

A comparison of landscape categorization in Inuit-Yupik and Dene languages in Alaska



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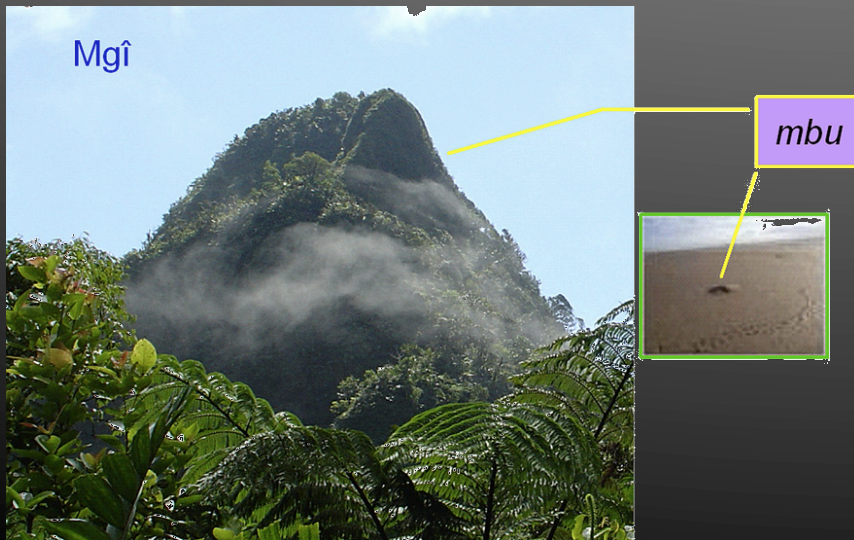


Language in landscape

- “From a geological point of view [landscape] is mere deformation of a continuous surface, so that discrete units and categories must be the construction of the cognizer.” (Levinson 2008)
- “Different language groups/cultures have different ways of conceptualizing landscape, as evidenced by different terminology and ways of talking about and naming landscape features.” (Mark, Turk & Stea 2007)
- “Landscape features are more likely to be driven by their ‘affordances’, by what they are good for in human activities and purposes.” (Levinson 2008)
- “Landscape terms tend to be organised around an imposed cognitive scheme or template” (Levison & Burenhult 2009)

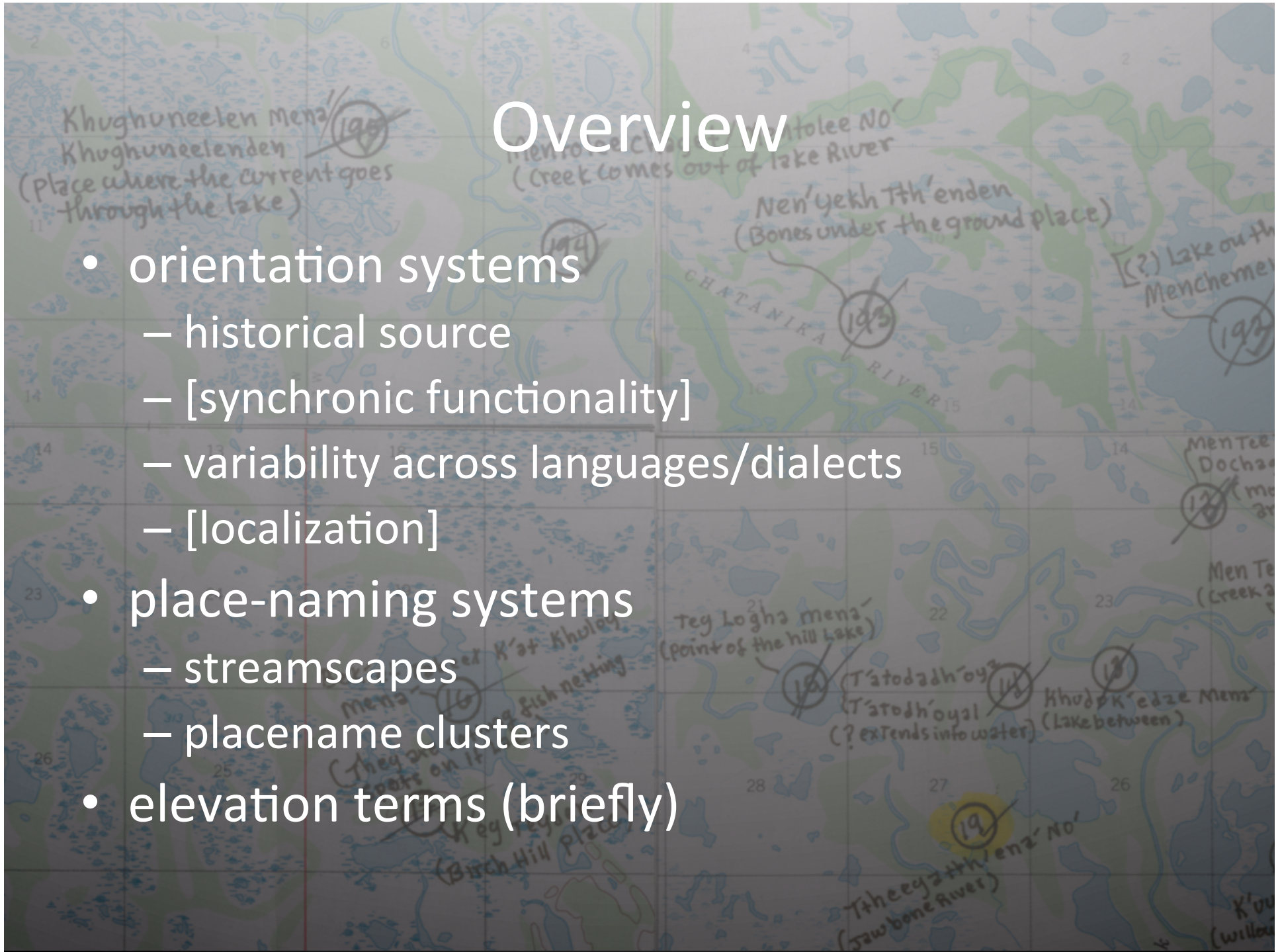
Not all landforms are created equal

- Landscape terms delineate an ontological system, similar to kinship, flora, fauna, astronomy, etc.
- Yélî Dnye lacks generic term mountain (Levinson 2008)
 - *mbu* denotes 'convex', incl. mountain and anthill
- W Pantar lacks a generic term river (Holton 2011)
 - water features classified as to amount of brine (hali, masi, mata)

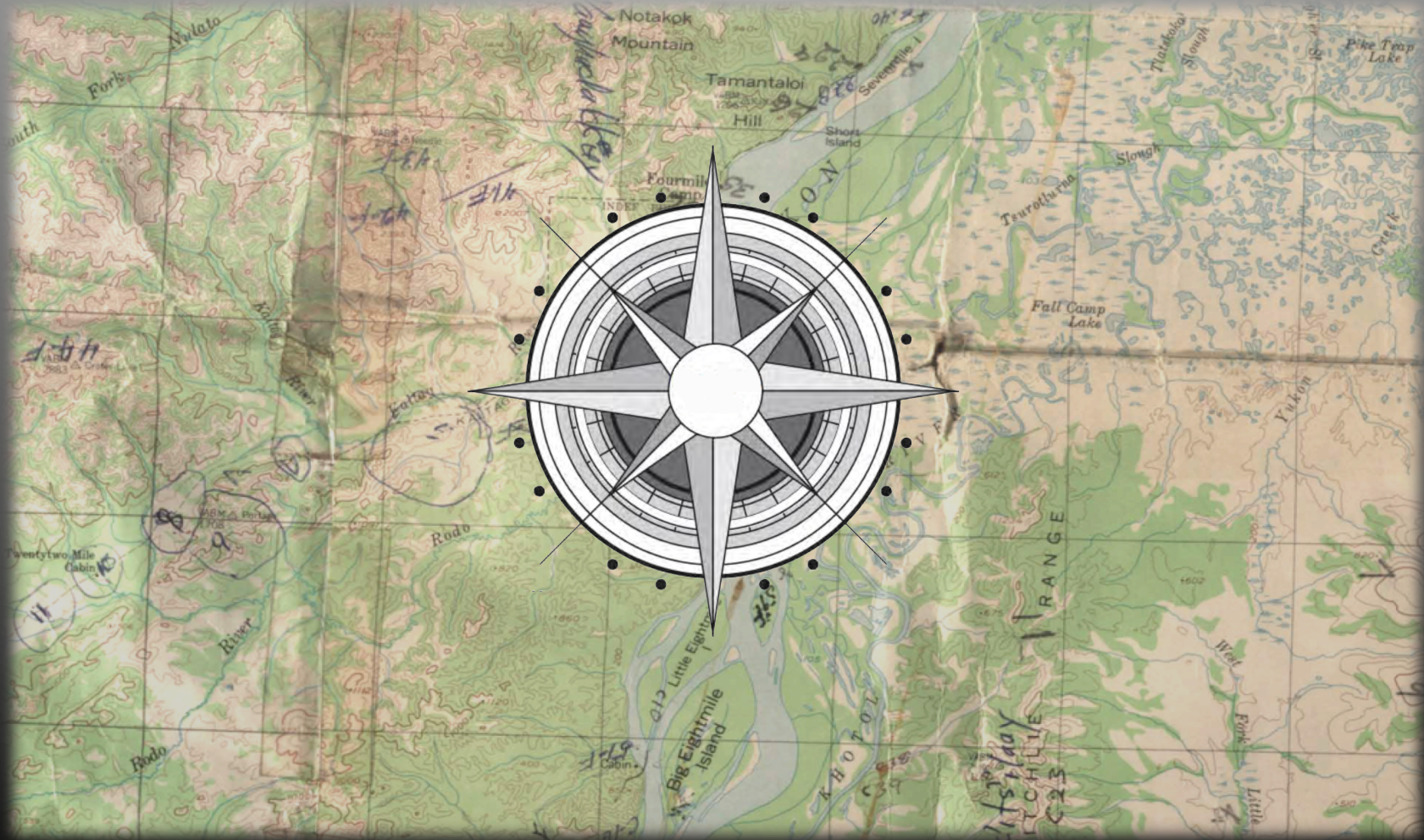


Overview

- orientation systems
 - historical source
 - [synchronic functionality]
 - variability across languages/dialects
 - [localization]
- place-naming systems
 - streamscapes
 - placename clusters
- elevation terms (briefly)



Orientation Systems



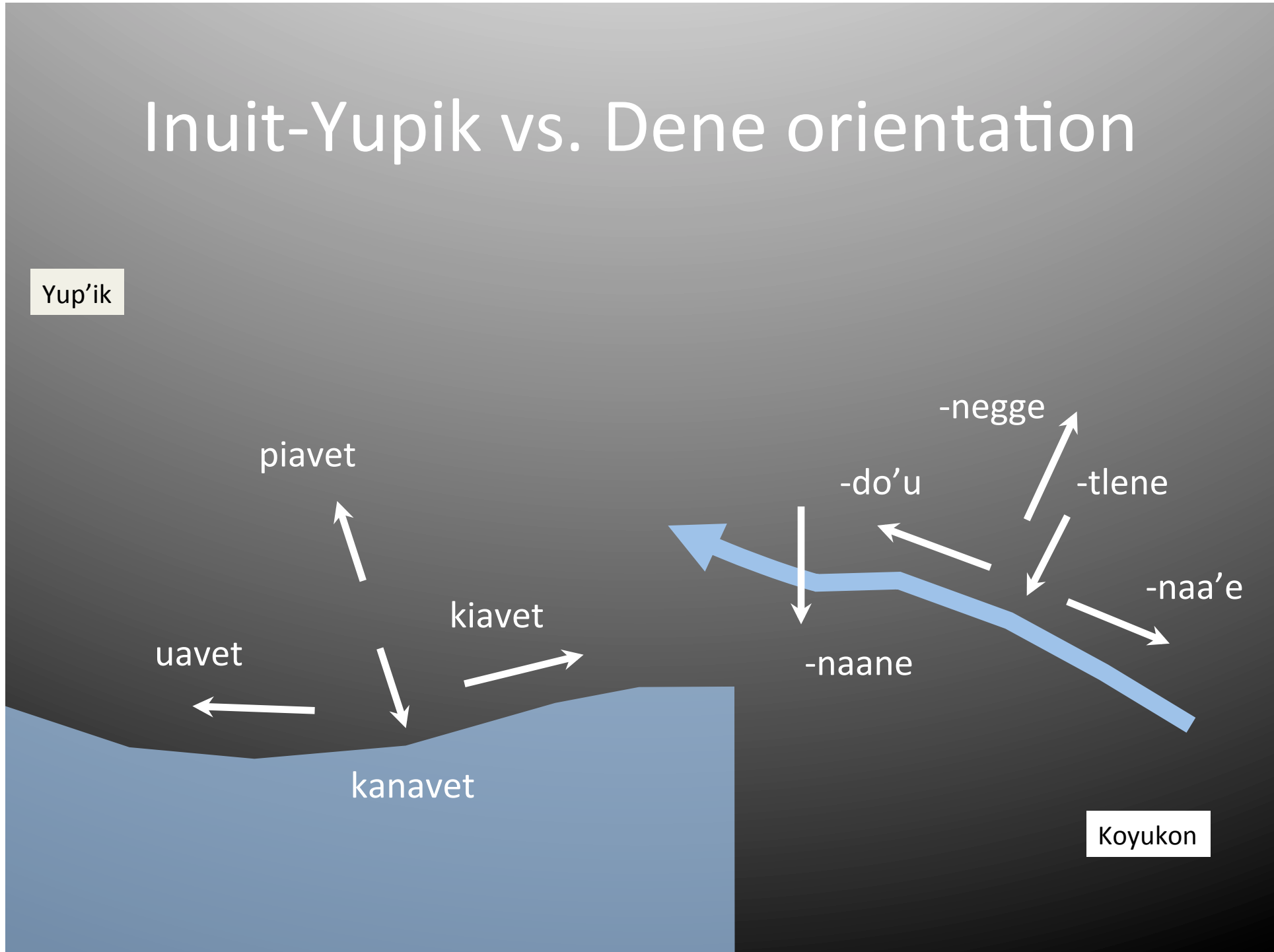
Inuit-Yupik vs. Dene orientation

Yup'ik

piavet
uavet
kanavet
kiavet

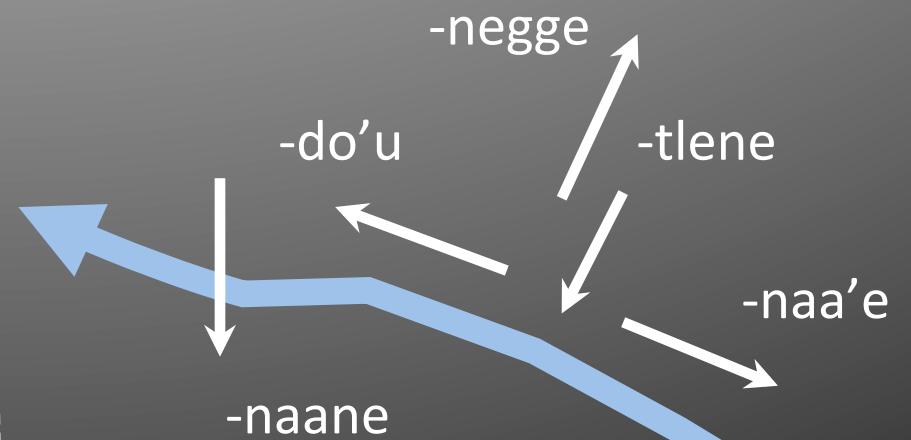
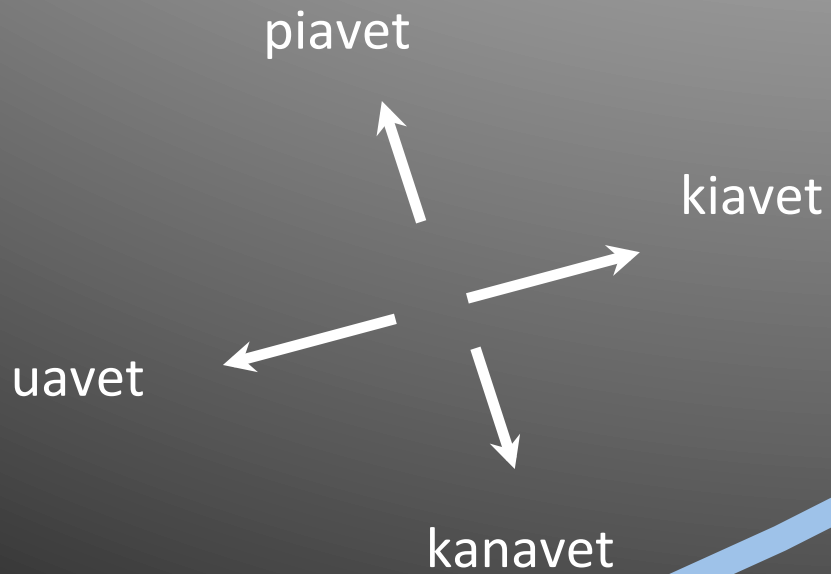
-negge
-do'u
-tlene
-naane
-naa'e

Koyukon



Inuit-Yupik vs. Dene orientation

Yup'ik



Koyukon

Proto-Inuit-Yupik demonstrative roots

	RESTRICTED		EXTENDED		OBSCURED	
PROX	*uv-		*mað-		*im-	
	ACC	NON-ACC	ACC	NON-ACC	ACC	NON-ACC
DIST	*kiv-	*kiγ-	*qav-	*qay-	*qam-	*qakəm-
LEVEL	*iŋ-	*ik-	*av-	*ay-	*am-	*akəm-
DOWN	*kan-/ *kað-	*uγ-	*un-	*unəγ-	*cam-	*cakəm-
UP	*piŋ-	*pik-	*pav-	*pay-	*pam-	*pakəm-

(Fortescue, Jacobson, and Kaplan 2010)

Elevation-based systems are not uncommon

	VISIBLE		NON-VISIBLE	
	SPEC	NON-SPEC	SPEC	NON-SPEC
PROX	saiga	aiga	sigamme	igamme
DIST	saina	aina	sinamme	inamme
UP	spaugu	paugu	spaume	paume
LEVEL	sraugu	daugu	sraume	daume
DOWN	smaugu	maugu	smaume	maume

Elevation-based systems are not
uncommon

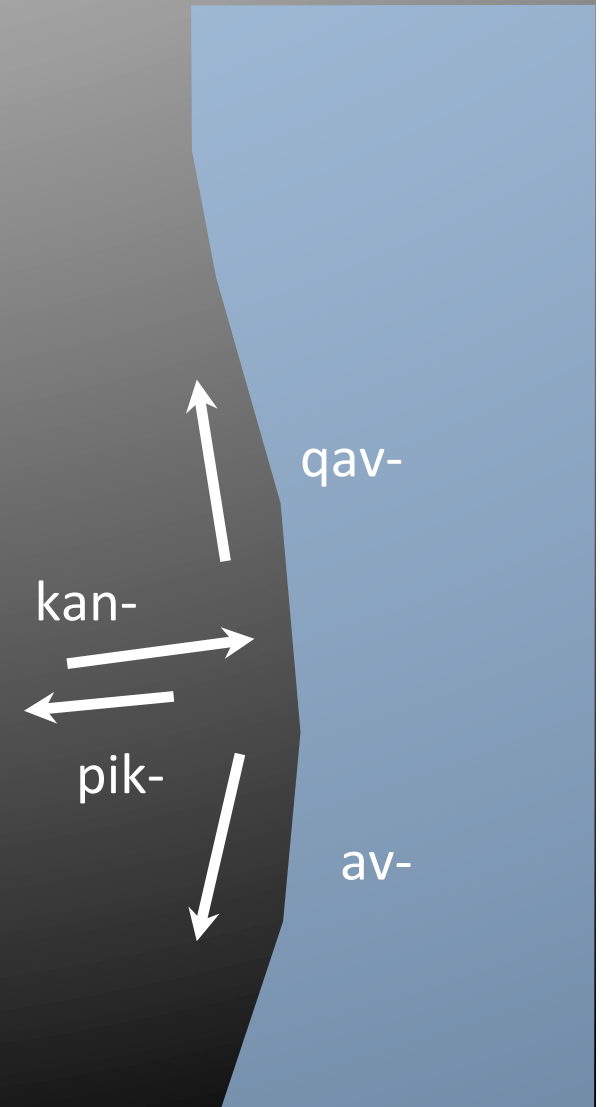


Greenlandic demonstrative roots

	RESTRICTED		EXTENDED		OBSCURED	
PROX	u-		ma-		(im-)	
	ACC	NON-ACC	ACC	NON-ACC	ACC	NON-ACC
DIST		kig-	qav-		qam-	
LEVEL		ik-	av-			
DOWN	kan-				sam-	
UP		pik-	pav-			

Greenlandic demonstrative roots

	RESTRICTED		EXTENDED	
PROX	u-		ma-	
	ACC	NON-ACC	ACC	NON-ACC
DIST		kig-	qav-	
LEVEL		ik-	av-	
DOWN	kan-			
UP		pik-	pav-	



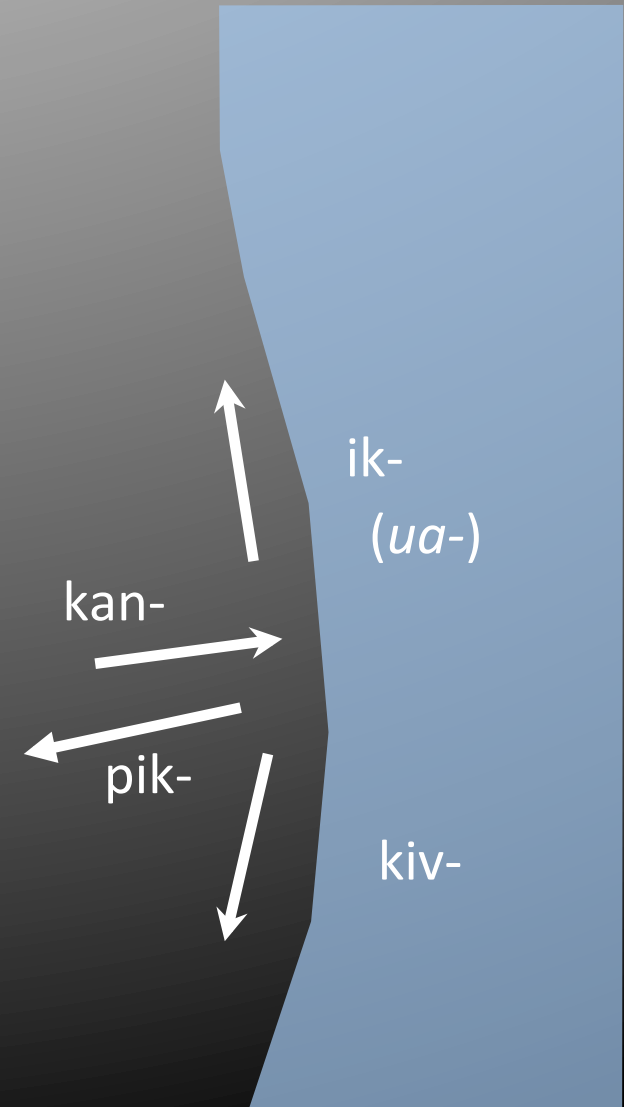
Inupiaq (North Slope) demonstrative roots

	RESTRICTED		EXTENDED		OBSCURED	
PROX	uv-		ma-		sam-	
DIST	kiv-	kig-	qav-	qag-	qam-	qakim-
LEVEL		ik-	av-	ag-	am-	akim-
DOWN	kan-		un-		sam-	sakim-
UP		pik-		pag-	pam-	pakim-

(MacLean, to appear)

Inupiaq (North Slope) demonstrative roots

	RESTRICTED	EXTENDED		
PROX	uv-		ma-	
DIST	kiv-	kig-	qav-	qag-
LEVEL		ik-	av-	ag-
DOWN	kan-		un-	
UP		pik-		pag-

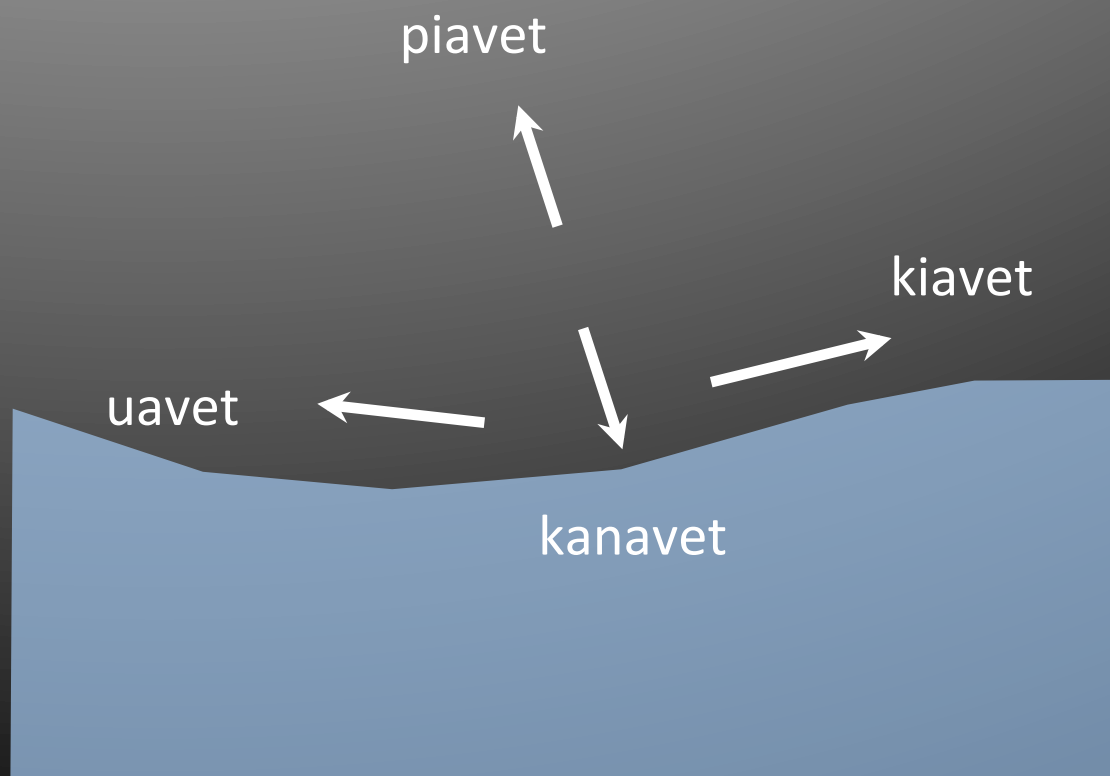


Alaskan Yup'ik demonstrative adverbs

	RESTRICTED		EXTENDED		OBSCURED	
PROX	wavet		maavet			
	ACC	NON-ACC	ACC	NON-ACC	ACC	NON-ACC
DIST	kiavet	keggavet	qavavet	qagaavet	qamavet	qakmavet
LEVEL	yaavet	ikavet	avavet	agaavet	amavet	akmavet
DOWN	kanavet	uavet	unavet	un'gavet	camavet	cakmavet
UP	piavet	pikavet	pavavet	pagaavet	pamavet	pakmavet

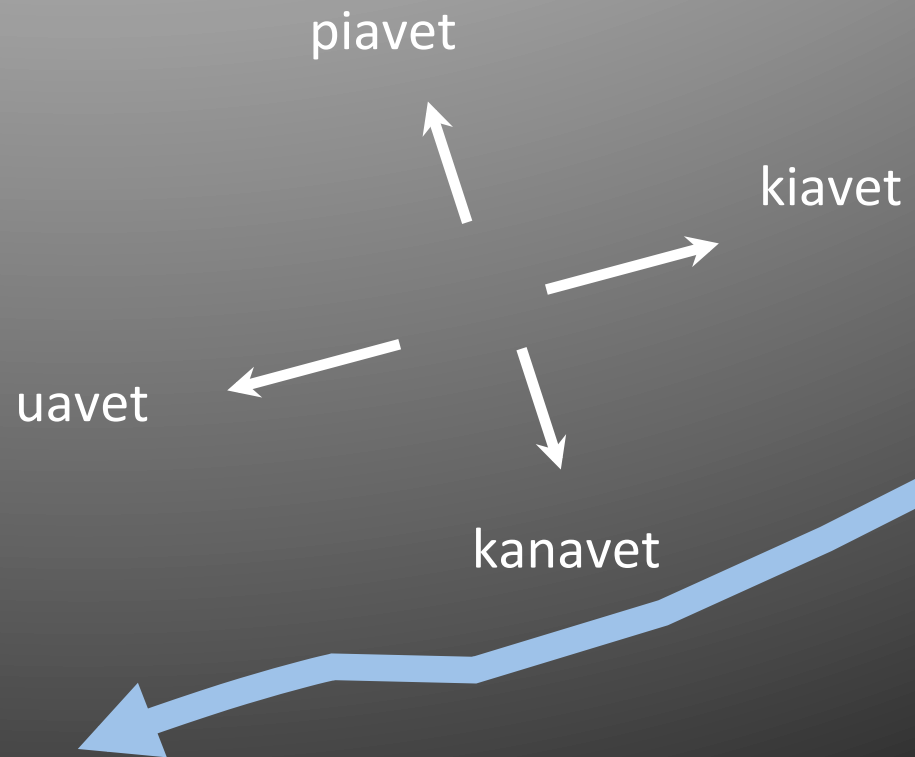
Alaskan Yup'ik dem. adverbs in coastal system

	RESTRICTED	
PROX	wavet	
	ACC	NON-ACC
DIST	kiavet	keggavet
LEVEL	yaavet	ikavet
DOWN	kanavet	uavet
UP	piavet	pikavet



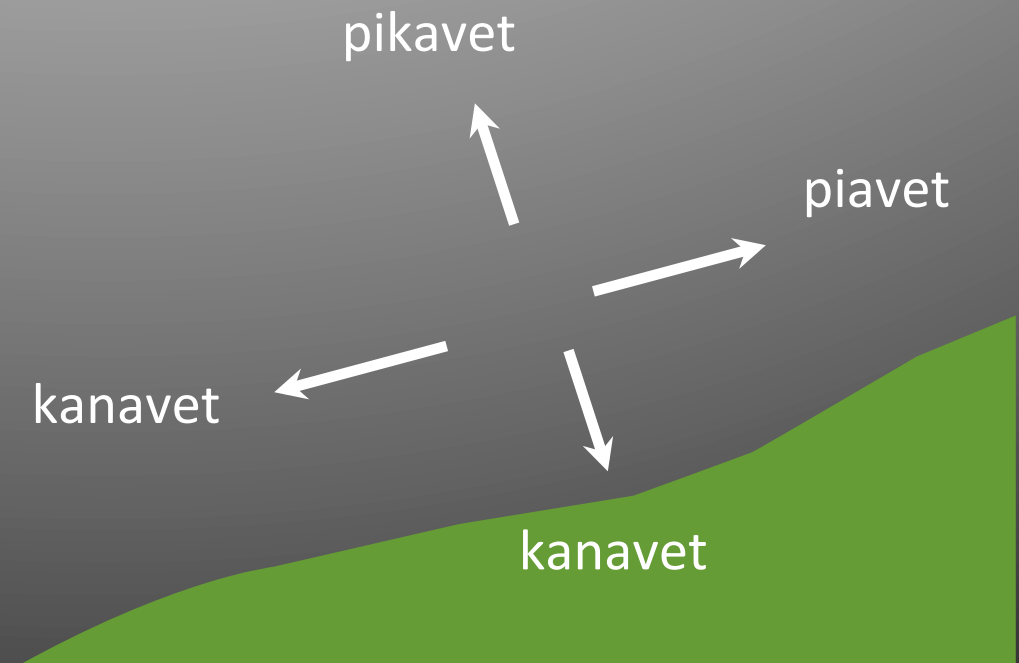
Alaskan Yup'ik dem. adverbs in riverine system

	RESTRICTED	
PROX	wavet	
	ACC	NON-ACC
DIST	kiavet	keggavet
LEVEL	yaavet	ikavet
DOWN	kanavet	uavet
UP	piavet	pikavet



Alaskan Yup'ik dem. adverbs on a slope

	RESTRICTED	
PROX	wavet	
	ACC	NON-ACC
DIST	kiavet	keggavet
LEVEL	yaavet	ikavet
DOWN	kanavet	uavet
UP	piavet	pikavet



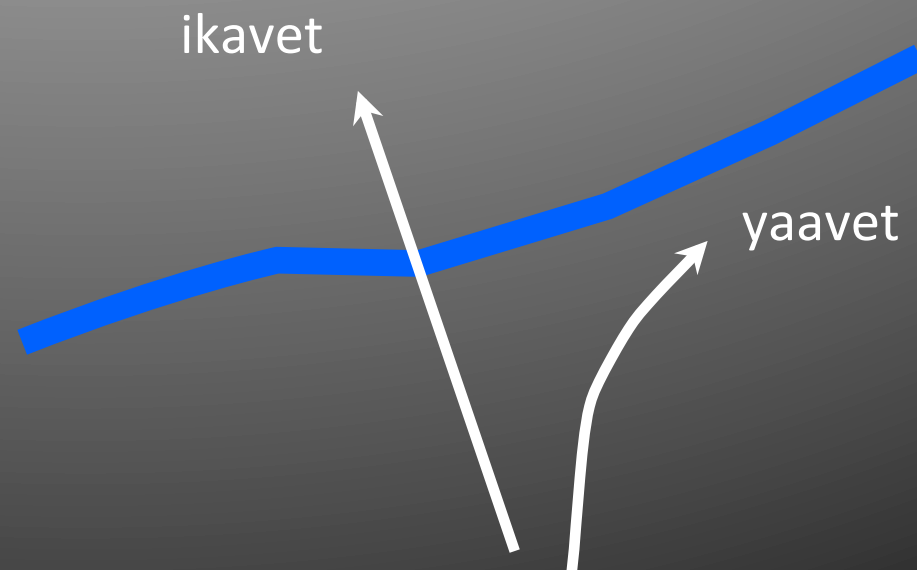
Alaskan Yup'ik dem. adverbs in a house

	RESTRICTED	
PROX	wavet	
	ACC	NON-ACC
DIST	kiavet	keggavet
LEVEL	yaavet	ikavet
DOWN	kanavet	uavet
UP	piavet	pikavet



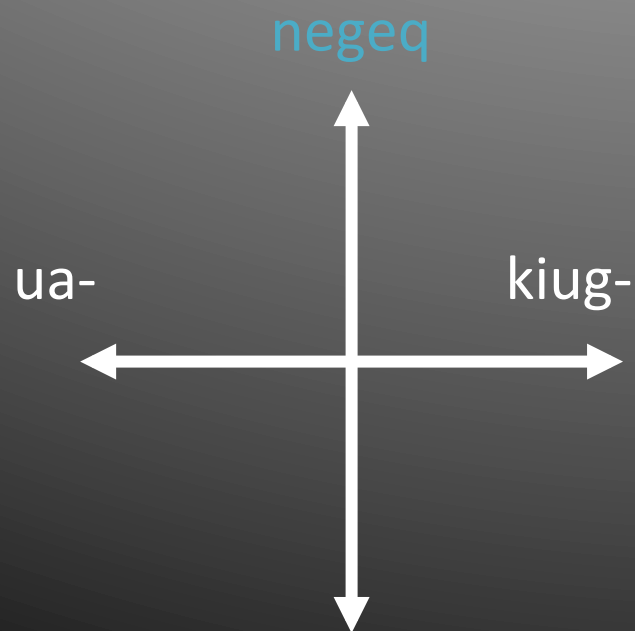
Alaskan Yup'ik dem. adverbs across a barrier

	RESTRICTED	
PROX	wavet	
	ACC	NON-ACC
DIST	kiavet	keggavet
LEVEL	yaavet	ikavet
DOWN	kanavet	uavet
UP	piavet	pikavet



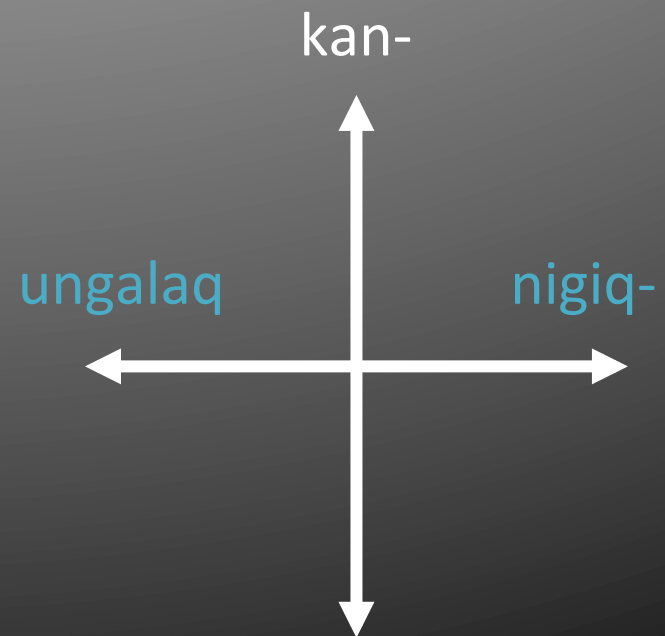
Extensions from local to global

- combine wind terms with demonstratives (Fortescue 1988, 2011)



Yup'ik

ungalaq



Iñupiaq

pik-

Proto-Dene directional stems

	ALLATIVE	PUNCTUAL
UPSTREAM	*niʔ	*ni'-d
DOWNSTREAM	*daʔ	*da'-d
INLAND	*nəG-ə	*nəχ
WATERWARD	*tsənʔ	*tsj'-d
AHEAD	*nəs-ə	*nəs
ACROSS	*ŋa·nʔ	*ŋa'·-d
AWAY	*ʔanʔ	*ʔa'·-d
ABOVE	*-ə	*-d
BELOW	*dəG-ə	*dəχ

Koyukon directional stems

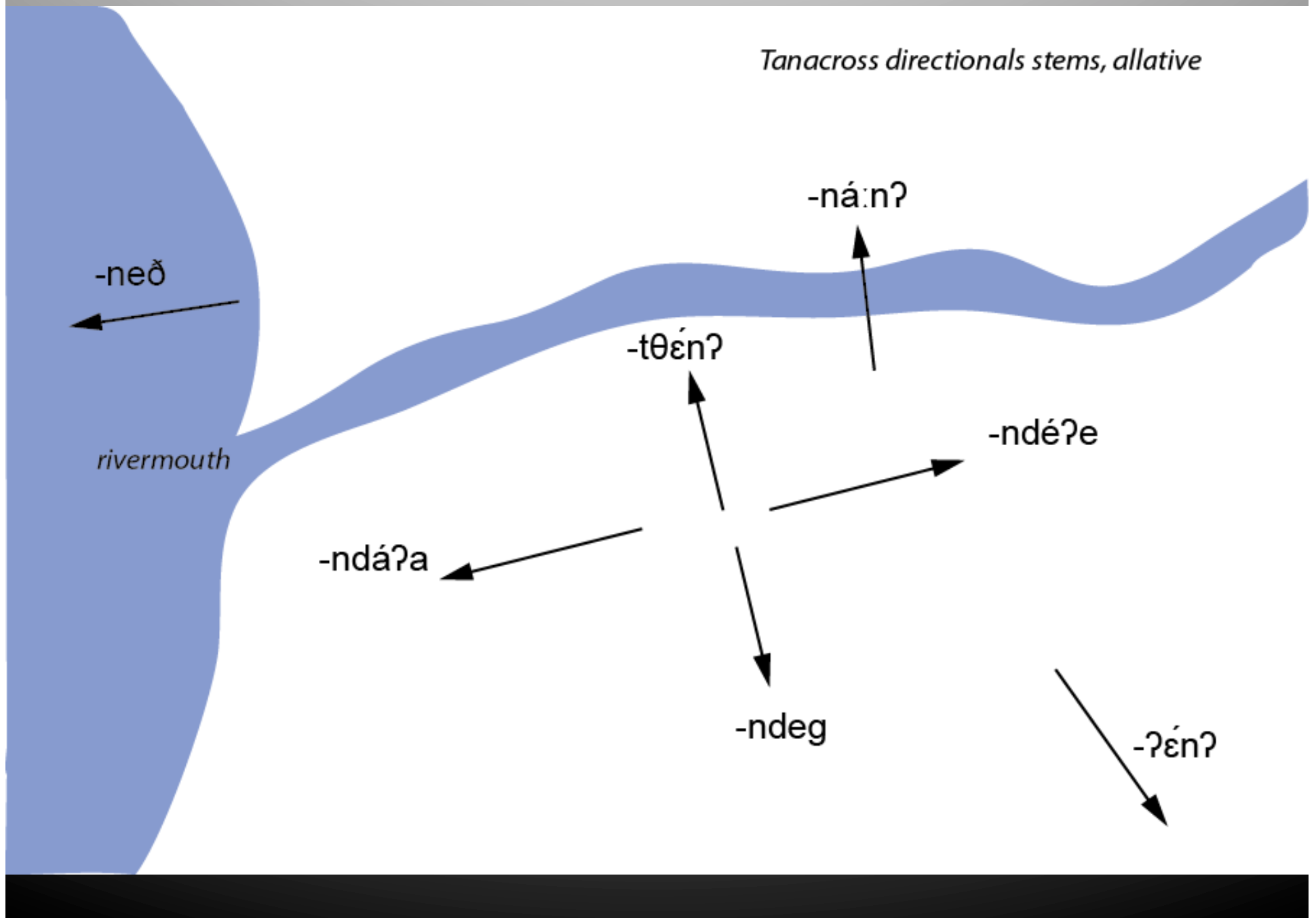
	ALLATIVE	ABLATIVE	PUNCTUAL	AREAL
UPSTREAM	-ndéʔe	-ndî·dz	-ndé·	-ndí·g
DOWNSTREAM	-ndá·ʔa	-ndâ·dz	-nda·	
INLAND	-ndeg	-ndêdz	-ndég	-ndóg
WATERWARD	-tθénʔ		-tθí·	-tθúg
AHEAD	-neð			-noð
ACROSS	-ná·nʔ	-ndáz	-ná·n	-ndás
AWAY	-ʔénʔ	-ʔáz		-ʔóg
ABOVE	-deg	-dêdz	-dé·	
BELOW	-ʒégʔ	-ʒêz	-ʒé·	-ʒóg

Tanacross directional stems

PROX	da-
DIST ₁	na-
DIST ₂	ya-
DIST ₃	yaʔa-
NEUT	a-

	ALLATIVE	ABLATIVE	PUNCTUAL	AREAL
UPSTREAM	-ndéʔe	-ndî·dz	-ndé·	-ndí·g
DOWNSTREAM	-ndá·ʔa	-ndâ·dz	-nda·	
INLAND	-ndeg	-ndêdz	-ndég	-ndóg
WATERWARD	-tθénʔ		-tθí·	-tθúg
AHEAD	-nεđ			-nođ
ACROSS	-ná·nʔ	-ndáz	-ná·n	-ndás
AWAY	-ʔénʔ	-ʔáz		-ʔóg
ABOVE	-deg	-dêdz	-dé·	
BELOW	-ʒégʔ	-ʒêz	-ʒé·	-ʒóg

Tanacross directionals stems, allative



-neõ

rivermouth

-ndá?a

-tθén?

-ndeg

-ná:n?

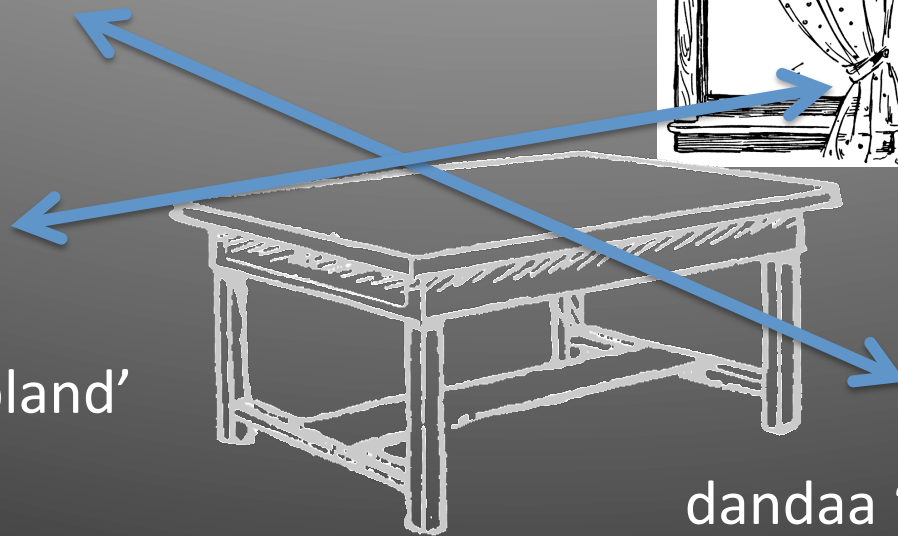
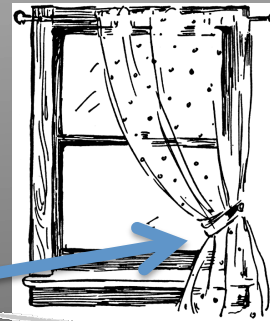
-ndé?e

-ʔén?

Tanacross directionals inside a house

dandee 'upstream'

daanaan 'across'

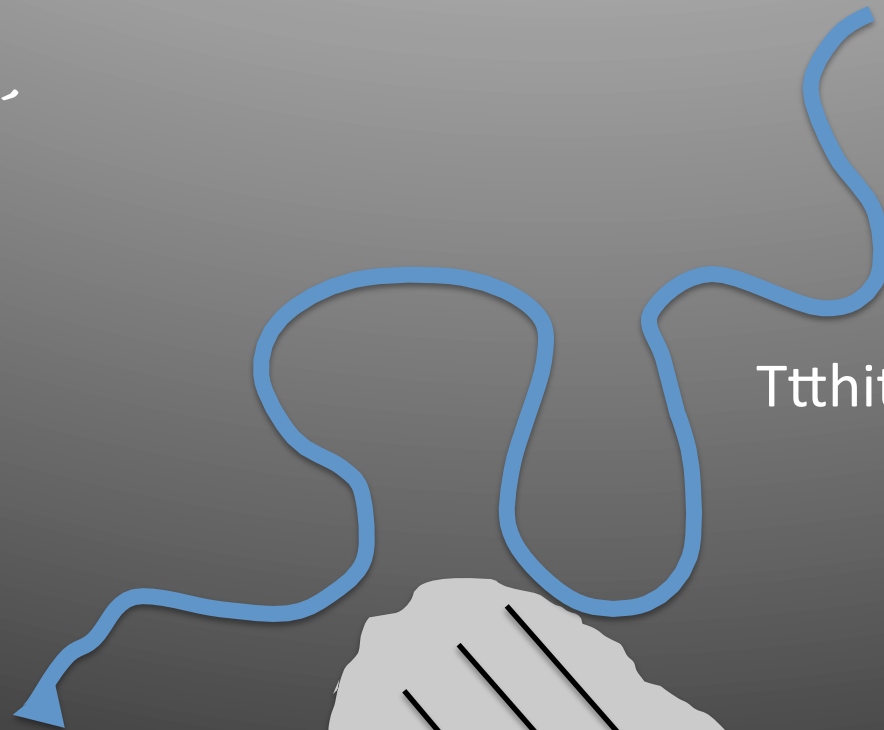


dandeg 'upland'

dandaa 'downstream'

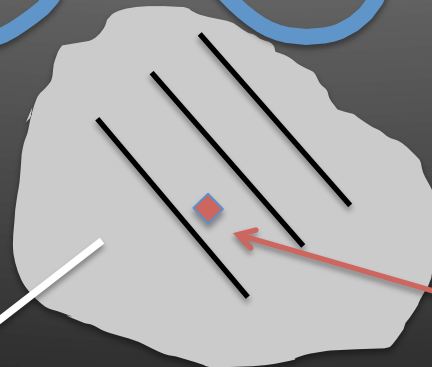
Tanacross village

'downstream'




Ttthitú' 'Tanana River'

'across'



house



Summary of Orientation Systems

- Inuit-Yupik
 - modern orientation systems derive from an elevation-based system, with addition of wind terms
 - individual languages draw from different parts of the original system
- Dene
 - modern orientation systems derive from original riverine system
 - individual languages preserve riverine orientation, differing only in the extent to which they elaborate on the original system by adding additional dimensions (suffixes indicating motion, prefixes indicating distance)

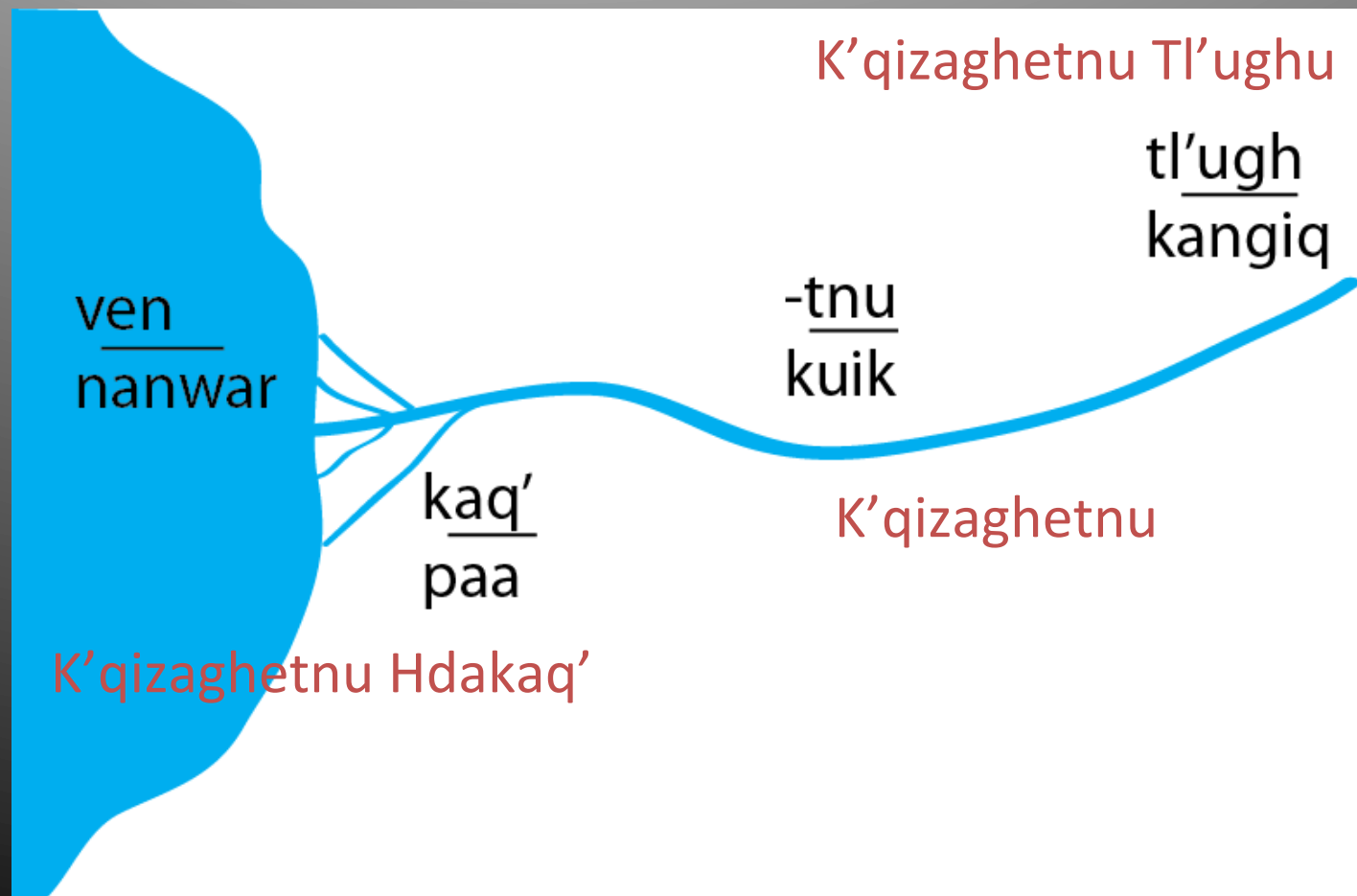
Place-naming strategies



Streamscape terms

Dena'ina

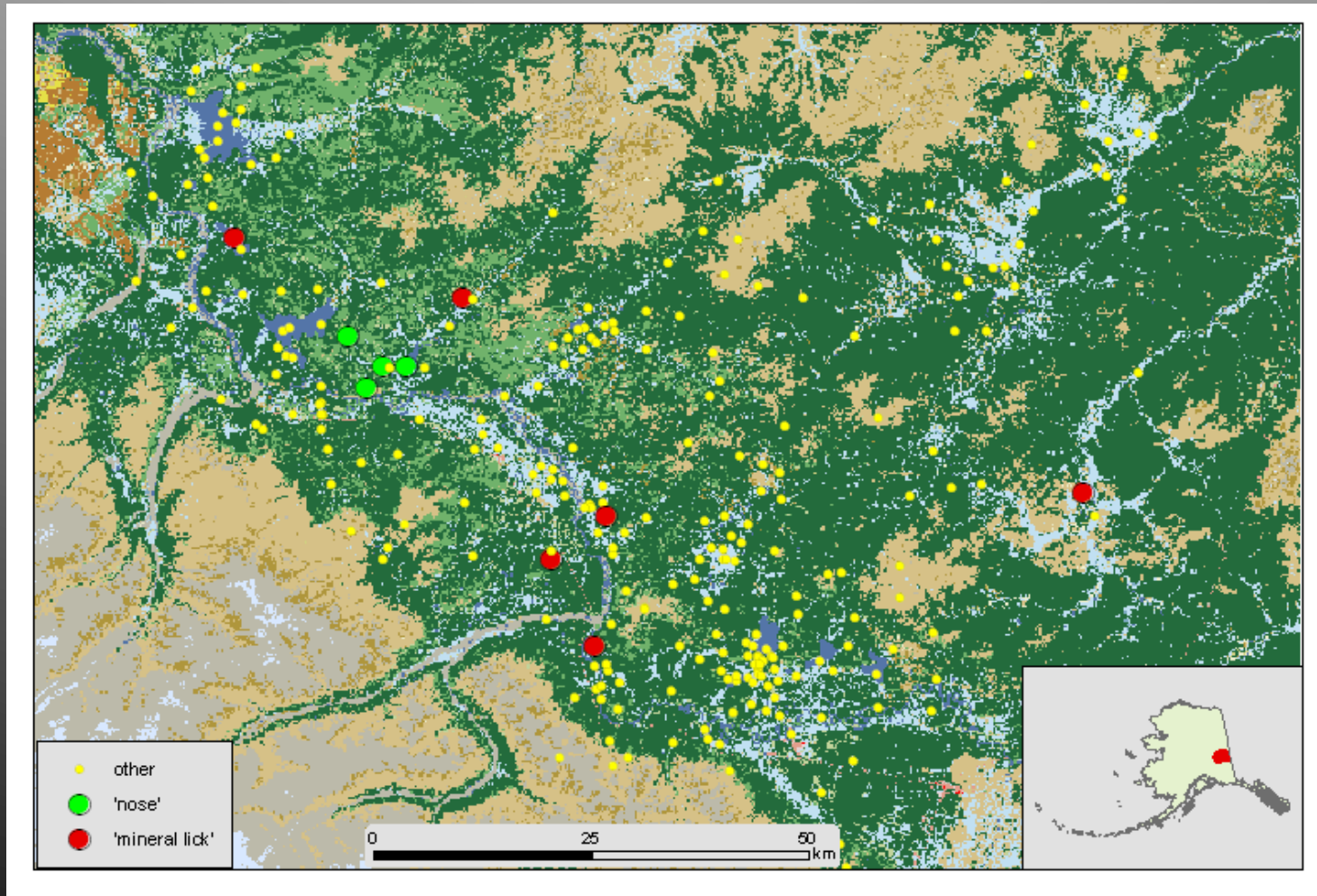
Yup'ik

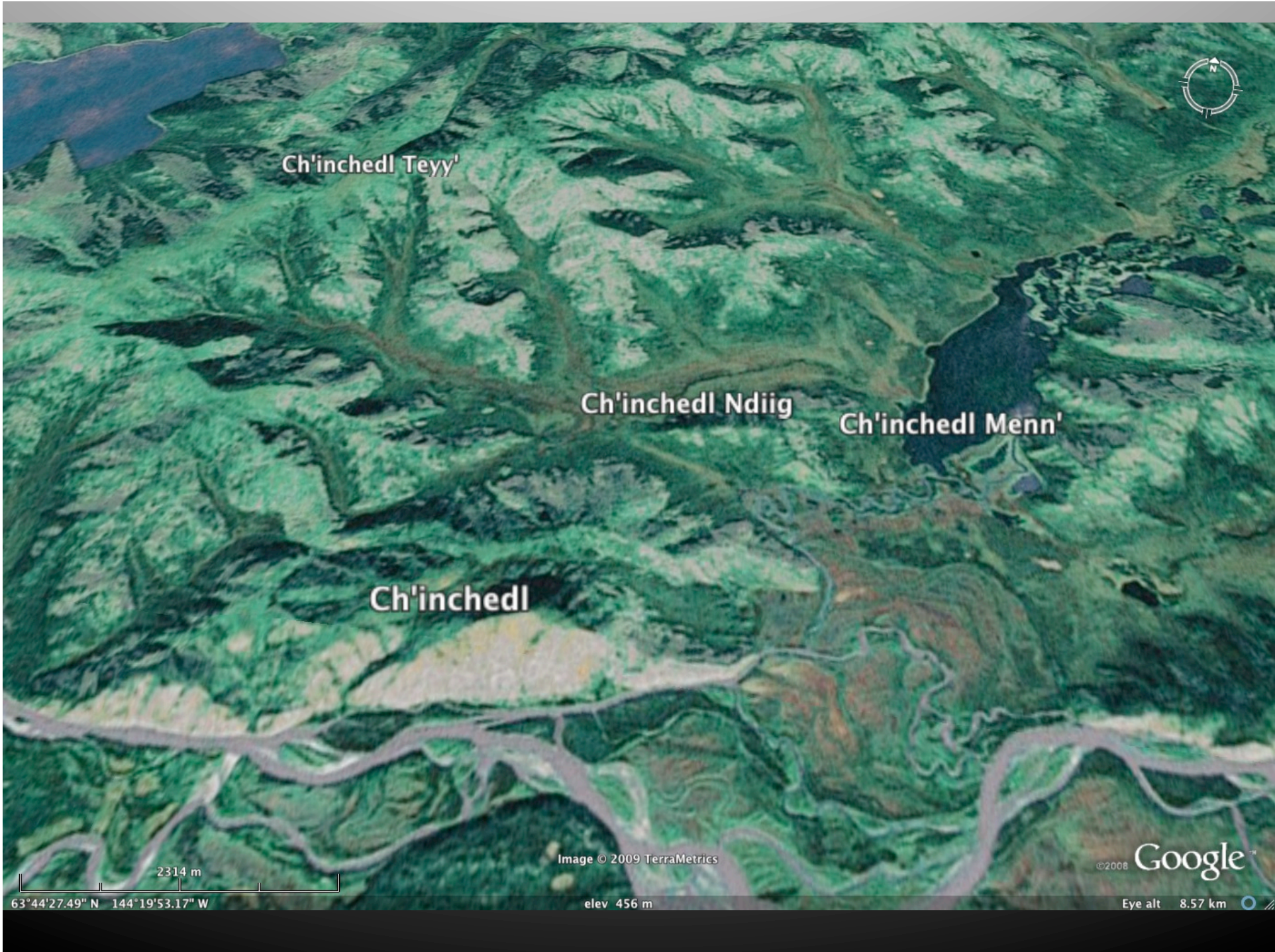


Dene streamscape terms regularly generate toponym clusters

- rigid toponymic structure
 - nominalized geomorphological verb
 - specific + generic (binomial)
- “generative”, in the sense that for any given specific, all generics can occur (Kari 2010, Levinson 2003)

Dene place name clusters





Ch'inchedl Teyy'

Ch'inchedl Ndiig

Ch'inchedl Menn'

Ch'inchedl

2314 m

Image © 2009 TerraMetrics

©2008 Google

63°44'27.49" N 144°19'53.17" W

elev 456 m

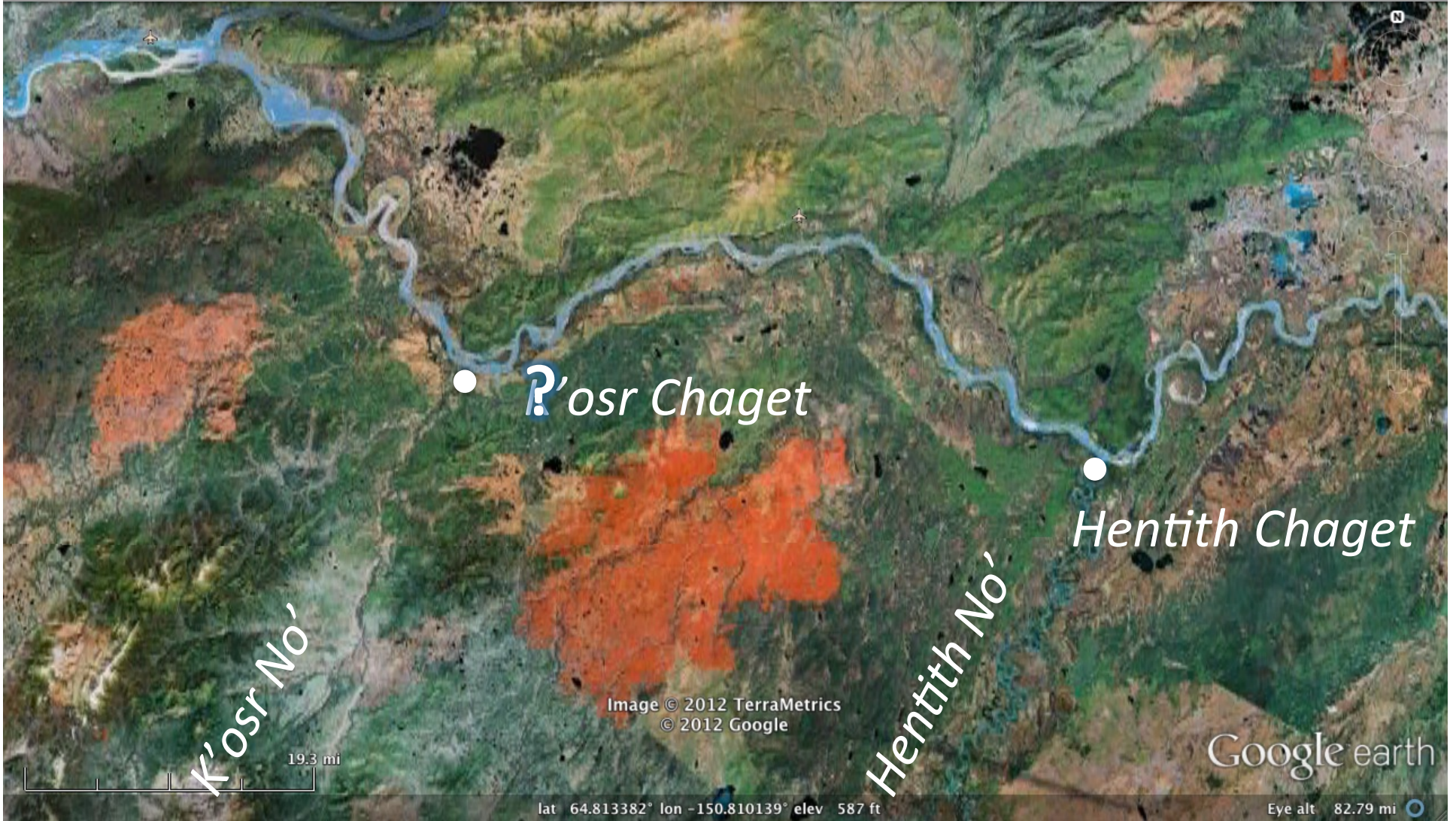
Eye alt 8.57 km

Inuit-Yupik directionals as a source for toponyms

- local demonstrative system plays minimal role in place naming
 - Kivalliñaq ‘Kivalina’
- global system based on winds may provide source of names
 - Negeqliq ‘St. Mary’s’
- majority of names do NOT use (local or global) directionals

Place names based on 'mouth'

- Inuit-Yup'ik *may* employ *paðə 'mouth' in place names
 - Dena'ina *K'qizaghetnu Hdakaq'*
 - Yup'ik *Teggalqum Kuigan Painga*
- Dene *kæq' 'mouth' *obligatory* when it applies
 - Deg Xinag *Jonetno' Xidochagg Deloy Chux*
 'big mountain at base of Jonetno''
 - Yup'ik *Kiturciigalnguq* 'place one cannot pass'



'polishing stone river'

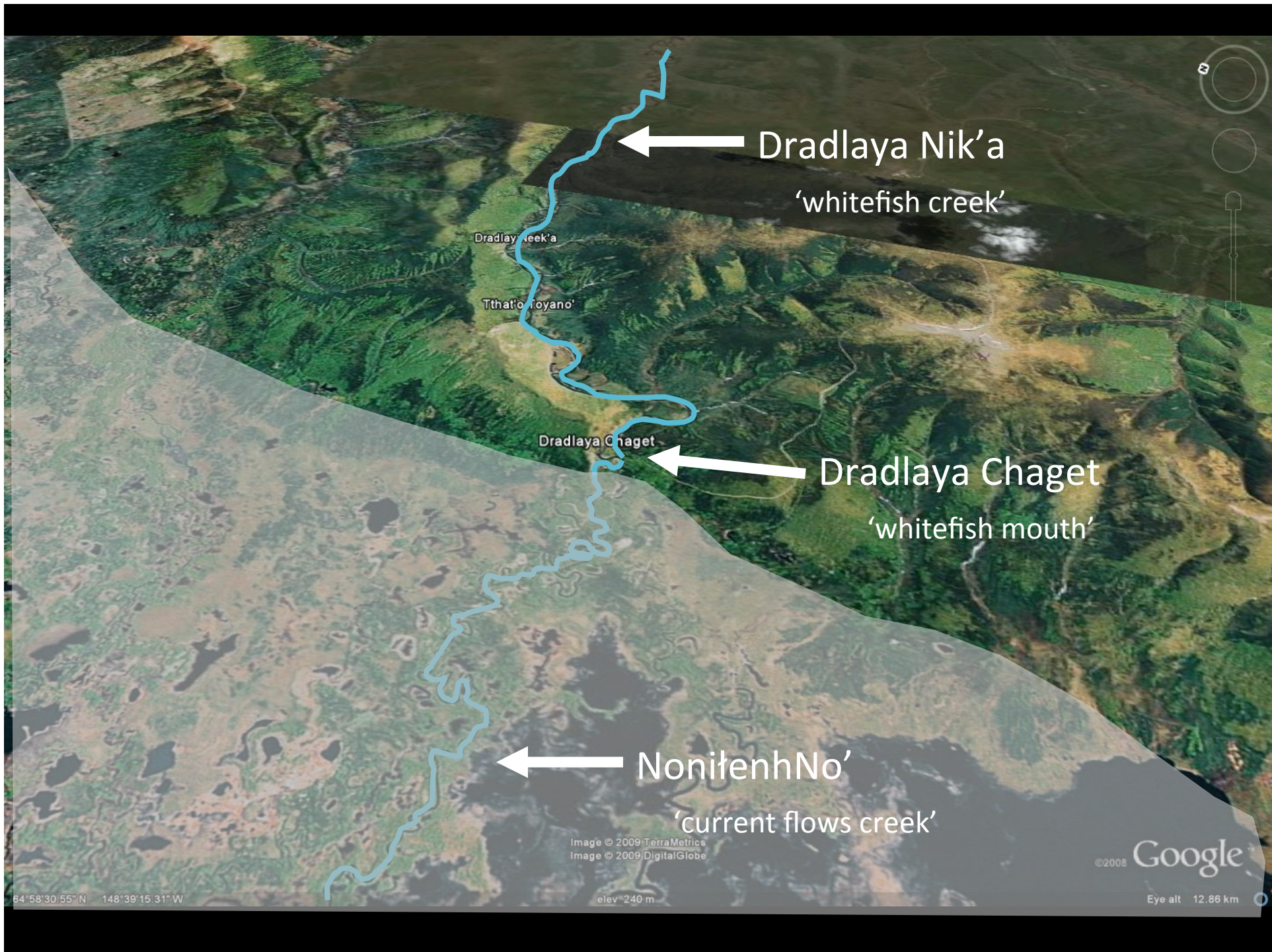
'? river'

*-kæq' in Alaskan Dene names

Tleneŋ Chaget	Rampart
Soŋ Chaget	Salcha
K'osr Chaget	Crossjacket
Ch'edzaya' Chaget	Bearpaw
Ch'eno' Khwdochaget	Chena
Mendees Cheeg	Healy Lake
Saages Cheeg	Ketchumstuck
Holjichak'	Holikachuk
Gitr'ingith Chagg	Anvik
K'qizaghetnu Hdakaq'	Stony River
Tsiis Tl'edze' Caegge	Chistochina
Tl'aticae'e	Copper Center
Aalaa Kkaakk'et	Allakaket
Hut'odlee Kkaakk'et	Hughes
Tochak'	McGrath

Differing semantic range

- Inuit-Yupik *paḏə ‘opening, entrance’ has broad semantics
 - Yup’ik *pai/paa* ‘mouth of river; outlet; opening of den, bottle, etc., cockpit of kayak’
- Dene *kæq’ ‘mouth’ restricted to landscape
 - distinguished from roots such as *du* ‘orifice’ and *zaq* ‘mouth (anat.)’



Dradlaya Nik'a
'whitefish creek'

Dradlaya Creek'a

Tthat'o'oyano'

Dradlaya Chaget

Dradlaya Chaget
'whitefish mouth'

NonifenhNo'
'current flows creek'

Image © 2009 TerraMetrics
Image © 2009 DigitalGlobe

©2008 Google™

64°58'30.55" N 148°39'15.31" W

elev 240 m

Eye alt 12.86 km

Dradlaya Chaget

Noneelen No'

Dradlay Neek'a
Tthat'oyano

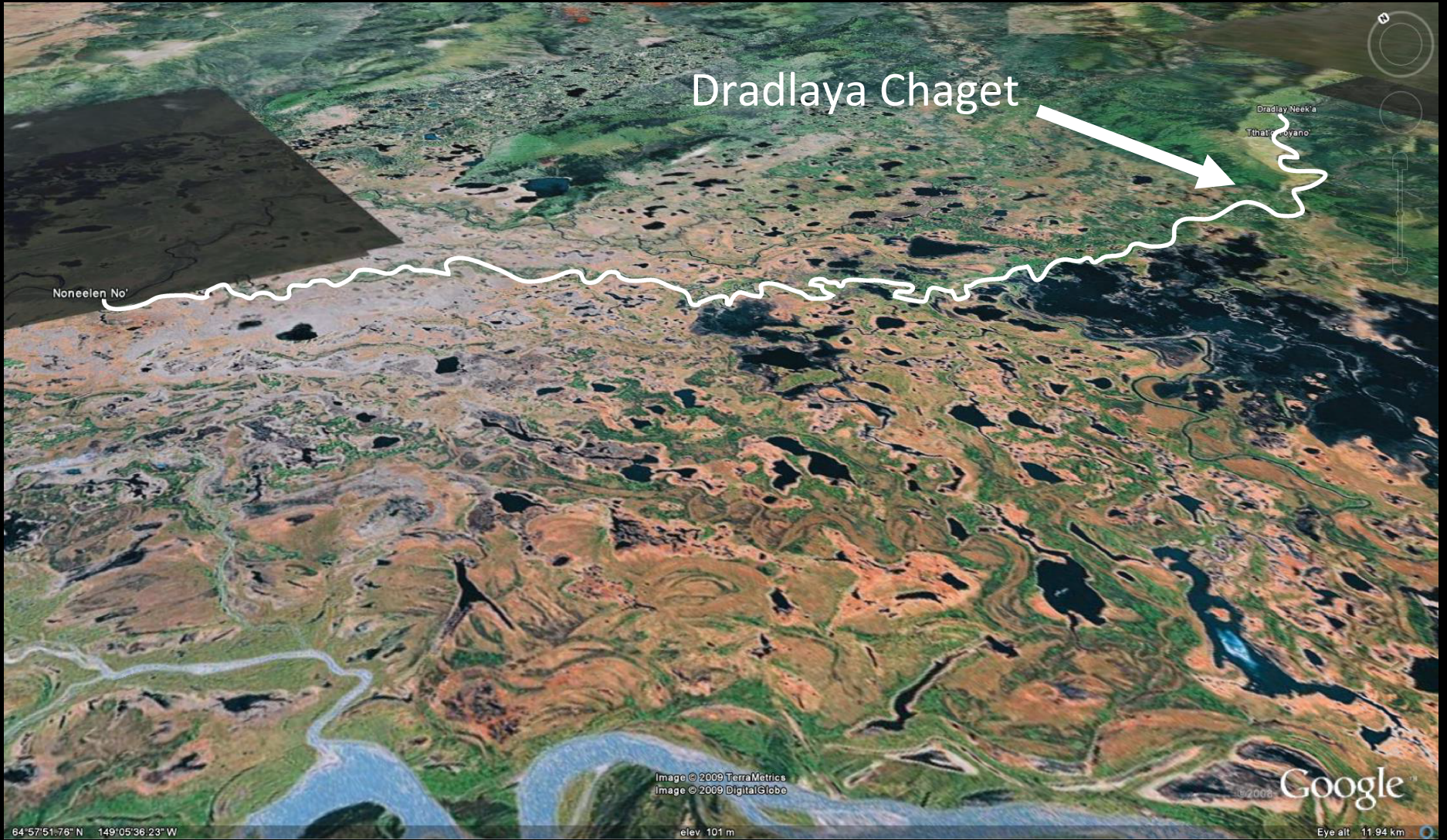
Image © 2009 TerraMetrics
Image © 2009 DigitalGlobe

© 2008 Google

64°57'51.76" N 149°05'36.23" W

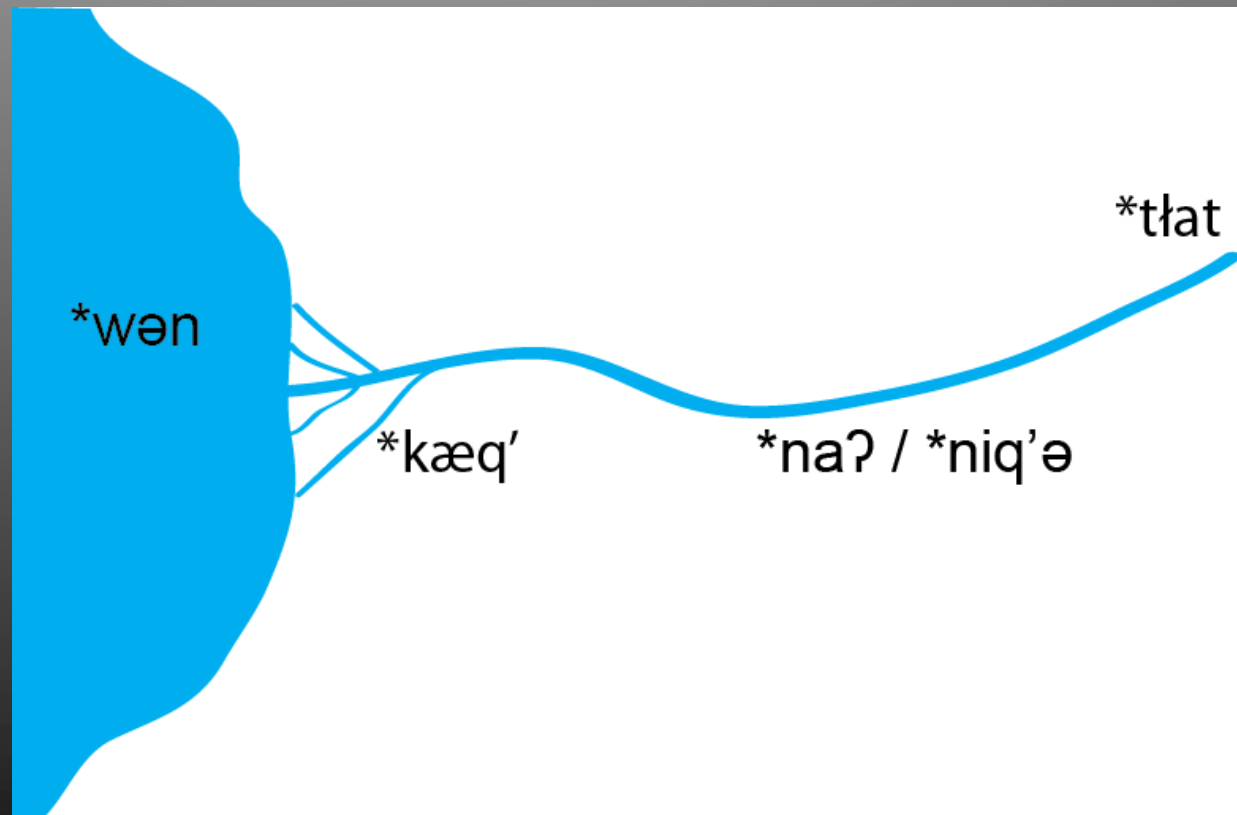
elev 101 m

Eye alt 11.94 km



Dene streamscape

- generative pattern consistent across languages



Place-naming summary

- Inuit-Yupik
 - orientation system plays minimal role
 - streamscape terms used in place-names but only in an ad-hoc manner
- Dene
 - orientation system plays prominent role
 - the entire place-naming system is built around the streamscape system in a generative fashion
 - single specific “generates” numerous names within a region by combining with different generics
 - streamscape terms have very narrow semantics restricted to the landscape domain

Elevation



Yup'ik derived elevation terms

akulneq	'valley, dale'	*akulə 'midsection' + *nəR 'result'
allngignaqaq	'small hill'	*aʎniɣ 'patch on sole' + *naR 'resemble'
kuignayuk	'valley'	*kuðəɣ 'river' + ?
cirmik	'snow-capped mountain'	cf. cirmuite- 'be iced in'
sayangaq	'front of hill'	cf. *tʃaðə- 'front'
talliqutaq	'spur'	*taʎiR 'arm' + kutaq 'device'
kaimaq	'bluff, scree slope'	cf. kaime- 'make or drop crumbs'
englulluk	'mound'	*eŋʎu 'house' + *ʎuy 'bad'
nunapik	'tundra, flat mound on tundra'	*nuna + *piɣ

Yup'ik basic elevation terms

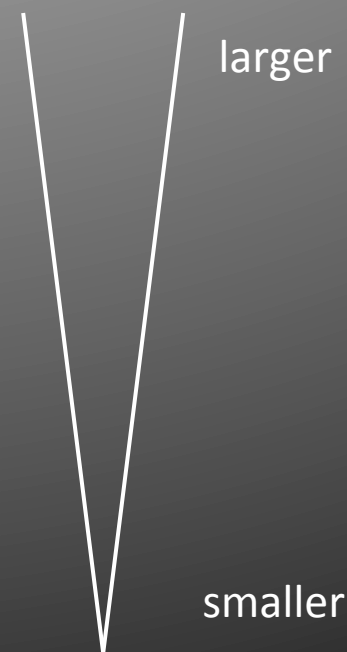
ingriq	'mountain'	< *iŋRiR
qemiq	'ridge of hills', 'floatline'	< *qəmiR
penguq	'hill, mound'	< *peŋuR
ekvik	'cliff, bluff, riverbank'	< *əkviγ
penaq	'cliff, bluff'	< *əpnaR
qiuq	'scree'	< *qiγγu

qemiq 'ridge'?

- more properly denotes a ridge or a broad hill which is part of a ridge of hills
- often inflected for number: *qemiq*, *qemik*, *qemit*
- used (metaphorically) to denote objects which resemble series of hills, as on a ridge, rather than single hills
 - *qemiq* 'lead line or float line of a fishing net'
 - *qemir-* 'to string floats or leads on a fishnet'
 - *qemirrluk* 'backbone, spine'
- Fortescue et al. (2010) list **qəmir* 'ridge' and **qəmir* 'net line' as homonyms but acknowledge that they may be the same form

penguq

pengurpall'er	'great big hill'
pengurpak	'big hill'
penguq	'hill'
pengucuar	'small hill'
pengurraq	'little hill'
penguyaaq	'tiny hill'
penguruaq	'imitation hill'
penguguayaaq	'baby hill'
penguquiner	'little bit of a hill'



scale-independent

Ingriq



Ingri'urluq

only clear scale-dependent term

Dena'ina basic elevation terms

dghili	'mountain'	Dghilishla 'little mountain'
tex	'hill'	Ch'atexni'u 'hill extends out'
ses	'ridge'	Ses Ka'a 'big ridge'
ves	'bank, bluff'	
qenen	'hillside'	
ken	'flat, meadow, low ridge'	
-duq'	'ledge'	
qin	'high elevated ridge'	

Elevation summary

- Inuit-Yupik
 - one scale-dependent elevation term
 - Yup'ik *ingriq*
- Dene
 - three scale-dependent elevation terms
 - Dena'ina *dghili, tex, ses*

Landscape in language



Landscape in language

- Inuit-Yupik emphasizes shape over elevation
 - shape matters more than elevation
 - directional system built ad-hoc based demonstratives
 - no over-arching place naming strategy
- Dene emphasizes the linear valley
 - elevation is prominent
 - directional system based on valleys
 - rigid and well-defined place naming strategy
 - coherence across languages

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Ekleq / Digheq'un Deloy



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