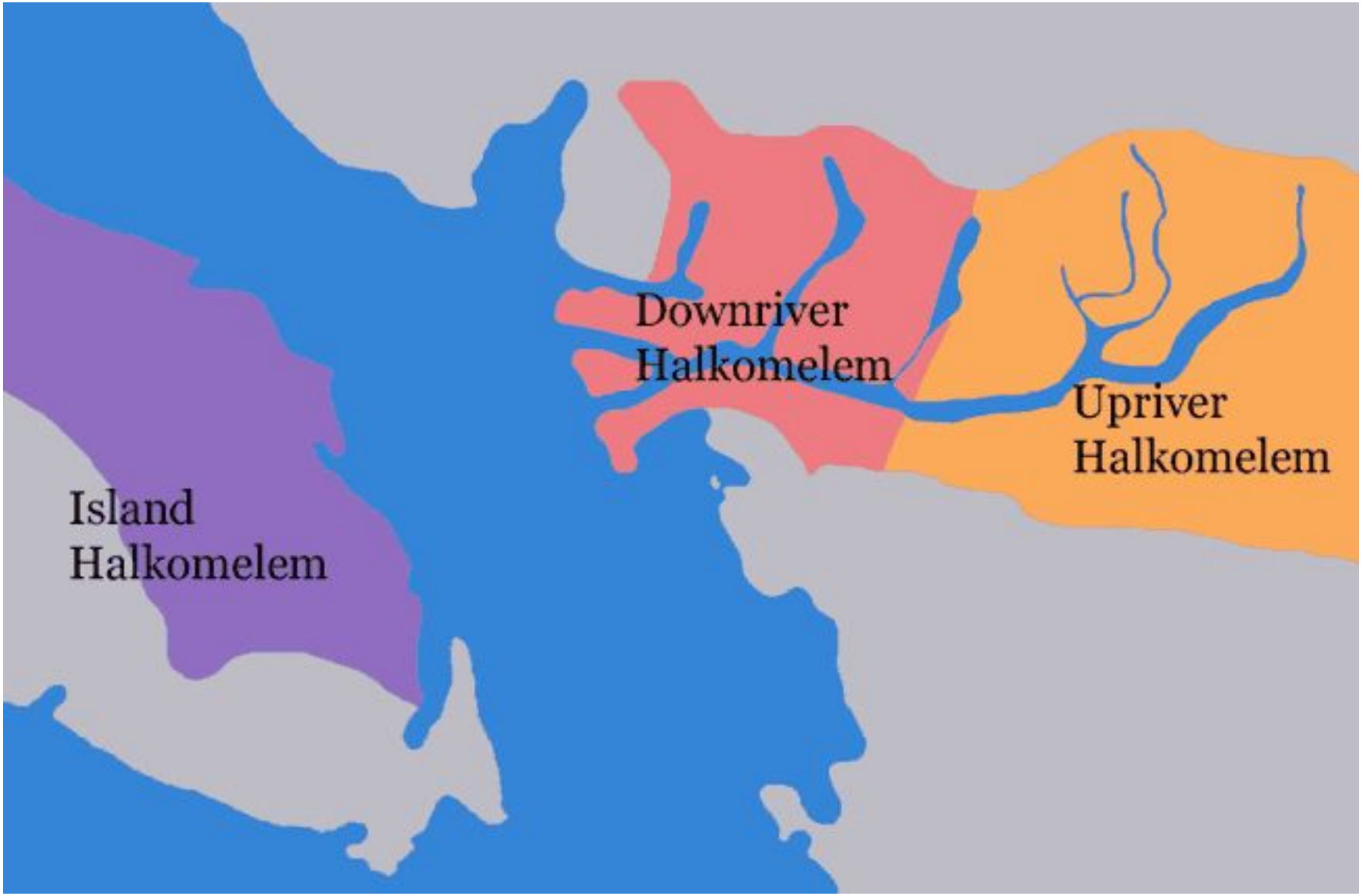
Hul'q'umi'num' Numeral Classifiers: A Study in Salish Language and Culture

Donna B. Gerdts
Simon Fraser University
Co-researchers:
Mercedes Q. Hinkson and
Thomas E. Hukari

- Hul’q’umi’num’ is a Salish language of southwestern British Columbia.

- Salishan language family:
  23 languages spoken in
  British Columbia, Washington,
  Idaho, Montana



Three Dialects of Hul’q’umi’num’

Island Hul’q’umi’num’ = hul’q’umi’num’

Salish languages are known for their:

- complex inventory of consonant phonemes
- polysynthetic structure, including a rich system of transitive inflection
- lexical suffixation

Island Halkomelem Sounds

p	t^{θ}	t	c		č	(k)k^{w}	q	q^{w}	
p’	$t’^{\theta}$	t’	c’	ƛ’	č’	$k’^{w}$	q’	$q’^{w}$	ʔ
	θ		s	ł	š	x^{w}	x̌	$x̌^{w}$	h
m		n		l	y	w			
m’		n’		l’	y’	w’			

i e u (o) a ə

(vowel length)

Lexical suffixes are bound forms with substantival meaning.

lexical suffix		free-standing N	
=alus	'eye'	*qulum'*	'eye'
=shun	'foot, leg'	*sxun'u*	'foot'
=exun	'arm, wing'	*t'eluw'*	'arm, wing'
=ew't-hw	'building, room'	*lelum'*	'house'
=eyulh	'baby, child'	*qeq*	'baby'

Lexical Suffixes Originating as Truncated Nouns

NOUN		LEXICAL SUFFIX	
thathun	‘mouth’	=(a)thun	‘mouth, edge’
muqsun	‘nose	=uqsun	‘nose, point’
tupsum	‘neck’	=upsum	‘neck’
tumuhw	‘land’	=muhw	‘land, group of people’

Most Salish languages have 100—200 lexical suffixes :

- human/relational terms (*people, children*)
- cultural items (*canoe, net, house, clothing*)
- basic physical/environmental concepts (*earth, fire, water, wind, tree, rock, berry*)
- body parts (*hand, foot, heart, nose*)

N + LEXICAL SUFFIX = N		
saxwul=ew't-hw	grass=building	'barn'
tuxwa'ts=ulhp	bow=plant	'yew tree'
tumulh=upsum	ochre =neck	'woodpecker'
qwlhey'=shun	log=foot	'shoe'
V + LEXICAL SUFFIX = N		
t'iw'uyulh=ew't-hw	pray=building	'church'
'itut=ulwut	sleep=garment	'pajamas'
kw'ikw=ul'=shun'	trolling=CN=foot	'trolling line'
s-qw'uqw=tsus	N=club=hand	'red huckleberry'
A + LEXICAL SUFFIX = N		
slhul'p'=ul'=exun'	floppy=CN=arm	'bat'
xuxp'=itsun'	striped=back	'chipmunk'
hw=tl'uqt=nuts	PFX-long=tail	'cougar'
p'q'=ul'=qun'	white=CN=head	'mountain goat wool'

Verbal uses of lexical suffixes

qws=ey'un	go.into.water=net	'set a net'
suw'q'=iw's	seek=body	'search for a lost person'
lhts'=ul=qun	cut=hair	'shear wool'
p'tth'=ul=muhw	wring out=breast	'milk a cow'
q't=athun	go along=mouth	'walk along (a shore etc.)'
q'ut=nuts	go along=bottom	'go around end of lake'
q'a'=shin=t	add=foot-tr	'accompany s.o.'
q'p=as-um	gather=face-middle	'assemble, gather face to face'

Compounding	Classifying
Suffix does not double with an NP.	Suffix doubles with an NP.
Suffix serves as argument.	NP serves as argument.
Suffix completes the meaning.	Suffix highlights one feature of the NP.

Classifying lexical suffixation

nem’ kwahw=uw’t-hw=t thu lelum’.
go knock-house-TR DT house
‘Go knock on the house.’

Classifying lexical suffixation

nem’ ch shqu=t hw=xt’akw’=us=t
go 2.SUBend-TR PR-carve=face-TR
tthu shts’uluhwus.
DT mask
‘You finish carving the mask.’

The grammaticalization cline: (Gerdts and Hinkson 1996)

noun

> compounding lexical suffix

> classifying lexical suffix

> numeral classifier

Numeral classifiers

- Lexical suffixes are used as numeral classifiers in Salish languages.

Numeral classifiers

- Lexical suffixes are used as numeral classifiers in Salish languages.

- Of the approximately 120 lexical suffixes, around 30 are used as classifiers.

Numeral classifiers

- Lexical suffixes are used as numeral classifiers in Salish languages.
- Of the approximately 120 lexical suffixes, around 30 are used as classifiers.
- They attach to numerals and quantifiers but not to articles or demonstratives.

Classifying Suffix:

lhq’etss=umutth’ shelh

five=long road

‘five roads’

sortal:

lhihw=uqun xthum

three=container box

‘three boxes’

mensural:

lhihw=uqun sqewth

three=container potato

‘three sacks of potatoes’

Not all suffixes that appear on numerals are classifiers.

COMPOUNDING SUFFFIX	CLASSIFYING SUFFIX
Suffix does not double with an NP.	**Suffix doubles with an NP.**
The suffix is being counted.	**The NP is being counted.**
Suffix is often a measure word.	**Suffix highlights one feature of the NP.**

Compounding Suffix:

t-hw=lhihw=shun ’ul’ tthu snuhwulh.

only-three=foot only DT canoe

‘The car only has three tires.’

Key questions

- What gets classified?
- What numeral classifier is used to classify a particular noun?
- How does this relate to the meaning of the noun?
- Where do numeral classifiers come from?

Our survey of classifiers:

- We had data from texts and educational materials:
- Cecelia Alphonse
- Arnold Guerin
- Ruby Peter
- Wilfred Sampson
- Theresa Thorne

We worked with individuals and groups:

- Wilfred Aleck
- Leonard Edwards
- Hazel Good
- Margaret James
- Dora Sampson
- Steve Sampson, Sr.
- Theresa Thorne


FLORIDA STATE

Methodology:

- We gave suffixes and asked for examples.
- We showed pictures and asked for descriptions.
- We took a list of nouns and had them counted.

Observations:

- Elicitation was an enjoyable and easy task for consultants and they agreed as to what classifier should be used for a particular item.
- They had no trouble using higher numbers and counting up to twenty or higher, if it made sense.
- Some phonological differences among speakers.

	NUMBER	**LEXICAL SUFFIX**	**GLOSS**
		=elu	people
3	lhihw	lhhwelu	three people
4	xu'athun	xuthiinu	four people
5	lhq'etsus	lhq'utsse'lu	five people
6	t'xum	t'xumulu	six people
7	tth'a'kwus	tth'ukwselu	seven people
8	te'tsus	te'tsselu	eight people
9	toohw	toohwelu	nine people
10	'apun	'upeenu	ten people
20	tskw'ush	tskw'shelu	twenty people
how many	kw'in	kw'iinu	how many people?

Things classified in Halkomelem

SEMANTIC DOMAIN	ENTITIES CLASSIFIED
People	people, children,
Animals	waterfowl, fish, sealife
Natural environment	plants, land, water, stone
Material culture	canoe, house, blanket, clothing, bundle, container
Objects	round, loop, sphere, cylinder, oblong, long thin, flat

Some things are not classified:

fauna	large birds and animals
land formations	mountains, bays, lakes, rivers, islands, points of land
material culture items	tables, chairs, doors, desks, axes, brooms
abstract things	stories, words, languages, work
calendrical terms	hours, days, and weeks

nuts’a’ xatsa’ ‘one lake’
lhihw lutem ‘three tables’
yuse’lu shelh ‘two doors’
’apun shts’e’nutstun ‘ten chairs’
xu’athun skweyul ‘four days’

Some suffixes never appear as numeral classifiers.

= tsus	‘hand’
= a’luw’tsus	‘finger’
= shun	‘foot’
= uqsun	‘nose’ (used in counting points)
= uxun	‘side’ (used in describing shapes, e.g. a triangle)
= athun	‘mouth, edge’ (used in counting prongs on spears).

HUMAN/ ANIMAL	**NATURAL ENVIRONMENT**	**MATERIAL CULTURE**
lhhw=elu 'three people'	*s=lhihw=ulhp* 'three trees'	*lhihw=uw't-hw* 'three houses'
lhhw=ey'lh 'three children'	*lhuhw=nets* 'three root plants'	*lhhw=uwulh* 'three canoes'
lhhw=iws 'three ducks'	*lhhw=eenhw* 'three plant parts'	*lhhw=eel'wus* 'three paddles'
lhihw=a'qw 'three fish (heads)'	*lhhw=ulhtsup* 'three pieces of firewood'	*lhhw=ulwut* 'three garments'
lhhw= elqlh 'three pieces of game'	*lhhw=unup* 'three plots of land'	

te'tss=elu *kwthunu* *sts'am'uqw.*
eight=CONT DT.1POS great.grandchild
'I have eight great-grandchildren.'

(Numerals often appear as predicates.)

	base	container
shhwimelu	sell	‘store’
shluthiinu	plate	‘kitchen cupboard’
shhwutl’qun’elu	feather	‘pillow case’
shtihelu	tea	‘teapot’
shhwuy’qwelu	fire	‘fireplace’
shhw’uw’kw’elu	stuff	‘chest of drawers’
shlumelu	liquor	‘bottle’
shoukwu’elu	sugar	‘sugar bowl’
shtulelu	money	purse, wallet’
shtulaluselu	glasses	‘glasses case’
shum’sumuy’elu	bee	beehive
shp’tl’umelu	smoke	‘stovepipe, smoking pipe’

*=*iqw (=a'qw)* 'head' is used for animals, fish, fish heads, sea life (mussels, oysters, sea cucumbers), cabbages, lettuce, garlic, berries, balls of yarn

lhihw=a'qw	*tl'uxwtl'uhw*	*kwthu*	*ni'*	*nu*	*s'ulhtun.*
three=head	oyster	DT	AUX	1POS	food

'Three oysters is what I had to eat.'

Four key elements of material culture

=*uw't-hw* 'house'

=*uwulh* 'canoe'

=*eel'wus* 'paddle'

=*ulwut* 'blanket, garment'

Clemclem bighouse *theew't-hw ~ thi lelum'*

yuse’l=uw’t-hw tthu lelum’ hw=uwe’
two=house DT house PR-not
niis ts-huy’qwoon’.
AUX:3SSUB PR-lamp

‘Two houses haven’t got their lights yet.’

xuthin=uw’t-hw tthu telew’t-hw.
four=house DT bank

‘There are four banks.’
bank = *telu* ’money’ from Eng. ’dollar’
via Chinook Jargon

’uw’ nuts’=uw’t-hw’ul’ shhwimelu
just one=house just store
ni’ ’u-tl’ s’amuna’.
AUX OBL-DT Somenos
‘There is just one store at Somenos.’

CANOE

xuthin=uwulhsnuhwulh ’i tetsul.

four=canoe canoe AUX arrive

‘Four canoes arrived here.’

CANOE > AUTOMOBILE

kw’in=uwulh snuhwulh ni’ ’un’nehw

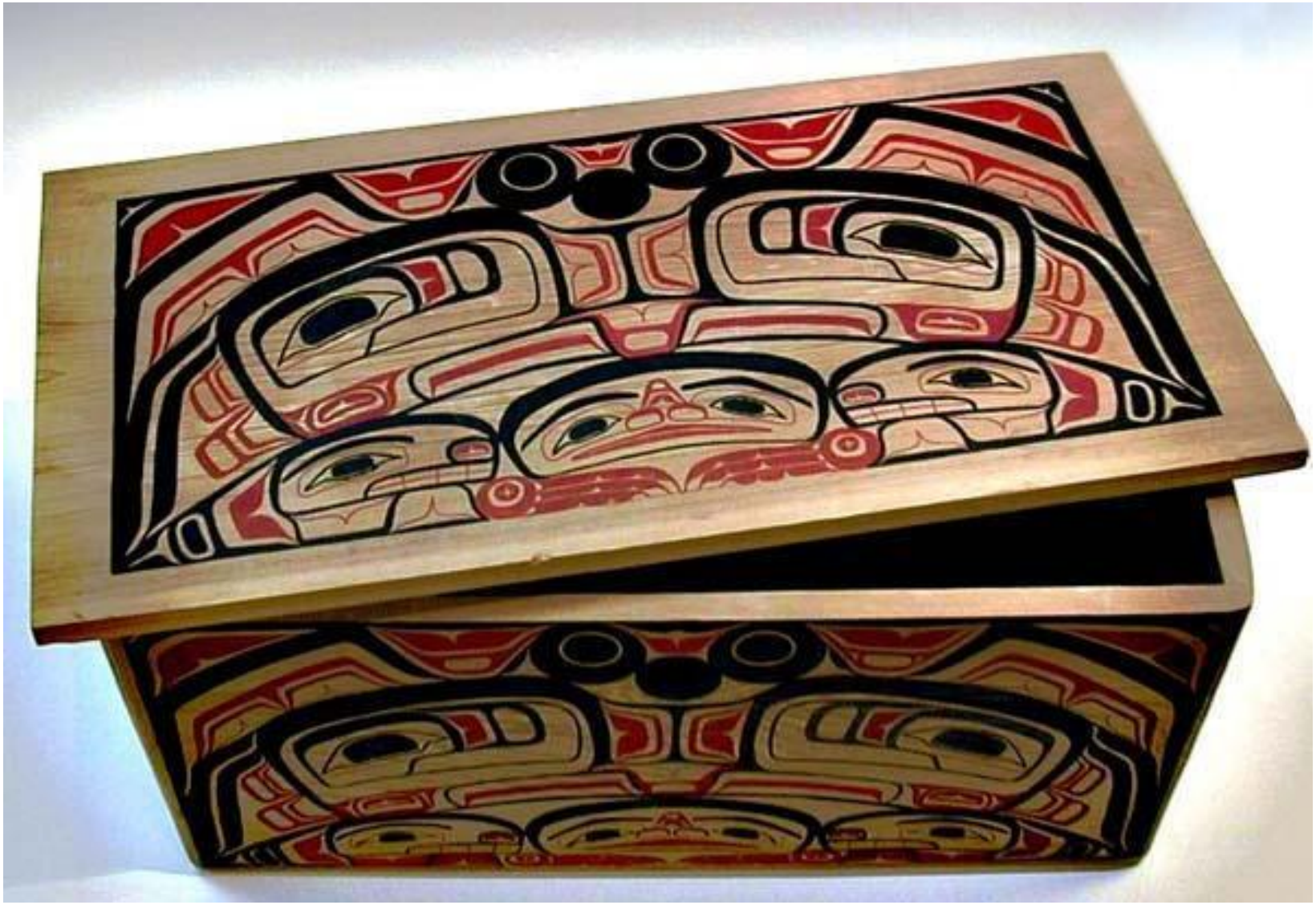
how.many=canoe canoe AUX stopped

ni’ ’u kwthun’ lelum’?

AUX OBL DT.2POS house

’How many cars were parked in front of your house?’

snuhwulh	‘canoe’	‘car’
snuhwulhew’t-hw	‘canoe shed’	‘garage’
tl’ulumthut	‘to steer’	‘to drive’
’aalh	‘get aboard’	‘get in a car’
s’ile’uq	‘stern’	‘back seat’
q’lhanum	‘to go to forward’	‘to get in the front seat’
huy’qwoon’	‘light, lamp’	‘car headlight’
xthum	‘box’	‘trunk’



CANOE > CONVEYANCE

This suffix is also used when counting other vehicles, including wagons, buggies, planes, trains, trailers, scooters, bicycles, and skateboards.

CANOE > VESSEL

‘um’i-stuhw xuthin=uwulhla’ul’thun

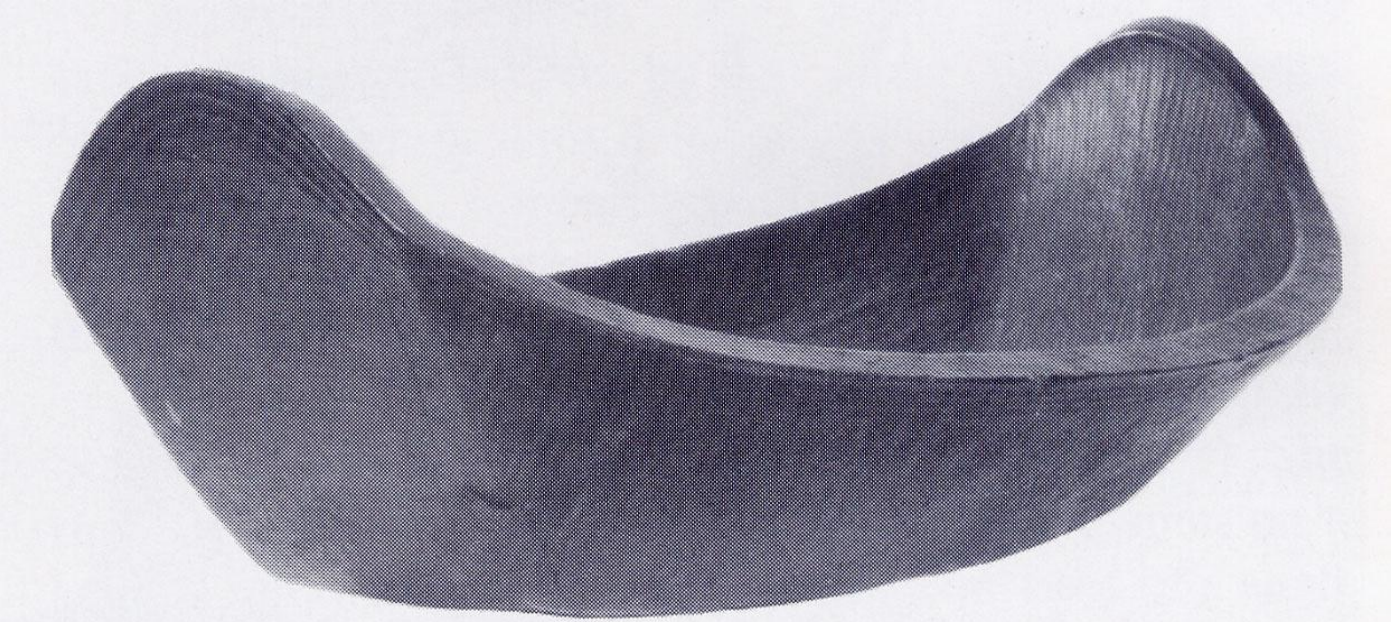
come-CS four=canoe plate.PL

’i’ thum=uhwulhqwthalus!

and two=canoe platter

‘Bring four plates and two platters!’

qwthalus



Mus. of the Amer. Ind., Heye Foundation, New York: 1/3859.

=*ulwut* ’blanket, garment’

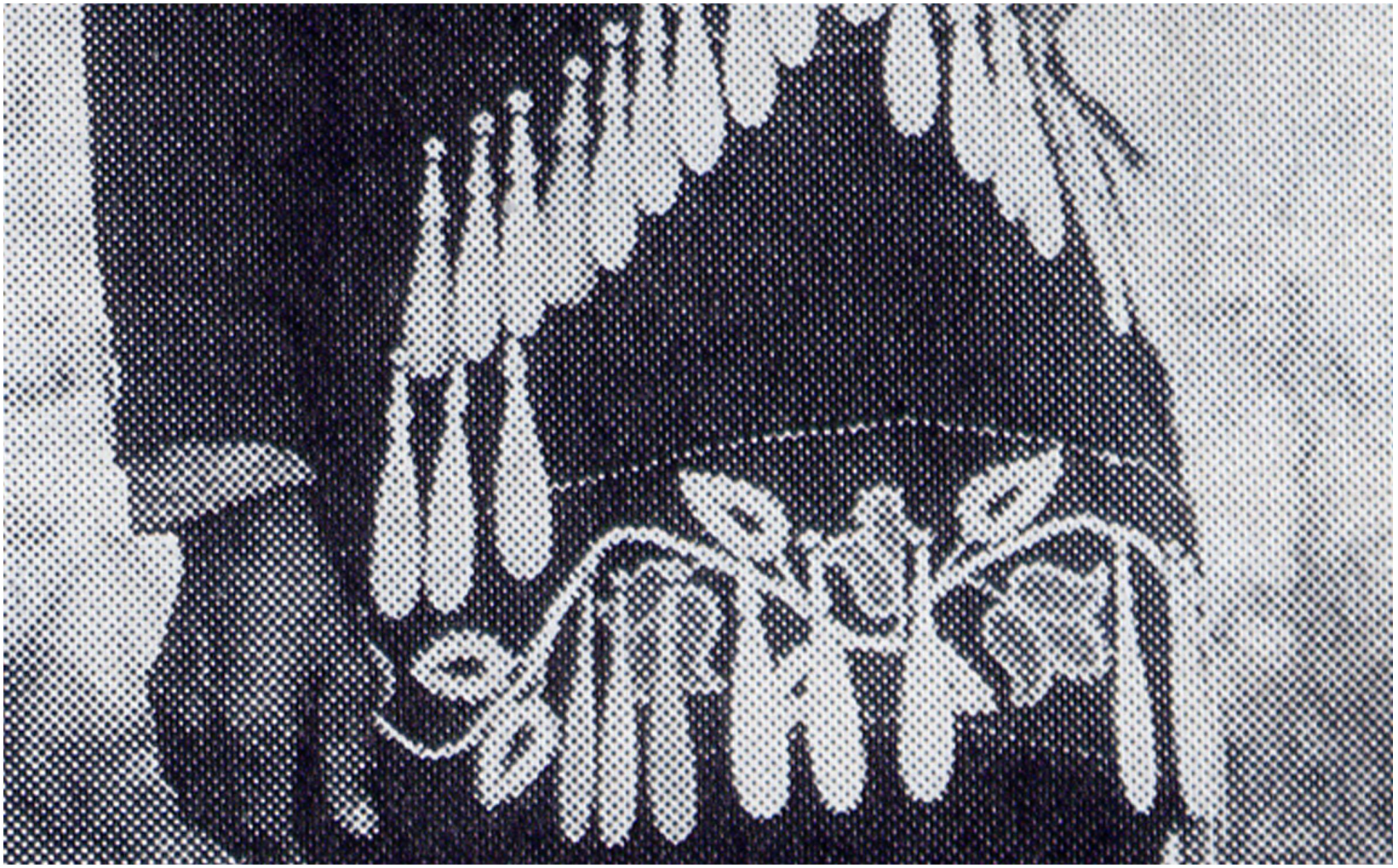
kw’in=ulwut tthun’ luxwtun?
how.many=garment DT:2POS blanket
‘How many blankets do you have?’

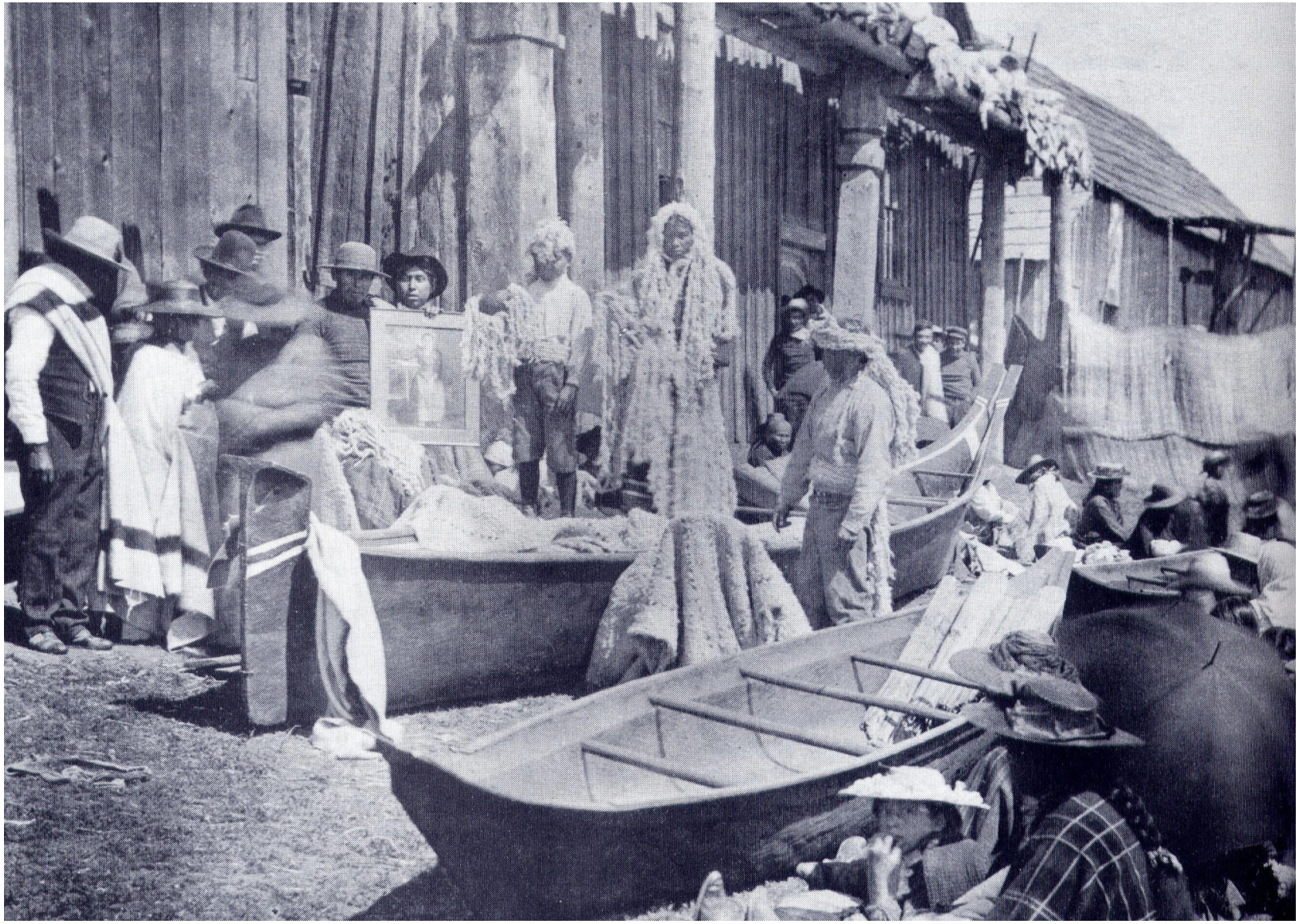
lhihw=ulwut tthunu shtl’piw’un’.
three=garment DT.1POS shirt
‘I have three shirts.’

sq’umul’ “paddle”

sq’umul’=ulwut “paddle shirt (with shafts on paddle)

q’umul’=ulhp “maple tree”





- Most inanimate objects are classified on the basis of their shape or function.

- The key parameters are dimension (flat vs. spherical) and consistency (rigid vs. flexible).

- Secondary features are size and length.

Classifying by shape

SUFFIX	CLASSIFICATORY MEANING	CLASSIFIES
=as	**ROUND**	small round objects, months, dollars
=alus	**LOOP, CYLINDER**	meshes of net, stitches of knitting, campfires, pens, sticks, boards
=uy'us	**COIL**	rings, bracelets, coils of rope, coiled baskets

Classifying by shape (cont.)

SUFFIX	MEANING	CLASSIFIES
=als	**SPHERE**	stones, eggs, berries, apples, oranges, potatoes. tomatoes, balls, balls of yarn
=a'qw	**HEAD SPHERE**	animals, fish, fish heads, sea life, cabbages, lettuce, garlic, berries, balls of yarn
=emutth'	**LONG, THIN OBJECT**	poles, rods, logs, house posts, roads, water pipes
=itth'e'	**STRAND**	ropes, roots, strands of fiber, strips of cloth

Classifying Loops and Cylinders =*alʔs:*

t-hw=yusul=alus-stuhw ch tthun’

only-two=loop-CS:3OBJ 2SUB DT:2POS

syaays ’i’ ’uy’ .

work and good.

’It will be better if you do two more rounds in your knitting.’

Classifying Loops and Cylinders =a/us

alus

loop

=ulus

loop

Classifying Long Objects =*emutth'*:

lhq'etss=emutth' shelh

five=long road

'five roads'

Classifying Long Objects =*emutth'*:

lhihw=emutth' qwlhey'

three=long log

'three logs'

Classifying Long Objects =*emutth'*:

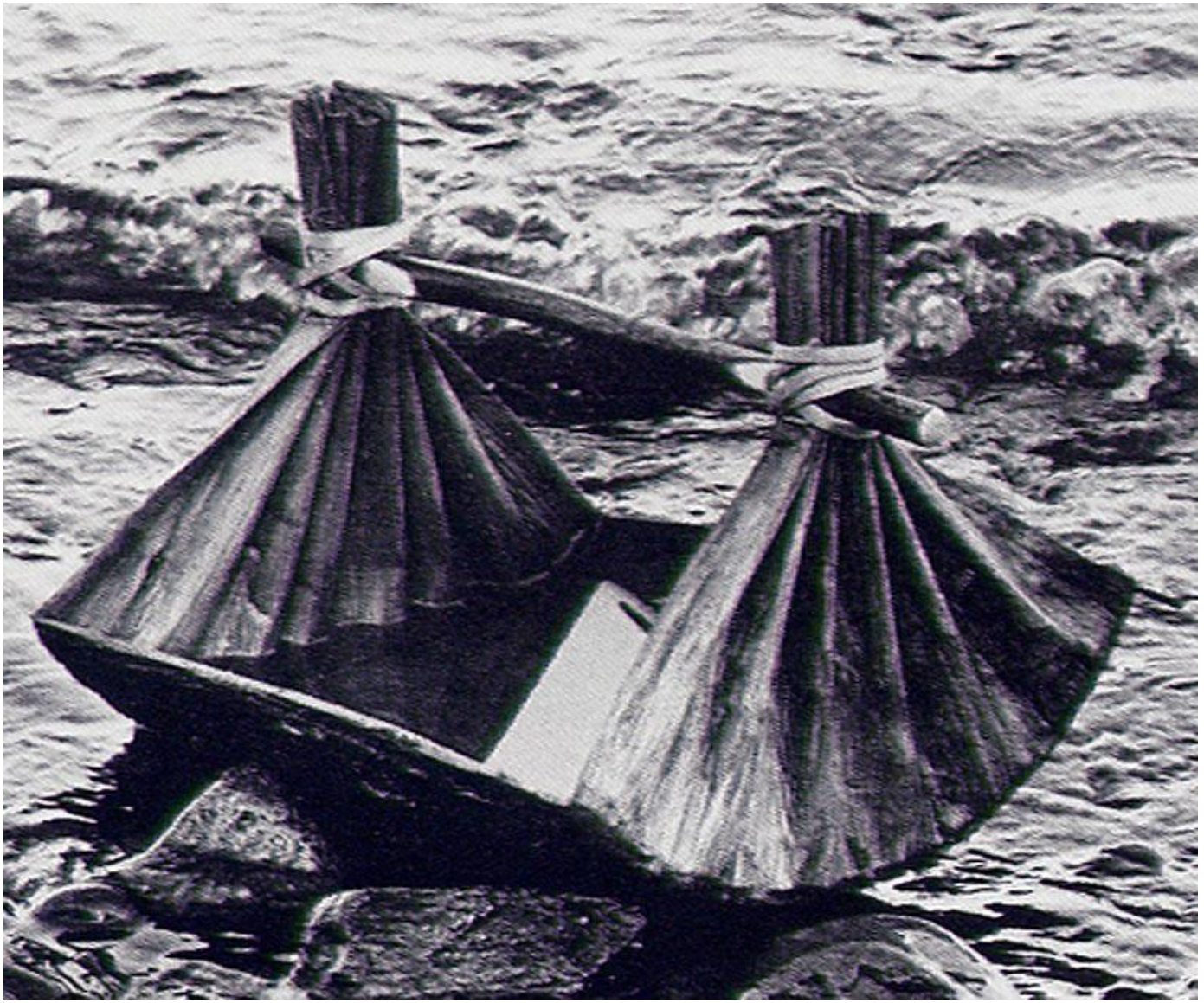
xuthun=emutth' kwthu qequn'

four=long.object DT house.post

'four house posts'

Three classifiers refer to objects that are put together into some sort of arrangement and to the containers that hold them:

SUFFIX	MEANING	CLASSIFIES
=uqun	**CONTAINER**	bowls, cups, teapots, pans, pots, pipes, lanterns, buckets, barrels, baskets, jars, cans, boxes, sacks, suitcases, and pillowcases.
=ule'ts	**BUNDLE, LOAD**	bales of hay, bundles of wood, barrels of fish, baskets of laundry, bundles of blankets, sacks of potatoes, boxes of fruit, and trunks of possessions.
=umat	**GROUP, PILE**	blankets, mats, rugs, part, piece or group of things that are piled.



n;ç;q;n ®;lt;n ’one bailer’

Classifying the object

kw’in=uqun tthun’ t’umol’uch?
how.many=container DT:2POSS barrel
‘How many barrels do you have?’

Classifying the arrangement

kw’in=ule’ts tthun’ t’umol’uch
how.many=bundle DT:2POSS barrel
’How many (loads of) barrels do you have?’

Classifying the arrangement

kw’in=ule’ts tthun’ lhuxwtun?
how.many=bundle DT:2POS blanket
‘How many stacks of blankets do you have?’

Classifying the object

t-hw=lhihw=umat ’ul’ thunu swuqw’a’lh.
just-three=part only DT .1POS goat.blanket
‘I only have three goat wool blankets.’

Classifying the object

kw’in=uqun xthum kwu ni’

how.many=container box DT AUX

’iluq=ut=uhw?

buy-TR-2SSUB

‘How many boxes did you buy?’

Classifying the contained item

nuw’ tsun lhuw’een=t lhunu
go 1SUB give.gifts-TR DT.1POSS
mun’u ’u kwthu ’upen=uqun ’apuls.
offspring OBL DT ten=container.apple

‘I am going to bring gifts (of 10 boxes of apples) for my daughter.’

Different temporary aspects of an NP are possible.

These can refer to shape, containment, or arrangement.

Different classifiers can be
used for particular aspects of an NP.

Classifying ’potatoes’ with = *als*

xuthin=uls kwthu sqewth.
four=sphere DT potato
‘There are four potatoes.’

Classifying ’potatoes’ with = *eenhw’*

’upeenhw	tthu	sqewth	ni’	ts’isum.
ten:plant.part	DT	potato	AUX	grow

‘Ten potatoes sprouts grew.’

Classifying 'potatoes' with = *nec*

lhuhw=nuts sqewth ni'
qw'umu=tum.
three=bottom potato AUX dig.up-PAS
'There were three potatoes dug up.'

Classifying 'potatoes' with = *uqun*

lhihw= uqun sqewth

three=container potato

'three sacks of potatoes'

Classifying 'potatoes' with = *ule'ts*

lhhw=ule'ts sqewth
three=bundle potato
'three packages of potatoes'

Classifying ’rope’ with = *ule’ts*

lhihw=ule’ts xw’i’lum’
three=bundle rope
‘three coils of rope’

Classifying 'rope' with = *umat*

lhihw=umat xw'i'lum'

three=part rope

'three piles of rope'

Classifying 'rope' with = *itthu'*

tth'a'kws=itth'e' tthunu xwi'xwlum'.
seven=strand DT .1POS rope (DIM)
'I had seven pieces of thread.'

Mandarin

- san ’three’ hua ’flower’

- zhi = elongated objects
- san zhi hua ’three flowers’
- (flowers on their stalks)

- duo = round objects
- san duo hua ’three flowers’
- (flower part of the plant)

Summary:

- Specific lexical suffixes classify key elements of the culture, including people, fish, waterfowl, plants, houses, and canoes.

- Most inanimate objects are classified on the basis of their shape or function.

- Some things are not classified (counted with plain numerals).

New items get added to the system according to their shape or function.

The lexical suffix =*as* originally meant 'face'

sh=lhul'p'=us 'facial wrinkles'

PR=wrinkled=face

hw=lhaqw'=us=t 'slap him/her on the face'

PR=slap=face-TR

sh=yat'qw'=us-um' 'face cloth'

PR=rub=face-middle

kw'u'=as 'facing up'

climb=face

FACE > ROUND OBJECTS

liim=us ‘April’ [cf. *sli:m* ’sandhill crane’]

lhum’ts’=us=t ‘pick them (berries)’

thith=us ‘big rocks’

qw’umxw=us-=t ‘wind it (wool) into balls’

wawa’ ni’ yusa’l=us lhqel’ts’ ’i’

perhaps AUX two=round moon and

tl’e’ wulh nem’ tsam.

again already go go.up.

‘*It was maybe two months later and he again went up into the mountains.*’

FACE > ROUND OBJECTS > COINS > MONEY

tskw’sh=as	’i’	kw’	lhq’atss=us
twenty=roundand	DT		five=round
’u	tthun’	telu?	
Q	DT:2POS	money	

‘Do you have twenty-five dollars?’

- **Salish lexical suffixes have their origin as nouns.**

- **They derive their classifactory functions through semantic extension.**

- **Because body part lexical suffixes are especially prone to semantic extension, they are excellent sources for classifiers.**

PROTO SALISH	HALK	PROTO-MEANING AND SEMANTIC PATH
*=al=ikin	=e¬ec	BACK > PACK > LOAD/CONTAINER
*=awas ~ *=iws	=i∑s	BODY > BIRD
*=anak	=n;c	ABDOMEN > BOTTOM > ROOT
*=aqin	=q;n	HEAD > THROAT > CONTAINER
*=iqø	=a÷qø	HEAD > ROUND THING
*=us	=as	FACE > ROUND OBJECT > DOLLAR
*=al=us	=al;s	EYE > LOOP > CYLINDER > BOARD
*=iça÷	=i ˙e÷	HIDE > STRAND (CLOTHING)

PROTO SALISH	HALK	PROTO-MEANING AND SEMANTIC PATH
*=al=ikin	=e¬ec	BACK > PACK > LOAD/CONTAINER
*=awas ~ *=iws	=i∑s	BODY > BIRD
*=anak	=n;c	ABDOMEN > BOTTOM > ROOT
*=aqin	=q;n	HEAD > THROAT > CONTAINER
*=iqø	=a÷qø	HEAD > ROUND THING
*=us	=as	FACE > ROUND OBJECT > DOLLAR
*=al=us	=al;s	EYE > LOOP > CYLINDER > BOARD
*=iça÷	=i˙e÷	HIDE > STRAND (CLOTHING)

PROTO SALISH	HALK	PROTO-MEANING AND SEMANTIC PATH
*=al=ikin	=e¬ec	BACK > PACK > LOAD/CONTAINER
*=awas ~ *=iws	=i∑s	BODY > BIRD
*=anak	=n;c	ABDOMEN > BOTTOM > ROOT
*=aqin	=q;n	HEAD > THROAT > CONTAINER
*=iqø	=a÷qø	HEAD > ROUND THING
*=us	=as	FACE > ROUND OBJECT > DOLLAR
*=al=us	=al;s	EYE > LOOP > CYLINDER > BOARD
*=iça÷	=i˙e÷	HIDE > STRAND (CLOTHING)

*=*qin* = HEAD

Central Salish: Lushootseed
(Hess 1976:384)

≈*aç=qíd-;b*
cover=HEAD-MID
’cover your head’

HEAD > THROAT

Central Salish: Hul’q’umi’num’ *ˀ;*

≈ø=qin-;m

wash=HEAD-MID

‘wash one’s throat (have a beer)’

xø;lm;xø=q;n

First.Nations=HEAD

‘speak a First Nations language’

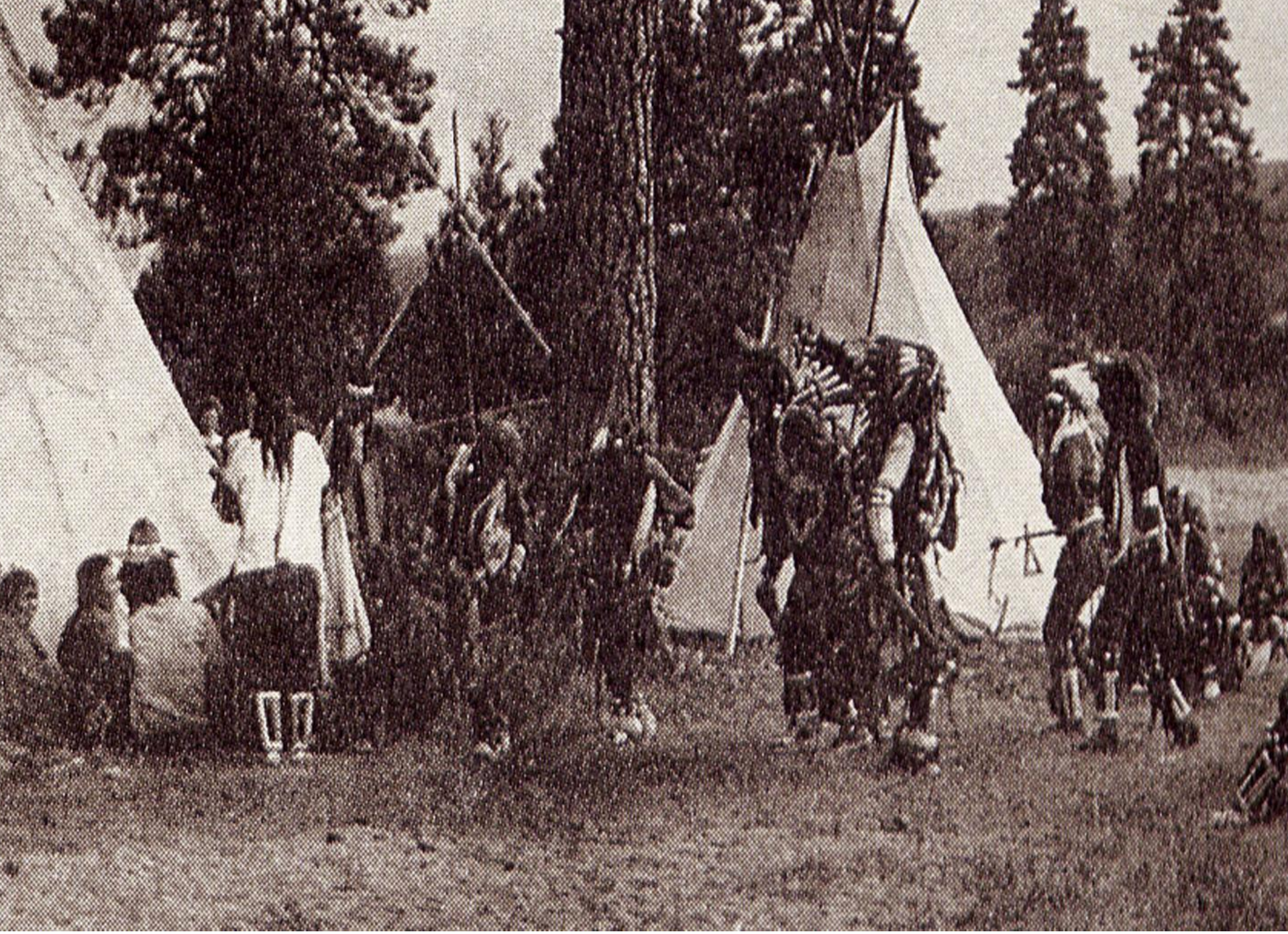
HEAD > THROAT> CONTAINER
(Hul’q’umi’num’ only)

nuts’a’=qun ’al’ tthun’ sqwal’s.
one=container just DT:2POS pot
‘You have just one pot.’

*=*aqin* HEAD developed in Southern Interior Salish as a classifier for tipis.

Columbian (Kinkade n.d. #1665)

n-m;sa=qín
PR-four=HEAD
'four tipis put together'



Salish Numeral Classifiers

- The overall system is replicated throughout Salish, but different suffixes are used as classifiers in each language.

- For example, *wil used as a classifier for CANOE in all Salish languages, but differ in its use as VESSEL.

PROTO SALISH	HALK	PROTO-MEANING AND SEMANTIC PATH
*=al=ikin	=e¬ec	BACK > PACK > LOAD/CONTAINER
*=awas ~ *=iws	=i∑s	BODY > BIRD
*=anak	=n;c	ABDOMEN > BOTTOM > ROOT
*=aqin	=q;n	HEAD > THROAT > CONTAINER
*=iqø	=a÷qø	HEAD > ROUND THING
*=us	=as	FACE > ROUND OBJECT > DOLLAR
*=al=us	=al;s	EYE > LOOP > CYLINDER > BOARD
*=iça÷	=i˙e÷	HIDE > STRAND (CLOTHING)

Mercedes Q. Hinkson. 1999. *Salishan lexical suffixes: A study in the conceptualization of space.* Ph.D. dissertation, Simon Fraser University.

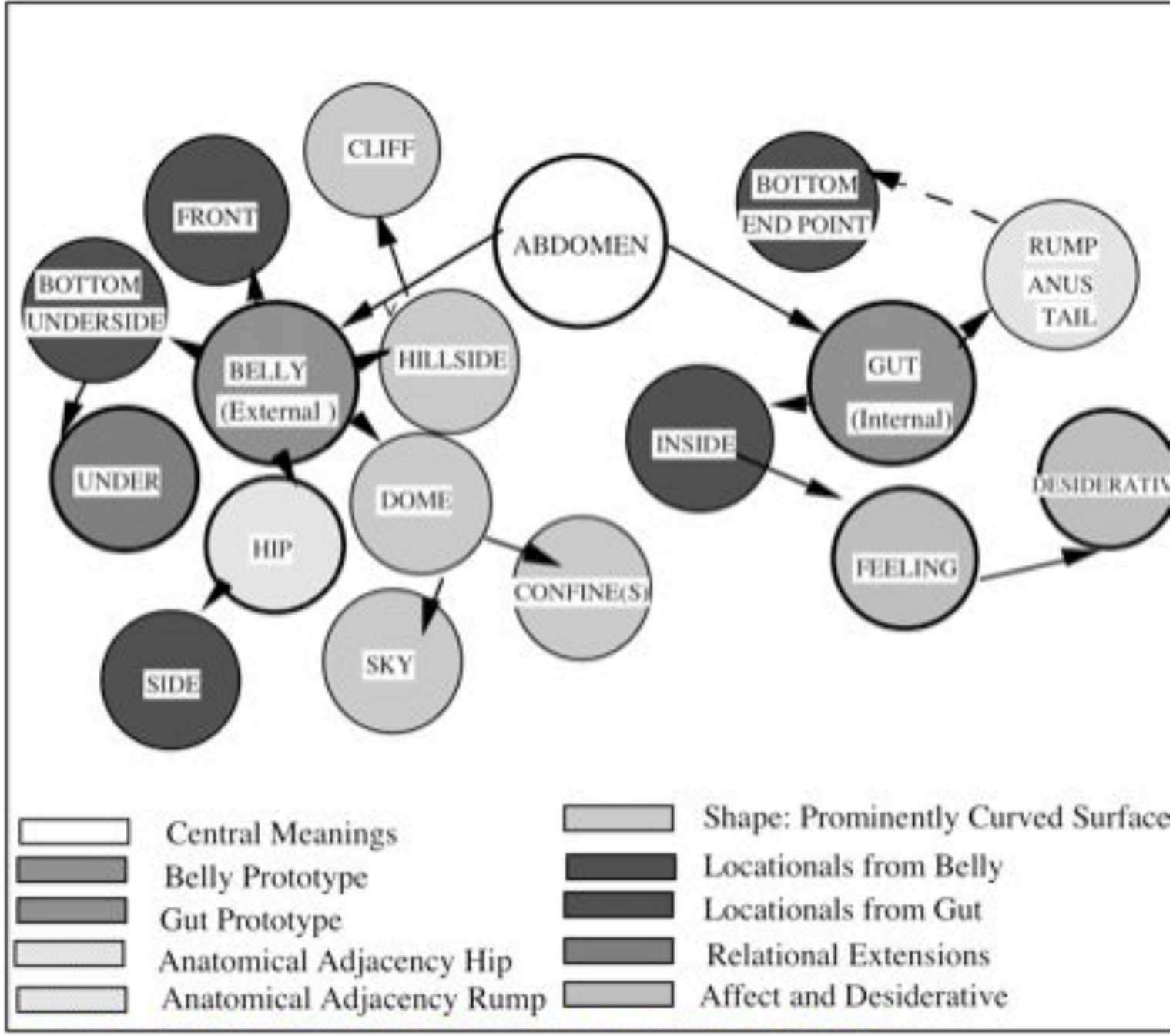


Figure 16: Radial Category of the Meanings of the Suffix **af/nak.*

Jacaltec noun classifiers

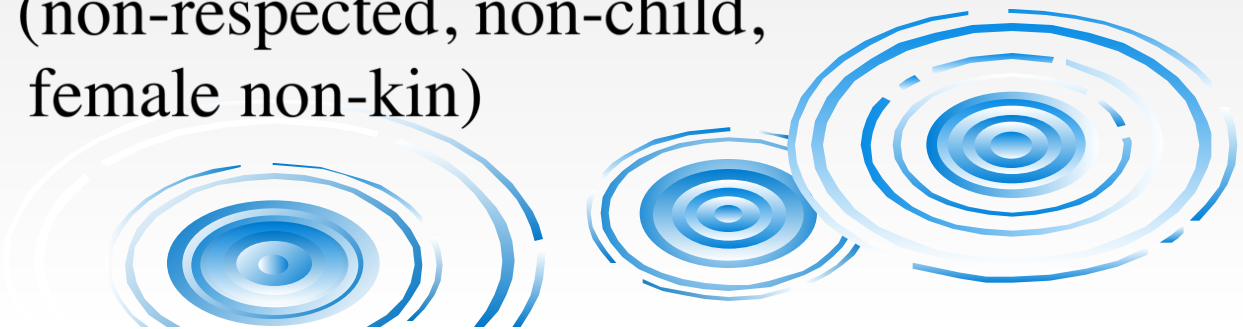
slok’	**naj**	pel	**no’**	cheh	c’ej’iñ
bought	CL	Peter	CL	horse	black

‘Peter bought the black horse.’

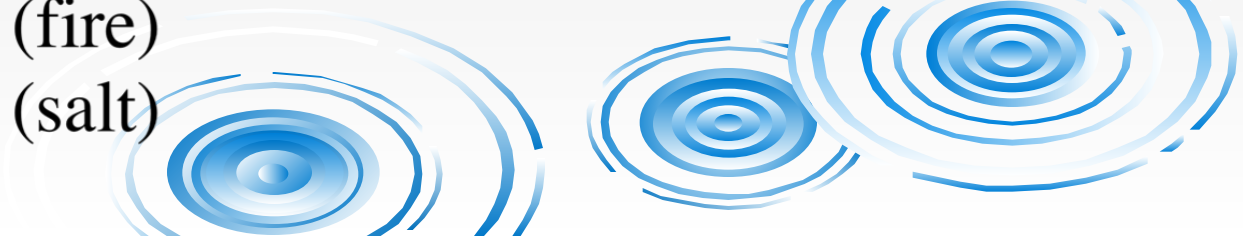
Colette Grinevald Craig. 1979. Jacaltec: Field Work in Guatemala. In Timothy Shopen, ed. *Languages and their Speakers*. Philadelphia: University of Pennsylvania Press, pp. 3–57.

Jacaltec classifiers for peopl

comam (male deity)
comi' (female deity)
ya' (respected non-deity)
unin (infant)
ho' (non-respected non-infant, male kin)
xo' (non-respected, non-infant, female kin)
naj (non-respected, non-child, male non-kin)
ix (non-respected, non-child, female non-kin)



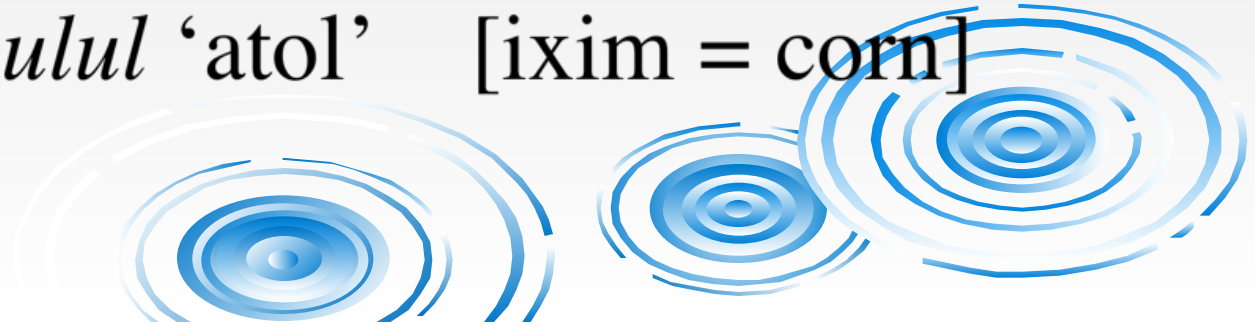
metx	(dog)
no'	(animal, animal products)
ixim	(corn, corn products, wheat, wheat products)
tx'al	(thread)
tx'añ	(fiber rope)
k'ap	(cloth)
te'	(plant, plant products)
ha'	(water)
ch'en	(stone, metal, glass)
tx'otx'	(dirt)
k'a'	(fire)
atz'am	(salt)



Classifiers point to the primary substance out of which a product is made:

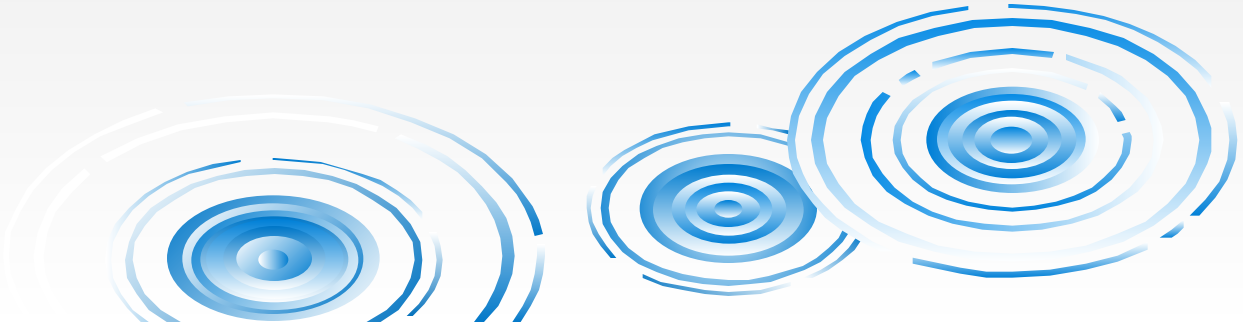
Drinks:

ha' *ha'*	'water'	[ha'= water]
no' *lech*	'milk'	[no' = animal]
te' *cape*	'coffee'	[te' = plant]
ixim *ulul*	'atol'	[ixim = corn]



New words get added to system based on what material they are made out of:

te' cuchara 'wooden spoon'
ch'eñ cuchara 'metal spoon'



Halkomelem	Jacaltec
people=one classifier	people=many classifiers
fowl, fish, sea life, game	dog versus others
house, canoe, containers	corn, water, salt
shape and function	material

References: Hul'q'umi'num' Classifiers

Gerdts, Donna B., & Mercedes Q. Hinkson (2004) Salish numeral classifiers: A lexical means to a grammatical end, *Sprachtypologie und Universalien-forschung 57: 2/3, 247–279.*

Gerdts, Donna B., Mercedes Q. Hinkson & Thomas E. Hukari (2002) Numeral classifiers in Hul'q'umi'num', *ICNSL 37,* 147–180.

Classifiers

- Aikhenvald, Alexandra Y. (2000) *Classifiers: A typology of noun categorization devices.* Oxford Studies in Typology and Linguistic Theory. Oxford: Oxford University Press.
- Allan, Keith (1977) Classifiers, *Language* 53.2:285–311.
- Denny, J. Peter (1979): The 'extendedness' variable in classifier semantics: Universal features and cultural variation, in Madeleine Mathiot, ed., *Ethnolinguistics: Boas, Sapir, and Whorf revisited*, pp. 97–119. The Hague: Mouton.
- Friedrich, Paul (1970) Shape in grammar, *Language* 46.2:379–407.

Hul'q'umi'num' Lexical Suffixes

- Gerdts, Donna B. (2003) The morphosyntax of Hul'q'umi'num' lexical suffix. *IJAL* 69: 345–356.

- Gerdts. Donna B. (2004) Combinatory conditions on Hul'q'umi'num' Causatives, *Linguistics* 42:767–789.

- Gerdts, Donna B., and Mercedes Hinkson (2004) The grammaticalization of Hul'q'umi'num' FACE into a dative applicative suffix, *IJAL* 70: 227–25-.

Salish Lexical Suffixes

- Gerdts, Donna B., & Mercedes Q. Hinkson (1996): Salish lexical suffixes: a case of decategorialization, in *Proceedings of the Conference on Conceptual Structure, Discourse and Language*, ed. Adele Goldberg, 163–176. Stanford: CSLI.
- Hinkson, Mercedes Q. (1999): *Salishan lexical suffixes: A study in the conceptualization of space*. Ph.D. dissertation, Simon Fraser University.
- Hinkson, Mercedes Q. (2001): The semantics of the lexical suffix **wil, ICNSL 36,* 155–174.
- Kinkade, M. Dale (1998): Origins of Salishan lexical suffixes, *ICNSL 33*, 266–295.

Images

Edward S. Curtis. 1997. *The North American Indian: The Complete Portfoloios.* Köln: Tashen.

Ulli Steltzer. 1994. *Indian Artists at Work.* Vancouver: Douglas & McIntyre.

Hilary Stewart. 1984. Cedar: *Tree of life to the Northwest Coast Indians*T. Vancouver: Douglas & McIntyre.

Wayne Suttles, ed. 1990. *Handbook of North American Indians. Vol. 7: Northwest Coast*. Washington: Smithsonian Institute.

Maps designed by Donna Gerdts and Michelle Parent

Photography: David Bodaly, Kaoru Kiyosawa

bentwood box: Jeffrey Dartwin