätit<sup>i</sup>, untying, a redeeming  
teaoxu-tcäbi-h-ätit<sup>i</sup>, foe-shooting, the settling of a dispute by a game or test

-ah<sup>a</sup>wä<sup>n</sup>t<sup>i</sup>, dance. Also seems to contain the ending of the third person.

hou-n-ah<sup>a</sup>wä<sup>n</sup>t<sup>i</sup>, crow dance  
hasa<sup>n</sup>-n-ah<sup>a</sup>wä<sup>n</sup>t<sup>i</sup>, rain dance  
nou-t-ah<sup>a</sup>wä<sup>n</sup>t<sup>i</sup>, dancing out of sun dance  
ka'ei-n-ah<sup>a</sup>wä<sup>n</sup>t<sup>i</sup>, round dance, ghost dance  
tawa-n-ah<sup>a</sup>wä<sup>n</sup>t<sup>i</sup>, cutting dance  
na<sup>n</sup>-n-ah<sup>a</sup>wä<sup>n</sup>t<sup>i</sup>-anibä, all of you dance around me!

-tanā, burn, do to or with fire.

woti-tanā-t<sup>i</sup>, he makes a fire  
hā-tanā-hei, put the fire out!  
hā-tanā-θ-ā<sup>n</sup>t, he extinguishes it  
hā-tanā-kana-θei, drench the fire  
wot<sup>i</sup>-tanā-hokani, they burn it

-tcā-na, cook; probably from the same radical as the last.

hi-tcāna-ät<sup>i</sup>, gridiron  
tcäbitāna-tcāna, fried bread  
ni-te-tcānā-θäyēi-na<sup>n</sup>, I maintain the fire constantly

**-i-θetca<sup>n</sup>, think.**

kaka'-uθetca<sup>n</sup>-na<sup>n</sup>, thoughts  
 wax-<sup>n</sup>θetca<sup>n</sup>, feel sad (wa<sup>n</sup>sa<sup>n</sup>, wa<sup>n</sup>xeit', bad, ugly)  
 hä<sup>n</sup>-s-iθetca<sup>n</sup>-hoku, she thought  
 bi'a<sup>n</sup>h-ouθetca<sup>n</sup>, I truly thought  
 hä<sup>n</sup>nä<sup>n</sup>-kaxtaw-ūθetca<sup>n</sup>-t', then she thought something was wrong

**-θibi, relating to clothing.** This and the preceding three elements seem verbal and could with equal propriety be listed among the suffixes or stems of the next section.

nā-θibi, undress  
 tei-θibi-t', he dressed

**-a<sup>n</sup>wu, water.**

haxeci-n-a<sup>n</sup>wunete', muddy water  
 tcänätä<sup>n</sup>-n-a<sup>n</sup>wunete', blue or deep water  
 θä<sup>n</sup>θi-a<sup>n</sup>wu, high or rough waves  
 kaha'-a<sup>n</sup>wu, creek  
 kaku<sup>n</sup>iy-a<sup>n</sup>wu, sticky liquid, molasses

**-(i)yei, tent: nīna<sup>n</sup>, nīnan, tent.**

nāyei, häyei, hiyei, my, your, her tent  
 yeiyi, set up a tent  
 sīs-āyei, take down a tent  
 n-eiha<sup>n</sup>wū-uyei, I have no tent

**-akac, -akay, tent, house.**

hābāt-akay', large tent  
 hätcax-akay', small tent  
 wa<sup>n</sup>θei-n-akay, wa<sup>n</sup>θei-n-akac, an old brown tent  
 waotä<sup>n</sup>na-h-akay-eit', "Black Lodge," his tent is black  
 bätäbi-h-akac, old woman's tent  
 hī-beitciθei-n-akay-anit', who has the metal tent  
 hina-n-akay-a<sup>n</sup>, "main" pole, by which tent is raised  
 teit-akahay-inä<sup>n</sup>t', enter-tent-song, sung when water is brought into the  
 peyote tent  
 heθaw-akay-a-ni, in the dog tent

**-äθä', fire.**

bänäs-äθä', a large fire  
 hī-bāxutcän-äθä, when the fire became low  
 kox-k-aθä-ya<sup>n</sup>-na<sup>n</sup>, kindlings

**-anihi', pet, domestic animal; perhaps contains the diminutive suffix quoted below.**

tcīy-anēhi, furry, shaggy dog  
 ta'-anāhi-hi', short-legged dog  
 n-eiha<sup>n</sup>wū-t-anihi', I have no horses

-h-ā<sup>n</sup>x<sup>u</sup>, plural -h-ā<sup>n</sup>xābi, horse, domestic animal.

n-ābīt-ā<sup>n</sup>xabei-t', steals horses or cattle  
 noti-n-ā<sup>n</sup>xābī, looks for horses  
 hiwaxu-hā<sup>n</sup>xābi, horses (hiwax<sup>u</sup>, elk)

-ä'ei, head, hair, neck. The independent word for "hair" is beiθe'ä, for "his head" hakuhä<sup>n</sup>.

ot-ä'ei-hi, comb hair  
 hä<sup>n</sup>tit-ä'ei-niθi, beheaded ones  
 tcä'ä'ei-n-axa'ana<sup>n</sup>x<sup>u</sup>, round-head-ax  
 tcäste-ä'ei-niθi, scratched head  
 bäbä'a'ei-n', you are curly haired  
 na<sup>n</sup>-ta<sup>n</sup>-h-icīb-ä'ei-nei-t', and when he laid his head down  
 ka<sup>n</sup>k-ä'ei-θi, Blackfeet (with erect hair)  
 kax-ä'ei-sibät', fractured his skull  
 ka<sup>n</sup>-xu-hä<sup>n</sup>ix-täb-ä'ei-kū-θ-āna<sup>n</sup>, then again they cut off his head  
 behic'-täb-ä'ei-θēhi, all cut off heads  
 täb-ä'ei-bäs-i, cut-head-wood, stumps  
 täb-ä'ei-na<sup>n</sup>, cut-head, hornless saddle  
 teih-täs-ä'ei-ci, lay your head on!  
 na<sup>n</sup>k-a'ei-n, white-neck, starched collar  
 tah<sup>n</sup>-teih'-bä-teit-ä'ei-xa<sup>n</sup>-θi, when they all put their heads in

-i-θä, nose. The independent word is beic.

täb-iθä-bic, cut-nose-bush, whose fruit appears noseless like a skull

-ēhi, face.

kou-ēhi, swell-face, mosquito  
 kahan-ehi, hair burnt off  
 hä'-ni-täbi-eihī-t', struck him in the face

-θä<sup>n</sup>θ-i, fingers, hand. Independent word, bätcet.

hähis-θä<sup>n</sup>θ-ōhu, wash hands

-a<sup>n</sup>t, leg. Independent word, wa'a<sup>n</sup>θi.

hawah-ā<sup>n</sup>t-ät', many legs, centipede

-ixta<sup>n</sup>, nail, claw, foot.

was-ixta<sup>n</sup>, bear claws, bear foot (wox<sup>u</sup>, bear)  
 hä<sup>n</sup>s-ixtä<sup>n</sup>-cīsa<sup>n</sup>, "Sore-foot-child"

-ineihi, tail. Independent word, bātihi'i.

tä<sup>n</sup>ta<sup>n</sup>ka-n-ineihi, raccoon (twisted, ringed tail?)  
 taxa<sup>n</sup>-n-ineihi, opossum (smooth tail?)  
 wa<sup>n</sup>θeiniθ-ineihi, bat, also Satan (brown, or old, ugly tail?)

-hi'i, -hä', -hähi, diminutive.

hanaxa'aha, young man, hanaxa'ä-hi'i, boy

bätäbi(ä), old woman, batäbi-hähi

teia<sup>n</sup>, child, teia<sup>n</sup>-n-ähä'

cicitei, duck, cicitee-hä<sup>n</sup>'

ta'anähi-hi', short-legged dog

## VERBS

### WORD-FORMING PREFIXES

Among the elements prefixed to verbs, it is clear that those which are essentially word-forming come nearest the stem, while those whose purpose is more strictly relational or grammatical on the whole precede them. As might be expected, no hard and fast line can, however, be drawn between the two classes.

Word-forming prefixes, in turn, are often difficult to separate from independent words. Thus, täs-i- and teän-i- mean "on" and "under" in verbs; but provided with the locative suffix -i-hi' they are adverbs which stand alone. Just so xou-wu-hu', "straight," and xanou, "immediately," are employed, in the forms xou- and xanou-, as prefixes to verbs. Verbs themselves, like teäsis, "to begin," and θa<sup>n</sup>ku-h, "to follow," are used as prefixes to other verbs.

Apparently related to this last group are such elements as tä', tou-, "to stop," and ta, tou, "to strike, tie, or be or come in contact with"; kax-, "through," and kax, "to impact violently"; teäθ-i-, "away, outdoors," and teäθ-i, "to depart or elope"; teäb-i-, "past, alongside," and teäb-i, "to travel."

It is true that even when these elements are themselves verbs they are not used merely with the personal suffixes, but that second elements such as -hi, -ni, -ku, -xa, -h are added to them. Now these added elements, which are frequent on indubitable verb stems, have all been listed as suffixes. But the possibility is by no means precluded that these "suffixes," whose significance usually is of the vaguest and most general, are themselves the real stem of the verb; in which case the preceding element, which is so much more specific in meaning as usually to carry the principal idea conveyed by the complete word, would after all be a prefix of the adverbial or prepositional type familiar from so many other languages.

For instance, θi- or θei- occurs as the first etymological element of a considerable number of verbs or nouns in all of which the idea of "in" or "on" or "projecting upward" is contained. Thus, θi-aya<sup>n</sup>,

“a post”; *θei-ka-h* and *θei-wa-n*, “to carry on the back.” On the other hand, the frequent element *-ku* is always at the end of words, and often adds little if anything to the meaning of the stem to which it is attached, as in *äbitä-ku*, “to steal,” of which the stem appears without the *-ku*, but with the same denotation, in *äbitä*, “to steal,” *n-äbit-īhi*, “thief,” *h-äbit-ā<sup>u</sup>xabei-ti*, “he steals horses.” When, however, the prepositional “prefix” *θei-* and the vague “suffix” *-ku* are put together they form *θei-ku*, “to put in.” In the same manner the combination of the variant *θi-* with the suffix *-ok<sup>u</sup>*, apparently an intransitive equivalent of transitive *-ku*, results in *θi-ok<sup>u</sup>*, “to sit.” Which part of *θei-ku* and *θi-ok<sup>u</sup>* is what in other languages would be called the stem? If the first element is a verb stem, then *θei-wa-n*, and such parallel forms as *tcīθi-n-a<sup>u</sup>ha-b*, “to enter in order to see,” are clearly compound or double verbs. If the second element is a verb stem, then *äbitä-ku* must be a compound of two verbs.

That Arapaho, like Shoshonean and some other American languages, possesses true compound verbs—verbs functioning as such and composed of two verbs—is thus probable. But either *θei-* or *-ku*, or both, and with them a large number of other elements, are lost as affixes. And yet the process involved in these cases is not one of mere simple word-compounding, for apparently *θei-* never occurs without a following element and *-ku* never without a preceding one. In short, it would seem that the Arapaho verb is frequently, perhaps normally, compounded of elements which themselves either are, or can become, verbal in force.

It is therefore possible that the old terms “polysynthesis” and “holophrasis,” which in recent years have been in justifiable disrepute on account of their vagueness and their implication of processes totally foreign to other languages, may, when the Algonkin, and for that matter the Iroquoian and Caddoan languages, are more precisely understood, be rehabilitated with a new and exact meaning. And still extreme caution seems called for in drawing any such inference. “Incorporation” is another linguistic concept which has been re-established of late years; and yet the justification was brought about only by an abandonment of the very traits which “incorporation” was originally and long believed to denote. Bandied about without standing for anything definite, the term “incorporation” was abused until the very existence of the process was challenged and denied. And when the reality of the process was finally demonstrated the proof resolved itself into the recognition of pronominal incorporation

as a familiar and purely grammatical method represented in some degree in most languages, and of nominal incorporation as a form of the equally familiar process of etymological word-compounding, with only the one distinctive feature that in "incorporating" languages noun and verb can be combined to form verbs, whereas in other idioms they combine only into nouns. In short, the concept of incorporation involves only a new application of a widespread and well known linguistic process, not a new and unique process itself. Or it might be said that incorporating idioms differ from non-incorporating ones in degree, not in kind.

In an analogous manner it seems possible that we may ultimately be justified in speaking of Algonkin as truly "holophrastic" or "polysynthetic." But if so, these terms will essentially be only a convenient designation for the linguistic process which allows two verbs to consolidate into a single one.

In fine, the Algonkin verb, so far as Arapaho is representative of it, cannot in any off-hand manner be broken up into the usual elements of "prefix," "stem," and "suffix"; and any attempt to apply such a procedure leads quickly to contradictions and inconsistencies that reveal the arbitrariness of the method.

The late Dr. William Jones reached exactly the same conclusion as regards the Fox dialect. He does not separate "prefixes" and "suffixes" from "stems" in the verb, but distinguishes "initial stems," "secondary stems of the first order," and "secondary stems of the second order," making these elements differ from each other not so much in their kind of meaning or in their ability or inability to appear as separate words, as in their mere order or position in the word-compound. This classification is a valuable and important departure from the all too frequent method of forcing new languages to fit old schemes or the categories established in other tongues. That the principles of Algonkin verb formation are in some respects conspicuously different from those of Indo-European Dr. Jones has made very clear; and a realization of this fact is the first requisite to a true understanding of Algonkin structure.

At the same time, while Dr. Jones has cleared away the brush and brought us face to face with the trees, he has not led us out of the forest. This task he would no doubt have achieved, save for his untimely death; but it remains undone. The realization that the Algonkin foot does not fit into the grammatical shoe built around the Indo-European last is, however important, only a first step. The

next and necessary one must be the construction of a new type of shoe which upon suitable modification for individual cases will fit both feet. Or, to drop the metaphor, while an application to Algonkin of linguistic categories derived from Indo-European leads to misunderstanding, the construction and use of an entirely novel set of categories for Algonkin is meaningless. The types of structure represented by the two groups of languages obviously have something in common, however different these common principles may in reality be from what superficial acquaintance or a one-sided approach would lead one to suppose. In fact, the determination of what they have in common, involving as it does the recognition of that in which they are different, is an essential purpose of the study of both; for whether our interest lies in the problem of the nature or that of the origin of human speech, a classification is involved. In its widest ultimate aspect philology is concerned not with Algonkin as such nor with Indo-European as such but with all languages. Only when speech in general, its scope and its methods, are better understood will both Algonkin and Indo-European, or for that matter any particular group of languages, be more truly understandable. The real aim of the study of any American tongue, as well as the aim of any deeper research in Indo-European philology, must therefore be the more precise and fundamental determination of their relations to all other languages; and this necessitates concepts and terms which are applicable in common. It is impossible to characterize the wolf in terms of his skeleton, the elephant of his embryology, the whale of his habits, and then to construct a classification which will help to reveal the inherent nature, the development, or the origin of the animal kingdom. True tribute to the memory of Dr. Jones's work will be paid, not by a standing still where his labors were unfortunately broken off when chiefly their negative or destructive side had been completed, but by carrying his efforts and formulations on through a constructive phase to a point, denied to him by time, at which Algonkin will once more appear in a definite relation to human speech as a whole.

What this relation will be the writer does not have knowledge or understanding enough of any Algonkin language to say. But until the science of language is revolutionized by entirely new methods of thinking about it there seem to be only three possible descriptions of the Algonkin verb that have a usable meaning.

The first interpretation is that of the verb as the result of a process of composition similar to that of noun composition, but extended in

Algonkin also to verbs. This essentially is the conclusion of Dr. Jones; and it is also the inference of the present writer. But it cannot be too clearly recognized that even if this explanation is in substance the correct one we do not yet really know anything as to the rules and conditions and limitations of this verb-compounding.

The second interpretation of the Algonkin verb is that of a stem followed by a greater or less number of suffixes. In this case the "initial stem" of Dr. Jones would be the only true stem, his "secondary stems" the suffixes. In support of this explanation is the fact that the initial elements of verbs come nearest to having the power of forming words by themselves, in both Arapaho and Fox; and the statement of Dr. Jones<sup>8</sup> that on the whole initial stems more definitely perform the function of verbs. If this view is correct, the type of Arapaho verb-building would be somewhat analogous to that of Eskimo.

The third possible interpretation is also that of a verb stem with affixes, the word-forming ones, however, being chiefly or wholly prefixes, the stem coming last, except for grammatical endings.

In favor of this last view is the fact that practically all the "secondary stems of the second order" given by Dr. Jones are naturally translated by words which in most other languages are verbs, whereas substantially all his cited "initial stems" and "secondary stems of the first order" can actually be rendered, without much distortion, as adverbs, nouns, auxiliary verbs, or modal particles. It is not certain how far Dr. Jones's examples of each class are fully representative of that class, his lists obviously aiming at well translated instances rather than at fullness; but it is clear that his own presentation of evidence leaves the interpretation of the "secondary stems of the second order" as being true verb stems defined by prefixes, in a position where it cannot be summarily dismissed.

Thus the "secondary stems of the second order" listed by Dr. Jones<sup>9</sup> are most simply rendered as follows: egä, dance; teim (Arapaho teawou), swim; isä, fly; isähö, jump; ötä, crawl; usä (Arapaho is-ä, us-ä), walk; gäpā (Arapaho *θi-ä<sup>n</sup>ku*), stand; pahö (Arapaho *i-ka<sup>n</sup>-hu*), run; ö, carry on back; hogö, swim, convey by water; pugö, float. *Initial stems cited*<sup>10</sup> are: kī, about; pem(i), past, alongside, incipiently; pyä, hither; pī(t), into; cōsk, straightly, smoothly; säg(i), projecting, holding; mīk, assiduously; kōg, wetly, with water; kās(i), by wiping; pas(i), suddenly, hotly; wī, with; tä(wi), painfully; nag(i), stop; pōn(i), cease;

<sup>8</sup> Some Principles of Algonquian Word-formation, *American Anthropologist*, n. s., vi, 401, 1904.

<sup>9</sup> *Op. cit.*, 394.

<sup>10</sup> P. 388.

wäp(i), begin; kask(i), can, be able; kīc(i), completely; nōtä (pp. 394, 404), be unable; pag (pp. 393, 403, Arapaho kax-), by striking, with impact. *Secondary stems of the first order*<sup>11</sup> are ā'kw, wood, resisting; nag, hole; tag, color; nägu, appearance; itä, feel; äne, think; kam, expanse; and the following body part stems, used objectively or adverbially (in translation) to the verbal element in the verb complex: cä, ear; kum, nose; tun, mouth; winä, horn; 'kwä, head, hair, nape; tcä, belly.

Compare also wäp-usä-w<sup>a</sup>, "he begins to walk" (p. 386) = "incipiently he walks" (or "he begins in his walk"?) ; wäpi-pyä-tei-tetep-usä-w<sup>a</sup>, he begins to walk approaching in a circle = "incipiently hither circularly he walks" (or "he begins his hither circular walk"?) ; pägi-kumä-cin-w<sup>a</sup>, "he bumped his nose" (p. 393) = "with impact his nose he struck" (or "he struck his nose against it"?) ; täwi-cin-w<sup>a</sup>, "he fell and hurt himself" (p. 386) = "painfully he struck" (or "he hurt himself against it, he hurt himself by impact"?) ; täwe-'kwä-hō-w<sup>a</sup>, "he has a headache" (p. 394) = "painfully as to his head he is" (or "he hurts as to his head"?) ; pag-ä'kwi-tunä-cin-w<sup>a</sup>, "he bumps his mouth" (p. 403) = "with impact against something resisting his mouth he struck" (or "he struck against something resisting with his mouth so as to be stopped"?). Translating these Algonkin words as compound verbs gives a third set of renditions, which are perhaps the truest, but, owing to Indo-European idiom, almost unintelligible in English: "he begin-walks," "he begin-hither-around-walks," "he hit-nose-strikes," "he hurt-strikes," "he hurts-head," "he hit-hard-mouth-strikes."

The posthumous and fuller grammatical sketch of Fox by Dr. Jones in the *Handbook of American Indian Languages*<sup>12</sup> gives some other forms, to which the reviser, Dr. Michelson, has added a hundred odd further initial stems taken from the Fox Texts of Dr. Jones. But this increased material does not alter the conclusion which can be drawn from Dr. Jones's earlier work as here summarized. The secondary stems of the first order are clearly not the principal stems of the verb-complexes. The "initial stems" may be verbs. If they are, the "secondary stems of the second order" are either suffixes or other verbs compounded with the "initial stems." That they are suffixes does not seem likely from the character of the examples given. If their number is substantially limited to those quoted, their suffix nature might be conceived of; but if their number is indefinitely large they cannot well be anything but true verb stems. The evidence of quantity, then, becomes as decisive on this point as that of quality; and this evidence must be awaited with interest from Dr. Michelson or some other authority competent to carry on Dr. Jones's analysis. Meanwhile the strong probability is that if the "initial stems" are truly verbal in nature the normal Fox verb is a compound binary

<sup>11</sup> P. 391.

<sup>12</sup> Bureau of American Ethnology, Bull. 40, 735-873, 1911.

verb. If, on the other hand, the "initial stems" are essentially adverbial, prepositional, or modal in quality, they deserve only to be ranked as prefixes, even if some of them may have reached this condition by the way of once having been subsidiary verbs; and in that case Fox, and with it no doubt Algonkin in general, possesses verbs that are built up around a kernel of a normal verbal stem or root, as in most languages, and these stems or roots are the "secondary stems of the second order."

The problem has a somewhat different aspect in Fox and Arapaho because Dr. Jones and Dr. Michelson have started their analysis of the verb from the concept of three kinds of stems, while the present treatment proceeds, though with full realization of the difficulties involved, from the more conservative premises of prefix, stem, and suffix. But Arapaho is so obviously Algonkin in its whole plan of expression and word-building that the fundamental problem is undoubtedly identical in the two languages.<sup>13</sup>

One suggestion to future laborers in this field may not be amiss. It is the dropping of the term "secondary stems," at least as applied to those "of the second order." If these "secondary stems" are suffixes, nothing will be gained by denominating them stems. If they are stems, that is, true verbal elements, they are either the real stem of the entire verb or at least one of a pair of stems, and in the latter case probably the ruling and "determined" one of the pair. In that event the designation "secondary" will be misleading. Tentatively the name "final stems," which parallels that of "initial stems" without any implication of primacy or dominance, is proposed.

In short, the undetermined and, in the writer's mind, fundamental problem of Arapaho, Fox, and Algonkin in general is whether these languages say "he enter-looks," "he enters lookingly," or "enteringly he looks." The first solution seems indicated; if it proves fallacious, the third appears more likely to be correct than the second. In either the probable first or third event, however, it can be said that the last element comes nearest to being the principal verb stem of the complex word.

The thorough difficulty of judging this case in the present state of knowledge may be illustrated by the English words "contend,"

<sup>13</sup> It is a matter of great satisfaction to the author that since the preceding passages were written, two statements from the pen of Dr. Michelson (*Am. Anthropol.*, n. s., xv, 475, 693, 1913) have been published which evince a very similar realization of the more important aspects of this intricate problem. Dr. Michelson's knowledge of Algonkin is much the greater; that he should have come to nearly the same conclusions is therefore gratifyingly corroborative.

“contest,” “conflict,” “combat,” “compete.” If English were as little understood in its basic structure and history as Algonkin, it would be a fair inference that “con-” in these words denoted the verbal idea of “struggle, oppose, fight,” and that the second syllables were adverbially modifying suffixes of this stem. That “-flict” and “-pete” do not occur independently, and “tend” and “test” when separate words have an entirely different meaning from their compound forms, would only incline to confirm the conjecture. Obviously it would require a wealth of accurately understood and exactly analyzable lexical material before the true nature of the elements of these words and their strict parallelism to the constituents of “offset,” “forbid,” or “withdraw” became clear. This understanding of Algonkin we do not yet possess; and therefore, tempting though it may seem to explain its verb as compounded of two verbal elements, or of a nominal or adverbial with a verbal element, it is wiser to proceed with caution. Accordingly, for purposes of presentation, the old concepts of stem, prefix, and suffix have been retained, subject to the qualifications discussed, as the categories underlying the following classification of Arapaho verb elements.

A. PREFIXES USED ALSO AS INDEPENDENT, SEPARATE WORDS, OR MADE INTO VERBS  
BY THE ADDITION OF AN UNSPECIFIC, MERELY VERBIFYING SUFFIX

tcäsis-, begin.

tcäsis-ina<sup>ei</sup>, go off to hunt  
teesis-ta-ka<sup>hu</sup>, begin to flee  
teeθiθ-ouhu, begin to climb

näye-, try.

tah<sup>a</sup>-bä-näyei-θ<sup>i</sup>, when all tried  
näyi-kaxk-atī-wa'ou, tried to roll through  
näye-tawa-h-un<sup>i</sup>, try to chop it down!

θa<sup>n</sup>k<sup>u</sup>-, following, behind.

θa<sup>n</sup>ku-h, θana<sup>n</sup>ku-h, follow  
θa<sup>n</sup>ku-na<sup>n</sup>-usã, come back  
θa<sup>n</sup>(k)-ka<sup>n</sup>outa<sup>n</sup>, follow making dust

tä', tanā-', tou-, tanou-, stop, cease. The element occurs also as an independent verb or characteristic first part of the verb in a

number of words which denote contact, impact, or the meeting of an obstacle by a motion.

tā'-usā, come and stop  
 tanā'-usā, stop when going  
 kou-tā'-ā<sup>n</sup>-bā-, lie abed long (ā<sup>n</sup>, bed)  
 ha<sup>n</sup>tni-taux-tcä-i-niθi, stopping place  
 hä-tou-n-a<sup>n</sup>wū-n-eθi, I hold it for you  
 tanou-ku-huθi, three first poles erected to hold up the remainder of the tent  
 nī-tou-na<sup>n</sup>, I strike  
 tou-nināt<sup>l</sup>, coup, counting strokes  
 tou-ku-hu-ta-ni-na<sup>n</sup>, they are tied up for  
 tou-ku-hu-i-n-ā<sup>n</sup>wū, tying-up house, jail  
 tou-tei-hīt<sup>l</sup>, belt  
 ta'a-xa-n-eθen<sup>l</sup>, I kick you  
 ta<sup>n</sup>-ya<sup>n</sup>-b-eθen<sup>l</sup>, I bite you  
 taa-w-a<sup>n</sup>ti, taa-b-ā<sup>n</sup>, struck him  
 ta-wa-hei-na<sup>n</sup>, I chop wood  
 ha<sup>n</sup>t-ta-wa-h-ät<sup>l</sup>, he will cut down the tree  
 nītauw-tou, "Striking First," a name

kax- seems to imply violent impact or penetration. Compare Fox pag-.

kax-ka'āna<sup>n</sup>, it went through  
 kax-k-oti-wā<sup>n</sup>, rolled through  
 kah-ä'ei-si-bä-t<sup>l</sup>, fractured his skull  
 kax-aei-t<sup>l</sup>, striking  
 kaxa'-axuxa<sup>n</sup>, wedge  
 kaxa'-ät<sup>l</sup>, there was a fissure  
 kax-ouhu, chipped off, shot off  
 kaxa'-ā<sup>n</sup>-häk<sup>n</sup>, shoots him  
 kox-k<sup>n</sup>θahä<sup>n</sup>-na<sup>n</sup>, "breastpins" of tent  
 kox-k<sup>n</sup>θä-ya<sup>n</sup>-na<sup>n</sup>, kindlings ("through flame starts"?)  
 kox-ta-wu-h, touch, do to, copulate

tcäb-i-, passing, past, on, continuing.

tcäb-i-hi-t<sup>l</sup>, travels  
 tcäb-i-sä, pass on, pass by, be on way, walk, go continually  
 tcäb-i-ka<sup>n</sup>hu, pass, come by  
 tcäb-i-xa<sup>n</sup>t<sup>l</sup>, walks  
 tcäb-i-xa-h-eθen<sup>l</sup>, I carry you

teit-, teiθ-i-, in, into, entering.

teit-ei, enter, go indoors  
 teiθi-n-a<sup>n</sup>ha-b, go in to see  
 teiθi-x-tcä-hi, run inside, go into  
 teit-ä-n-a<sup>n</sup>, takes him in  
 teit-awāt<sup>l</sup>, dancing in  
 teit-a<sup>n</sup>-bixüt<sup>l</sup>, undershirt, inner garment  
 teit-a<sup>n</sup>wū, indoors

B. PREFIXES USED ALSO AS INDEPENDENT, SEPARATE ADVERBS, OR SIMILAR PARTS  
OF SPEECH

*h-ixtc-i-*, up.

*hixte-äbä*, up, above  
*he-tei'ixtei-ku-s-i-bä*, throw me up  
*h-ixtc-is*, go up

*hä<sup>n</sup>θäb-i-*, to, reaching to, before, ahead.

*hä<sup>n</sup>θäb'*, toward  
*hä<sup>n</sup>θäb-i-nou-isä*, go there  
*hä<sup>n</sup>θäb-i-nä-sä*, arrive  
*t-ä<sup>n</sup>θäb-i-nä-usä*, when arrives  
*hä<sup>n</sup>θä'ei-sä<sup>n</sup>-t'*, before him  
*hä<sup>n</sup>θä'ei-tä<sup>n</sup>*, in front  
*hä<sup>n</sup>θaw-unena<sup>n</sup>*, head men  
*hä<sup>n</sup>θab-äsei*, chief woman  
*hä<sup>n</sup>θawä-n-axu*, "chief-medicine," a root

*tcän-i-*, far, down, headlong.

*tcän-ih'i'*, under  
*tcän-isei*, give birth to, "drop"  
*tcän-isi-b-eit'*, threw him off  
*tcän-isä*, fall off, go down, go far  
*tcän-i-xouka<sup>n</sup>*, flew down  
*tcen-i-ta-ka<sup>n</sup>hu*, flee far  
*tah<sup>n</sup>-tcäni-bihi'iyä<sup>n</sup>-ni*, when it was far into the night  
*tcen-a-näbä'a-t'*, plunged headlong

*täs-, täx-*, on, at the top.

*täs-ih'i'*, on top of, on, at the top  
*hä<sup>n</sup>i-täs-ä-n-ä<sup>n</sup>*, then he put it on  
*tä<sup>n</sup>s-isä<sup>n</sup>-θi*, mounted (horse)  
*täx-ohä<sup>n</sup>θi*, put hands on  
*h'ih'-tä<sup>n</sup>x-oku-ta-n'*, which he rode  
*täsi nīnanä*, top of a tent  
*täsihä<sup>n</sup> tea'otä<sup>n</sup>ya<sup>n</sup>*, on top of the hill  
*täsihi' ä<sup>n</sup>bä*, on the bed

*ä<sup>n</sup>xu-*, across.

*h-ä<sup>n</sup>x-anä<sup>n</sup>*, across the stream  
*ä<sup>n</sup>xu-n-oti-wa<sup>n</sup>*, rolled across  
*h-ä<sup>n</sup>xu-x-ä<sup>n</sup>t'*, the crossing  
*h-ä<sup>n</sup>xu-iy-ei-n*, sew  
*teih'-ä<sup>n</sup>xu-s*, come across!

*θi-*, *θei-*, on, upon. Perhaps more properly *θi'*-, *θei'*-.

*θi-ok<sup>n</sup>*, sit, live  
*θi-a<sup>n</sup>k<sup>n</sup>*, stand  
*θi-änä*, put, place  
*θi-a-ya<sup>n</sup>*, post, monument  
*θei-ku-θ*, put in  
*θei-ka-h-än*, carries on the back  
*θei-wa-n-öhu*, carrying on the back

*hä-*, *hä<sup>n</sup>s-i-*, hard, very, fast, violently.

*hänä<sup>n</sup>*, hänou, hard  
*hä'nä'ei*, *hä'nä'ou*, fast, very fast  
*häsei-yei-hiθe-t'*, very good  
*hä<sup>n</sup>si-i-ka<sup>n</sup>hu*, run hard, swiftly  
*häsa'a<sup>n</sup>-t'*, *änesa'a<sup>n</sup>*, swift  
*häsa'a<sup>n</sup>-n-oti'*, "fast-wheel," train  
*häseisen'*, wind  
*hasa<sup>n</sup>-netc'*, rain  
*hä-s-a<sup>n</sup>ha-b-eti-t'*, looking at oneself  
*hä-s-a<sup>n</sup>ha-θana<sup>n</sup>*, sights  
*(h)äsi-bä<sup>n</sup>*, a sore  
*hä<sup>n</sup>s-ixtä<sup>n</sup>-cisa<sup>n</sup>*, "Sore-foot-child," a name  
*äsi-na-ta*, hungers for it  
*äsi-na-n-ät'*, anger  
*äsi-ni-h*, to make angry  
*t-äs-owa-bi-x-t'*, when he became sick

*nou-*, *na<sup>n</sup>ä-*, *naha-*, out, around, down.

*na<sup>n</sup>u-hu'*, down  
*na<sup>n</sup>ä-hi*, go out, come out  
*na<sup>n</sup>ä-sä*, walk about  
*na<sup>n</sup>ä-ka<sup>n</sup>hu*, run around  
*nou-tä-n-in*, bring her out!  
*nou-sa-n*, drive out  
*nou-t-ahawä<sup>n</sup>t'*, dancing out, a ceremony  
*nou-θita<sup>n</sup>ä<sup>n</sup>*, went out in file  
*nohu-ku-θ*, lift up, carry  
*na<sup>n</sup>ä-n-ahawä<sup>n</sup>t-ani-bä*, dance around me!

*a<sup>n</sup>wu-*, *inä<sup>n</sup>wu-*, *hani-*, down, falling.

*ha<sup>n</sup>wu'*, *hanäwu'*, down  
*n-a<sup>n</sup>wu-hu'*, south  
*n-a<sup>n</sup>wu-bä'ei*, southern berries  
*teih<sup>n</sup>-a<sup>n</sup>wu-inä<sup>n</sup>*, let it come down!  
*tah<sup>n</sup>-na<sup>n</sup>sou-n-a<sup>n</sup>wu<sup>n</sup>-nihi-sä-t'*, while he traveled down-stream  
*h-a<sup>n</sup>wui-nihih*, down-stream  
*t-a<sup>n</sup>wu-n-ihö-a<sup>n</sup>*, floating down-stream  
*inä<sup>n</sup>wü-sä<sup>n</sup>-häk<sup>n</sup>*, dived, went under water  
*h-inä<sup>n</sup>wü-a<sup>n</sup>*, it sank  
*hani-näa<sup>n</sup>*, fall  
*hani-ku-θa<sup>n</sup>*, throw down

## kou-, kanou-, long, far.

kana<sup>n</sup>-a<sup>n</sup>ya<sup>n</sup>, "oblong," extended  
 ka<sup>n</sup>ä<sup>n</sup>-i<sup>n</sup>hi', slowly  
 kanou-ei-bi-θi-hi-na<sup>n</sup>, I eat a long time  
 kou-θ-inät-it', long life  
 kou-ta'-a<sup>n</sup>-bä-, lie abed long  
 kou-θihi', some time later  
 kanou-ta<sup>n</sup>tä<sup>n</sup>, long

## xou-, xanou-, straight.

xanou, xaxanou, straightway, immediately  
 xouwu, xouw-uhu', straight, straight in  
 xoub-ä<sup>n</sup>, straight  
 xanoub-i-x-t', straight  
 tani-xoub-ei, a very straight one  
 xouwu-xati, take this straight  
 xana<sup>n</sup>-ku-bä-, "straight (across) red," name of a design  
 xouw-usä, go straight

## tceib-i, aside, crookedly.

tceib', crooked  
 tceib-ä<sup>n</sup>, crooked (cf. xoubä<sup>n</sup>, straight)  
 tceib-i-s, step aside!  
 tceib-i-sä-na<sup>n</sup>, I get out of the way  
 tceib-i-teena'ä<sup>n</sup>, jumped aside

## tcäθ-i-, away, off.

tcäθi', outdoors  
 tcäθ-i-ä<sup>n</sup>t', he elopes  
 tceθ-i-ka<sup>n</sup>hu, escape, start off, leave  
 tceθ-eia<sup>n</sup>t', goes, departs  
 tceθ-akouuhu, go farther up  
 tcäθ-i-θä<sup>n</sup>ci-b-eit', blew him away

watä<sup>n</sup>-, into the camp circle.

watä<sup>n</sup>-ni', into a camp  
 watä<sup>n</sup>-s<sup>n</sup>, go into the camp circle  
 watä<sup>n</sup>-ka<sup>n</sup>hu, go (run?) to camp

## ci-, cix-, seciθ-, senix-, into water, in the water.

sec'θ-a<sup>n</sup>wu, at the bank, near the river  
 hit' teih-cih-kü-θ-i, throw me into the water here!  
 hänä<sup>n</sup>-cih-kü-θ-a<sup>n</sup>t', then he threw him into the water  
 seniex-teähit', jumps in the water  
 nä<sup>n</sup>-tei-cī-eisä<sup>n</sup>, come right into the water!  
 hänä<sup>n</sup>-nisa<sup>n</sup>-cī-eisä<sup>n</sup>-θi, then both entered the water  
 wa<sup>n</sup>-ci-e-b, take into the water

nänäb-, north.

nänäbä', nänäbi', north  
nänäb-isä-t', goes north

nīs-bis-, east; nīs-nä-, west.

nīs-bis-isä, go east  
nīs-nä-isä, go west

naxk<sup>u</sup>-n-, with, also.

naxkū-hu', with, together, including, also  
hä<sup>n</sup>-bä-naxku-hä<sup>n</sup>, you might be included  
nanaxku-ni-hi-tawa, I include it  
naxkū-n-isä, travel with  
ha<sup>n</sup>t-naxk-a-tceθ-ei-a<sup>n</sup>t', he will go away with him

nās-, hänās-, thus; compare the demonstratives nä-hä', hi-nä.

nās-inät-it', thus lived again  
nās-it-ā<sup>n</sup>t', did accordingly  
hänās-iθetca<sup>n</sup>-tana-hok<sup>n</sup>, thought of him thus

tābä-, just then, begin to.

tābä, then! lo! just then! being about to, when  
tābä-bänä, begin to drink  
tābä-tawa-h-ät', begins to chop down

ka<sup>n</sup>x<sup>u</sup>-, ka<sup>n</sup>xä<sup>n</sup>-, again, once more.

ka<sup>n</sup>x<sup>u</sup>, ka<sup>n</sup>xū, ka<sup>n</sup>xä<sup>n</sup>i, again, another time, then at last  
ka<sup>n</sup>xä<sup>n</sup>i-kaθe-n-ä, again lost him  
ka<sup>n</sup>xä<sup>n</sup>i-naxaw<sup>n</sup>, again was near  
ka<sup>n</sup>-xä<sup>n</sup>i-aneθeia-n-ä, once more he struck one down by kicking

hana'ut<sup>i</sup>-, hana'a-, all, completely, enough, sufficiently, until.

hanaut<sup>i</sup> biθeixa<sup>n</sup> tcän-isei, all leaves are falling  
hä<sup>n</sup>ix-hana'uta-ya<sup>n</sup>, now was complete  
hana'ut<sup>i</sup>-hä<sup>n</sup>ix-yāθani-sibihei, until he had killed (all) five  
hana'ut<sup>i</sup>-ha<sup>n</sup>t-icite-n-a<sup>n</sup>, indeed I will catch it  
hana'ut<sup>i</sup>-häh'-naha-'ou, until I killed them all

bā-, behi-, behīc-, bābānei-, all.

bāhihi', all, everyone, anybody, completely  
bā-hi-nihāni-x-t', the owner of all  
bā-tani-ci-niθi, all have a hole cut  
bā-hi-niha<sup>n</sup>-you, all are yellow  
bā-hi-yeiya<sup>n</sup>-unā<sup>n</sup>-θi, all have four arrows  
ba-h-āxa<sup>n</sup>-ät', shot all

hä<sup>n</sup>θei-, all, all who.

hä<sup>n</sup>θei, all. See Text I, note 5  
hä<sup>n</sup>θei-hiθeti-ni, all that were good  
hä<sup>n</sup>θei-wana-ūneiti-niθi, all who still lived

## C. PREFIXES NOT YET FOUND AS INDEPENDENT PARTS OF SPEECH

1. *Apparently Verbal*—

wan-, go to, go for, go after.

hänä<sup>a</sup>-wan-bī-n-ā<sup>t</sup>!, then he went to give it to him  
 wan-i-bī, go to eat  
 ni-wa<sup>a</sup>-ka<sup>a</sup>huwa, I went and cut  
 wan-ote-n, go and gather  
 wan-i-teena<sup>a</sup>!a, go in order to jump  
 wan-isei-nä-hiθi, burrs, "they who go after women"

näbi-, nawu-, make a motion to, move forward.

näbi-x-teä-hiθi, made a motion forward  
 teena-näbä<sup>a</sup>-t!, plunged headlong

nīs-, to, tied to.

nīs-axäya<sup>a</sup>, wire fence  
 nīs-i-äθeiyo, trousers, "tied leggings"  
 nä-nīs-a<sup>a</sup>ku-hu-niθi, the tied ones

na<sup>a</sup>-, to, arriving.

na<sup>a</sup>-usä, na<sup>a</sup>-us, arrive, come to

cīt-, continue.

cīt-isä, journey, go on, keep going

haθa<sup>a</sup>!a<sup>a</sup>-, truly, surely, indeed, necessarily.

haθa<sup>a</sup>!a<sup>a</sup>-bīti, indeed I shall be revenged  
 haθa<sup>a</sup>!a<sup>a</sup>-hä<sup>a</sup>-t-icīte-n-a<sup>a</sup>-, surely I shall catch him  
 haθa<sup>a</sup>!a<sup>a</sup>-hä<sup>a</sup>ni<sup>a</sup>!iteci, it must be eatable

2. *Apparently Adverbial, Referring to Manner*—

hinix-, hanux-, very.

hinix-iθeti, very good  
 hanux-uθeti-n, very good  
 hīn-teä-b-it!, water-monster ("very-shooter"?)  
 hinix-hänixt!, very tall

ni<sup>a</sup>-, good, well.

ni<sup>a</sup>-bī-ni, good to eat  
 ni<sup>a</sup>-īna<sup>a</sup>ei, good hunting  
 ni<sup>a</sup>-bāha<sup>a</sup>, smell good  
 ni<sup>a</sup>-tcei, eatable  
 ni<sup>a</sup>-teä<sup>a</sup>-t!, is sweet  
 ni<sup>a</sup>-owa-be-hi-na<sup>a</sup>, I feel well  
 ni-eh-t!, is fine-looking

tani-, indeed, very, skillfully.

tani-xoub-ei, very straight one  
nih<sup>1</sup>-tani-tcä-inäti-hok<sup>a</sup>, skillfully he lived again

inä-, fast, more swiftly.

nih<sup>1</sup>-inä-sä-t<sup>1</sup>, quickened his pace  
h-inä-nawa, without delay

nani-, nani-, constantly.

nani-bäni, drink frequently  
neni-nä<sup>a</sup>ku-t<sup>1</sup>, blind  
ni-neni-s-ei-ka<sup>a</sup>hu-t<sup>1</sup>, mole ("who constantly runs"?)

in-i-, aimlessly, randomly, about.

in-i-sä, wander, go aimlessly, "bum around"  
in-i-kuhi, was chased about  
in-i-θ-i-ka<sup>a</sup>hu, went around  
in-i-täθ-ka<sup>a</sup>hu-h-eit<sup>1</sup>, dragged him along

### 3. *Apparently Adverbial, Referring to Space—*

tcä-, tei-, back, again, returning.

tcä'-isä, tei'-isä, tcī-sä, go back  
tcä-yi-ka<sup>a</sup>hu, run back  
tea<sup>a</sup>-w-oti-wa<sup>a</sup>, rolled back  
tcä-näih-ä<sup>a</sup>-t<sup>1</sup>, "again killing," a place

iy-i-, near.

h-iy-i-sä, come near, approach  
i-ha<sup>a</sup>-n, iy-i-ha<sup>a</sup>-n, go after, pursue

a<sup>a</sup>y-, in front.

a<sup>a</sup>y-ei-ka<sup>a</sup>hu, go ahead

tei-bixä<sup>a</sup>-, out of the woods, into the open.

tei-bixä<sup>a</sup>-u-ka<sup>a</sup>, came running out of the timber

bis<sup>1</sup>-, up, out.

hä<sup>a</sup>ix-bis<sup>1</sup>-tcena'<sup>a</sup>, sprang up

## WORD-FORMING SUFFIXES

The etymological "suffixes" of Arapaho verbs are not only less numerous than the "prefixes" but far less concrete and specific, to the degree of being almost grammatical. They comprise transitives, intransitives, causatives and similar derivatives of wide applicability but general meaning.

**-ni, to be, to have; verb-forming.**

hiha<sup>w</sup>-aha'anākā<sup>n</sup>-ni-n, there are no stones  
 hīt-akā<sup>xu</sup>-i-ni-t', he who has tentpoles  
 n-eiha<sup>wū</sup>-uta-ni-hi, I have no horses  
 n-īθe-ti-ni-n, that which is good  
 hinana'ei-ni-na<sup>n</sup>, I am an Arapaho  
 inenitā-ni-n', you would be well, living  
 bāhāei-āhe-ni-t', becomes an old man  
 ni'-bī-ni, good to eat  
 nāteī-ni, wet (nete', water)  
 hi-netci-bī-ni-θ', the water-giver, owner of waters  
 niha<sup>n</sup>-ni-x-t', is yellow (niha<sup>n</sup>-ya<sup>n</sup>)  
 tea'otaya-ni-na<sup>n</sup>, I am hump backed  
 nānā-ni-na<sup>n</sup>, I, it is I

**-θi, intransitive.**

nā'ā-θi-x-t, resembled (nā'ā-si, thus)  
 bī-θi-, eat (bī-n, eat something, bī-θ', food)  
 anā<sup>n</sup>-θi-, be different in appearance

**-hi, intransitive.**

h-iθei-hi-nāxk<sup>n</sup>, if you are good  
 bihi'i-hi-n, be a deer  
 bānī-θi-hi-na<sup>n</sup>, I eat  
 kanāne-hi-na<sup>n</sup>, I am a coward  
 nānābā-hi-t', what is sacred  
 hīθa<sup>wu</sup>-tai-hi-na<sup>n</sup>, truly I am cold

**-hu, intransitive.**

i-ka<sup>n</sup>-hu, run  
 ta-ka<sup>n</sup>-hu, flee  
 na-ka<sup>n</sup>-hu, come, bring  
 ni-sā<sup>ku</sup>-hu-θi, were tied  
 nītou-hu-t', shouts  
 teābixa<sup>n</sup>-hu-t', flies  
 yana-hu-t', pledger, he who vows  
 tea'otaya-hu-t', hump backed

-awui-ni, become, begin, be.

t-intcäbit-awui-ni-t', he became a water-monster  
ka<sup>nä</sup>-n-awui-ni-θi, they opened it  
bäni-awui-n', spring (bäni-tee, summer)

-owa, feel; bodily condition.

ni'-owa-be-hi-na<sup>n</sup>, I feel sick  
hä-s-owa-, sick

-si, be in the condition of.

isi-si, be lying  
bä-tani-si-ni-θi, all have a hole cut  
nä'ä-si, nä'ei-si, thus, thus it is  
kah-ä'ei-si-bä-t', fractured his head

-bä-n, -wa-n, cause, make, bring about.

t-aseinou-bä-na<sup>n</sup>, I get meat  
axa<sup>n</sup>-bä, made laugh  
axa-bä<sup>n</sup>, axa-wu, fed them, give me food!  
waxu-bä-, to have medicine  
oti-wa<sup>n</sup>, roll (hoti', wheel)

-h, causative. See the starred forms under the "connective"  
suffix -h.

-ei, causative.

hakä<sup>n</sup>x-ei, make tentpoles  
h-ä<sup>n</sup>xu-iy-ei-n, sew (ä<sup>n</sup>xü-, across)  
tcä-tcäb-ei-θi, making pemmican (teeb<sup>1</sup>)  
tic-teibät-ei-t', after he made a sweat-house

-xa-h, cause to be in condition of.

tcäbi-xa-h, make travel; transport (tcäb-i-, passing)  
nä<sup>n</sup>a-xa-h, bring in (nou-, nä<sup>n</sup>ä-, out)  
tcä'e-xa-h, take back (tcä-, back)  
sä'iθi-xa-h, peg out flat (sä'ä-, flat)  
xouwu-xa-ti, takes it straight (xou-, straight)  
tcä-bi-xa<sup>n</sup>-hu-t', flies (tcä-b, shoot)  
ni-tanä-xa-hei-na<sup>n</sup>, I dig a hole (tana-t', hole)  
bä-xa-h, strike

What at first appears to be the stem preceding this suffix is in most cases an element which itself is normally a prefix. Whether the "prefix" tcäbi- or the "suffix" -xa is the true verbal "stem" remains to be determined, as in so many other cases.

-ku- $\theta$ , to make a motion leading to the condition or position described in the "stem." This "stem" in turn is often a "prefix" in other words.

$\theta$ ei-ku- $\theta$ , put in (tcī $\theta$ i-,  $\theta$ ei-, in, on)  
 nohū-ku- $\theta$ , lift, carry (nou-, out)  
 tcei-ku- $\theta$ , release, let go (teä-, tci-, back; teä $\theta$ -i-, away)  
 hä<sup>n</sup>ix-ixtci-ku- $\theta$ -ä<sup>n</sup>, threw him up (hixte-, hixtcäbä, up)  
 tou-ku- $\theta$ , bind  
 ka<sup>n</sup>ka<sup>n</sup>i-ku- $\theta$ -ä<sup>n</sup>, he uncovered him  
 i $\theta$ i-ku- $\theta$ , seize  
 äbita-ku- $\theta$ , steal  
 bä-kū-ta<sup>n</sup>, "red stand," a head-dress

Probably the same in origin as -ku- $\theta$  is an intransitive ending -ok<sup>u</sup>.

$\theta$ i-a<sup>n</sup>k<sup>u</sup>, stand ( $\theta$ i-, on, projecting)  
 $\theta$ i-ok<sup>u</sup>, sit, be sitting  
 teän-ok<sup>u</sup>, sit down, seat oneself (teän-i-, down)  
 tä<sup>n</sup>x-ok<sup>u</sup>, ride (täx-, täs-, on)

-ä, to make, bring, cause to be.

bäs-ä-, carry, bring wood (bäs<sup>1</sup>)  
 tcit-ä-n-a<sup>n</sup>, takes him in

-ta-n, -ta-na, for, to, of, about.

cī-ta-n, capture for  
 ic-ta-n, ici-ta-n, make  
 kousa 'ä<sup>n</sup>-ta-n, attack  
 $\theta$ a<sup>n</sup>wa-ta-n, believe  
 eīyi-ta- $\theta$ , make disappear for  
 ä<sup>n</sup> $\theta$ i-ta-n-a<sup>n</sup>t<sup>1</sup>, tells it to him  
 axä<sup>n</sup>-tana-w-a<sup>n</sup>t<sup>1</sup>, makes fun of him  
 äheisi-ta-ni, gave to be washed (äheisi-ou, wash one's self)  
 hänäs-i $\theta$ etca<sup>n</sup>-tana-hok<sup>u</sup>, thought of him thus  
 h-i $\theta$ i-ku-ta-n-a<sup>n</sup> $\theta$ i, when they seized them  
 isi-bi-ta-ni-ni, bedtime, time for lying  
 $\theta$ ähä 'i-ta-n, be agreeable (to?)  
 kaha 'ū-sa<sup>n</sup>-ta-b-ä<sup>n</sup>, took half of her  
 tou-ku-ta-n-ä<sup>n</sup>, tied to him  
 tou-ku-hu-ta-ni-na<sup>n</sup>, they are tied up for  
 nä-nä(h)ä-ta-n-eina<sup>n</sup>, he killed them for us

-wu-n, to, for, with.

wa $\theta$ anaha-wu-n, write to  
 ata-wu-n, eat up for  
 neiäna<sup>n</sup>-wu-n-ä<sup>n</sup>, holds it tight for him  
 ni-tana-wu-hei-na<sup>n</sup>, I dig a hole  
 kox-ta-wu-h, do to, meddle with

-t' (-i-t', -ā<sup>n</sup>-t'), forms abstract nouns. This ending seems to be that of the third person subjective.

bixa<sup>n</sup>-θ-et-it', love  
 bī-θi-h-it', food, eating  
 bäsä-ihä<sup>n</sup>t-it' (ceremonial) touching (by old men)  
 hinä-t-it', life  
 hinen-tän-it', tribe  
 teeita<sup>n</sup>-h-ät-it', "ear-piercing" ceremony  
 tee'ät-it', "welcoming" ceremony  
 häs-owa-be-h-it', sickness  
 änet-it', speech, voice  
 waxu-e-it', paint, the painting  
 ka'ue-h-it', a bleeding  
 tou-tei-h-it', belt  
 bät-ā<sup>n</sup>t', a dance  
 äsina-n-ā<sup>n</sup>t', anger  
 h-ā<sup>n</sup>xū-ā<sup>n</sup>t', a crossing

-ēhi, ōhu, agent, action, instrument, thing for.

h-äbit-īhi, thief  
 äneti-b-ēhi, speaker  
 häbäθ-ēhi, a large one  
 kata-ōhu, beadwork (kata-, cover, hide)  
 tcawouw-ūhu, swimmer

-ā<sup>n</sup>, -y-ā<sup>n</sup>, that which.

θi'a-yā<sup>n</sup>, post, monument, goal  
 hasei-yā<sup>n</sup>, an offering  
 bä-θa<sup>n</sup>to-ā<sup>n</sup>, hemorrhage  
 bäθi-yā<sup>n</sup>, property, clothing  
 bänī-yā<sup>n</sup>, night, darkness  
 bihi'i-yā<sup>n</sup>, at night  
 kana'<sup>n</sup>a-yā<sup>n</sup>, long, oblong  
 niha<sup>n</sup>-yā<sup>n</sup>, yellow (niha<sup>n</sup>-ni-x-t', is yellow)  
 nihä-yā<sup>n</sup>, self (nihä-ni-, to own)

## GRAMMATICAL PREFIXES

Grammatical affixes of verbs are prevailingly prefixes, except for most of the pronominal and a few other elements.

k-	interrogative
k-ih <sup>l</sup> -	
k-a <sup>n</sup> -	
k-a <sup>n</sup> hei-	
k-a <sup>n</sup> hä-	
k-a <sup>n</sup> hu-	
i-ha <sup>n</sup> wu-	negative
tei-, teih-	negative
tei-bä <sup>l</sup> ’, tei-bäh-	negative imperative
tei-	sometimes positive imperative
nī-, nih <sup>l</sup> -	incompleted action
-isi-	completed action
nih-isi-	
hä-n-isi-	
ha <sup>n</sup> t-	future, probably of purpose or intent
ha <sup>n</sup> t-ī-	
ha <sup>n</sup> t-a <sup>n</sup> ī-	
t-	when, after, because
tī-, tih <sup>l</sup> -	action incomplete
ta <sup>n</sup> -, tah <sup>a</sup> -	
tisi-	action complete
tisini-	
ta <sup>n</sup> hisi-, ta <sup>n</sup> hüsi-	
ta <sup>n</sup> hüsini-	
hä <sup>n</sup> -ti-	optative, “let me”
hä <sup>n</sup> -tih <sup>l</sup> -	
hih <sup>l</sup> -	“would that!”
θi-	optative, “let me,” “let us”
iθi-	
hä <sup>n</sup> -	meaning not determined
hä-ih-, hä <sup>n</sup> -ix-	“then” <sup>14</sup>
hä <sup>n</sup> -nä <sup>n</sup> -	“then” <sup>14</sup>
nī-	relatively subordinating or noun-making: “he who, which, where”
nih-	
hi-	
nihī-	
hini-	
hä <sup>n</sup> -ta <sup>n</sup> -	where
hä <sup>n</sup> -	while; continuing; “—ing”
hä <sup>n</sup> -tcis-	
na <sup>n</sup> sou-	the same meaning as the last
ti-na <sup>n</sup> sou-	
hawa-tih <sup>l</sup> -	although

## GRAMMATICAL SUFFIXES

-eti	reflexive
-uti	
-hok <sup>n</sup>	“it is said,” quotative
-äxk <sup>n</sup>	conditional, subordinating
-häxk <sup>n</sup>	
-näxk <sup>n</sup>	

<sup>14</sup> These two frequent prefixes, whose exact force is not clear, are evidently introductory and appear to contrast with each other. See text III, notes 4, 29.

## PRONOMINAL ENDINGS

The pronominal endings of intransitive verbs, including numerals, adjectives, and independent pronouns, are:

I	-na <sup>n</sup>
you	-n <sup>i</sup>
he	-t <sup>i</sup> , or a vowel
we	-na <sup>n</sup>
you	-nä <sup>n</sup>
they	-θi, or a vowel

These endings are usually added directly to intransitive stems.

bänä-na <sup>n</sup>	I drink
n-äneti-na <sup>n</sup>	I speak
θioku-t <sup>i</sup>	he sits
θia <sup>n</sup> kü-t <sup>i</sup>	he stands

The intransitive imperative is the stem.

The intransitive negative with the prefix iha<sup>n</sup>wu- is formed with prefixed pronominal elements.

I	n-eiha <sup>n</sup> wu—
you	h-eiha <sup>n</sup> wu—
he	h-ihā <sup>n</sup> wu—
we	n-eiha <sup>n</sup> wu—bä (or -hi-bä)
you	h-eiha <sup>n</sup> wu—bä (or -hi-bä)
they	h-ihā <sup>n</sup> -wu—na <sup>n</sup> (or -hi-na <sup>n</sup> )

In these forms -na<sup>n</sup> recalls the commonest plural suffix of nouns, -bä is probably the stem for "all," and the vowel change in the third person, as well as the initial prefixes, are suggestive of the possessive prefixes. Perhaps the division should be nei-ha<sup>n</sup>wu instead of n-eiha<sup>n</sup>wu.

The transitive conjugation is formed by suffixes. These are:

	<i>Me</i>	<i>You</i>	<i>Him</i>	<i>Us</i>	<i>You</i>	<i>Them</i>	<i>It</i>
<i>I</i>	—	eθen <sup>i</sup>	-a <sup>n</sup> '	—	-eθenä <sup>n</sup>	-ou	-awa <sup>n</sup>
<i>You</i>	un <sup>i</sup>	—	-a <sup>n</sup> t <sup>i</sup>	-eiä <sup>n</sup>	—	-a <sup>n</sup> tei	-aw <sup>n</sup>
<i>He</i>	-eina <sup>n</sup>	-ein <sup>i</sup>	-a <sup>n</sup> t <sup>i</sup> <sup>15</sup>	-ina <sup>n</sup>	-einä <sup>n</sup>	-a <sup>n</sup> t <sup>i</sup>	-a'
<i>We</i>	—	-än <sup>i</sup>	-ät <sup>i</sup>	—	-änä <sup>n</sup>	ät <sup>i</sup>	-awina <sup>n</sup>
<i>You</i>	-eiänä <sup>n</sup>	—	-anä <sup>n</sup>	-eiänä <sup>n</sup>	—	-änä <sup>n</sup>	-awinä <sup>n</sup>
<i>They</i>	-iθi	-einanī	-a <sup>n</sup> θi <sup>16</sup>	-eina <sup>n</sup>	-einä <sup>n</sup>	-a <sup>n</sup> θi	-ou

The above forms have been found on most stems. Some verbs, including teä-b- and kã<sup>n</sup>u-s, replace the first vowel of the suffix, be it e, ei, ä, or u, by i, except for the inanimate object, the "I-them" form -ou, and perhaps certain other forms of the third person object. Thus, teä-b-ī-na<sup>n</sup>, kã<sup>n</sup>u-s-iθen<sup>i</sup>. Some other verbs, including bāxa-h- and sä'iθixa-h-, substitute u for e, ei, ä as the first vowel of the suffix

<sup>15</sup> Second form: he (B) to him (A): -eit<sup>i</sup>.

<sup>16</sup> Second form: they (B) to him (A): eiθ<sup>i</sup>.

in the first and second persons object, but contrariwise in the third person object change a to ä, and ou to ei. On the other hand, the stem vowels change according to the suffix in some verbs: nä-nähä', kill, occurs before all persons of the object, animate and inanimate, except the "A" form of the third person: nänähä'-eina<sup>n</sup>, nänähä'-ein<sup>i</sup>, nänähä'-eit<sup>i</sup>, but nanaha'-a<sup>n</sup>ti.

The endings themselves cannot be analyzed in all cases into regularly recurring subjective and objective constituents, although -n<sup>i</sup> for the second person singular object, -nä<sup>n</sup> second plural subject and object, -ei first plural object, are clear. The impression given by the endings is that the two elements of each occur in a fixed order not so much according as they represent the subject and the object as according to the person denoted. The second person comes last, whether subject or object; between the first and third persons precedence is not so clear.

This is confirmed by the transitive negative conjugation with the prefix -i-ha<sup>n</sup>wu-. In this the second person is always prefixed; the first is suffixed as against the second, but prefixed as against the third, while the third is prefixed only when there are two elements of this person. Such a form as hei-ha<sup>n</sup>wu-bixa<sup>n</sup>-θ-eθ also corroborates the inference that -eθ in bixa<sup>n</sup>-θ-eθ-en<sup>i</sup> is the part that means "I".

	<i>Me</i>	<i>You</i>	<i>Him</i>	<i>Us</i>	<i>You</i>	<i>Them</i>	<i>It</i>
<i>I</i>		hei—eθ	nei—a <sup>n</sup>		hei—eθebä	nei—a <sup>n</sup> na'	nei— <sup>17</sup>
<i>You</i>	hei— <sup>n</sup>		hei—a <sup>n</sup>	hei—eiä <sup>n</sup>		hei—a <sup>n</sup> na'	hei— <sup>17</sup>
<i>He</i>	nei—e	hei—e	hī—ä	hei—ein	hei—eibä	hī—ä	hii— <sup>17</sup>
<i>We</i>		hei—ä	nei—äbä		hei—äbä	nei—äbä	nei—awubä
<i>You</i>	hei—ubä		hei—ä <sup>n</sup> bä	hei—eiä <sup>n</sup> bä		hei—ä <sup>n</sup> bä	hei—awubä
<i>They</i>	nei—ei	hei—ei	hī—äna <sup>n</sup>	hei—ein	hei—eibä	hī—äna <sup>n</sup>	hī—awū

The transitive imperative forms differ somewhat from the indicative: -un, -in, implies the object of the third instead of the first person. Probably it expresses only the subject of the second person.

bixa <sup>n</sup> -x-u	like me!
bixa <sup>n</sup> -x-un <sup>i</sup>	like him! like them!
hī-s-in <sup>i</sup>	fear him!
häseinä-b-in <sup>i</sup>	hate him!
bixa <sup>n</sup> -t-a <sup>n</sup>	like it!
bixa <sup>n</sup> -θ-eiä <sup>n</sup>	like us!
bixa <sup>n</sup> -θ-ä	do you (pl.) like him!

The negative imperative, with prefixed tei-bä-, has the same suffixes. The forms referring to an animate object of the third person are preceded by connective consonants which in the indicative of the same verbs occur before the first and second persons objective.

<sup>17</sup> Possibly a final surd <sup>a</sup> has escaped notice in these forms.

## CONNECTIVE SUFFIXES

The transitive pronominal endings are not added directly to the stem, but are invariably preceded by one of five consonants: b, n, s,  $\theta$ , h. At first regarded as part of the pronominal suffix, later as a connective characteristic of each verb, these consonants were later seen to correspond to the "instrumentals" of Dr. Jones.<sup>18</sup> Before this, in fact, -h had been recognized as a causative. The four other consonants, on the other hand, do not appear to be significantly instrumental in Arapaho, except in so far as they all occur only on transitive verbs. They certainly do not in most cases refer, except by the remotest implication, to a part of the body or a type or shape of instrument. There are also scarcely any observed instances of one stem appearing, under the same or an altered meaning, with any other than its characteristic consonant.<sup>19</sup> The designation "instrumentals" therefore seems of dubious applicability in Arapaho.<sup>20</sup>

It may be added that a search for a possible phonetic relation between stem and connective consonant gave no results.

Meaning	Verb	Me	You	Him	Us	You	Them	It
see	a <sup>n</sup> ha	b <sup>21</sup>	b	w	b	b	w	t
strike	ta <sup>n</sup>	b <sup>21</sup>	b	w	b	b	w	t
hate	äseinä	b <sup>21</sup>	b	w	b	b	w	[t]
shoot	tcä	b	b	b	b	b	b	t
tell	itawū	n	n	n	[n]	[n]	n	t
eat	bī	n	n	n	n	n	n	w
reach	ouxä <sup>n</sup> -ta	n	n	n	[n]	[n]	n	w
fear	i	s	s	x	s	s	[x]	t
cut	kā <sup>n</sup> u	s	s	s	s	s	s	x
like	bixa <sup>n</sup>	$\theta$ <sup>22</sup>	$\theta$	$\theta$	$\theta$	$\theta$	$\theta$	t
peg flat	sä 'i $\theta$ i-xa	h	h	h	h	[h]	h	h
strike	bä-xa	h <sup>23</sup>	h	h	h	h	h	h
kill	nä-nähä	'	'	'	'	'	'	t

These connectives or instrumentals change somewhat according to the person of the animate object expressed in the pronominal endings which follow them, and in part according to the stem. Such variations, which are illustrated in the following table, are clearly of a phonetic origin. But a radical change undergone by the consonant

<sup>18</sup> Am. Anthropol., n. s., vi, 403, 1904; Bur. Am. Ethn., Bull. 40, 807, 1911.

<sup>19</sup> Except bī, find, which occurs both as bī-n and bī-h; änä<sup>n</sup>ka-b, änä<sup>n</sup>ka-n, loosen; and cī-n, cī-h, capture.

<sup>20</sup> Compare Michelson, Am. Anthropol., n. s., xv, 476, 693, where substantially the same contention is advanced as regards Fox.

<sup>21</sup> w with subject of second person singular and third plural.

<sup>22</sup> x with subject of second person singular and third plural.

<sup>23</sup> This is the only stem found with the glottal stop.

when the object denoted by the pronominal suffix is inanimate, especially from -w to -t, can scarcely be due to any merely phonetic laws. The author sees in this thorough difference of form when the object is inanimate a further argument against the instrumental nature of these connectives.

## CLASSIFIED LIST OF STEMS

A number of transitive verb "stems" follow, arranged according to their "connective" suffixes. This list is followed by one giving the principal ascertained intransitive verbs, which lack connectives.

## TRANSITIVE

## -b, -w

a <sup>n</sup> ha-b	see
ānā <sup>n</sup> ka-b	loosen (also with -n)
a <sup>n</sup> tana <sup>n</sup> ta-b	buy
ābitā-b	steal
āseinā-b	hate
āyiātā-b	pursue closely
bās-ānā-b	think of highly
ka'a <sup>n</sup> -b	bite
ni-b	marry
tousā-b	bathe
ta-b	strike
ta <sup>n</sup> ya-b	bite
tāhi-b	help
tā-b	cut, break off
teā-b	shoot
wa <sup>n</sup> -ci-e-b	take into water

## -n

outāyā <sup>n</sup> -n	hang up to dry
awūna-n	pity
āina-n	know
iyiha <sup>n</sup> -n, yiha <sup>n</sup> -n	go to, go after, pursue
isa-n	alarm, scare up
icitā-n, ite-n, ātā-n, tā-n	take, catch, seize
nou-tā-n	bring out
tei-tā-n	take in, bring
bāsā-n	touch
bī-n	eat
bi-n	give
bīi-n, bīi-h	find
koutesa'a-n	chase, drive off
ka <sup>n</sup> ā <sup>n</sup> ei-n	cut open belly
ka <sup>n</sup> θe-n	lose grip on
ka <sup>n</sup> koua-n	envy
ka <sup>n</sup> ne-n	open (ka <sup>n</sup> u-s, cut)
kayei-n	pull out, pull off
noux-a-n	meet
nou-sa-n	drive out
nota-n	ask, question (noti-h, seek)
n-ī <sup>n</sup> a-n	go with, come with
nitou-n	breathe in, suck in

cī-n, cī-h	take, capture
cinouhu-n	resemble
tou-n, tanou-n	hold
ta-n	pour
ta'xa-n	kick
wa'awa'a-n	go in, draw in, suck in

*With suffix -ta:*

ouxā <sup>n</sup> -ta-n	reach
ici-ta-n, ic-ta-n	make (n-ici-h, make)
θa <sup>n</sup> wa-ta-n	believe
kousa'ā <sup>n</sup> -ta-n	attack
nā-nāhā-ta-n	kill for
cī-ta-n	capture for
touku-ta-n	tie to
tca'ā-ta-n	perceive, notice
tcei-ta-n	visit

*With suffixes -wu, -bä:*

ata-wu-n	eat up for
isi-bä-n	lay down, go to bed with
θei-wa-n, θei-ka-h	carry on back
tawaha-wou-n	cut tree down for
wathanaha-wu-n	write to
waxu-bä-n	imitate a bear

## -s, -x

(n-)ī-s	fear
itā-s, itā-s	meet, reach, arrive at, come to
bä-s	touch
ka <sup>n</sup> u-s	cut (et. ka <sup>n</sup> ne-n, open)
nou-ta <sup>n</sup> -s	carry out
tanä-s	pierce, make hole in
tcei-s	give here
wahani-s	unite
waxu-s	paint

## -θ

ā <sup>n</sup> θā <sup>n</sup> -θ	rub
ā <sup>n</sup> θi-θ	narrate
a <sup>n</sup> kā <sup>n</sup> -θ	take home
äneti-θ	speak to
bixa <sup>n</sup> -θ	like, love
ka <sup>n</sup> koutci-θ	scratch
sixahā <sup>n</sup> -θ	do thus, show
ciyi-ta-θ	make disappear for

*With suffix -ku:*

(ī-)tou-ku-θ	bind, tie to
θei-ku-θ	put in
ka <sup>n</sup> ka <sup>n</sup> i-ku-θ	uncover
nohū-ku-θ	lift up, carry
nīsā <sup>n</sup> -ku-θ	bind
tcei-ku-θ	release

-h<sup>24</sup>

atā-h	give
-axa-h, -äxä-h	bring, take, carry (in, back, etc.)
*äsini-h	anger, be angry at (äsina-nā-t <sup>1</sup> , anger)
-i-θetca <sup>n</sup> -h	think

<sup>24</sup> Starred forms show this suffix with an indisputable causative force.

*h-itca <sup>n</sup> -h	give pipe to, cause to smoke
iya-h	ignore, not know
bä-xo-h, bä-xa-h	strike
*bäta-h	give medicine to, doctor
bii-h, bii-n	find
θouu-h, θä <sup>a</sup> -h	crush, grind, chew (θaxan, forcibly)
θa <sup>n</sup> ku-h	follow
θei <sup>n</sup> ka-h, θei-wa-n	carry on back
*θia <sup>n</sup> ku-h	make stand
koxtauw-h	do to, meddle with, copulate with
ka <sup>n</sup> kax <sup>n</sup> ka-h	stab, pierce, sting
kataya-h	cover up
*noti-h	search for, seek (nota-n, ask)
nätäni-h	deceive, trick
n-ici-h, ici-ta-n	make
nicka-h	whip
sä <sup>n</sup> θi-xa-h	peg out flat
ci-h, ci-n	capture, take
*tcäbi-xa-h	carry, transport, cause to travel
*tcitei-h	cause to enter, let in
wawa-h	throw over, scatter

## INTRANSITIVE

ouhu	climb
ouθ	hang
ot	comb
a <sup>n</sup> ku-ä <sup>n</sup>	thaw, be warm
a <sup>n</sup> t-ä <sup>n</sup>	stand
awüna <sup>n</sup>	be closed
äθixtee-hi	shove
anä <sup>n</sup> θi	be different
ätei-ni	make camp, stay over night
ätei-yaka-ni	come to a camp
hiθa <sup>n</sup> bei	be true, right, so
ixane-hi	provide for, favor
ina <sup>n</sup> -ei	hunt
inenitä-ni	be well, live
inikati	play
isi-bi	lie down, go to bed
isi-si	be lying
itou, ätou, ätei-a <sup>n</sup>	shout, make noise, roar (cf. n-itou-hu)
h-itou	beg
itä <sup>n</sup> -ei	take arms
bäi-ni	be bloody, bleed
bei-teixu	be red hot
bäbä-ä <sup>n</sup> ei	be curly haired
bänä, ben <sup>t</sup>	drink
bäna <sup>n</sup> θei	smell
bäsäyei	touch
bixou	emerge, rise to surface of water
biwa <sup>n</sup> -hu	weep, cry
hähisi	wash
θiä <sup>n</sup> bä	snore
θibi	have to do with clothing
θiya-hu	cut hair
koxunä	hide, enter a hole
koxahei	dig
ka <sup>n</sup> '-us	drop, fall
ka <sup>n</sup> 'uye-	pick fruit
ka <sup>n</sup> out-	make dust
ha <sup>n</sup> hei, kohayei	get up, rise, ride
ka <sup>n</sup> kou	patch on
kaxou-hu	chip off

kaxa 'a	crack, fissure, dent
kanāne-hi	be a coward
ka <sup>a</sup> ni, kana <sup>a</sup> ni	be slow
kou, kanou, kana <sup>a</sup>	swell (kou-, kanou-, long, far)
kaya 'a-hu	fly away
nā-, nāya <sup>a</sup>	take off (clothing), dress
nā <sup>a</sup> θā <sup>a</sup>	stay
nā <sup>a</sup> kuθei	push
nā <sup>a</sup> nou	get ready
nāniθe	menstruate
nātcā, netce	die, be dead
neninā <sup>a</sup> k <sup>u</sup>	be blind
nihā-ni	own
nih <sup>a</sup> 'ā <sup>a</sup> , nih <sup>a</sup> 'āā	sting, hurt, irritate
nibou-hā	use perfume
n-itou-hu	shout, whistle, breathe (cf. itou)
sāse-hi	play, trouble, make noise
sāya	chew
cīcītei	stretch
cīyīhā <sup>a</sup> ti	disappear
tou	strike (tou-ku, bind)
tai	be cold
tāye-hi	be ashamed
teena 'ā <sup>a</sup>	jump
tcāni	skin, flay
tcāste	scratch
tcāteecti	cut, hurt
tein	plant, bury
wūa <sup>a</sup>	rest in water
wā <sup>a</sup> θā <sup>a</sup> , wanā <sup>a</sup> θā <sup>a</sup>	abound
waxusī	paint
yana-hu	pledge, vow

In general, transitive stems are used intransitively, or vice versa, so far as their meanings permit, without further change than that produced by the loss or insertion of an "instrumental" connective. The following are the principal observed cases of a more extensive modification.

<i>Transitive</i>	<i>Intransitive</i>
akū-hu-, cook	a <sup>a</sup> ku-, thaw, be warm
ā <sup>a</sup> ina-n, know	ā <sup>a</sup> in-, know
hīnitā-(t), inhabit	hānitā-, live, stay
isi-bā-n, lay down	isi-bi-, lie down; isi-si-, be lying
ici-ta-n, n-īci-h, do, make	ici-hi-, n-īci-ti-, āci-ta-, do, make
bāsā-n, touch	bāsā-yei-, touch
bīi-n, bīi-h, find	bīi-ti-, bīi-hā-, find
bī-n, eat	bī-θi-, eat
notī-h, seek, nota-n, ask	notī-hi-, look, search
naha', nāhā', kill	nā'ihei-, nāiha <sup>a</sup> -, kill
ni-b, marry	nī-ni-, marry
tcā-b-, shoot	tea-bā <sup>a</sup> -, shoot
sā <sup>a</sup> ku-θ, bind	sa <sup>a</sup> ku-hu-, be tied

## NOUNS

## PLURAL

Arapaho nouns take a plural suffix whether animate or inanimate, this distinction of gender being expressed by the verbs, adjectives, or numerals referring to them and not in the nouns themselves.

The most common plural suffix is *-na<sup>n</sup>*. This has been observed on *hic<sup>(i)</sup>*, liver; *bäseit<sup>i</sup>*, urine; *hā<sup>n</sup>xēi*, wolf; *hou*, raven; *bītei<sup>i</sup>*, dove; *hahā<sup>n</sup>t<sup>i</sup>*, cottonwood, tree; *kakā<sup>n</sup>x<sup>(i)</sup>*, tent pole; *haha<sup>n</sup>'uktā<sup>n</sup>*, hair braid; *haxa<sup>n</sup>'anā<sup>n</sup>kā<sup>n</sup>*, stone; *ha<sup>n</sup>θa<sup>n</sup>*, penis; *hā<sup>n</sup>kuhā<sup>n</sup>*, head; *nā<sup>n</sup>tcā<sup>n</sup>*, chief; *hānā<sup>n</sup>tcā<sup>n</sup>*, buffalo bull; *hinen<sup>i</sup>*, man; *hisei*, woman; *wa<sup>n</sup>'a*, *wa<sup>n</sup>'aha*, moccasin; *kakuiy*, tube, gun, whistle; *eisa<sup>n</sup>wa<sup>n</sup>*, tobacco; *teibāt<sup>i</sup>*, sweat-house; *wana<sup>n</sup>'*, wrist; *hi<sup>n</sup>ēina<sup>n</sup>*, buffalo; *bisā<sup>n</sup>*, worm.

With some slight or apparent change of final vowel, this ending occurs also in the following words:

*wax<sup>n</sup>*, grass, herbage, *waxuina<sup>n</sup>* (contrast *waxu<sup>n</sup>'*, medicine, below)  
*waxucit<sup>i</sup>*, painting, *waxucitana<sup>n</sup>*  
*hā<sup>n</sup>kā<sup>n</sup>x<sup>n</sup>*, saddle, *hā<sup>n</sup>kā<sup>n</sup>xuina<sup>n</sup>*  
*nic<sup>n</sup>'tceinan<sup>n</sup>'*, buckskin (probably antelope skin), *nic<sup>n</sup>'tceinana<sup>n</sup>* (for *nic<sup>n</sup>'tceinan<sup>n</sup>'na<sup>n</sup>?*)  
*bātceot<sup>(1)</sup>*, *watceot<sup>(1)</sup>*, stomach, *bātceotana<sup>n</sup>*  
*θik<sup>n</sup>*, ghost, *θeikana<sup>n</sup>*  
*θiw<sup>n</sup>*, bridge, boat, *θiwana<sup>n</sup>*

*-a<sup>n</sup>*, *-ha<sup>n</sup>* (probably really *-a<sup>n</sup>'*, *-ha<sup>n</sup>'*) is also common. Before it *-ä*, *-e*, change to *a*; and *-x* becomes *-θ*, *-c* becomes *-θ* or *-x*, *θ* becomes *-t*.

*bätā<sup>n</sup>*, heart, *bätā<sup>n</sup>ha<sup>n</sup>*  
*niciteä<sup>n</sup>*, antelope, *niciteaha<sup>n</sup>*  
*ni<sup>n</sup>'ihi*, eagle, bird, *ni<sup>n</sup>'ähiha<sup>n</sup>*  
*nīteiyē*, river, *nīteihaha<sup>n</sup>*  
*hōu*, robe, *houwa<sup>n</sup>* (ct. *hou*, raven, above)  
*ha<sup>n</sup>kūhu<sup>n</sup>'*, mouse, *ha<sup>n</sup>kūhuha<sup>n</sup>*  
*hāni<sup>n</sup>'i*, ant, *hāni<sup>n</sup>'iha<sup>n</sup>*  
*hanaxa<sup>n</sup>'ähi<sup>n</sup>'i*, boy, *hanaxa<sup>n</sup>'ähiha<sup>n</sup>*  
*hätā<sup>n</sup>*, sinew, *hätaha<sup>n</sup>*  
*waxu<sup>n</sup>'*, medicine, *waxūwa<sup>n</sup>* (ct. *wax<sup>n</sup>*, above)  
*wou*, buffalo calf, *wouha<sup>n</sup>*  
*tcä<sup>n</sup>'einox*, bag, *tcä<sup>n</sup>'eina<sup>n</sup>θa<sup>n</sup>*  
*ha<sup>n</sup>'uwanux*, parfleche case, *ha<sup>n</sup>'uwana<sup>n</sup>θa<sup>n</sup>*  
*beic<sup>(1)</sup>*, nose, *bei<sup>n</sup>θa<sup>n</sup>*  
*benec*, arm, *bānoxa<sup>n</sup>*  
*bäs<sup>n</sup>'*, wood, *bāxa<sup>n</sup>*  
*wa<sup>n</sup>'a<sup>n</sup>θ<sup>n</sup>'*, leg, *wa<sup>n</sup>'a<sup>n</sup>ta<sup>n</sup>*  
*beitei<sup>n</sup>θ*, tooth, *beiteita<sup>n</sup>*  
*tcax<sup>n</sup>*, foe, Comanche, *tcax<sup>n</sup>θa<sup>n</sup>*

tee'ä<sup>n</sup>ox<sup>u</sup>, club, tomahawk, tee'ä<sup>n</sup>oθa<sup>n</sup>  
 biteic, leaf, biteixa<sup>n</sup>  
 teicihi, night hawk, teiciha<sup>n</sup> (*sic*)  
 hitiθiθ, kidney, hitiθiθa<sup>n</sup> (*sic*)

Lengthening or vocalization of the final vowel is fairly frequent:  
 i > ī; u > ū; ä > ei; a, a<sup>n</sup> > ou, au.

hoθ<sup>i</sup>, arrow, hoθī  
 bihi'ī, deer, bihi'ī  
 tea<sup>n</sup>θani'ī, prairie dog, tea<sup>n</sup>θani'ī  
 wox<sup>n</sup>, bear, woxū  
 wa'ax<sup>u</sup>, nail, wa'axū  
 nete<sup>i</sup>, water, neteī  
 ni'ete<sup>i</sup>, lake, ni'eteī  
 hä<sup>n</sup>tete<sup>i</sup>, ocean, hä<sup>n</sup>teteī  
 wäsā<sup>n</sup>θ<sup>(1)</sup>, arrowpoint, wäsā<sup>n</sup>θī  
 häbäs<sup>(1)</sup>, beaver, häbāsī  
 hiθa<sup>n</sup>xu, guts, hiθa<sup>n</sup>xū  
 kaha'a<sup>n</sup>wu, creek, kaha'a<sup>n</sup>wū  
 hoseina<sup>n</sup>, meat, hoseinou  
 wa<sup>n</sup>kete<sup>(1)</sup>, cattle, wa<sup>n</sup>keteī  
 hotä', mountain sheep, hotei  
 bä<sup>n</sup>cisä', eye, bä<sup>n</sup>cisei  
 hä<sup>n</sup>w<sup>n</sup>, house, hä<sup>n</sup>wū  
 haθa<sup>n</sup>', star, haθa'ū (cf. haθa<sup>n</sup>, penis, above)  
 wanatana', ear, wanatana'ū

Apparently formed by a special suffix:

heθ, dog, heθäbī  
 ka'a<sup>n</sup>, coyote, kāxawū  
 hiwaxuhā<sup>n</sup>x, horse, hiwaxuhā<sup>n</sup>xäbī

#### CASES

An oblique case, usually an objective, was observed on a few nouns. It seems to be formed by -n<sup>i</sup>.

hisei, woman, objective hisei-n<sup>(1)</sup>, compare text III, note 28.

wot nähä' niteihe-hinen<sup>i</sup> ni'bäbänähäx<sup>u</sup>, this Kiowa was handsome; hä<sup>n</sup>ixnouxanē niteihe-hineni-n<sup>i</sup>, he met a Kiowa.

tuxkanä' bäninä<sup>n</sup>t<sup>i</sup> nitea-ou-n<sup>i</sup> bitcineni-n<sup>i</sup>, Tuxkanä' gives a blanket to Bitcinen<sup>i</sup>.

nähä' hinen<sup>i</sup> tawā<sup>n</sup>t<sup>i</sup> hi'ih<sup>i</sup>' haxa'anā<sup>n</sup>kä<sup>n</sup> hinä' hineni-n<sup>i</sup>, this man struck with a stone that man.

A general locative, also serving as an instrumental, is more frequent. It takes the forms -hä', -nä', -bä'; also -i', n<sup>i</sup>, -ī, -ū, recalling both one type of plural and the objective.

näyei, my tent, näyeihä'  
 hi'ä<sup>θ</sup>, his leg, hi'ä<sup>ti</sup>, hi'ä<sup>θin</sup> (plural)  
 bei, awl, beihä'  
 niteiye, river, niteihä'  
 haxa'anä<sup>x</sup>, ax, haxa'anä<sup>θä</sup>'  
 nīna<sup>n</sup>, tent, nīna<sup>nä</sup>'  
 hä<sup>x</sup>eb<sup>i</sup>, spring, hä<sup>x</sup>ebinä'  
 bā'a<sup>n</sup>, road, bā'a<sup>nä</sup>'  
 ha<sup>n</sup>kühä<sup>n</sup>, head, ha<sup>n</sup>kühä<sup>nä</sup>'  
 hakā<sup>x</sup>, tent pole, hakā<sup>x</sup>inā'  
 kakuic, kakuuy, gun, kakuianā'  
 tetcena<sup>n</sup>, door, tetcena<sup>nä</sup>'  
 tcäseix, one, tcäseiya<sup>nä</sup>', in one spot  
 wax<sup>n</sup>, grass, waxu'unä'  
 h-ā<sup>n</sup>, bed, h-ā<sup>nä</sup>'  
 hoti', wheel, hotibä'  
 netc<sup>i</sup>, water, netci  
 tea'otä<sup>n</sup>ya<sup>n</sup>, hill, tea'otä<sup>n</sup>i  
 hahā<sup>ti</sup>, cottonwood tree, hahā<sup>ti</sup>, hahā<sup>ti-n</sup><sup>i</sup>  
 bita'ā<sup>n</sup>wu, earth, bita'a<sup>n</sup>wū  
 wāw<sup>n</sup>, ice, wa'awū  
 heθ-aw-akay-a-ni, in the doghouse

## POSSESSION

The personal possessive affixes of nouns are illustrated by the following examples:

<i>Word</i>	<i>Father</i>	<i>Mother</i>	<i>Older brother</i>	<i>Daughter</i>
Vocative	neixa <sup>n</sup>	na'a <sup>n</sup>		natā
My	neisana <sup>n</sup>	neina <sup>n</sup>	nāsähä'ä	natāne
Your (s.)	heisana <sup>n</sup>	heihā <sup>n</sup>	hāsahä'ä	hatāne
His	hinisanā <sup>n</sup> (n <sup>i</sup> )	hīnan <sup>i</sup>	hīsaha'a <sup>n</sup>	hitāna <sup>n</sup>
Our (incl.)	heisanānin <sup>i</sup>	heinānin <sup>i</sup>	hāsähä'ehin <sup>i</sup>	hatanihin <sup>i</sup>
Our (excl.)		neinānina <sup>n</sup>	nāsähä'ähina <sup>n</sup>	
Your (pl.)		heinānina <sup>n</sup>		
Their	hinisanānina <sup>n</sup>	hinānina <sup>n</sup>		hitanehina <sup>n</sup>
Somebody's	beisana <sup>n</sup>	beina <sup>n</sup>	bāsähä'ä	

  

<i>Word</i>	<i>Grandfather</i>	<i>Son</i>	<i>Sons</i>	<i>Robe</i>
Vocative	nābāciwa <sup>n</sup>	ne'i		(hou)
My	nābācibähä	neih'ä <sup>n</sup>	neih'a <sup>n</sup> ha <sup>n</sup>	natou
Your (s.)	hābācibähä	heih'ä <sup>n</sup>	heih'a <sup>n</sup> ha <sup>n</sup>	hatou
His	hibāciwaha <sup>n</sup>	hī'a <sup>n</sup>	hī'a <sup>n</sup> ha <sup>n</sup>	hitouwu
Our (incl.)	hābācibeih-in <sup>i</sup>	heih'ehin <sup>i</sup>		
Our (excl.)				
Your (pl.)				
Their	hibācibähāina <sup>n</sup>			
Somebody's				

<i>Word</i>	<i>Robes</i>	<i>Penis</i>	<i>Dog</i>	<i>Tent</i>
Vocative	(houwa <sup>n</sup> )	(haθa <sup>n</sup> )	(heθ)	(nīna <sup>n</sup> )
My	natouwa <sup>n</sup>	neiθa <sup>n</sup>	netäθäbibi	näyei
Your (s.)	hatouwa <sup>n</sup>	heiθa <sup>n</sup>	hetäθäbibi	häyei
His		hiniθa <sup>n</sup>	hitäθäbīwu	hiyei
Our (incl.)	hatouwun <sup>an</sup>		hetäθäbībin <sup>1</sup>	häyeihin <sup>1</sup>
Our (excl.)				näyeihina <sup>n</sup>
Your (pl.)				häyeihina <sup>n</sup>
Their	hitouwuna <sup>n</sup>		hitäθäbībina <sup>n</sup>	hiyeihina <sup>n</sup>
Somebody's		bäθa <sup>n</sup>		

Some of the above forms under "our," "your," and "their" may really denote plural instead of singular nouns. The "vocative" in the terms of relationship is the term of direct address: "father!" In the other words given, the corresponding form in parentheses is the nominative.

Several nouns show a suffix with labial consonant in all three persons. This perhaps denotes acquirement of possession.

nat-ahā<sup>n</sup>tī-bi, my tree  
hit-ahā<sup>n</sup>tī-wu, his tree  
net-äθäbī-bi, my dog  
na-nouhuhä-bi, my kit-fox  
nä-nä<sup>n</sup>tcä<sup>n</sup>-wa<sup>n</sup>, my chiefs  
nä-teia<sup>n</sup>nī-wa<sup>n</sup>, my children

#### PRONOUNS

The demonstratives, which are alike for singular and plural, animate and inanimate, are:

nähä', nuhu'	this
hinä'	that, visible, or near the person spoken to
hinī	that, invisible, or of reference only

Compare: nā'äsi, thus, nā'eisi, nā'äsa<sup>n</sup>, it is thus, resembles, nänä-hisou, alike, nā'aθixt<sup>i</sup>, he resembles.

#### Interrogatives:

hä <sup>n</sup> nä'	who
hä <sup>n</sup> you	what
hä <sup>n</sup> ta <sup>n</sup> , tä <sup>n</sup> ti, tä <sup>n</sup> teiha <sup>n</sup>	where
hä <sup>n</sup> tax <sup>u</sup>	whenever
tou	when
tousa <sup>n</sup>	why, what kind
tahou, tahoutax <sup>n</sup>	how many
touθouhu'	for how much, at what price

A real personal pronoun does not exist. Independent words translatable by English pronouns occur only in answer to questions, or

occasionally for tautological emphasis. They are verbs formed from a demonstrative stem.

nänä-ni-na <sup>n</sup>	it is I, "I"
nänä-ni-t <sup>l</sup>	it is he, "he"
nänä-häxk <sup>u</sup>	it must be he, "he"

Compare:

hineni-ni-na <sup>n</sup>	it is a man that I am, "I am a man"
hisei-ni-na <sup>n</sup>	I am a woman
hahā <sup>n</sup> kā <sup>n</sup> -ni-na <sup>n</sup>	I am a fool, I am crazy

The "independent possessive pronouns" are also verbal sentences, with a possessive prefix and a subjective suffix of the third person.

mine	neinis'tā <sup>n</sup> t <sup>l</sup> ("he is mine")
yours	heinis'tā <sup>n</sup> tī
his	hīnis'tā <sup>n</sup> t <sup>l</sup>
ours	neinis'tā <sup>n</sup> tībina <sup>n</sup>
yours	heinis'tā <sup>n</sup> tīnina <sup>n</sup>
theirs	hīnis'tā <sup>n</sup> tīnina <sup>n</sup>

#### ADVERBS

-ihi', -uhu', is the commonest ending of independent words of adverbial or prepositional force. Without the suffix, several of the stems occur as prefixes of verbs.

tcän-ihi', under (tcän-i-)
täs-ihi', on (täs-i-, täx-)
ka <sup>n</sup> ä <sup>n</sup> -n-ihi', slowly (kou-)
xou-w-uhu', straight (xou-)
bä-h-ihi', all (bä-)
nā <sup>n</sup> -ūhu', out from the river or valley (nou-)
hanawu-n-ihi', ha <sup>n</sup> wui-nih-ihi', down-stream
n-ā <sup>n</sup> wū-hu', south
hawahō-uhu', many times
hi'-ihi', hu'-uhu', with, on account of
hi <sup>θ</sup> a <sup>n</sup> w-ūhu', really, truly (hi <sup>θ</sup> a <sup>n</sup> bei-, to be so)
θei-n-ihi', θeinei-si, inside
kouθ-ihi', some time later
kox-θ-ihi', over, beyond (kax-, violently, through)
ka <sup>n</sup> -kaxuθ-ihi', over a hill
kanaw-ūhu', meanwhile, at the same time
kanax-uhu', obstinately, unduly
nih-ihi', along, during
tou-θo-uhu', at what price (tou, what)
kā <sup>n</sup> kā <sup>n</sup> θ-ihi', homeward

-bä, -bi, -wu, is another ending of adverbs, whose stems in some cases also serve as prefixes of verbs.

hixte-ä-bä, up, above (hixte-i-)
hä <sup>n</sup> θä-b <sup>l</sup> , toward (hä <sup>n</sup> θä-, hä <sup>n</sup> θä-bi-)
nänä-bä, nänä-bi, north
nā <sup>n</sup> tä-bä, at the rear of the tent, opposite the door

-ā<sup>n</sup>wu refers to the ground :

bīta'ā<sup>n</sup>wu, earth  
 hiθā<sup>n</sup>wu, on the prairie  
 hiθawā<sup>n</sup>wu, under ground  
 naxutā<sup>n</sup>wu, above ground

-ou :

hän-ā<sup>n</sup>, hard, hän-ou, very hard  
 hä'nä'-ei, fast, hä'nä'ou, very fast  
 nā'āsi, thus, nānāhis-ou, alike  
 hä-nä', who, hä<sup>n</sup>-y-ou, what

### NUMERALS

The Arapaho numerals given in the vocabulary are those used in counting, and mean "— times." The cardinals used in sentences are formed like verbs with the pronominal endings *-i-θ<sup>i</sup>*, animate, and *-ei*, *-i-i*, inanimate. They occur either with a prefix *hä-* or with prefixed reduplication. In this reduplication initial *y* of the stem turns to *n*. The relationship of these two sounds has been mentioned before. The stem of the cardinal numeral "one" is the same as that of "two," *nīs*, but has the corresponding singular suffixes *-ix-t<sup>i</sup>* and *-e-t<sup>i</sup>*. In the ordinal and the forms for "six," the stem for "one" appears in what may be its original form, *nīt*. The stems for "nine" and "ten" are used without reduplication or the prefix *hä-*. The ordinals are formed, with reduplication, by the suffix *-awā*. This is sometimes further enlarged by the ending *-na'* when inanimate, and when animate has the ending *-t<sup>i</sup>*. Numeral classifiers have not yet been observed, except *-ā<sup>n</sup>nā*, which is employed when camps, towns, herds, or portions are referred to, and which may be a locative or collective: *yāneyi-ā<sup>n</sup>nā-na'*, four bands.

	<i>Counting</i>	<i>Cardinal</i>	<i>Cardinal</i>	<i>Ordinal</i>
1	tcāseix	hä-nīsi-xt <sup>i</sup> (an.)	nä-nīsi-xt <sup>i</sup>	nä-nīt-awā-t <sup>i</sup>
		hä-nīs-et <sup>i</sup> (inan.)	nä-nīs-et <sup>i</sup>	nä-nīt-awā-(na')
2	nīs <sup>i</sup>	hä-nīsi-θ <sup>i</sup> (an.)	nä-nīsi-θ <sup>i</sup>	nä-nīsi-awā-t <sup>i</sup>
		hä-nīs-ei (inan.)	nä-nīs-ei	nä-nīsi-awā-(na')
3	nāsa <sup>n</sup> , nāsax	hä-nāi-θ <sup>i</sup>	nä-nāi-θ <sup>i</sup>	nä-nāsi-awā-t <sup>i</sup>
4	yein <sup>i</sup>	hä-yeini-θ <sup>i</sup>	yā-neini-θ <sup>i</sup>	yā-neini-awā-t <sup>i</sup>
5	yāθan <sup>i</sup>	hä-yāθani-θ <sup>i</sup>	ya-nāθani-θ <sup>i</sup>	ya-nāθani-awā-t <sup>i</sup>
6	nīt-a <sup>n</sup> -tax <sup>u</sup>	hä-nīt-a <sup>n</sup> -taxu-θ <sup>i</sup>	nä-nīt-a <sup>n</sup> -taxu-θ <sup>i</sup>	nä-nīt-a <sup>n</sup> -taxu-awā-t <sup>i</sup>
7	nīs-a <sup>n</sup> -tax <sup>u</sup>	hä-nīs-a <sup>n</sup> -taxu-θ <sup>i</sup>	nä-nīs-a <sup>n</sup> -taxu-θ <sup>i</sup>	nä-nīs-a <sup>n</sup> -taxu-awā-t <sup>i</sup>
8	nās-a <sup>n</sup> -tax <sup>u</sup>	hä-nās-a <sup>n</sup> -taxu-θ <sup>i</sup>	nä-nās-a <sup>n</sup> -taxu-θ <sup>i</sup>	nä-nās-a <sup>n</sup> -taxu-awā-t <sup>i</sup>
9	θi' <sup>a</sup>	θi'a-taxu-θ <sup>i</sup>		θi'a-taxu-awā-t <sup>i</sup>
10	bätä-tax <sup>u</sup>	bätä-taxu-θ <sup>i</sup>		bätä-taxu-awā-t <sup>i</sup>

The numerals from 11 to 19 are formed from those for 1 to 9 by the suffix -ini, which occurs also on words denoting measures of time; the tens by the ending -a<sup>n</sup>, -a', or u', with change of preceding consonant.

1	tcäseix	11	tcäseini		
4	yein <sup>l</sup>	14	yeinini	40	yeiyu'
5	yāθan <sup>l</sup>	15	yāθanini	50	yāθaya'
7	nīsa <sup>n</sup> tax <sup>u</sup>	17	nīsa <sup>n</sup> tax <sup>u</sup> ini	70	nīsa <sup>n</sup> tasa <sup>n</sup> '
8	nāsa <sup>n</sup> tax <sup>u</sup>	18	nāsa <sup>n</sup> tax <sup>u</sup> ini	80	nāsa <sup>n</sup> tasa'

Other forms: nīta<sup>n</sup>, first, before; nīsa<sup>n</sup>ouhu', nisaha'a, both; tcä<sup>n</sup>xa<sup>n</sup>, another one; tcäseix, one, inanimate; tcäsä', one, animate.

The suffix -tax<sup>u</sup>, in 6 to 10, appears to be found also in tahoutax<sup>u</sup>, how many, and hā<sup>n</sup>tax<sup>u</sup>, whenever.

### TEXTS

Only enough textual material is presented here to illustrate some of the leading structural and phonetic features that have been outlined. Several hundred pages of Arapaho texts were secured by the writer. But the foregoing description is, after all, not more than a sketch of part of the salient traits of the language; and any analysis making a pretense at even approximate completeness was impossible, without a study so thorough-going that it would have crowded into the background indefinitely other work which was a nearer duty. With the possible exception of Eskimo, Algonkin, as represented by Arapaho and Yurok, is far the most difficult form of speech encountered by the writer at first hand. How much remains to be done in Arapaho before the language is really understood is revealed by the notes that have been added to the appended texts. The purpose of these notes is elucidation; but whoever consults them will not need the advice that for nearly every point explained there is a problem raised, and several that are not even touched on. For these reasons the entire body of texts recorded has been put in the possession of the Bureau of American Ethnology, in the hope that under the hand of Dr. Michelson or some other investigator better fitted by capacity or long occupation with Algonkin than the writer, their publication will ultimately result in greater usefulness than could be attained now.

TEXT I—A PRAYER<sup>1</sup>

hä <sup>n</sup> -heisanā'nin <sup>i2</sup> Ha! our father,	nänitänē'ina <sup>n3</sup> hear us,	na-h <sup>a</sup> bäcibē'hin <sup>i4</sup> and grandfather.	häθē'i <sup>5</sup> All
naha'ä <sup>n</sup> sē'hi'it the shining ones	nanaxkunihi'ita'wa <sup>n6</sup> I also mention,	hīci' <sup>7</sup> day	nī'ha'ya <sup>n</sup> yellow,
häse'isen <sup>i8</sup> wind	hī'i'θeti good,	nä'yeitci timber	i'i'θetin <sup>9</sup> good,
bita'a'wu earth	ū'θetin <sup>9</sup> good.		
tcäsäē'hi Animal	hä <sup>n</sup> θiteä'θtin <sup>i10</sup> listen	hiθa <sup>n</sup> wā <sup>n</sup> wu <sup>i11</sup> under the ground!	naxutā <sup>n</sup> wu <sup>i11</sup> above the ground
tcäsäē'ihī animal,	nätci <sup>i12</sup> in water	tcəsähe'iha <sup>n13</sup> animals,	tcibäh'tcähä'θti <sup>i14</sup> all listen!
häteiyawa <sup>n</sup> ni'na <sup>i15</sup> Your food-remnants	ha <sup>n</sup> twani'bini <sup>i16</sup> we will go to eat.	hä <sup>n</sup> tihi'iθē'hi <sup>i17</sup> May they be good!	
hä <sup>n</sup> tihiteihikā <sup>n</sup> tā <sup>n18</sup> May there be long	ha <sup>n</sup> waθa'wu breath	hīnāiti't <sup>i19</sup> life!	hä <sup>n</sup> tihiawa <sup>n</sup> ho'ua <sup>n</sup> May increase
hinā <sup>n</sup> tāni't <sup>i19</sup> the people,	teia <sup>n</sup> nā' <sup>i20</sup> children	hänäteiha <sup>n</sup> ye'it <sup>i21</sup> of all ages,	hisē'hihi <sup>i22</sup> girl
naha-hana'xa'ähixi <sup>i22</sup> and boy	nax'hine'n and man	hänäteixa <sup>n</sup> ye'it of all ages,	hi'sei woman,
bäh <sup>a</sup> e'ihähin <sup>i23</sup> old man,	hänäteixa <sup>n</sup> ye'in of all ages,	bätäbi' old woman.	ha <sup>n</sup> tninioxanē'ia <sup>n</sup> nou <sup>i24</sup> It shall give us strength
bī'ciwa <sup>n25</sup> the food	ha <sup>n</sup> neika <sup>n</sup> huθi <sup>i26</sup> while runs	hīci'e the sun.	hä <sup>n</sup> 'θä <sup>n</sup> Oh that!
nēixā <sup>n27</sup> my father!			
tcixtēä'ä'θti <sup>i28</sup> listen,	näbä'ciwa <sup>n27</sup> my grandfather!	nän <sup>n</sup> nihi'iθa' <sup>a</sup> n <sup>29</sup> for what I ask,	kakau'θetca <sup>n30</sup> thoughts,
bätā <sup>n31</sup> heart,	bixa <sup>n</sup> θeti't <sup>i32</sup> love,	hanaw <sup>ui</sup> nāti't happiness!	ha <sup>n</sup> tninīθixanäbeθen <sup>i33</sup> We will eat you.

## Notes

<sup>1</sup> Bull. Am. Mus. Nat. Hist., xviii, 315, 1907.<sup>2</sup> 1st pers. pl. inclusive: neisana<sup>n</sup>, my father.<sup>3</sup> -n-, connective; -eina<sup>n</sup>, he—me or they—us: thou—us is -eiä<sup>n</sup>.<sup>4</sup> na<sup>n</sup>' or nah<sup>a</sup> is 'and'; the -h<sup>a</sup>- may be part of this or part of the possessive elements hä—h-in<sup>i</sup>, our; näbäcibä, my grandfather.<sup>5</sup> Also a prefix of verbs.<sup>6</sup> na-, for na<sup>n</sup>' or nah<sup>a</sup>, and; -naxku-n-, with, a prefix of verbs; nih<sup>i</sup>-, incomplete action; ita, stem; -w-, connective; -a<sup>n</sup>, I—him.<sup>7</sup> Cf. hīci, sun, below.<sup>8</sup> Cf. häsa'a<sup>n</sup>t<sup>i</sup>, swift, and the prefix of verbs häs-, swiftly, violently, very, hard.<sup>9</sup> These two words were heard as parts of the preceding ones, to the final vowels of which their initial vowels are assimilated.<sup>10</sup> hä<sup>n</sup>θi- apparently equals hä<sup>n</sup>tī-, optative; -in<sup>i</sup>, transitive imperative.<sup>11</sup> -ä<sup>n</sup>wu, an ending of adverbs referring to the ground.<sup>12</sup> Locative of netc<sup>i</sup>, water.<sup>13</sup> -ha<sup>n</sup>, plural; -ēhi, -ehei, may be -ēhi, denoting the agent, -ēhi, face, or -hi'i, -hähi, diminutive.

<sup>14</sup> *tcī-*, imperative, regular in the negative, occasional in the positive; *-bäh'*, all; *tcähäθ-t-ī*, compare *tcäθ-t-*, note 10, is or contains the stem.

<sup>15</sup> "Crumbs." Plural, with 2nd pers. possessive.

<sup>16</sup> *ha<sup>n</sup>t-*, purposive future; *wan-i-*, go to do; *bī*, eat; *-n-*, connective.

<sup>17</sup> *hä<sup>n</sup>tih<sup>1</sup>-*, optative or precative (cf. note 10), *-ih<sup>1</sup>* probably denoting incompleteness of action; *iθe* appears to be the stem meaning good, cf. above, note 9; *-hi*, intransitive.

<sup>18</sup> *hä<sup>n</sup>tih<sup>1</sup>-*, as in last word; *-tcihi-*, possibly *tcī-*, imperative, and *n-ih<sup>1</sup>-*, incomplete action; *kā<sup>n</sup>-t-ä<sup>n</sup>* suggests the "prefix" *kou-*, *kanou-*, long, far.

<sup>19</sup> Cf. *hinen<sup>1</sup>*, man, *hinenitā<sup>n</sup>*, person, *hinana<sup>1</sup>ei*, Arapaho, *hiteni*, life symbol; *-it<sup>1</sup>*, no doubt containing the pronominal ending of the 3rd pers., recurs below on abstract nouns.

<sup>20</sup> Plural (♀) of *teia<sup>n</sup>*, child. The form has the appearance of a locative.

<sup>21</sup> Unanalyzed, except for the abstract ending, cf. note 19.

<sup>22</sup> *hisei*, woman; *-hi<sup>1</sup>*, *-hä<sup>1</sup>*, *-hähi*, etc., diminutive; *hanaxa<sup>1</sup>aha*, young man.

<sup>23</sup> *bähä<sup>1</sup>ei*, *behi<sup>1</sup>*, old, with perhaps the diminutive suffix. Compare the stems for old woman, in the second word following, and for grandfather, as in note 4. The ending of the next word changes from *-t* to *-n*, evidently to agree with the unexplained *-n* of the present noun.

<sup>24</sup> *ha<sup>n</sup>tnī-*, or *ha<sup>n</sup>t-*, *ha<sup>n</sup>ta<sup>n</sup>ni-*, purposive future; *-ni-*, perhaps *ni<sup>1</sup>*, good; *-oxa-*, the stem, cf. *axa-wu*, give me food, *-axa-h-*, to bring, take, carry; *-n-* appears to be the connective, in spite of the *-h-* of *-axa-h-*; *-eiä<sup>n</sup>nou* then would be the pronominal ending, not fully clear, though *-eiä<sup>n</sup>* is thou—us.

<sup>25</sup> Unknown derivation from *bī*, eat.

<sup>26</sup> *hä<sup>n</sup>-*, while, continuing; *-ne-*, for *nī*, *nih<sup>1</sup>*, incomplete action; *i-ka<sup>n</sup>*, stem, to move, especially to run, usually with the intransitive suffix *-hu*.

<sup>27</sup> "Vocative," 1st pers. possessive, regularly a shortened form in terms of relationship.

<sup>28</sup> Imperative: cf. notes 10 and 14.

<sup>29</sup> *nä<sup>n</sup>*, perhaps *my*; *nih-*, *nihī-*, *nī-*, *hī-*, that which, he who, where.

<sup>30</sup> *-iθetca<sup>n</sup>-h-*, to think; *kaka-xa<sup>n</sup>änäta<sup>n</sup>*, thought, think.

<sup>31</sup> Indefinite possessive prefix *b-ä-*, *b-ei-*, *w-a-*.

<sup>32</sup> *bixa<sup>n</sup>-θ-eθen<sup>1</sup>*, I love you; for *-it* see note 19.

<sup>33</sup> *ha<sup>n</sup>tnī-*, one form of future of intent; *-nīθixanä-*, unanalyzed; *-b-*, connective; *-eθen*, I—you.

TEXT II—AN ADVENTURE<sup>1</sup>

<i>bihi<sup>1</sup></i> "Deer"	<i>hä<sup>n</sup>ixīna<sup>n</sup>ei<sup>2</sup></i> now went hunting.	<i>hitaxa<sup>n</sup>hok<sup>3</sup></i> He came to	<i>wotix</i> accidentally	<i>touciniehin</i> one who was pretty
<i>hisein<sup>4</sup></i> woman.	<i>behic<sup>1</sup>nic<sup>1</sup>tcä<sup>n</sup>5</i> All antelope	<i>hinaninouyuyaxkan</i> was her clothing.	<i>xanou<sup>6</sup></i> Straightway	
<i>hä<sup>n</sup>ixtceciθänā<sup>n</sup></i> then he wanted to court her	<i>tah<sup>n</sup>nahawā<sup>n</sup>t<sup>7</sup></i> when he saw	<i>hisein<sup>4</sup></i> the woman.	<i>hä<sup>n</sup>ixänēitaxawūinā<sup>n</sup>8</i> Then she motioned for him to approach.	
<i>wa<sup>n</sup>hei</i> "Well,	<i>ha<sup>n</sup>tibīā<sup>n</sup>θeθen</i> let me love you,"	<i>hä<sup>n</sup>θa<sup>n</sup>hok<sup>3</sup></i> said to her	<i>bihi<sup>1</sup></i> "Deer."	<i>nah<sup>1</sup>nihāya<sup>n</sup></i> "And yourself
<i>häcita<sup>n</sup>nani</i> please,"	<i>hä<sup>n</sup>θeihok<sup>3</sup></i> she said to him.	<i>hänäiyiha<sup>n</sup>t<sup>10</sup></i> Then he went to her.	<i>tā<sup>n</sup>bā<sup>11</sup></i> Just	
<i>ha<sup>n</sup>tnitena<sup>n</sup>hok<sup>12</sup></i> he will be about to touch her,	<i>hīna<sup>n</sup>nanax</i> to his surprise	<i>hä<sup>n</sup>ixwosätouhin<sup>13</sup></i> then she cried (like a deer),	<i>tccestcācena<sup>1</sup>ā<sup>n</sup></i> suddenly jumped,	
<i>tcätcebitā<sup>1</sup>eixa<sup>n</sup>15</i> ran off looking back.	<i>hä<sup>n</sup>i<sup>1</sup>bīniha<sup>n</sup>habā<sup>16</sup></i> Then he saw she was	<i>bihi<sup>1</sup></i> a deer.	<i>bihi<sup>1</sup></i> "Deer"	<i>hä<sup>n</sup>ixtäyē</i> then was ashamed
<i>ha<sup>n</sup>wo-nih<sup>1</sup>ot-biā<sup>1</sup>ä<sup>n</sup>t<sup>17</sup></i> at being deceived in loving.	<i>hä<sup>n</sup>nātcātcākā<sup>n</sup>hut<sup>18</sup></i> Then he returned	<i>taxtäyēhit<sup>19</sup></i> ashamed.		

hā <sup>n</sup> ixxā <sup>n</sup> tā <sup>n</sup> 'einin Now later	bihi'i "Deer"	ta'bihi'ihinā <sup>n</sup> tin <sup>20</sup> became like a deer.	nāyēθa <sup>n</sup> nā <sup>n</sup> In the camp-circle		
hā <sup>n</sup> ixinikuhinā <sup>n</sup> 21 then was chased	bihi'i "Deer"	wā <sup>n</sup> ti like	bihi'i a deer.	wā <sup>n</sup> ti Like	bihi'i a deer
nīθetouhāk <sup>22</sup> he cried,	wā <sup>n</sup> ti like	bihi'i a deer	tcātcena'a <sup>n</sup> 14 he jumped,	wā <sup>n</sup> ti like	bihi'i a deer
hāhnā <sup>n</sup> kuhnāhāk <sup>u</sup> he fled on the prairie;		hābāhiyeihanā <sup>n</sup> tāk <sup>u</sup> 23 all pursued.		tīcītānāt <sup>24</sup> When he was caught,	
hā <sup>n</sup> ixnānā <sup>n</sup> niθa <sup>n</sup> kua <sup>n</sup> then his eyes looked different.	bihi'i "Deer"	hā <sup>n</sup> ixtatinā <sup>n</sup> now had his mouth open.	hā <sup>n</sup> ixbāhāneiānā <sup>n</sup> 25 Then all held him.		
hā <sup>n</sup> nī At last	hā <sup>n</sup> ixteīnīn <sup>i</sup> then he ceased	bihi'ihīn <sup>26</sup> being a deer.	nā <sup>n</sup> 'āθīcīhit <sup>i</sup> For this he is named	bihi'i "Deer."	

## Notes

<sup>1</sup> Bull. Am. Mus. Nat. Hist., xviii, 20, 1902.

<sup>2</sup> For hā<sup>n</sup>ix-, see note 29 to following text; ina<sup>n</sup>, hunt; -ei, causative, here: go to.

<sup>3</sup> -hok<sup>u</sup>, it is said, they say. Cf. Michelson, Bur. Am. Ethn. Ann. Rept., xxviii, 237, 1912.

<sup>4</sup> An apparent instance of the objective or oblique case: hisei, woman.

<sup>5</sup> bā-, behi'i-, behici-, bābānei-, all, completely; na<sup>n</sup>sitcā<sup>n</sup>, nisitcā<sup>n</sup>, antelope.

<sup>6</sup> Also a "prefix" of verbs.

<sup>7</sup> tah<sup>a</sup>-, when; n-a<sup>n</sup>ha-w, see; -ā<sup>n</sup>t<sup>i</sup>, he—him.

<sup>8</sup> Cf. h-itaxa<sup>n</sup> in the third word of this text; with this "stem" compare itā-s, itā-s, reach, meet. For hā<sup>n</sup>ix-, see note 2: -wūinā<sup>n</sup>, from -wu-n, to, for, with, or more probably from -awui-ni, become, begin, and -n-, connective, -ā<sup>n</sup>-, -a<sup>n</sup>-, he—him (a form different from those given above in the table of transitive pronominal endings, and no less common; but their relation is not yet clear).

<sup>9</sup> For ha<sup>n</sup>t-i-bixa<sup>n</sup>-θ-eθen<sup>i</sup>, I will love you.

<sup>10</sup> hānā- = hā<sup>n</sup>nā<sup>n</sup>-, which see in note 29 to next text; iyiha<sup>n</sup>t suggests the analysis iyi-h-ā<sup>n</sup>t<sup>i</sup>, but the form otherwise found is stem iyiha<sup>n</sup> with connective -n-.

<sup>11</sup> Also a prefix, but here heard as a separate word.

<sup>12</sup> ha<sup>n</sup>t-nī-; ite-n, take; -hok<sup>u</sup>, see note 3.

<sup>13</sup> hā<sup>n</sup>ix-; wos-ʔ; ātōu, itōu, cry, make a noise, shout; -hi, intransitive; -n, ʔ

<sup>14</sup> Cf. teesis-, begin; tcā-, again, back, or perhaps reduplication here, "jumped about"; teena'ā<sup>n</sup>, jump.

<sup>15</sup> Cf. tcā-, backward, again; tceib-i-, aside, crooked; the stem seems to be the same verb of motion as in the word referred to in note 8.

<sup>16</sup> hā<sup>n</sup>ix-, as ante; bīni-h-, possibly from bī-n, bī-h, find; a<sup>n</sup>ha-b-ā<sup>n</sup>, he sees him.

<sup>17</sup> Perhaps from bixa<sup>n</sup>-θ, to love.

<sup>18</sup> hā<sup>n</sup>nā<sup>n</sup>-, as above; tcā-, back, again; -tc-, ʔ; i-ka<sup>n</sup>-hu, run, travel; -t<sup>i</sup>, he.

<sup>19</sup> tah<sup>a</sup>-, when, because; tāye, be ashamed, as in the preceding sentence; -hi, intransitive; -t<sup>i</sup>, he.

<sup>20</sup> ta'-, for tah<sup>a</sup>- (ʔ); bihi'i, deer; -hi-nā<sup>n</sup>ti-n, compare nī-waxū-nā<sup>n</sup>t<sup>i</sup>, she who turned into a bear, and the independent word wā<sup>n</sup>ti in the next sentence.

<sup>21</sup> hā<sup>n</sup>ix-; in-i-, about, aimlessly, at random; -ku-hi-nā<sup>n</sup>, possibly from -ku-θ, make a motion to, transitive, and -hi, intransitive.

<sup>22</sup> ni-θ-, ʔ; etou, for itōu or ātōu, shout; -hāk, for -hāxk<sup>u</sup>, conditional, subordinating.

<sup>23</sup> hā-, (ʔ); bāh-, all, as in note 5; iyeiha-n-, for iyiha<sup>n</sup>-n, pursue; ā<sup>n</sup>tāk<sup>u</sup>, uncertain, but evidently contains the "conditional," as the word in note 22.

<sup>24</sup> tic-i-, when; ite-n, catch; -āt, for -ā<sup>n</sup>t<sup>i</sup>, equals -ā<sup>n</sup>t<sup>i</sup>, he—him.

<sup>25</sup> Again the prefix "all," as in notes 5 and 23.

<sup>26</sup> Perhaps the intransitive verbifying suffix -hi.

TEXT III—TANGLED HAIR<sup>1</sup>

hinen	hä <sup>n</sup> nixā <sup>n</sup> ti <sup>n</sup> hok <sup>u2</sup>	nā <sup>n</sup> hä <sup>n</sup> ina <sup>n</sup> eihok <sup>u3</sup>	hä <sup>n</sup> eita <sup>n</sup> wūna <sup>n</sup> hok <sup>u</sup>
A man	lived alone.	He went to hunt.	He told her
hīnīni	ha <sup>n</sup> ta <sup>n</sup> nīna <sup>n</sup> ēiti <sup>3</sup>	ha <sup>n</sup> na <sup>n</sup> ya <sup>n</sup>	tcībā <sup>n</sup> ta <sup>n</sup> ka <sup>n</sup> ha <sup>n</sup> wunā <sup>n4</sup>
his wife,	when he was about to go to hunt:	"Mind!	do not look at him
ha <sup>n</sup> tanitā <sup>n</sup> seini <sup>5</sup>	na <sup>n</sup> nā <sup>n</sup> tēiti <sup>6</sup>	hīna <sup>n</sup> hā <sup>n</sup> teineiti <sup>6</sup>	hiha <sup>n</sup> wuxuwa <sup>n7</sup>
when he comes to you	a powerful one	with tangled hair	who is hard to satisfy about
a <sup>n</sup> titei	hä <sup>n</sup> inā <sup>n</sup> ya <sup>n</sup>	ha <sup>n</sup> ta <sup>n</sup> nītā <sup>n</sup> sā <sup>8</sup>	na <sup>n</sup> tcībā <sup>n</sup> yeiā <sup>n</sup> eini
plates.	He will make a noise	when he will come	and do not look there
hitā <sup>n</sup> seinihina <sup>n</sup> ku <sup>8</sup>	hä <sup>n</sup> inā <sup>n</sup> ya <sup>n</sup>	hota <sup>n</sup> nītoutea <sup>n</sup> na <sup>n</sup> θi <sup>9</sup>	ha <sup>n</sup> na <sup>n</sup> ya <sup>n</sup>
where he comes.	He will make a noise;	he will shout;	mind!
tcībā <sup>n</sup> neia <sup>n</sup> ha <sup>n</sup> wunā <sup>n4</sup>	na <sup>n</sup> nā <sup>n</sup> teiti	hä <sup>n</sup> bā <sup>n</sup> tcītēiti <sup>10</sup>	hä <sup>n</sup> yeiā <sup>n</sup> 'ā <sup>n11</sup>
do not look at him	the powerful one,	he might enter	your tent,"
hä <sup>n</sup> θa <sup>n</sup> hoku <sup>12</sup>	hīnīnin <sup>13</sup>	ta <sup>n</sup> tcā <sup>n</sup> θeia <sup>n</sup> t <sup>14</sup>	na <sup>n</sup> nā <sup>n</sup> tcā <sup>n</sup> θieina <sup>n</sup> eihoku <sup>15</sup>
he said to her	his wife	when he went away.	And he went to hunt
tcīcīnihiθa <sup>n</sup> ti <sup>16</sup>	hīnīni	na <sup>n</sup> nā <sup>n</sup> na <sup>n</sup> θa <sup>n</sup> hoku	tīna <sup>n</sup> eiti <sup>17</sup>
after he had told	his wife;	he left her	to hunt.
na <sup>n</sup> hä <sup>n</sup> nā <sup>n</sup> neitā <sup>n</sup> seiniθi <sup>5</sup>	hīnīni	hīna <sup>n</sup> ha <sup>n</sup> teineiniθi <sup>18</sup>	
And then he came to	his wife,	he whose hair was tangled.	
na <sup>n</sup> hä <sup>n</sup> tcīta <sup>n</sup> ka <sup>n</sup> ha <sup>n</sup> wa <sup>n</sup> hoku <sup>4</sup>		na <sup>n</sup> nā <sup>n</sup> tcā <sup>n</sup> isā <sup>n</sup> ya <sup>n</sup> ka <sup>n</sup> nei <sup>19</sup>	
And she did not look at him.		And he went back	
ta <sup>n</sup> tcīneia <sup>n</sup> ha <sup>n</sup> wa <sup>n</sup> ti <sup>4</sup>	hä <sup>n</sup> tcā <sup>n</sup> isā <sup>n</sup> ya <sup>n</sup> ka <sup>n</sup> nī <sup>19</sup>	hä <sup>n</sup> tisā <sup>n</sup> nīθi <sup>20</sup>	nuhu
when she did not look at him,	he went back to	where he had come from,	that
hina <sup>n</sup> ha <sup>n</sup> teinihiniθi <sup>18</sup>	ta <sup>n</sup> θa <sup>n</sup> nīheiti	nuhu	tā <sup>n</sup> bā <sup>n</sup> tītā <sup>n</sup> seiti <sup>5</sup>
one with the tangled hair,	he failed	that one	on first coming
nuu	a <sup>n</sup> ha <sup>n</sup> kā <sup>n</sup> neineiθi <sup>21</sup>	hä <sup>n</sup> yawūtā <sup>n</sup> seiθi <sup>5</sup>	nītcīta <sup>n</sup> ka <sup>n</sup> ha <sup>n</sup> wa <sup>n</sup> hoku <sup>4</sup>
that	demented one,	whenever he came to	her who did not look at him.
na <sup>n</sup> ya <sup>n</sup> neinia <sup>n</sup> wa <sup>n</sup> nī <sup>22</sup>	hä <sup>n</sup> ta <sup>n</sup> nā <sup>n</sup> hoku <sup>23</sup>	ha <sup>n</sup> tcā <sup>n</sup> ci	beihā <sup>n</sup> 'ā <sup>n11</sup>
But the fourth time	she made a hole	by means of	an awl
ha <sup>n</sup> xūti	nīna <sup>n</sup> nā <sup>n11</sup>	ta <sup>n</sup> hīnā <sup>n</sup> tcā <sup>n</sup> θeia <sup>n</sup> nīθi <sup>14</sup>	hī'ihī' beihā <sup>n</sup> 'ā <sup>n11</sup>
at the left of the door	in the tent,	when he turned back,	with an awl,
ta <sup>n</sup> hūhīθiwa <sup>n</sup> ha <sup>n</sup> wa <sup>n</sup> ti <sup>4, 24</sup>		θihā <sup>n</sup> īθā <sup>n</sup> hīθi <sup>25</sup>	hä <sup>n</sup> hāku
as she looked through,		"Let me see him!"	she said.
hä <sup>n</sup> nā <sup>n</sup> eiwa <sup>n</sup> ha <sup>n</sup> wa <sup>n</sup> ti <sup>4</sup>	hīhīθi'i	nuu	ā <sup>n</sup> ta <sup>n</sup> na <sup>n</sup> tihini
Then she looked out	through	that	hole
hīθi'i	ha <sup>n</sup> 'heite	hä <sup>n</sup> θeihoku <sup>12</sup>	nā <sup>n</sup> inā <sup>n</sup> sa <sup>n</sup> ya <sup>n</sup> kani
through.	"Here!"	he said to her	as he turned back.
ta <sup>n</sup> tcīteia <sup>n</sup> neiti <sup>10</sup>	hä <sup>n</sup> θeihoku	ta <sup>n</sup> nīā <sup>n</sup> cinā <sup>n</sup> na <sup>n26</sup>	nā <sup>n</sup> tcīa <sup>n</sup> xa <sup>n</sup> wu <sup>27</sup>
When he came in	he said to her:	"I am hungry,	give me to eat,

hän <sup>n</sup> θa <sup>n</sup> hoku <sup>12</sup>	nuhu'	hīseini <sup>28</sup>	hänä <sup>n</sup> a <sup>n</sup> tīteihēiti <sup>29</sup>	ha <sup>n</sup> einā <sup>n30</sup>
he said to her	that	woman.	Then she gave him for a plate	a clay one.
hiha <sup>n</sup> wnänisou'u <sup>31</sup>		na <sup>n</sup> tīteitā <sup>n</sup> na <sup>n32</sup>		hänä <sup>n</sup> a <sup>n</sup> tīteihēiti <sup>29</sup>
"It is not the kind		I use for plates."		Then she gave him for a plate
bäcīna <sup>n30</sup>	hiha <sup>n</sup> wnänisou'u	na <sup>n</sup> tīteitā <sup>n</sup> na <sup>n</sup>		hähä <sup>n</sup> ku
a wooden one.	"It is not the kind	I use for plates,"		he said.
hänä <sup>n</sup> a <sup>n</sup> tīteihēiti	ka <sup>n</sup> ka <sup>n</sup> ha <sup>n</sup> wa <sup>n</sup> ti	ka <sup>n</sup> xu		hän <sup>n</sup> inā <sup>n</sup> eihiti
Then she gave him for a plate	a war-bonnet.	Again		he said the same.
hänä <sup>n</sup> a <sup>n</sup> tīteihēiti	hibixūta <sup>n</sup> nīni <sup>33</sup>	ta <sup>n</sup> na <sup>n</sup> nä <sup>n</sup> '		hän <sup>n</sup> θa <sup>n</sup> hoku
Then she gave him for a plate	her dress.	"Very nearly!"		he said to her.
na <sup>n</sup> hänä <sup>n</sup> a <sup>n</sup> tīteihēiti	hiwā <sup>n</sup> nīna <sup>n33</sup>	ta <sup>n</sup> na <sup>n</sup> nä <sup>n</sup> '		hän <sup>n</sup> θa <sup>n</sup> hoku
And then she gave him for a plate	her moccasins.	"Very nearly!"		he said to her.
ka <sup>n</sup> xu	hänä <sup>n</sup> nā <sup>n</sup> icibiniθi <sup>34</sup>	ha <sup>n</sup> θiθeineihi'i <sup>35</sup>	nänä <sup>n</sup> '	hän <sup>n</sup> θa <sup>n</sup> hoku
Again	then she lay down	flat on her back.	"That is it!"	he said to her.
na <sup>n</sup> ta <sup>n</sup> ha <sup>n</sup> ta <sup>n</sup> wa <sup>n</sup> nīθi <sup>37</sup>		hänä <sup>n</sup> nā <sup>n</sup> ikā <sup>n</sup> θeineiθi <sup>38</sup>		wa <sup>n</sup> hän <sup>n</sup> inisei <sup>39</sup>
And when he had eaten		then he slit her open.		She was pregnant with twins,
nīsa <sup>n</sup> u' <sup>39</sup>	ha <sup>n</sup> na <sup>n</sup> 'än <sup>n</sup> hīa <sup>n40</sup>	nīsa <sup>n</sup> na <sup>n39</sup>		hänä <sup>n</sup> nā <sup>n</sup> i'tā <sup>n</sup> na <sup>n</sup> ti <sup>41</sup>
both	were boys,	the twins.		Then he took them;
tcä <sup>n</sup> xa <sup>n42</sup>	nuu	ha <sup>n</sup> na <sup>n</sup> 'än <sup>n</sup> hīa <sup>n40</sup>		hänä <sup>n</sup> nā <sup>n</sup> iwa <sup>n</sup> cieiwa <sup>n</sup> ti <sup>43</sup>
one	that	boy		then he put in the water
ha <sup>n</sup> xäbeinä <sup>41</sup>	na <sup>n</sup>	tcä <sup>n</sup> xa <sup>n</sup>	a <sup>n</sup> hän <sup>n</sup> iθeikūθä <sup>n44</sup>	θä <sup>n</sup> ya <sup>n</sup> ka <sup>n</sup> xu'
in the spring,	and	one	he threw under	the right side of the door
nīna <sup>n</sup> nä <sup>n41</sup>	hänä <sup>n</sup> nā <sup>n</sup> na <sup>n</sup> θitcä <sup>n</sup> θia <sup>n</sup> ti <sup>45</sup>	tīcθeikūθa <sup>n</sup> ti <sup>46</sup>		teīyanā <sup>n</sup> '
at the tent.	Then he went away	after he had placed		the children.
	hän <sup>n</sup> inā <sup>n</sup> kei	nä <sup>n</sup> hīnā <sup>n</sup> ni <sup>48</sup>	hän <sup>n</sup> einici'ia <sup>n49</sup>	hīnīni
	He returned,	this man,	he called	his wife,
hän <sup>n</sup> itcä <sup>n</sup> tiθini	ta <sup>n</sup> nīciā <sup>n</sup> ti <sup>49</sup>	hīnīni	na <sup>n</sup>	xa <sup>n</sup> xa <sup>n</sup> nōu <sup>50</sup>
she did not answer,	when he called her,	his wife.	And	straightway
hän <sup>n</sup> iā <sup>n</sup> ini <sup>51</sup>	ta <sup>n</sup> nä <sup>n</sup> eineiθi <sup>52</sup>			ta <sup>n</sup> tcä <sup>n</sup> tiθeineiθi <sup>52</sup>
he knew	that she was dead			when she did not answer.
hänä <sup>n</sup> ntēiθina <sup>n</sup> ha <sup>n</sup> wa <sup>n</sup> ti <sup>53</sup>	ha <sup>n</sup> hän <sup>n</sup> eikā <sup>n</sup> θeinei <sup>54</sup>			neitcīnīhīθa <sup>n</sup> na <sup>n</sup> ou <sup>55</sup>
Then he went in to see.	She was slit open.			"I told you,"
hän <sup>n</sup> θa <sup>n</sup> hoku	hänä <sup>n</sup> nā <sup>n</sup> iwiwa <sup>n</sup> huti <sup>56</sup>	hänä <sup>n</sup> nā <sup>n</sup> na <sup>n</sup> θina <sup>n</sup> hit <sup>i</sup>		
he said to her.	Then he cried.	Then he went off.		

## Notes

<sup>1</sup> Field Columbian Museum Publications, Anthropol. Series, v, 378, 1903. The informant spoke with elaborate slowness and distinct syllabification. To this are due the numerous nasalized vowels, which, as Dr. Michelson says, tend to disappear in rapid speech. The slow utterance of the present informant may have caused nasalization to be heard where it was not organic. Dr. Michelson nasalizes o and perhaps other vowels; the author noted only a<sup>n</sup> and ä<sup>n</sup>, though a<sup>n</sup> was sometimes confused with o. Arapaho long vowels were usually heard

and written as geminated or doubled, particularly from this informant. As the writer in studying other languages has, however, found this apperception to be largely an individual peculiarity, such double vowels have in this paper been represented by single letters with the macron, except long e and o, which are represented, as heard, by ei and ou. The tendency to double crest long vowels seems nevertheless actually to be fairly marked in Arapaho, although the slight importance of the trait at best, and the cumbersomeness of its appearance in print, probably make its orthographical neglect preferable.

<sup>2</sup> The ending -hok<sup>u</sup>, given by Dr. Michelson as a stem meaning "say," is common as a quotative. Text II, note 3.

<sup>3</sup> nä<sup>n</sup>-,?; ina<sup>n</sup>-ei, hunt, go to hunt, probably containing -ei, causative; -hok<sup>u</sup>, "quotative"; ha<sup>n</sup>ta<sup>n</sup>i-, ha<sup>n</sup>tī-, ha<sup>n</sup>t-, purposive future, as in the preceding text; -ti, for -t', he, intransitive.

<sup>4</sup> teī-, negative, teī-bä-, negative imperative; ta<sup>n</sup>k-, nei-, not determined; ta<sup>n</sup>-, when; na<sup>n</sup>-, nah<sup>n</sup>- (also independent, perhaps regularly loosely proclitic rather than prefixed), and; hä<sup>n</sup>-, probably related to hä<sup>n</sup>ix-, hä<sup>n</sup>nä-, see note 29; a<sup>n</sup>ha-w, stem, to see; -hok<sup>u</sup>, "quotative"; -ti, -a<sup>n</sup>-ti, ei-ti, 3rd pers.; -nä<sup>n</sup>-, not clear, but evidently pronominal, -nä occurring quite regularly as the subjective and objective element of the 2nd pers. plural.

<sup>5</sup> ha<sup>n</sup>ta<sup>n</sup>i-, future; na<sup>n</sup>-, and; hä<sup>n</sup>nä-, "then"; tä<sup>n</sup>bä-, just, only, first begin to; hä<sup>n</sup>yaw-, if the translation obtained is literal, would mean "whenever" (independent, hä<sup>n</sup>-tax<sup>u</sup>, whenever, hä<sup>n</sup>-you, what); itä<sup>n</sup>-s, to come to; -ni, -niθi, -θi, modal-pronominal; -ti, see note 6.

<sup>6</sup> These two words contain the 3rd pers. ending -(ei)-t', and are to all appearances verbs.

<sup>7</sup> iha<sup>n</sup>wu-, with pronominal prefix, a frequent form of the negative in verbs.

<sup>8</sup> Cf. note 5.

<sup>9</sup> hota<sup>n</sup>i- for ha<sup>n</sup>ta<sup>n</sup>i-, cf. note 1; itou, stem.

<sup>10</sup> teitei, enter; cf. teit-, teiθ-i-, in, entering.

<sup>11</sup> These words all contain a locative suffix.

<sup>12</sup> hä<sup>n</sup>-θa<sup>n</sup>-hok<sup>u</sup>, he (A) said to him (B); hä<sup>n</sup>-θei-hok<sup>u</sup>, he (B) said to him (A). Cf. Michelson, Bur. Am. Ethn., Ann. Rep., xxviii, 237, 1912. It appears that a similar distinction is made in other verbs in the transitive pronominal endings. The two contrasting forms are probably related to the two forms of the third person in Central Algonkin; but the writer is under the impression that, in Arapaho at least, the "suus-ejus" distinction has been far transcended, the two forms serving rather as a convenient and valuable means of expressing over considerable passages the ideas which in our legal documents are rendered by "the party of the first part" and "the party of the second part." If this view proves correct, the force of the paired Arapaho forms would be somewhat similar to the contrasting Yuki particles sa<sup>n</sup>' and si', of which one indicates the continuance and the other a change of grammatical subject or agent in the sentences which they open.

<sup>13</sup> Without the final -n in other occurrences in this text, as *ante*.

<sup>14</sup> ta<sup>n</sup>-, when; teä<sup>n</sup>θ-ei-, teäθ-i-, off, away.

<sup>15</sup> na<sup>n</sup>-, and; teä<sup>n</sup>θ-i-, away; ina<sup>n</sup>-ei, go to hunt; -hoku, quotative.

<sup>16</sup> tic-, ticīni-, when, after, with implication of completed action; hi-,?; -θa<sup>n</sup>-, cf. hä<sup>n</sup>-θa<sup>n</sup>-hoku, note 12; -ti, he.

<sup>17</sup> t-, ti-, tih<sup>1</sup>-, ta<sup>n</sup>-, tah<sup>n</sup>-, when, after, to, because.

<sup>18</sup> Compare the corresponding form in note 6.

<sup>19</sup> na<sup>n</sup>-, and; teä<sup>n</sup>-, back; i-sä<sup>n</sup>-, go, come.

<sup>20</sup> hä<sup>n</sup>t-, hä<sup>n</sup>t-a<sup>n</sup>-, where; i-sä<sup>n</sup>-, go, come.

<sup>21</sup> hahä<sup>n</sup>kä<sup>n</sup>, crazy.

<sup>22</sup> yä-neini-awä-t', the fourth, animate, yä-neini-awa-na', inanimate. The ending -nī is evidently the same as is found on the cardinal numbers from 11 to 19, and on words denoting measures of time.

<sup>23</sup> tanä-s, pierce, make hole in. Cf. tā'-, tanä', tou-, tanou-, to stop, or by stopping; also the fourteenth word below in the text.

<sup>24</sup> ta<sup>n</sup>-, when, as; a<sup>n</sup>ha-w, a<sup>n</sup>ha-b, see; hūhiθi-w- is evidently a form of the independent word hīhiθi'<sup>1</sup> or hīθi'<sup>1</sup> (as below), probably for hīhiθ-ihī'.

<sup>25</sup> θi-, iθi-, let me.

<sup>26</sup> äsini-h, to anger; äsina-nä-t', anger; the same stem seems to be used to express the meanings of anger and hunger, which both imply stirring emotion; or has the similar sound of the English words led to confusion in translation? The ending -na<sup>n</sup> is the regular intransitive of the 1st pers.

<sup>27</sup> *tei-*, positive or negative imperative; *a<sup>n</sup>xa<sup>n</sup>-wu*, *axa-wu*, give to eat!

<sup>28</sup> Objective of *hisei*.

<sup>29</sup> *a<sup>n</sup>titei*, plates, *ante*; *-h-ei*, causative; *hänä<sup>n</sup>-*, *hänä<sup>n</sup>-*, correlative with *hä<sup>n</sup>ix-*, mentioned in the preceding text. The force of these two common prefixes is not clear. Informants left them untranslated or rendered them by "then." They appear to be relational to the discourse as a whole rather than syntactical or grammatical. For *hä<sup>n</sup>-* alone see note 4.

<sup>30</sup> Compare Gros Ventre *ka'ä<sup>n</sup>ty<sup>1</sup>*, lime, white earth; and *haäninin*, better *ha'äninin*, the Gros Ventre name for themselves, translated, perhaps in false etymology, as "lime-men." The myth refers to a time when the Arapaho at least knew pottery. For the ending *-i-na<sup>n</sup>* compare *bäcina<sup>n</sup>*, a wooden one, just below, from *bäc<sup>1</sup>*, wood.

<sup>31</sup> *i-ha<sup>n</sup>wu-*, negative of verbs.

<sup>32</sup> *a<sup>n</sup>titei*, plates, as in note 29; *-ta-n*, *-ta-na*, to, for, of; either the initial *n* or the final *-na<sup>n</sup>* denotes the first person.

<sup>33</sup> *hi-*, her; *bixüt<sup>1</sup>*, dress; *wa'a*, *wa'aha*, moccasin, plural *-na<sup>n</sup>*.

<sup>34</sup> *ici-bi*, *isi-bi*, lie down.

<sup>35</sup> *-ihi' i*, *-ihi'*, the commonest suffix of adverbs.

<sup>36</sup> Compare *nähä'*, *nuhu'*, this; *hinä'*, that, visible; *nänä-ni-na<sup>n</sup>*, I, it is I; *nänä-häxk<sup>n</sup>*, he, it must be he.

<sup>37</sup> *na<sup>n</sup>*, and; *ta<sup>n</sup>-*, when; *ha<sup>n</sup>t-*, future intent, and *a<sup>n</sup>wa<sup>n</sup>*, eat; or *h-a<sup>n</sup>ta<sup>n</sup>-*, eat (cf. *ata-wu*, eat up for), and *-wa*, *-bä*, cause.

<sup>38</sup> *i-kä<sup>n</sup>θei-n*, cf. *ka<sup>n</sup>ä<sup>n</sup>θei-n*, cut open belly (*ka'a<sup>n</sup>-b*, bite, *ka<sup>n</sup>ne-n*, open, *ka<sup>n</sup>u-s*, cut off); *-eit<sup>1</sup>*, he (B)—him (A).

<sup>39</sup> *nis<sup>1</sup>*, two (counting), *hä-nis-ei*, two, inanimate; *-na<sup>n</sup>*, plural.

<sup>40</sup> *hanaxa'aha*, young man; *-hi' i*, *-hä'*, *-hähi*, diminutive; *-a<sup>n</sup>*, for *-a<sup>n</sup>'*, *-ha<sup>n</sup>*, plural. For: *hanaxa'ähiha<sup>n</sup>'*.

<sup>41</sup> *ite-n*, take, catch.

<sup>42</sup> Compare *tcäseix*, one, in counting.

<sup>43</sup> *i-wa<sup>n</sup>ciei-w* for *wa<sup>n</sup>cie-w*, *wa<sup>n</sup>cie-b*, take into water.

<sup>44</sup> *i-θei-kü-θ* for *θei-ku-θ*, put in; *-ä<sup>n</sup>*, he—him.

<sup>45</sup> *na<sup>n</sup>θi-?*; *tcä<sup>n</sup>θi*, for *tcä<sup>n</sup>θ-i*, away, usually a "prefix," here obviously the "stem," since it is followed directly by the pronominal ending.

<sup>46</sup> *tie*, or *tisi-*, when, after, completed action.

<sup>47</sup> *teia<sup>n</sup>*, child; *-na<sup>n</sup>*, plural.

<sup>48</sup> For: *nähä'* *hinen<sup>1</sup>*.

<sup>49</sup> This transitive stem seemingly is used without the usual connective consonant. Compare the endings of the two occurrences of the stem: *-a<sup>n</sup>t<sup>1</sup>* and *eit<sup>1</sup>*, the A and B forms according to the table of pronominal endings, occur, here and elsewhere in the text, in subordinate verbs; *-ä<sup>n</sup>*, as in note 44, and notes 8 and 16 of Text II, is found on independent verbs.

<sup>50</sup> Or *xanou*; also a prefix.

<sup>51</sup> Transitive *ä<sup>n</sup>ina-n*. This form seems to be intransitive and without pronominal suffix.

<sup>52</sup> *ta<sup>n</sup>-* once means that, once when.

<sup>53</sup> *tcä<sup>n</sup>θ-i-*, in, entering, to enter; *a<sup>n</sup>ha-b*, *a<sup>n</sup>ha-w*, to see. Perhaps best: he entering saw, he enter-saw. This word illustrates excellently the difficulty in distinguishing in Arapaho between verb stems with adverbial prefixes and binary compound verbs, as discussed above in the first part of the section dealing with verbs.

<sup>54</sup> See note 38.

<sup>55</sup> The expected ending *-eθen<sup>1</sup>*, I—you, is lacking; *n-ei-* seems to be the part of the word meaning I.

<sup>56</sup> *biwa<sup>n</sup>-hu*, to cry.

PART III  
NOTES ON GROS VENTRE

PHONETICS

The sounds of Gros Ventre have been discussed in connection with those of Arapaho proper. Certain sound correspondences between the two languages have been pointed out in Part I.

Vocalic changes, consonantal substitutions, increments, and reduplications or similar expansions, are frequent, but the laws by which they are governed are not often clear.

- wos, bear; waotā<sup>n</sup>-n-os, black bear.  
 hitāna<sup>n</sup>(n)-ī-bī, buffalo cow.  
 nixa<sup>n</sup>t-ou-iθā, white-man woman.  
 na<sup>n</sup>ts<sup>o</sup>, rabbit; na<sup>n</sup>k-ā<sup>n</sup>ts, "white rabbit," jackrabbit; nawat-a<sup>n</sup>ts, "left-hand rabbit," cottontail rabbit.  
 na<sup>n</sup>ts-ou-hitāna<sup>n</sup>, white buffalo.  
 na<sup>n</sup>k<sup>u</sup>-θ-otei, "white belly," donkey; wanot<sup>o</sup>, some one's belly; na-na<sup>n</sup>ty-ix-ty<sup>1</sup>, he is white.  
 ha'a<sup>n</sup>-ty<sup>1</sup>, white clay, lime; ha'ā-n-inin, Gros Ventre; ha'ā-n-iθā, Gros Ventre woman.  
 b<sup>1</sup>-teibyī, louse, "some one's louse"; bei-teibyī, "red louse," flea; θei-teibyī, "flat louse," bedbug; baxa'a<sup>n</sup>-teibyī, "thunder louse," butterfly.  
 a<sup>n</sup>wu, down; a<sup>n</sup>wu-nihī<sup>1</sup>, down along a stream; n-a<sup>n</sup>w<sup>1</sup>-na<sup>n</sup>tyineī, "lower-Assiniboines," Sioux.  
 kāka-ya<sup>n</sup>, flat, it is flat; kāka-tyī, he is flat; kāk-ou-biθ, "flat wood," cut lumber, planks.  
 bāθ-ani<sup>1</sup>i, "large gopher," prairie-dog; bāθ-ā<sup>n</sup>tsu, "large mouse," rat; bās-ou, bāθ-ei-(y)a<sup>n</sup>, bānāθ-ei-(y)-a<sup>n</sup>, large (inanimate), it is large, a large thing; bānāθ-ei-tyī, he is large, a large one; bās-initā<sup>n</sup>, "large person," a giant; hābāty-initā<sup>n</sup> (hābā-ty<sup>1</sup>-initā<sup>n</sup>?), a large person.  
 baxa-a<sup>n</sup>, red, inanimate; bei-x-ty<sup>1</sup>, he is red, red (animate); bānā-ty<sup>1</sup>, he is red; bāā<sup>n</sup> bis, red wood; bax-ou, "red porcupine(?)," badger; nix-bā-ā'ā-na<sup>n</sup>, I was red headed; bānābā-'tā-na<sup>n</sup>, I have red ears; bānā<sup>n</sup>b(ā<sup>n</sup>)-a<sup>n</sup>tsō-na<sup>n</sup>, I have red eyes.

COMPOSITION

Some body part stems when in composition are dissimilar to the independent stems of the same meaning; others are the same.

*Distinct:*

-ībā-, nose; be-icā, nose. Arapaho: -i-θā-, b-eic.

θā-n-ībā-ty<sup>1</sup>, "flat nose he is," pig

ta-n-ībā-ts, "pierced nose they are," Nez Percé Indians

bāā<sup>n</sup>s-ōbā<sup>n</sup>-na<sup>n</sup>, "large nose I am," I have a large nose

-ä'ä-, head; bī-t<sup>a'an</sup> (or bit-a'<sup>a'n</sup>?), head. Arapaho: ä'ei-; ha-kuhä<sup>n</sup>, head; bei-θe'ä, hair.

bänäθ-ä'ä-na<sup>n</sup>, I am large headed

kāka-ä'ä-nin, "flat head men(?)," Flat-head Indians

-täxä-, belly; wa-n-ot<sup>e</sup>, belly. Arapaho: wa-not.

hä<sup>n</sup>tyis-täxä-na<sup>n</sup>, I am small-bellied

-a<sup>n</sup>tsö-, eye; be-sōθ, eye. Arapaho: bä-cisä.

wanā<sup>n</sup>wa<sup>n</sup>θ-a<sup>n</sup>tsö-na<sup>n</sup>, I have ugly eyes

*Identical:*

ityi-, mouth; be-tyī', mouth. Arapaho: bä-ti.

wanā<sup>n</sup>θ-ityi-na<sup>n</sup>, I am ugly mouthed

-tän-, ear; wa-n-otan, ear. Arapaho: wa-natana'.

bänäbäθ-tän-(n)a<sup>n</sup>, I have large ears

-a<sup>n</sup>tsötä-, tooth; bī-tsit<sup>i</sup>, tooth. Arapaho: bei-tciθ.

ninän<sup>i</sup>-a<sup>n</sup>tsötä-na<sup>n</sup>, I have pretty teeth

-öθana-, neck; wa-θana, neck. Arapaho: bä-sona<sup>n</sup>.

bänäs-öθana-ni-na<sup>n</sup>, I have a large neck

-tinä, mammae; be-ten, breast. Arapaho: bä-θen-etc<sup>i</sup>, breast-water, milk.

bänäbäs-tinä-na<sup>n</sup>, I have large breasts

Several other nouns occur in two forms:

-okay-, house, in composition only; -yei, house, independent word with possessive pronoun; nīn<sup>a'n</sup>, house, independent word without possessive. Arapaho: -akac or -akay, -i-yei, nīna<sup>n</sup>.

wux-n-okay-än, "(?)-houses," the Minitari

wasöin-hiyei-hi-ts, "grass their houses," "they have grass houses," a Shoshonean tribe

-ā<sup>n</sup>wu-, water, in composition only; nets<sup>i</sup>, water. Arapaho: -a<sup>n</sup>wu, netc<sup>i</sup>.

bā<sup>n</sup>-ā<sup>n</sup>wu<sup>n</sup>ha<sup>n</sup>θā<sup>n</sup>-nets<sup>i</sup>, red rain

nana<sup>n</sup>k-ā<sup>n</sup>wu<sup>n</sup> nets<sup>i</sup>, white water

tsök-ā<sup>n</sup>wu<sup>n</sup>, clear water

hou-n-ā<sup>n</sup>wu<sup>n</sup>, muddy water

waotä<sup>n</sup>-n-ā<sup>n</sup>wu<sup>n</sup>, black water

waotä<sup>n</sup>-nots<sup>i</sup>, "black water," coffee

nixa<sup>n</sup>t-ou-nets<sup>i</sup>, "white man's water," whisky

bete(n)-nits<sup>i</sup>, "breast water," milk

beθ<sup>i</sup>-nits<sup>i</sup>, "wood-water," sap

## VERBS

## AFFIXES OF MODE AND TENSE

The tense and mode affixes observed are substantially the same as in Arapaho.

*Prefixes*

n-, nī-, na<sup>n</sup>-, incomplete action, present; Arapaho: nī-nih<sup>1</sup>-, nīnih<sup>1</sup>-, incomplete action, past; Arapaho: nih<sup>1</sup>-nih-ise-n-, completed action, past; perhaps: once continued action now completed; Arapaho: nih-isi-ha<sup>n</sup>ta<sup>n</sup>-, ha<sup>n</sup>ta<sup>n</sup>ni-, future, probably of intent; Arapaho: ha<sup>n</sup>t-, ha<sup>n</sup>t-i-, ha<sup>n</sup>ta<sup>n</sup>nī  
 nih<sup>1</sup>-a<sup>n</sup>ta<sup>n</sup>-, "was about to"; nih<sup>1</sup>- and ha<sup>n</sup>ta<sup>n</sup>-ha<sup>n</sup>-ē-, interrogative, present; Arapaho: kih<sup>1</sup>-, ka<sup>n</sup>-, ka<sup>n</sup>hei-, ka<sup>n</sup>hā-, ka<sup>n</sup>hu-ha<sup>n</sup>-ex-, interrogative, past  
 ha<sup>n</sup>'a<sup>n</sup>ta<sup>n</sup>-, interrogative, future  
 tsō-, tsu-, tsā-, tse-, negative; Arapaho: teī-, teih-ha<sup>n</sup>-(n), optative, "let me"; Arapaho: hä<sup>n</sup>-ti-, hä<sup>n</sup>-tih<sup>1</sup>  
 hax-, that, when, subordinating; Arapaho: ta<sup>n</sup>-, tah<sup>a</sup>-ihi-, if, past unreal supposition  
 nā<sup>n</sup>θei-, perhaps; Arapaho: na<sup>n</sup>xei-

A few etymological affixes have also been distinguished:

nāye-x-tsō-, niyā-x-tsō-, try to; Arapaho: näye-teā<sup>n</sup>-sō-, begin to; Arapaho: tcāsis-na<sup>n</sup>wa-, nā<sup>n</sup>bi-, make a motion to; Arapaho: nawu-, näbi-

*Suffixes*

-etyi, reflexive; Arapaho: -eti, -uti  
 -ēhi, -ōhu, agent; Arapaho: -ēhi, -ōhu  
 -n-äxku, added to personal ending, conditional; Arapaho: -h-äxk<sup>n</sup>, n-äxk<sup>n</sup>  
 -ya<sup>n</sup>, ending of many adjectives in the absolute or inanimate form; Arapaho: -a<sup>n</sup>, -ya<sup>n</sup>

## PRONOMINAL ENDINGS AND CONNECTIVES

The intransitive endings are:

	<i>Gros Ventre</i>	<i>Arapaho</i>
I	-na <sup>n</sup>	-na <sup>n</sup>
You	-n <sup>n</sup>	-n <sup>1</sup>
He	-ty <sup>1</sup>	-t <sup>1</sup>
We	-nin	-na <sup>n</sup>
You	-nä <sup>n</sup>	-nä <sup>n</sup>
They	-ts(1)	-θi

The intransitive imperative is expressed by -ts; äniy-i-ts, talk! This ending has not been observed in Arapaho.

The transitive conjugation is substantially the same as in Arapaho.

	<i>Gros Ventre</i>	<i>Arapaho</i>
I—you	-etin	-eθen <sup>1</sup>
I—him	-u, -i	-a <sup>n</sup>
I—you (pl.)	-etina <sup>n</sup>	-eθenä <sup>n</sup>
I—them	-ou	-ou
I—it	-awa <sup>n</sup>	-awa <sup>n</sup>
you—him	-ots <sup>1</sup>	-a <sup>n</sup> t <sup>1</sup>
he—me	-ein <sup>an</sup>	-eina <sup>n</sup>
he—you	-ein <sup>1</sup>	-ein <sup>1</sup>
he—him	-aty <sup>1</sup>	-a <sup>n</sup> t <sup>1</sup>
they—you	-ein <sup>an</sup> ( <sup>1</sup> )	-einanī
they—him	-ots <sup>1</sup>	-a <sup>n</sup> θi

The preceding consonant or connective also undergoes change much as in Arapaho.

<i>Meaning</i>	<i>Verb</i>	<i>Me</i>	<i>You</i>	<i>Him</i>	<i>You</i>	<i>Them</i>	<i>It</i>
see	a <sup>n</sup> ha		b	kw <sup>25</sup>	b	w	t
strike	ta <sup>n</sup>	b	b	w			
shoot	teī	by	by	by			bit <sup>26</sup>
kick	tāθa		n	n			
tell	n-i		t <sup>27</sup>	t <sup>27</sup>		t <sup>27</sup>	
kill	naha			,			

The transitive imperative is -in; Arapaho, -in<sup>1</sup>, un<sup>1</sup>.

tei-by-in	shoot him!
nihī <sup>1</sup> -in	kill him!

The transitive endings occurring with the interrogative prefix ha<sup>n</sup>ex- are evidently the same as the Arapaho personal suffixes used in the negative formed by -ī-ha<sup>n</sup>wu-.

	<i>Gros Ventre</i>	<i>Arapaho</i>
I—you	-etä	-eθ
I—him	-ā <sup>n</sup>	-a <sup>n</sup>
you—him, them	-ā <sup>n</sup>	-a <sup>n</sup> , -a <sup>n</sup> na <sup>1</sup>
he—me	-'	-e
he—him, them	-', -ā <sup>n</sup>	-ā
they—me	-ei	-ei
they—him, them	-', -ā <sup>n</sup>	-āna <sup>n</sup>

One of the two personal elements seems to be expressed, the other understood.

The negative conjugation appears to be based on the use of the prefix tsō- (and its phonetic modifications), corresponding to Arapaho teī-. The equivalent of the Arapaho negative in -ī-ha<sup>n</sup>wu- has not been observed.

ne-tsä-āsa <sup>n</sup> , I am not swift
nä-tsä-ätcesou-hi, I am not small
he-tsu-na <sup>n</sup> ha-b-et <sup>1</sup> , I do not see you

<sup>25</sup> Unparalleled in Arapaho.

<sup>26</sup> As in Arapaho.

<sup>27</sup> Corresponds to Arapaho s.

## NOUNS

The plural of nouns shows the same types as in Arapaho.

-n, -in, -an, corresponding to Arapaho -na<sup>n</sup>, -i-na<sup>n</sup>.

bear	wos(ö)	wosö'n
elk	(h)iwasö <sup>n</sup>	(h)iwasöhin
wildcat	beθa <sup>n</sup> tyä	beθa <sup>n</sup> tyän
crow	(h)ouu	(h)oun
fly	nōubā <sup>n</sup>	nōubän
feather	bii	biin
bone	hiθ <sup>an</sup>	hiθan
tent	nin <sup>an</sup>	ninan
stone	(h)axa 'änä <sup>n</sup> tyä <sup>n</sup>	(h)axa 'änä <sup>n</sup> tyän

-a<sup>n</sup>, -ha<sup>n</sup>, as in Arapaho.

mouse	ā <sup>n</sup> tsu	ā <sup>n</sup> tsuhih <sup>n</sup>
antelope	na <sup>n</sup> sity	na <sup>n</sup> sitya <sup>n</sup>
rabbit	na <sup>n</sup> ts <sup>e</sup>	na <sup>n</sup> ts 'ha <sup>n</sup>
gopher	(h)ani 'i	(h)ani 'iha <sup>n</sup>
muskrat	iθos	iθosa <sup>n</sup>
otter	nēi	nēih <sup>n</sup>
squirrel	θaθa <sup>n</sup> ya 'ei	θaθa <sup>n</sup> ya 'eiha <sup>n</sup>
cat, puss	wus	wusha <sup>n</sup>
donkey	na <sup>n</sup> k <sup>u</sup> θotei	na <sup>n</sup> k <sup>u</sup> θoteihiha <sup>n</sup>
bald eagle	na <sup>n</sup> k <sup>u</sup> tiyēhi	na <sup>n</sup> k <sup>u</sup> tiyēhi <sup>an</sup>
turtle	bā 'änou	bā 'änouha <sup>n</sup>
fish	na <sup>n</sup> w <sup>u</sup>	na <sup>n</sup> wuh <sup>n</sup>
butterfly	baxa 'a <sup>n</sup> -teiby	baxa 'a-teibiyihiha <sup>n</sup> 28
river	nitsä	nitsaha <sup>n</sup>

Lengthening of the final, often surd or inaudible, vowel to -ī, -ū, or a phonetic equivalent, as in Arapaho.

deer	bihi 'i	bihi 'ihi
beaver	(h)äbes	(h)äbesöi
skunk	θou	θoue
cattle	wā <sup>n</sup> kety <sup>l</sup>	wā <sup>n</sup> ketyī
mountain sheep	(h)ot <sup>(e)</sup>	(h)otēi
wooden house	bātyiθou	bātyiθou 'u
ear	wanatan	wanatanou
water	nets <sup>l</sup> , nots	notsā <sup>n</sup>
louse	b <sup>l</sup> teibyi	b <sup>l</sup> teiwuh <sup>n</sup> 28

Words for "domestic animal," or compounded with it, take -ibī, Arapaho -äbi.

dog	(h)ot <sup>e</sup>	(h)otibī
horse, "elk-dog"	hiwas 'hā <sup>n</sup> θ	hiwas 'hā <sup>n</sup> θebī
dragon-fly, "insect dog"	bīθa <sup>n</sup> hā <sup>n</sup> θ	bīθa <sup>n</sup> hā <sup>n</sup> θibī

A few words change final -s or -ts to -t.

tooth	bītsits	bītsit
horn	ninis	ninit
parfleche bag	houwanos	houwanot

<sup>28</sup> Apparently different plurals on the same stem.

Animateness or inanimateness of nouns is indicated in the conjoined verb, adjective, or numeral; or, as they should collectively be called, the verb. The "animate" gender, however, includes many names of lifeless things. Such are: sun, moon, stars, thunder, wagon, mowing-machine, which travel; and snow, stone, tree, log, cedar, pine, pipe, and money, which do not move. Inanimate are the nouns for sky or clouds, lightning, rainbow, rain, water, river, spring, earth, iron, willow, sage, grass, mountain, gun, bow, arrow, and wind, several of which denote moving objects.

A locative is formed by a vocalic suffix, as at times in Arapaho.

earth	bīta 'āw <sup>u</sup>	bīta 'āwū
stone	(h)axa 'ānā <sup>n</sup> tyā <sup>n</sup>	(h)axa 'ānā <sup>n</sup> tyēi
parfleche bags	houwanot	houwanote
bed	(h)ā <sup>n</sup> w <sup>u</sup> '	(h)ā <sup>n</sup> bā'

The types of possessive pronominal prefixes are those occurring in Arapaho. The third person frequently shows a vocalic suffix increment.

<i>Word</i>	<i>Father</i>	<i>Mother</i>	<i>Son</i>	<i>Grandmother</i>
vocative	nīθā <sup>n</sup>	na 'ā <sup>n</sup>	neihe'	nīp
my	nīθina <sup>n</sup>	neina <sup>n</sup>	eihe'	eip
your	iθina <sup>n</sup>	eina <sup>n</sup>	iha 'aha <sup>n</sup>	iniwaha
his	iniθina <sup>n</sup>	inan <sup>n</sup>		
our (incl.)	iθinan			
our (excl.)	āniθinan <sup>n</sup>			
your	iθinanina <sup>n</sup>			

<i>Word</i>	<i>Grandchild</i>	<i>Mother's brother</i>	<i>Hair</i>	<i>Mouth</i>
vocative	nīsō	nis 'hā <sup>n</sup>		
my	nīsā	nis'	nānit <sup>an</sup>	netyi'
your	isā	ās'	ānit <sup>an</sup>	etyi'
his	inisaha <sup>n</sup>	isa 'an	inīt <sup>an</sup>	ityi'
somebody's			bīt <sup>an</sup>	betyi'

It is probable that an h-, which is fainter in Gros Ventre than in Arapaho, occurs before all the above words written as commencing with a vowel.

#### PRONOUNS

As in Arapaho, the so-called "pronoun" is a verbal sentence.

ni-nā	it is it, that is it
ni-nā-ni-na <sup>n</sup>	"I," literally, it is I
nih-nā-ni-na <sup>n</sup>	it was I
ha <sup>n</sup> ta <sup>n</sup> -nā-ni-na <sup>n</sup>	it will be I
ni-nā-ni-ts	"they," it is they

## NUMERALS

	<i>Counting</i>	<i>Cardinal</i>	<i>Ordinal</i>
1	tyāθei	äh-niθi-ty <sup>1</sup> (an.) äh-niθ- <sup>e</sup> (inan.)	ni-nit-awā <sup>n</sup> -ty <sup>1</sup>
2	nīθä	äh-nisi-ts (an.) äh-niθ- <sup>e</sup> i (inan.)	ni-nīsa-uwā <sup>n</sup> -ty <sup>1</sup>
3	nāθä	äh-nixi-ts (an.) äh-näθ- <sup>i</sup> (inan.)	ni-nāsa-uwā <sup>n</sup> -ty <sup>1</sup>
4	yān <sup>1</sup>	äh-yāni-ts (an.) äh-yān-ei (inan.)	ye-nāna-uwā <sup>n</sup> -ty <sup>1</sup>
5	yātan <sup>1</sup>	äh-yātani-ts (an.) <sup>29</sup>	ye-nātana-uwā <sup>n</sup> -ty <sup>1</sup>
6	neityā <sup>n</sup> tos		ni-neitya <sup>n</sup> tos-awā <sup>n</sup> -ty <sup>1</sup>
7	nīθā <sup>n</sup> tos		
8	nāθā <sup>n</sup> tos		
9	änhäbetā <sup>n</sup> tos		
10	betā <sup>n</sup> tos	äh-betā <sup>n</sup> tsi-ts (an.)	bätā <sup>n</sup> tos-awā <sup>n</sup> -ty <sup>1</sup>

The above ordinals are animate. The inanimate forms lack the animate intransitive ending -ty<sup>1</sup>. The form for "second" was obtained without the prefixed reduplication. "First" is nītawū. The difference of consonant in the animate cardinals for "one" and "two" follows that in Arapaho.

Eleven to 19 are formed from 1 to 9 by -in, -ōin, Arapaho -ini: tyāθēin, nīsōin, nāsōin, yānin, yātanin, neityā<sup>n</sup>tosōin, nīθā<sup>n</sup>tosōin, nāθā<sup>n</sup>tosōin, änhäbetā<sup>n</sup>tosōin or änhänīθōu. Here the θ of "two" and "three" reverts to its Arapaho form, s. Twenty to 100 are made by -ōu; Arapaho, -a<sup>n</sup>, -a', -u': nīθōu, nāθōu, yānōu, yātanou, neityā<sup>n</sup>-taθou, nīθā<sup>n</sup>taθou, nāθā<sup>n</sup>taθou, änhäbetā<sup>n</sup>taθou, betā<sup>n</sup>taθou. Here s becomes θ. Twenty-two is nīθōu nīsōin, 39 änhäyānōu, 200 nīθä betā<sup>n</sup>-taθou, 1000 bās betā<sup>n</sup>taθou, "great hundred."

The only appearance of a "classifier" noted is -an-, corresponding to Arapaho -ā<sup>n</sup>nä, a collective.

tya<sup>n</sup>'äyā<sup>n</sup>tei biθ yātan-an-ei, "heaps wood five," five piles of sticks

## TEXT IV—TANGLED HAIR

ini <sup>n</sup> A man	hōuxnīθā <sup>n</sup> tcibā <sup>n</sup> 'ä <sup>n</sup> was living alone.	ā <sup>n</sup> 'tasnā <sup>n</sup> ka <sup>n</sup> nī In the morning	hōu'xa'atsō'u he went hunting,
hītō'uāni in the evening	wa <sup>n</sup> tyinānā <sup>n</sup> 'nīā <sup>n</sup> tyē'ityi he returned.	nohuūtc'hā <sup>n</sup> ntinān "When I am away,	nohuū'θā <sup>n</sup> ts when comes
ini'tā <sup>n</sup> a person,	tsāb <sup>1</sup> hē'i do not	tsō <sup>n</sup> 'tits <sup>n</sup> ē'hin invite him!"	wā <sup>n</sup> tyi'tā <sup>n</sup> tyi he told her
hänā <sup>n</sup> 'yeisō <sup>n</sup> if he is about to	tsō <sup>n</sup> 'tyā <sup>n</sup> ts enter,	tsō <sup>n</sup> 'tyā <sup>n</sup> ts enter	tsāb <sup>1</sup> 'hi'isün do not let him."
ā <sup>n</sup> 't'asō <sup>n</sup> jhā <sup>n</sup> 'tē'i when he was away	i <sup>n</sup> -ini <sup>n</sup> this man,	hōū'ta <sup>n</sup> wū surely	a <sup>n</sup> hi'ta <sup>n</sup> wū' And indeed some one came.

<sup>29</sup> Or: hä<sup>n</sup>-yātani-ts, animate; hä<sup>n</sup>-yātan-ei, inanimate.

i'ninīn	naxkā <sup>n</sup> 'ka <sup>n</sup>	hītsó'watecēini	ā <sup>h</sup>	no'hu	ini'tā <sup>n</sup>
His wife	just	would not say anything.	And	that	person
kā <sup>n</sup> 'ka <sup>n</sup> '	hōūxnā <sup>n</sup> ā <sup>n</sup> θā <sup>n</sup> 't <sup>i</sup>	hini'n'a <sup>n</sup>	ha <sup>n</sup> hītsó'watyā <sup>n</sup> tyin		
just	walked about.	His wife	would not say anything.		
hi'niθān	hōū'xtānī	i'θawū	tsō' tsōdjā <sup>n</sup>	ha <sup>n</sup> hu'ityinā-	
	He made as if to	in	enter,	but he did	
itsōwatyī-istsō'djā <sup>n</sup>	nah'noū'uθā'nts	hi'n-inin	hōū'xnā <sup>n</sup> tcitanā		
not enter.	Returned	this man,	asked her:		
hā <sup>n</sup> āxtsō-nōunē'nitā <sup>n</sup> t	nī'watyitā <sup>n</sup> t	hini'n	wa'ē'idyiā <sup>n</sup> ts		
"Has some one come?"	he said to her	his wife.	"Indeed he did!"		
niwatei'teity <sup>i</sup>	hih <sup>a</sup> 'ā <sup>n</sup> '	nī'watecīa <sup>n</sup>	hanā <sup>n</sup> 'dyā <sup>n</sup>	ta'tā <sup>n</sup>	
she said to him.	"Is that so?"	he said to her.	"Now	even	
hānā'yeisō	hiθawū'	tixi'i'	tsōtyā <sup>n</sup> ts <sup>i</sup>	tsōtyā <sup>n</sup> ts	tsā'bh <sup>e</sup> 'isi'n
if he is about to	in		enter,	enter	do not let him!"
wā <sup>n</sup> tyi'ta <sup>n</sup> tyi	ini'n	naxtā'θ <sup>i</sup>	hō'uxats'ōu	nu'hu-inen	
he said to her	his wife.	And again	went hunting	that man.	
haxkouta'nixty <sup>i</sup>	houxtēi'	nōune'nitā <sup>n</sup> tē'hinin	nu'hu	ini'n	
When he was away long,	again	some one came	that	man.	
wā <sup>n</sup> tyinā'xni'i'	tayanī'	ti'isō'	tsōtyā <sup>n</sup> its	nu'hu	ini'tān
He was about to		but did not	enter,	that	person
nuhuū'	inōunenitā <sup>n</sup> tē'itan	hōū'xkā <sup>n</sup> kanitākō'utyin	hitidjē'na <sup>n</sup>		
who	came.	Then he flapped	the door.		
wa <sup>n</sup> tyinehi'i'tsa <sup>n</sup> nine'ixty <sup>i</sup>	tsōdjā <sup>n</sup> ts	wa <sup>n</sup> tyitā <sup>n</sup> 'tyi	ā <sup>n</sup> 'hine'n		
She began to restrain herself no longer.	"Enter!"	she said to him.	And a man		
ōuxtsō'djānī	wa <sup>n</sup> tyinēhi'i'	byitsiwā <sup>n</sup> na <sup>n</sup>	hō'hūsō <sup>n</sup> '		
it was who entered.	She began to	cook for him.	When she had		
byitsi'wa <sup>n</sup> na	wa <sup>n</sup> tyinehi'i'	haθa'wa <sup>n</sup> tyi	ā <sup>n</sup> hiyō'u-wā <sup>n</sup> tyi'nits		
cooked,	she went to	give him food.	And he said:		
itsünānī'i'θōu	nā <sup>n</sup> tyi'tsōta <sup>n</sup>	wa <sup>n</sup> tyi'teity <sup>i</sup>	wa <sup>n</sup> tyinehi'i'		
"That is not the kind	I use as plates,"	he said to her.	She went to		
ā'nātetyin	ā <sup>n</sup> tyi'tshā <sup>n</sup> 'tyi	ā <sup>n</sup> 'htā <sup>n</sup> θ	itsönānī'θou	nā <sup>n</sup> tyitsō'tan	
change	his plate.	And again,	"That is not the kind	I use as plates,"	
wa <sup>n</sup> tyi'teity <sup>i</sup>	nī'watei-ka'sō	ānatyī'tsaha'a <sup>n</sup>	ā <sup>n</sup> h	hōū'uxni'θā	
he said to her.	Constantly she changed	his plates	and	the same	
nītē'idji	wa <sup>n</sup> tyine'hi'i	bihī	hatyī'tsaha <sup>n</sup>	i'nān	
he said.	Then she began	all	to use her plates,	every kind.	
wa <sup>n</sup> tyinā <sup>n</sup> 'nī'i	ityhō'uwin	a <sup>n</sup> tyi'tshā <sup>n</sup> tyi	wa <sup>n</sup> tyinā <sup>n</sup> 'nī'i'		
Then she began	not to know	what to use as a plate.	Then she began		
notyānā <sup>n</sup> 'ta <sup>n</sup>	otnā <sup>n</sup> dji'tsā <sup>n</sup> hā <sup>n</sup> tyi	wa <sup>n</sup> tyine'hī'i	nāt'a'hnī'i		
to think	what to use as a plate.	Then she went and	drew off		
āxni'θetyin	hiw'a'xa'	wa <sup>n</sup> tyinā <sup>n</sup> 'n	a <sup>n</sup> tyitsha <sup>n</sup> 'tyi	wū'uu	
one of	her moccasins.	And she went and	used it as a plate.	"Ha,	
tanā <sup>n</sup> 'nā <sup>n</sup>	wa <sup>n</sup> tyitē'ity <sup>i</sup>				
that is very near,"	he said to her.				

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