

Carrier Monosyllabic Noun Stems

William J. Poser

Carrier-Sekani Tribal Council, Lheidli T'enneh
and the University of British Columbia

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Athabaskan languages have extremely complex and productive morphology based overwhelmingly on verbal roots. There are very few unanalyzable nouns. Monosyllabic noun stems are either unanalyzable, and therefore presumptively old, or, where analyzable, reflect very old derivational processes. For this reason, the idea that they can provide a window into the deeper layers of culture history has floated around the Athabaskanist community for some time. One of the few explicit statements on this topic is by Young & Morgan (1987; 3):

Although comprising only a small proportion of the noun corpus, the stem nouns represent one of the oldest strata in the language, many having close cognates in other Athapaskan languages far removed in time and space from the American Southwest.

The reasoning underlying this approach was laid out by Sapir (1916;434-435):

If we have any method of determining the relative age of a word that has cultural significance, it is clear that we have at the same time a means of ascertaining something as to the relative age of the associated culture element itself. One of the most useful principles for the determination of the age of a word is a consideration of its form; that is, whether it can be analysed into simpler elements, its significance being made up of the sum of these, or is a simple irreducible term. In the former case, we suspect, generally speaking, a secondary or relatively late formation, in the latter considerable antiquity. . . . We know, for instance, that the objects and offices denoted in English by the words *bow*, *arrow*, *spear*, *wheel*, *plough*, *king* and *knight* belong to a far more remote past than those indicated by such words as *railroad*, *insulator*,

battleship, submarine, percolator, capitalist and *attorney-general*, but we might have guessed this from the fact that the latter set, unlike the former, are clearly secondary formations, descriptive terms that seem to have been created out of older linguistic material to meet new cultural needs.

In the same vein, it is not surprising that in Carrier it is “canoe” that is *ts’i* and “helicopter” that is *na k’at an dot’en-i na t’o-i* (“the thing that resembles a dragonfly and flies around”), and not the other way around.

Although this idea is widespread, to my knowledge no one has actually carried out a detailed study of the monosyllabic noun stems of an Athabaskan language. In this paper, I present a first attempt at this, focussing on the Nak’albān/Dzinγābān (Stuart/Trembleur Lake) dialect of Carrier.¹

The following lists contain the well documented monosyllabic noun stems of Carrier, classified as to type. This list is probably almost exhaustive, as I have extensive lexical material for this dialect. I have, however, omitted a few obscure words known only from old missionary sources, and have not listed every conceivable abstract noun. It is likely that quite a few other verbal roots can, in appropriate circumstances, function as nouns. There are a total of 315. These represent about 8% of the phonotactically possible monosyllables.

Although monosyllables are likely to be old, they can still be borrowed. There are eight clear cases of monosyllabic loans into Carrier.²

Loans

ʔuts	oats	English
bel	Father (priest)	French
bus	cat	English
mai	berry	Gitksan
sto	stove	English
stor	store	English
tuk	tuque	French via English
ts’ak	ceremonial dish	Babine

Here are the remaining monosyllabic noun-stems, grouped by semantic field.

Body Parts

¹ Carrier examples are in the North American variant of the International Phonetic Alphabet. Underscores on /s/, /z/, /ts/, /dz/, and /ts’/ indicate lamino-dentals, which in conservative speech contrast with apico-alveolars. Other examples are in the practical orthography for that language, except for Tahltan, which is in IPA. A leading hyphen indicates that the noun is inalienably possessed.

² One of the forms cited below as native arguably belongs among the loans. γAts “cartilage” may be a loan from Babine. In general, coda /ts/ is retained in Babine but became /z/ in Carrier. Two of the four attested cases of coda /ts/ are clearly loans. These are balats “potlatch”, which is ultimately from Nuuchanulth, and ʔuts “oats”, a loan from English. The origin of the remaining case, ʔAtast’ots “fascia” is unclear, but it is not implausible that it is also a loan from Babine or Sekani as this word is attested only in the Stuart/Trembleur Lake dialect of Carrier.

-ʔaz	groin
-bat	stomach, belly
-ča	ribs
-čan	womb, vagina
-če	tail
č'oh	porcupine quill
-č'uz	vein
-č'at	gristle
-da	lip, beak, brim of container
-de	horn, antler
-das	lungs
-dzat	shinbone
-dzeh	ear (canal)
-dzo	ear (conch)
-dzi	heart
-gan	arm, foreleg of animal
gos̄	scales of fish
-ɣa	hair, fur
-ɣai	fin, bone of fish
-ɣu	tooth
-ɣak	bone not connected to the spine
-ɣats	cartilage
-ɣwas̄	shoulder
-ɣwaz	thigh
-g ^w at	knee
-ke	foot, hind paw
xez	egg, testicle
-k'al	female genitalia
-k'i	hip
-k'o	fat
-k'un	fish roe
-k'as̄	gill, side of throat
-la	hand, forepaw
-len	ovary
mek	rabbit kidney
-na	eye
-ni	nostril
-nin	face
-tai	inside of skin
-t'a	back

-t'a	wing
-t'Λk	shoulder blade
-tl'a	buttocks
-tl'et	groin
-tl'Λz	gall
-tsΛk ^w	penis
-ts'i	intestine
-ts'Λz	kidney
-tsi	head
-tsΛl	anus
-tsΛŋ	flesh
-ts'e	vein
-ts'eh	tendon
-ts'il	elbow
-ts'u	breast
-ts'Λn	bone
ts'Λz	down
-yat	flesh
-ye	marrow
-yih	larynx, gullet, dewlap, trachea
-yoh	chest
-yΛn	spine
-yΛt	chest
-zul	exterior of throat
-ze	mouth
-zΛm	tonsils, glands
-zΛs	skin, hide, case
-zΛt	liver

Bodily Fluids

-γΛz	synovial fluid
xΛz	pus
ku	vomit
k ^w Λs	mucous
lΛz	urine, spray of skunk
so	saliva
tsan	feces

Quasi-Anatomical

čΛz	wart, mark from ringworm
lut	scab
šis	wart
šΛt	scar
ts'Λz	boil
-zi	corpse

Parts of Plants

ʔΛl	needle of coniferous tree
-γaz	root of a fallen tree now above ground
-γih	root
xi	root of spruce tree
-k'i	pod, mollusc shell
-laʔ	bark of tree (inner and outer together)
-t'an	leaf
-t'uz	inner bark of tree, peel of potato

Kinship Terms

ʔat	wife
-ba	father
-biz	mother-in-law
-čai	grandchild
-čΛl	younger brother
-dis	younger sister
-dΛs	parent
-g ^w az	nephew
ki	husband
-xe	spouse's sibling
-loh	spouse's sibling's spouse
-lu	mother
-tai	FaBr/MoSiHu
-tsu	grandmother, great-aunt
-tseʔ	man's daughter
-tsu	man's sister's child
-yat	older sister
-yaz	woman's child
-yeʔ	man's son
-zaz	father-in-law
-zit	female cross-cousin

Geographical Terms

ʔan	cave, hole in ground
bin	middle of lake
b _{AS}	high-water line of body of water
-da	surface of water
d̥z _Δ ł	mountain
keh	pond
-koh	river
lu	glacier
nu	island
š _Δ s	hill, knoll
tl'oh	bay

Natural Substances

bis	obsidian, flint
d _Δ z	drift-wood
dzan	silt, slime
dzeh	pitch
k ^w _Δ n	fire
lez	dust, dirt, ashes
ł _Δ m	piece of ice
ł _Δ t	smoke
sai	sand
tu	water, liquid
t _Δ n	ice over a surface
ts _Δ ł	soot
ts _Δ n	dirt (not soil)
ts _Δ z	firewood
t _{se}	rock
t _{si} h	ochre
t'es	charcoal, coal
tl' _Δ s	verdigris
tl' _Δ t	musk

Natural Environment

ʔa	fog
ʔo	whirlpool, eddy
čan	rain
č _Δ z	snowflake
γ _w _Δ s	foam
ken	den of animal
xaz	windfall
k ^w _Δ s	cloud
sa	sun
so	frost

sAM	star
šΔl	snow drift
ti	road, trail
tut	lair of bear
tsil	blowing snow
tsΔl	the thin layer of floating ice at freeze-up
t'o	nest
ts'oh	brush
ts'Δl	dry underbrush
ya(t)	sky
yAS	snow on ground

Water-Related Artifacts

ʔAS	fish or muskrat trap
čAS	canoe paddle
gas	fish spear
jAS	fish hook
k'ai	salmon opened with vertebrae cut out
mas	beaver net buckle
soh	gaff
sAS	weir
t'az	dried, thin-sliced salmon
-tl'i	barb of fish-hook or harpoon
ts'a	thwart of canoe
ts'i	canoe
-ts'ai	blade of canoe paddle
we	kind of fish trap
yaz	mesh of net

Other Artifacts

ʔaih	snowshoes
bat	mittens
bił	snare, net
bΔn	roof, shingle
-čΔn	handle
dzut	coat
guh	deadfall trap
g ^w Δz	runner of sleigh, sleigh
kΔs	shank of arrow, shaft, handle

k'a	blade (arrow, bullet, blade of knife)
k'as	bullet pouch, quiver
k'en	plaited bark rope
k'Λn	wattle of high-bush cranberry
xaz	ceremonial apron
xe	grease, lard
xes	grease container
xΛł	club
xΛs	handle, shank
les	flour, bread
łas	chunk of wood
naih	clothes
se	belt
sih	wall
tel	bed of spruce boughs
teł	small basket
tes	bed, bedding
ti	handle (as of axe or knife)
tΛs	blunt-headed arrow
tΛz	walking stick
tus	fish-skin water container
t'oh	pocket
t'oh	hunting blind
tlak	double-edged knife
tle	oil, ointment
tluk	drawstring of sack
tl'uł	rope
tsan	breechcloth
tsan	trap trip
tse	fringe
tsΛł	awl
ts'oh	hat
ts'Λt	blanket
yil	splitting wedge
yil	marmot trap
yoh	house
yu	medicine

Mammals

goh	rabbit
li	dog
sΛs	black bear
šas	grizzly bear
tsa	beaver
tsis	otter
yΛs	wolf

Aquatic Organisms

bit	char
čil	old male salmon
ges	steelhead
łbai	dentalium shell
lo	fish
loh	Lake Whitefish
huz	perch

Birds

del	crane
xoh	Canada Goose
soh	American Robin
ts'łł	Red-necked Grebe

Invertebrates

guʔ	bug, worm
ya	louse
ts'ih	mosquito

Plants

ʔah	fiddlehead fern
č'ok	Sitka Mountain Ash
dlat	water weed
gus	Cow parsnip
k'en	Saskatoon bush
k'i	Paper Birch tree
k'łs	Green Alder
xas	Fireweed
xul	water lily roots
tłz	leafless waterweed at bottom of streams
tl'o	grass
ts'al	Common Red Sphagnum Moss
ts'oh	Mountain Balsam
ts'u	spruce tree
x'łs	wild rose, thorns

Abstract Verbal

bɿ	sleep, dream
-če	sleep
dli	cold
dliz	stewing
dlo	laughter
gal	running
jan	age
kɿ	slipping
sɿ	shouting
sɿ	heat, steam
ti	freezing
tɿ	kicking

I suspect that further investigation of the rather specialized constructions in which abstract verbal nouns are used will reveal that quite a few verb roots can also function as abstract verbal nouns. In some cases, as with *dliz* above, the nominal form is not the bare verbal root but has the *d*-valence prefix attached.

People

čil	young man
k'oʔ	hunchback
t'et	young woman

Miscellaneous

ʔɿ	dam
ba	edge
ban	edge, side
boh	war
-da	words of song
dai	famine, starvation, hunger
daŋ	summer
dzin	day
guł	dear, sweetie
ɣɿ	concupiscence
jeh	witchcraft
ka	harm
xel	load, pack
xit	winter
k'oh	footprint, track
me	taboo
mɿk	sudden and complete darkness
ni	mind
ših	breath, energy
šin	early summer

šʌn	song
sun	dull pain
teh	bottom of water
tʌz	night (with reference to time and computation)
t'ez	oxide
-tsin	second soul, shadow
tsis	crumb
ts'ʌs	hair of a fur
ʌł	poison
yiz	breath, voice
yʌn	ground, floor
-zul	second soul after death
zʌł	ghost, empty cartridge casing
-zʌł	soul

There are a few morphologically complex monosyllables. *tl'ut* “rope” consists of the verb root *tl'u* “tie” plus the old instrumental suffix *-l*. Such formations are no longer productive. *xes* “fish-skin grease container”, *tus* “fish-skin water container”, and *k'aš* “quiver, bullet pouch” represent the nouns *xe* “grease”, *tu* “water”, and *k'a* “blade, arrow, bullet” to which the suffix *s*, a reduced form of “skin”, has been added. This is not productive, but is apparently an old process in Athabaskan. White Mountain Apache has an exact cognate to Carrier *tus* in *tus* “water container”, derived from *tu* “water”.

The distribution of the monosyllables over semantic fields is as follows:

anatomical		89 (28%)
body parts	68 (22%)	
bodily fluids	7 (2%)	
quasi-anatomical	6 (2%)	
parts of plants	8 (3%)	
artifacts		60 (19%)
water-related	15 (5%)	
other	45 (14%)	
biological		36 (11%)
mammals	7 (2%)	
fish	7 (2%)	
birds	4 (1%)	
invertebrates	3 (1%)	
plants	15 (5%)	
miscellaneous		34 (11%)
kinship		21 (7%)
natural environment		21 (7%)
natural substances		19 (6%)
abstract verbal		12 (4%)
geographical		11 (4%)
loans		8 (3%)
people		3 (1%)

In general, the monosyllables do reflect what are probably very old aspects of the culture. By far the most heavily represented semantic field is anatomical terms. Other than the rather diffuse field of artifacts, the next most heavily represented field consists of kinship terms; most of the basic terms in these areas are monosyllables. Similarly, much of the terminology for describing the natural world is monosyllabic. The monosyllabic technological terms are suggestive of a cultural emphasis on water and on trapping; in general they reflect a very old layer of technology.

One artifact in particular calls for comment. This is *ʔaih* “snowshoes”, which in the anthropological literature, have been claimed to have been unknown to Carrier people prior to European contact. This claim is surprising on cultural grounds; surely Carrier people had a use for snowshoes and the technology to make them. Moreover, they cannot have been unaware of their construction and use by neighbouring peoples. The point that I would like to make here is that it is unlikely on linguistic grounds that snowshoes are a recent innovation.

The noun *ʔaih* is an unanalyzable monosyllable and therefore presumptively old. It appears to be cognate to equivalent terms in other Athabaskan languages, e.g. Sekani *ʔāh*, Beaver *aah*, Kaska *ah*, Mountain Slavey *’ah*, and Dogrib *ʔah*.

What is especially striking is that *ʔaih* is morphologically irregular. In Carrier there are several sets of possessive prefixes, the choice of which is determined, with only a few exceptions, by the initial segment of the noun stem. In general, nouns beginning with glottal stop behave differently from nouns beginning with other consonants; they take a set of prefixes ending in the vowel /e/. The four sets of prefixes for the Stuart/Trembleur Lake dialect are illustrated below:

Class 1 — *dayi* “chief”

1s	s-dayi	1p	ne-dayi
2s	n-dayi	2p	noh-dayi
3s	u-dayi	3p	b Λ -dayi
Ref	d Λ -dayi	Obv	y Λ -dayi
Rec	ʔ-dayi	PlObv	hi-dayi
Areal	x ^w Λ -dayi	Ind	ʔ Λ -dayi

Class 2 — *ʔusaʔ* “pail”

1s	se-ʔusaʔ	1p	neye-ʔusaʔ
2s	nye-ʔusaʔ	2p	nohye-ʔusaʔ
3s	be-ʔusaʔ	3p	b Λ be-ʔusaʔ
Ref	d Λ de-ʔusaʔ	Obv	ye-ʔusaʔ
Rec	ʔe-ʔusaʔ	PlObv	hiye-ʔusaʔ
Areal	x ^w e-ʔusaʔ	Ind	ʔe-ʔusaʔ

Class 3 — *uziʔ* “name”

1s	s-uziʔ	1p	ney-uziʔ
2s	ny-uziʔ	2p	noh-uziʔ
3s	b-uziʔ	3p	b Δ b-uziʔ
Ref	d Δ d-uziʔ	Obv	y-uziʔ
Rec	ʔ-uziʔ	PIObv	hiy-uziʔ
Areal	x ^w Δ h-uziʔ	Ind	?-uziʔ

Class 4 — *AltAs* “sister”

1s	s-AltAs	1p	ney-AltAs
2s	ny-AltAs	2p	nohy-AltAs
3s	b-AltAs	3p	b Δ b-AltAs
Ref	d(Δ d)-AltAs	Obv	y-AltAs
Rec	ʔ-AltAs	PIObv	hiy-AltAs
Areal	x ^w -AltAs	Ind	?-AltAs

Class 1 consists of the nouns beginning with a consonant other than glottal stop; Class 2 consists of the nouns beginning with glottal stop; Class 3 consists of the vowel-initial nouns. Class 4 contains a handful of irregular nouns slightly different from Class 3. In some dialects there is no distinction between Class 3 and Class 4.

There are two exceptions to the generalization that nouns beginning with glottal stop take Class 2 prefixes, both of which take Class 1 prefixes. One is *ʔat* “wife”. The other is *ʔaih*. Thus, we have for example *sʔaiʔ* “my snowshoes”, not **seʔaiʔ*. For this reason, it is very unlikely that *ʔaih* is a recent loan.³

Perhaps surprising is the relatively small amount of monosyllabic biological terminology. Names of organisms and types of organisms make up only 11% of the monosyllables; most names of organisms are polysyllabic and morphologically complex. Even items for which Athabaskan speakers have surely had words for a very long time sometimes are often complex. This can be seen in the Carrier terms for the mammals listed below.

The Mammals

³ There is another aspect of the possessed forms that seems at first glance to offer an argument for antiquity. This is the fact that the possessed stem is not *ʔaih* as in the unpossessed form, but *ʔaiʔ*, with the final /h/ replaced by a glottal stop. This alternation is found in other Carrier nouns, e.g. *xoh* “goose”, possessed stem *xoʔ* and *ʔaztih* “knife”, possessed stem *ʔaztiʔ*, but has ceased to be productive, probably due to the introduction of numerous non-alternating final /h/s as a result of the sound change by which /x/ in most environments became /h/ around the turn of the 20th century. The fact that “snowshoes” undergoes this now archaic alternation is not, however, clear evidence of the use of the term prior to contact, as it apparently persisted productively post-contact. Not only does it seem to have been rendered opaque only around 1900, but there is one mid-nineteenth century loanword that undergoes the alternation. This is *mandah* “canvas, tarpaulin”, possessed stem *mandahʔ*, which is a loan from Spanish *manta* introduced by Mexican pack-train men in the 1860s.

Bat	ʔat'a _z	
Bear, Black	sas	
Bear, Grizzly	šas	
Beaver	t _{sa}	
Cariboo	xʷadzi _h	“it scrapes ground”
Chipmunk	solj _{as}	?
Coyote	čantali	“forest dog”
Deer	yests'e	?
Dog	li	
Elk	yez _i h	?
Fisher	čanihčo	“big marten”
Fox	nangaz	“it drags (tail)”?
Lynx	wasi	loan from Gitksan
Marmot	d _{at} ni	“it makes a sound”
Marten	čani _h	?
Mink	teč _{as}	?
Moose	d _{an} i	?
Moose, Bull	jeyo	?
Moose, Calf	t _{si} ye	“yellow thing” (probably from Sekani)
Moose, Dry Cow	dets'it	?
Mouse	ʔalga _k	?
Muskrat	t _{sek} 'et	stone-?
Otter	t _{sis}	
Packrat	dlunčo	“big <i>dlun</i> ”
Porcupine	d _{alč} 'akʷ	“it is quilled”
Rabbit	goh	
Sheep	ʔas _{bai}	“it is white”
Shrew	dats'uz	“it squeaks”
Skunk	hunliz	“it sprays”
Squirrel	tsal _{ak}	“beaver dog”
Squirrel, Flying	ts'an _{al} b _{az}	“it stretches ?”
Weasel	noh _{bai}	“white <i>noh</i> ”
Wolf	y _{as}	
Wolverine	mustel	?
Woodchuck	k'ani	?

Other dialects provide additional examples. In the Lhk'acho (Ulkatcho) dialect, “otter” is *n_{at}dzuk*, literally “it slides around”. Here a descriptive term has apparently replaced the old monosyllable *t_{sis}*. A particularly striking example is the Lheidli dialect term for “bat” *liyab d_{at}'ai*. This is literally “devil bird”, where *liyab* “devil”, is borrowed from French *le diable*. Here a clearly recent descriptive term has replaced the monosyllable used in all other dialects.

It is important to note that even terms for animals with which Carrier people have been familiar for thousands of years are often analyzable. Moreover, even where the terms are not analyzable, there is tremendous variation. It is not the case that culturally ancient organisms are necessarily named by unanalyzable monosyllables.

This point is nicely illustrated by the terms for “porcupine”, whose range includes every area in which Athabaskan people have plausibly lived for millenia, from the Arctic to the American Southwest. The Carrier dialects show considerable diversity in the terms for “porcupine”.⁴

Carrier Words for “porcupine”

	Nak'albun	ᑭaik'uz	Nadleh	Stelakoh	Cheslatta	Lheidli	Lhk'acho
dΛč'Λk ^w	X	X	X				
dΛnezaʔ	X	X	X	X			
jats'Δn							X
yats'Δn					X		
ts'it						X	
ʔujunih				X			
ʔΔjunih				X			

There is a similar range of terminology when the full range of languages in the family is considered.

Some Athabaskan Words for “porcupine”

Language	Word	Etymology
Ahtna	neghadiye	?
	nuuni	creature
Apache (White Mountain)	dahszíne	it stands up?
Dena'ina (Inland)	nini	creature
(Cook Inlet)	qanchi	?
(Seldovia)	nk'eggi	?
Dogrib	ch'oh	quill
	ts'oh	quill
	ts'ih	quill?/cognate of Lheidli <i>ts'it</i> ?
	diedah	?
Hupa	ky'oh	quill
Kaska	dech'ue	it is quilled
Navajo	dahsání	old <i>dah</i>
Sekani	duch'owe	it is quilled
Slavey (Mountain)	ch'ue	it is quilled
Tahltan	dəč'uə	it is quilled
Witsuwit'en	dic'ikw	it is quilled
	'ugunī	?
	'agunī	?

In sum, the idea that the monosyllabic noun stems reflect an archaic cultural layer is generally borne out. However, the converse is clearly not true; Carrier (and

⁴ The word *dΛnezaʔ* properly refers to a noble in the clan system; it is applied to porcupines as an epithet since they are regarded as the chiefs of the small animals.

probably Athabaskan languages more generally) frequently uses morphologically complex terms, and not infrequently innovates complex terms, for items that have long been familiar. This tendency seems to be especially pronounced in the area of biological terminology, perhaps reflecting the exploitation of the rich morphological resources of the language in service of an interest in the behaviour of animals.

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