THE WITSUWIT'EN AND KWADACHA DICTIONARY PROJECTS
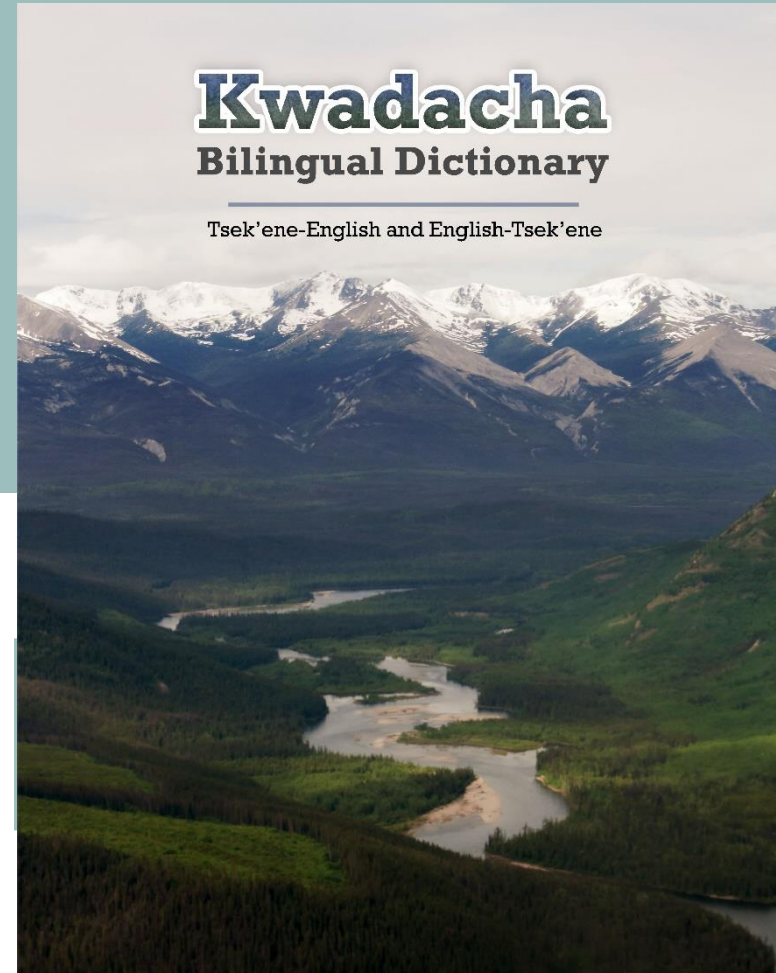

Witsuwit'en Hibikinic

Witsuwit'en-English and English-Witsuwit'en

Sharon Hargus, University of Washington, Seattle

Previously presented at:

American Anthropological Association/CASCA, Vancouver B.C., November 21, 2019

Kwadacha Bilingual Dictionary

Tsek'ene-English and English-Tsek'ene

ORGANIZATION

Dictionaries

Introduction to Witsuwit'en and Kwadacha

Dene dictionary design challenges and decisions

DICTIONARIES ARE A GOOD THING

"A good dictionary is a powerful adjunct to a good grammar." Noonan

A dictionary forces you to deal with all the data. Munro

For historical linguistics, dictionaries are more valuable than grammars. (Michael Krauss, p.c.)

Munro, Pamela. 2007. From parts of speech to the grammar. In Thomas Payne & David Weber (eds.), *Perspectives on grammar writing*, 71-111. Amsterdam: John Benjamins.
Noonan, Michael. 2007. Grammar writing for a grammar-reading audience. In Thomas Payne & David Weber (eds.), *Perspectives on grammar writing*, 113-26. Amsterdam: John Benjamins.

BUT: DICTIONARIES TAKE A LOT OF TIME

'This dictionary would have to be the most effort that I have ever put into a single project…' (Zecarias 2007)

"Dictionaries are notoriously time-consuming projects, typically the work of lifetimes, or at least professional lifetimes…" (Rood and Koontz 2002)

"we know some people who began working on dictionaries as graduate students and have not completed them after a whole career…The best and biggest dictionaries…may take ten or twenty years of full-time work by several people." (Hinton and Weigel 2002)

Hinton, Leanne & William F. Weigel. 2002. A Dictionary for Whom? Tensions between Academic and Nonacademic Functions of Bilingual Dictionaries. In William Frawley, Kenneth C. Hill & Pamela Munro (eds.), *Making Dictionaries: Preserving Indigenous Languages of the Americas*, 155-70. Berkeley: University of California Press.

Rood, David S. & John E. Koontz. 2002. The Comparative Siouan Dictionary Project. In William Frawley, Kenneth C. Hill & Pamela Munro (eds.), *Making dictionaries: Preserving Indigenous Languages of the Americas*, 259-81. Berkeley: University of California Press.

Zecarias, Efrem. 2007. Tigrigna - English English - Tigrigna Dictionary. www.memhr.org.

ARE DICTIONARIES WORTH THE TIME?

'once a grammar is available, other linguists can consult it and prepare a vocabulary and story books. In contrast, however, it is much more difficult, though not impossible, to write a grammar on the basis of texts alone, and it is impossible to write a grammar on the basis of a dictionary alone. Therefore, in the writer's view, the primary task of fieldworker linguists is to write a grammar, although this does not deny the importance of vocabulary and texts, and raw data.' Tsunoda

'within descriptive linguistic fieldwork, as we define it…, lexicography or dictionary writing can be considered a tangential activity' Chelliah and deReuse

Tsunoda, Tasaku. 2005. *Language endangerment and language revitalization*. Berlin; New York: Mouton de Gruyter.
Chelliah, Shobhana T. & Willem J. de Reuse. 2011. *Handbook of descriptive linguistic fieldwork*. Berlin: Springer.

THE BEST DICTIONARIES ARE COMPILED BY LINGUISTS

"How can one understand the grammar without understanding the lexicon? The answer is, one cannot." (Everett)

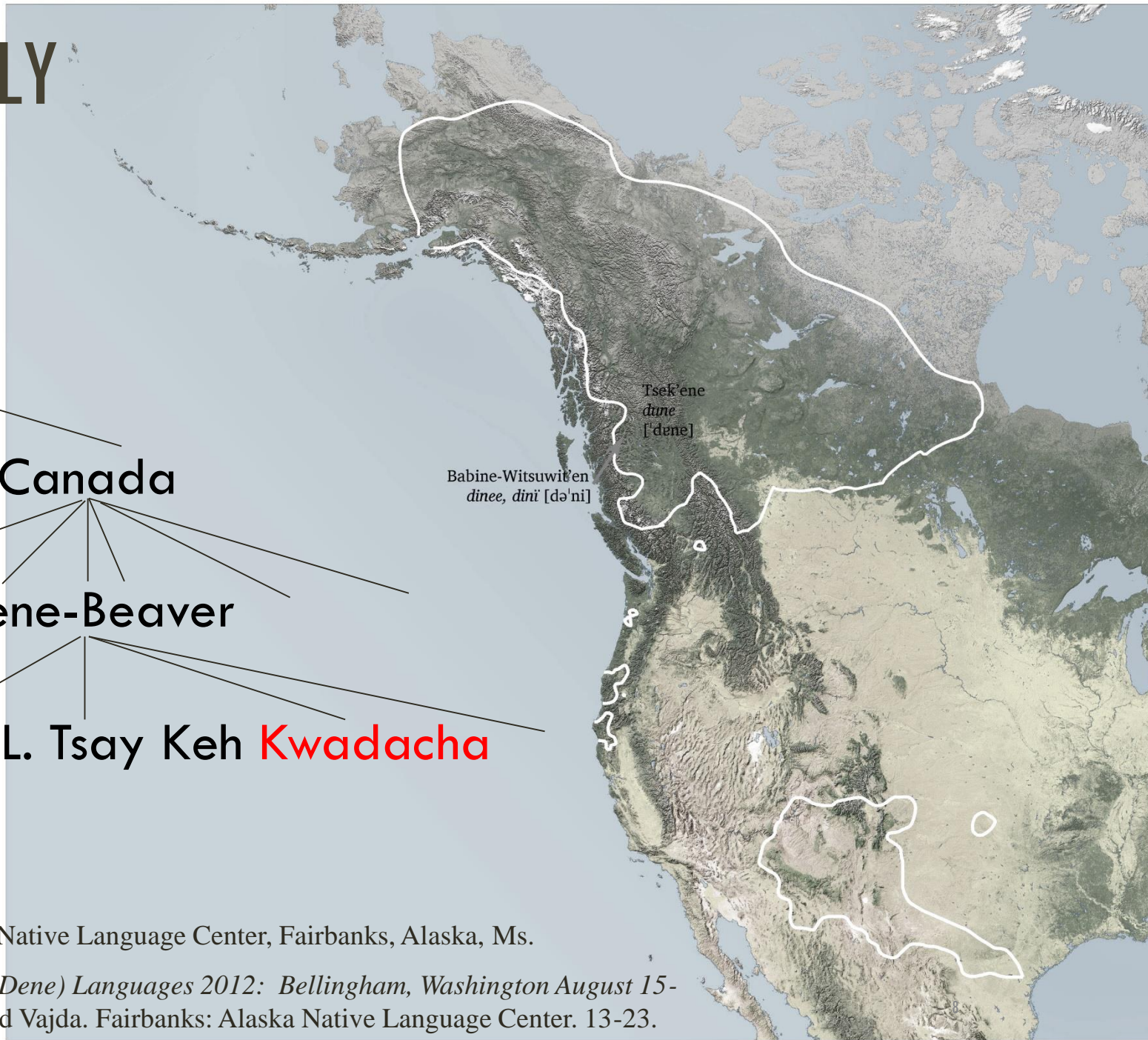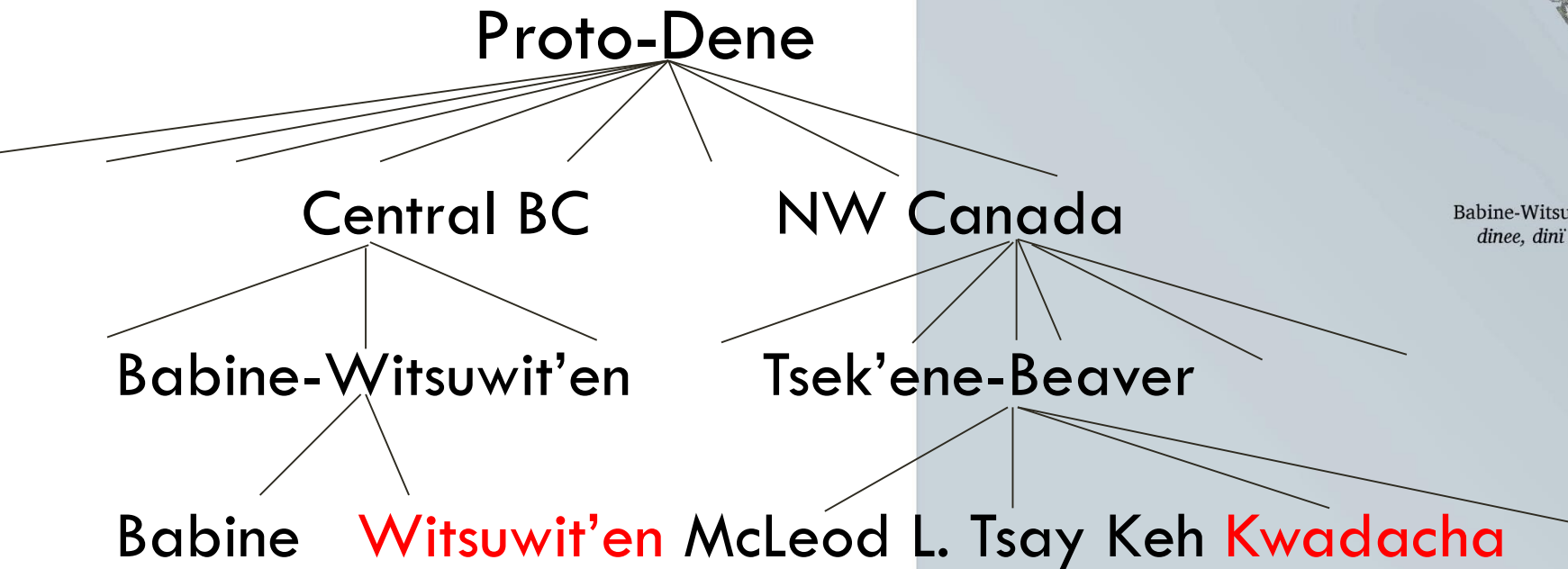"It's the same thing" (grammatical and lexicographical research) Jeff Leer, p.c.

Only those with linguist-like knowledge of the grammar of a language can create good dictionaries. (personal observation)

Everett, Daniel L. 2001. Monolingual field research. In Paul Newman & Martha Ratliff (eds.), *Linguistic Fieldwork*, 166-88. Cambridge: Cambridge University Press.

Witsuwit'en communities on **Widzin Kwah** (Morice, Bulkley R. and tributaries) [near Smithers]

Kwadacha (Fort Ware) at confluence of Fox, White (Kwadacha) (**Kwùdàtą**) and Finlay Rivers

LANGUAGE FAMILY

Proto-Dene

Central BC   NW Canada

Babine-Witsuwit'en   Tsek'ene-Beaver

Babine   Witsuwit'en   McLeod L.   Tsay Keh   Kwadacha

Tsek'ene
dune
['dɛne]

Babine-Witsuwit'en
dinee, dinï [də'ni]

Leer, Jeff. 2006-2010. Comparative Athabaskan Lexicon. Alaska Native Language Center, Fairbanks, Alaska, Ms.

Hargus, Sharon. 2013. 'Dene.' In *Working Papers in Athabaskan (Dene) Languages 2012: Bellingham, Washington August 15-17, 2012*, ed. by Daniel W. Hieber Sharon Hargus, and Edward Vajda. Fairbanks: Alaska Native Language Center. 13-23.

SOME SPEAKERS

Alfred Joseph

Lillian Morris, Roy Morris

Mabel Forsythe

Sue Alfred, Mary Jim

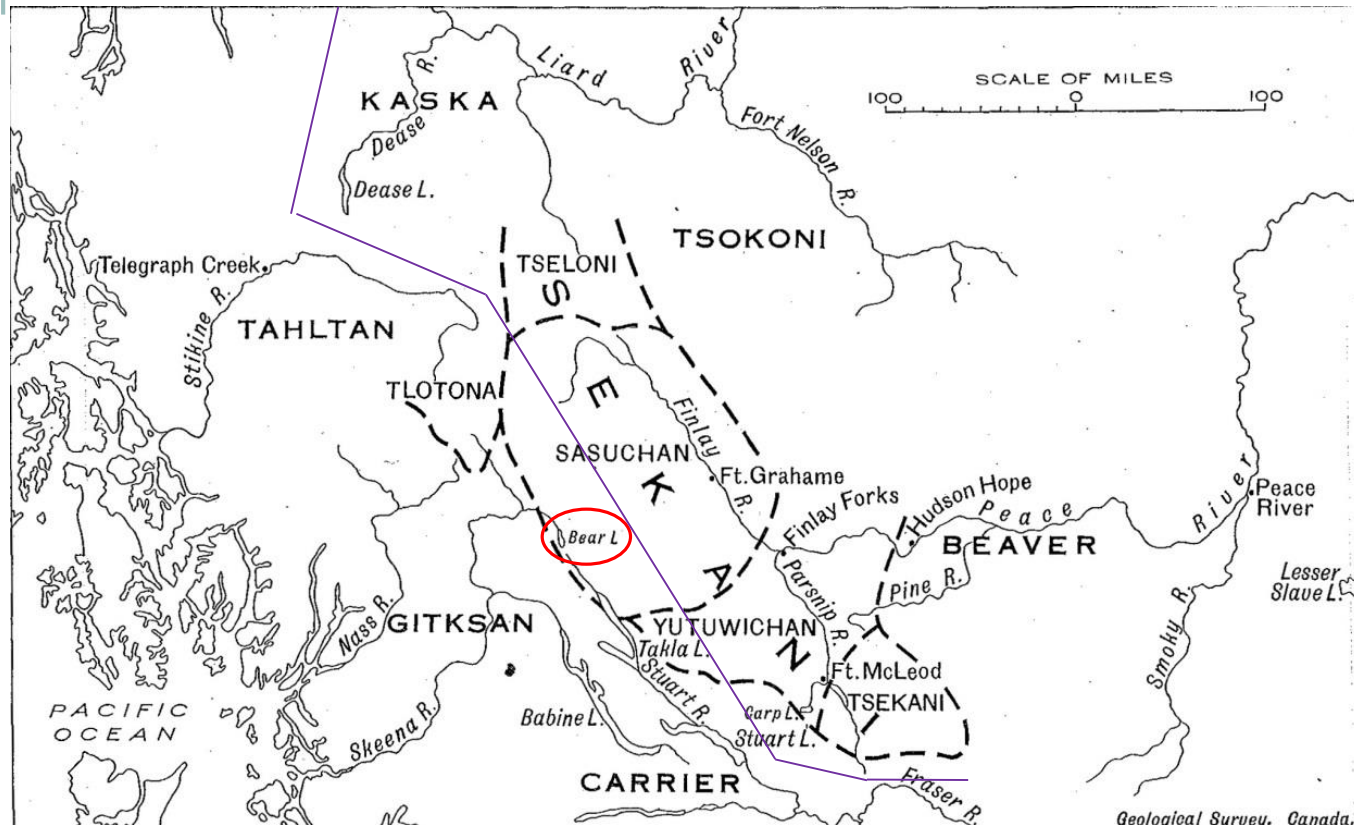Mike Abou, Louie Tomah

Eileen McCook

Edna McCook, Mary Charlie

Kwadacha

Witsuwit'en

ORIGINS OF KWADACHA

4 groups "in the early days of the nineteenth century"
- *Tseloni* (**Tselone**)
- *Sasuchan* (**Sqstoot'q**) [Bear L.]
- *Yutuwichan* (**Yitsoot'q**)
- *Tsekani* (**Tsek'ene**)

Bear Lake outpost, Fort Connelly, est. 1826-7 by Hudson Bay Co.

——————— continental divide

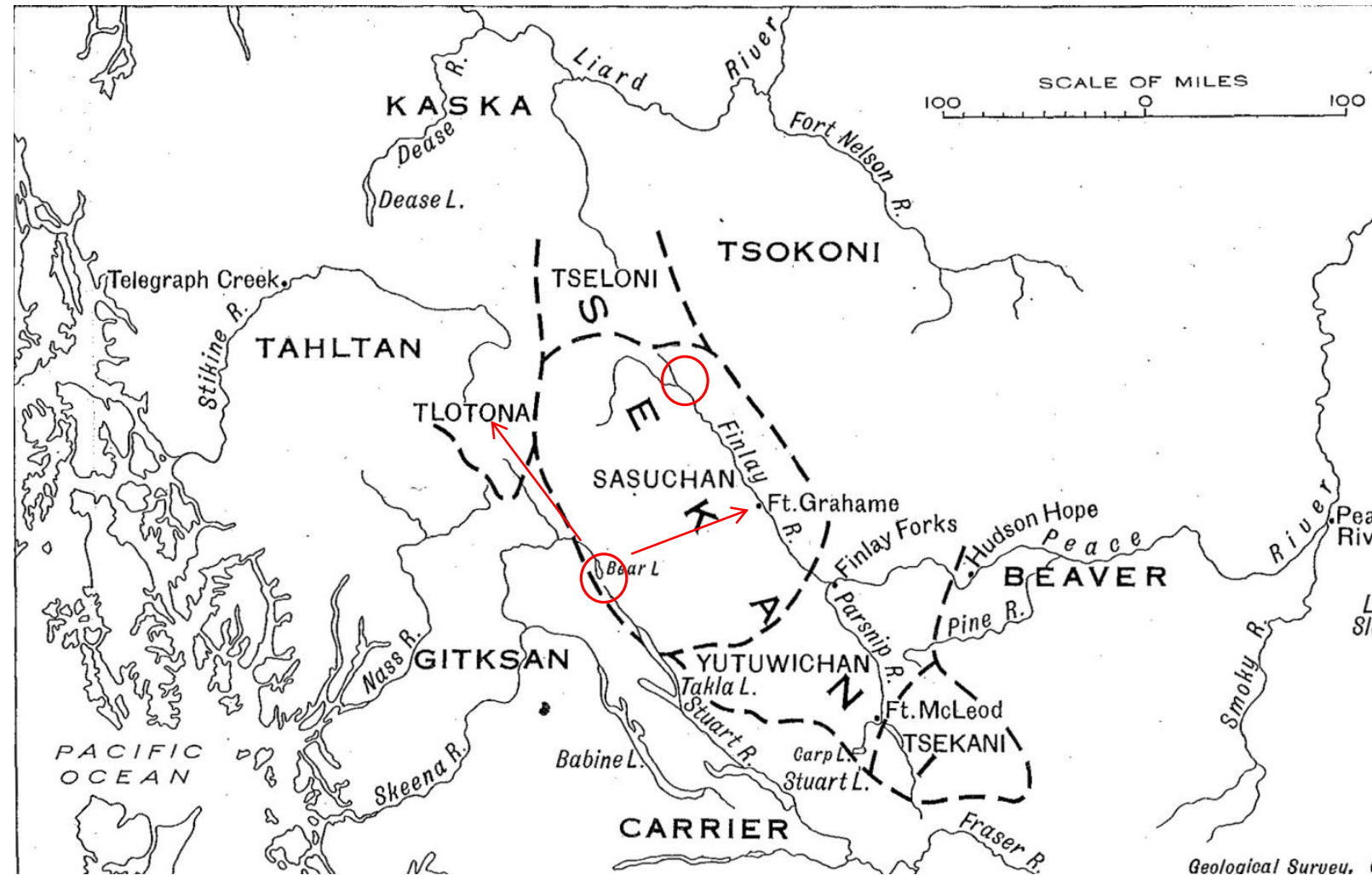Jenness, Diamond. 1937. *The Sekani Indians of British Columbia*. Ottawa: Department of Mines and Resources.
Morice, Adrien-Gabriel. 1892-1893. 'Notes Archaeological, Industrial and Sociological on the Western Dénés With an Ethnographical Sketch of the Same.' *Transactions of the Royal Canadian Institute* 4:1-222.

ORIGINS OF KWADACHA, CONT.

"around 1840, apparently, ...a few families of the Sasuchan Sekani broke away from the main band and established themselves as the T'lotona or Long Grass Indians in the Groundhog country" (Jenness);

"about 1890" "Established trail systems to Hyland Post and Telegraph Creek to the west and Ware in the east were used to transport furs and hides." (Friesen)

"The *Tseloni* band amalgamated with the *Sasuchan* or Bear Lake band when Fort Grahame was established [about 1890], and a new band..., *Otzane* ['**Odziinè**'], now occupies its old territory on Fox and Kechika rivers." (Jenness)

Friesen, David E. 1985. *Aboriginal Settlement Patterns in the Upper Stikine River Drainage, Northwestern British Columbia*: University of Calgary M.A. thesis.

'ÀTSE DAVIE AND SOME RELATIVES

"The leader and creator of this band was a man named Davie or David, the son of a French-Canadian trapper and a *Sasuchan* mother. Marriage with a Tseloni woman [no. McLeod L.] gave him hunting rights in the old *Tseloni* territory, where he raised a family of four [six] daughters."
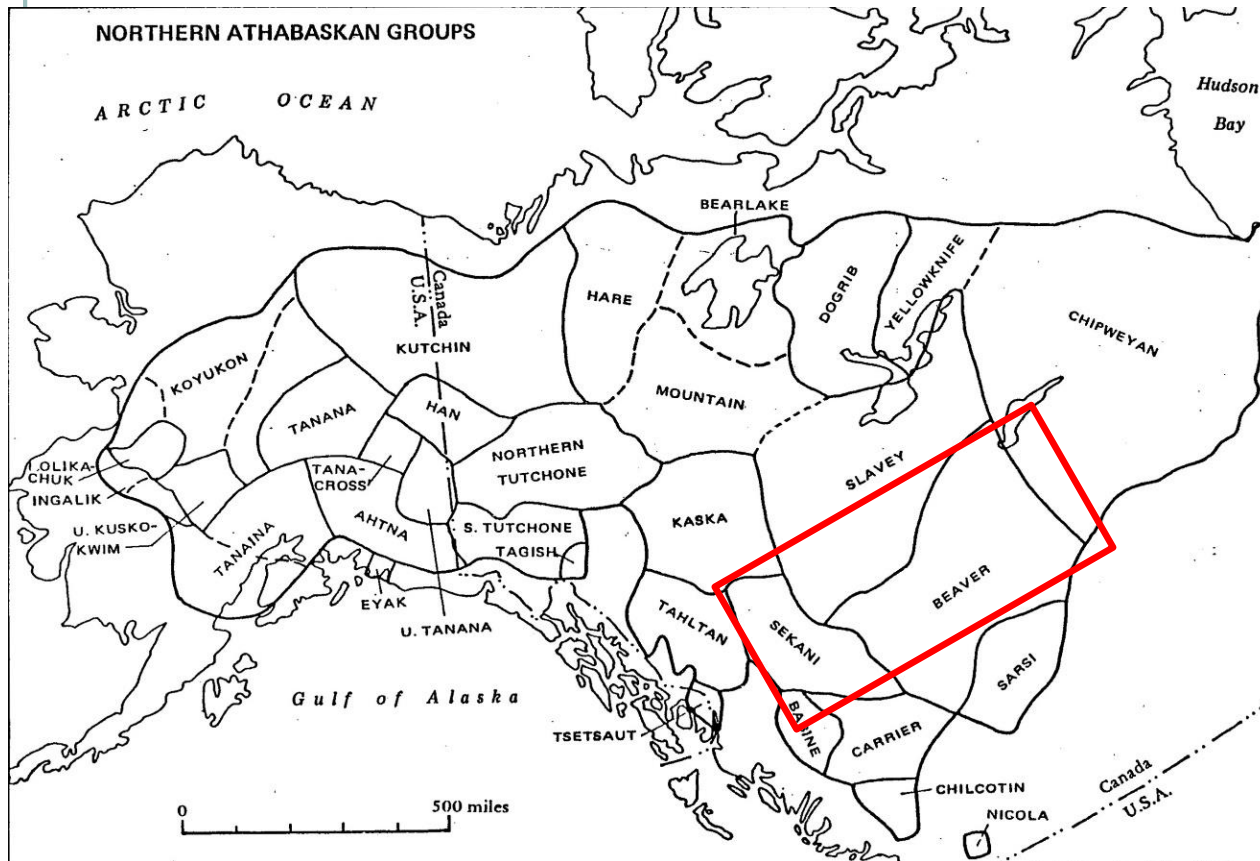

Munro Massetoe son-in-law	Harry Davie	Mac McCook son-in-law	Frank Abou	'Àtse Davie
	stepson to Mac		son-in-law to Munro	

PHONOLOGICAL UNIQUENESS OF KWADACHA

NORTHERN ATHABASKAN GROUPS

- Beaver (Dane zaa) dialects (Jung and Müller 2008)
  - Northern Alberta Beaver
  - Southern Beaver
  - Central Beaver
  - Low marked Beaver
- Unlike other Tsek'ene and most Beaver, no Palatalization in Kwadacha
  - **d t t'** > **j ch ch'** / ___ **ii** [i], **i[I]**, **e**, **oo** [u]
  - **too** vs. **choo** 'water'
  - Northern Alberta Beaver, "merely has a palatalization of the stop in these environments": e.g. wu-dyíh 'he speaks', lidyii 'tea'. "the picture is complicated by a few words that never show palatalization even though it would be expected, e.g. *madee* "his eye" is never palatalized." (Müller 2009:54)

Jung, Dagmar & Gabriele Müller. 2008. Varieties and Language Documentation – the case of Beaver Athabaskan. In Antje Casaretto & Silvia Kutscher (eds.), *Sprachkontakt synchron und diachron. Ergebnisse des 2. LinK-Workshops am Zentrum für Sprachenvielfalt Bibliography 193 und Mehrsprachigkeit*, 153-68. Aachen: Shaker.

Müller, Gabriele 2009. *Intonation and Prosodic Structure in Beaver (Athabaskan): Explorations on the language of the Danezaa*: Universität zu Köln Ph.D dissertation.

PHONOLOGICAL UNIQUENESS OF KWADACHA, CONT.

Beaver-Tsek'ene time-depth: 800 years?

Ft. Grahame of 100 years ago had surely palatalized **d t t'** > **j ch ch'** / ____ **ii, i, e, oo**

How then did Kwadacha undo this sound change????

"Immigrants or conquerors with regional or foreign accents may swamp the locals and change the pool of speech available to children." Pinker 1999:48

Pinker, Stephen. 1999. *Words and Rules: The Ingredients of Language.* New York: Basic Books

INFILTRATION

'Àtse Davie's mother was *Sasuchan;* **'Àtse** Davie born in Bear Lake, moved to Fort Grahame age 14?

'Àtse Davie's wife from McLeod Lake; split off from Ft Grahame with family; 10 year walk-about

- "another family…, probably kinsfolk of Davie's wife, joined the band, which in 1924 numbered forty individuals."
- "Davie's band took the name and territory of a kindred band that had recently dissolved; the Long Grass Indians", living around the headwaters of the Stikine River [Tahltan] (Friesen: some of those moved to Caribou Hide then Metsantan)
- "Davie's band is increasing rapidly, but remains in such close contact with the mother group that the two may ultimately unite again, or Davie's band absorb the other. The Long Grass Indians are more remote, and have already taken on the culture of foreign tribes, Gitksan and Tahltan."

Next generation, 6 sons-in-law: (1) Kaska, (2) Kaska? Interior Tlingit?, (3) Sweden, (4) Takla?, (5) Sweden, (6) Bear Lake "Carrier" (Takla?)

PROPOSED SCENARIO

Assume that **'Àtse** Davie spoke a palatalizing form of Tsek'ene. His wife, from McLeod Lake, also would have.

Tahltan and Kaska did not undergo **d t t'** > **j ch ch'**

The extended family unit which became Kwadacha must have incorporated enough speakers of non-palatalizing Dene languages (first Tahltan, then Kaska) that lack of palatalization became the norm in three generations.

'Àtse Davie

/ | \ \ \ \

Munro Massetoe = Ada

/ | \ \

Louise = Frank Abou (< Ft. Grahame)

/ / / / | \

Mike Abou

Plenty of loans from Kaska into Kwadacha. As more information about Tahltan becomes available, we may be able to sort out the relative contributions from these two languages.

WHAT IS KWADACHA THEN?

A dialect of Tahltan, phonologically?

- tone matches Tahltan, opposite of Kaska
- not that simple: *a > o / ___n in Tsek'ene and Beaver, but not Kaska and Tahltan

A dialect of Tsek'ene, lexically? with borrowings from Tahltan and more recently Kaska?
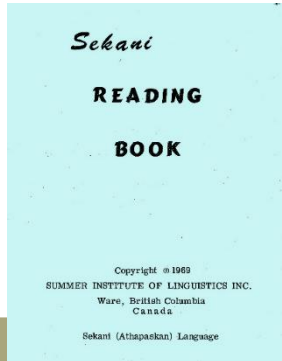
A mixed language?

- "a language that arose primarily due to expressive needs in community bi- or multilingualism and which has a limited amount of identifiable source languages" (Velupillai)
- "any language where a considerably large portion of one area of the grammar comes definitely from one source, but another portion from another" (Loggins)
- gradual mixing of two languages over time (Bakker and Muysken)

Bakker, Peter, and Pieter Muysken. 1994. 'Mixed languages and language intertwining.' In *Pidgins and creoles: An introduction*, ed. by Jacques Arends, Pieter Muysken and Norval Smith. Amsterdam: John Benjamins. 41-52.
Loggins, Nathan. in prep. *Xining, Daohua and Bai---Language Contact in China's Ethnic Borderlands*: University of Washington PhD dissertation.
Velupillai, Viveka. 2015. *Pidgins, Creoles and mixed languages: An introduction*. Amsterdam: John Benjamins.

DICTIONARY PROJECT HISTORIES

	Witsuwit'en	Kwadacha
SH involved since	1988	1986
Community liaison	Kyah Wigit Education Society, Witsuwit'en Language and Culture Society	Kwadacha Education Society, Aatse Davie School
Projects	orthography revision	orthography revision
	texts (http://depts.washington.edu/wittexts/)	texts (http://depts.washington.edu/kwatexts/)
	grammar, part 1	grammar (in progress)
	topical dictionary (1999)	topical dictionary (1990)
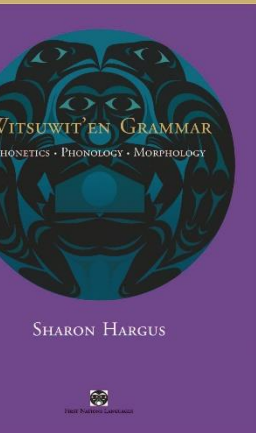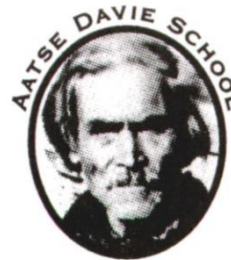
Hargus, Sharon. 1995. *Tsë Cakh Wit'en*. New Hazelton: The Hagwilget Band.
Hargus, Sharon. 2007. *Witsuwit'en Grammar: Phonetics, Phonology and Morphology*. Vancouver: UBC Press.
Lake Babine Band. 1977. *Nedut'een Habikinic*. Burns Lake, B.C.: Lake Babine Band.
Wilkinson, Dave, and Kay Wilkinson. 1969. *Sekani Reading Book*. Ware, B.C.: Summer Institute of Linguistics, Inc.
Wilkinson, Dave, and Kay Wilkinson. 1969. *Sekani Bible Story Book*. Ware, B.C.: Wycliffe Bible Translators, Inc.
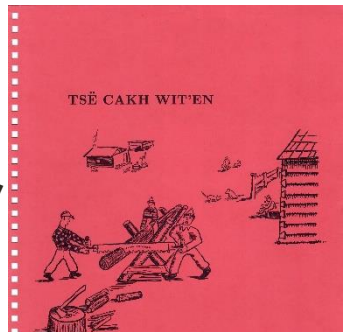
CURRENT STATUS OF EACH PROJECT

Witsuwit'en Hibikinic
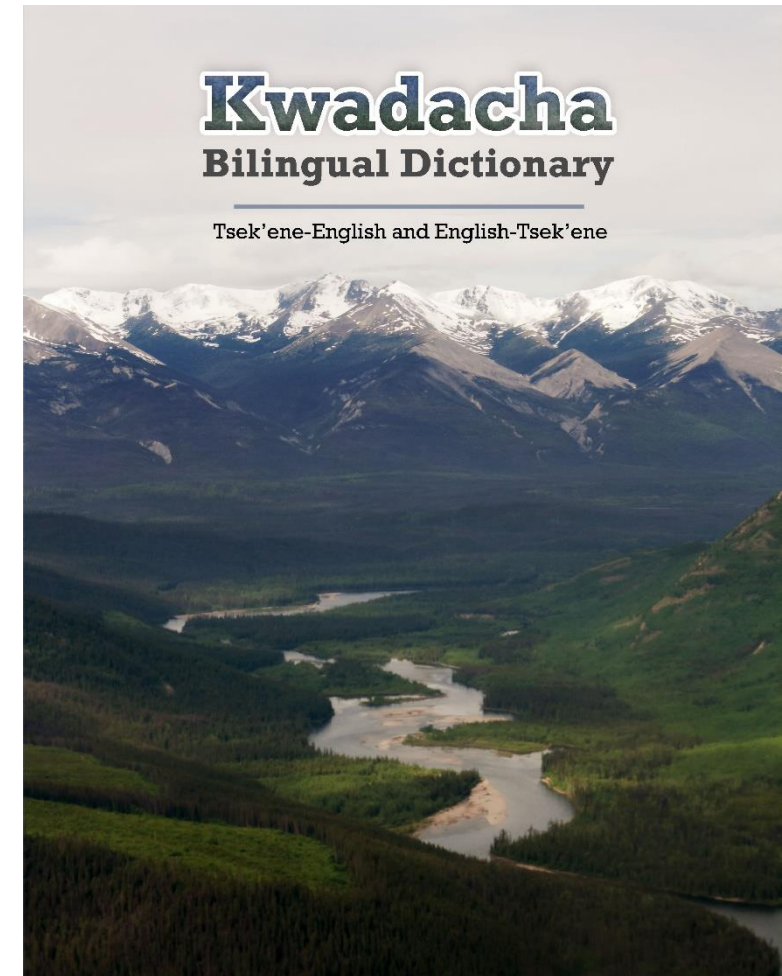
Witsuwit'en-English and English-Witsuwit'en

Kwadacha
- 2019 edition in press
- sound files through 2004 (mostly)

Witsuwit'en
- Reviewing 2017 field notes and recordings
- 2020 release?

Kwadacha
Bilingual Dictionary

Tsek'ene-English and English-Tsek'ene

CURRENT DICTIONARY STATISTICS

		Witsuwit'en	Kwadacha
version		3-31-20	12-31-19
pages	front matter	14	27
	main dictionary	677	508
	English index	151	92
headwords		1802	1453
derived lexical items		9206	6729
lexical item cross-references		1999	1146
examples		13232	10656
example cross-references		763	887
sound files		11744	7453
images		68	133

SAMPLE WITSUWIT'EN

ggï[1] DRY

conc	**ggï**	**ggï/ggïh**	**ggï**	**ggï**
concneg	**ggï**	**ggï/ggïh**	**ggï**	**ggï**
mom	**ggïh**	**ggï**	**ggï**	**ggïh**
momneg	**ggïc**	**ggï/ggïh**	**ggïc**	**ggïc**
cust	**ggïh**			

-ggï *v.* (0,s) dry.

conc —**Higgï.** ⊙mf It's drying. —**Siggï.** ⊙mf ⊙lm It dried; he's skinny. —**Nedïstggïh.** ⊙lm They (clothes) dried. —**Khiyt wenï dïzggï.** ⊙kn It (wood) dried for winter. —**Widïzggï.** It's dry (outside). —**C'ikwah widïzggï.** ⊙lm The creek dried up. —**Wesggï.** ⊙aj ⊙mf It isn't drying out, shouldn't dry out.

bik'its c'iniggï *n.* ⊙vg drying rack for fish or berries. (*lit.* "round things dry on it")

SAMPLE WITSUWIT'EN INDEX

dry: **-ggï** ($<$ ggï[1]), **ggï** ($<$ ggï[1]).
    air-dry O halfway: **ha#O-u-ts'iy**
        ($<$ ts'iy[2]).
    be smoked, half-dried: **lhit#d-D-git**
        ($<$ git[3]).
    full-dry, fully dried meat: **bi'in**
        haggïh ($<$ ggï[1]).
    half-dry salmon: **bits'inïnïnggï**
        ($<$ ggï[1]).
dryer
    clothes dryer: **bï nec'iditggïh**
        ($<$ ggï[1]).
dry goods
    powder, dry goods: **nitgitnï** ($<$ git[3]).

lexical item

where to find it

SAMPLE KWADACHA

gwùgwun *n.* ⊙^{ma} scary animal, monster. (*"anything that's grizzly or bear, or something like that, anything that's scareful out in the bush they call* **gwùgwun***" MA*)

   —**gwùgwun chow** ⊙^{ma} ⊙^{mc} big scary creature

gwun¹

   gwun *ono.* hollow, exploding sound.

gwun², gɋ̀'

conc	**gwun**	**gwun**	**gwun**	**gwun**
mom		**gwun**		.
cust	**gɋh**			

-**gwun** *v.* dry. [PA **Gaŋ* "dry" (L87)]

   conc —**Sugwun.** ⊙^{ma} ⊙^{mc} It dried. —**'Utsigɋ̀' 'udoo k'udà' shòwà' 'ugwun.** The dry meat hasn't finishe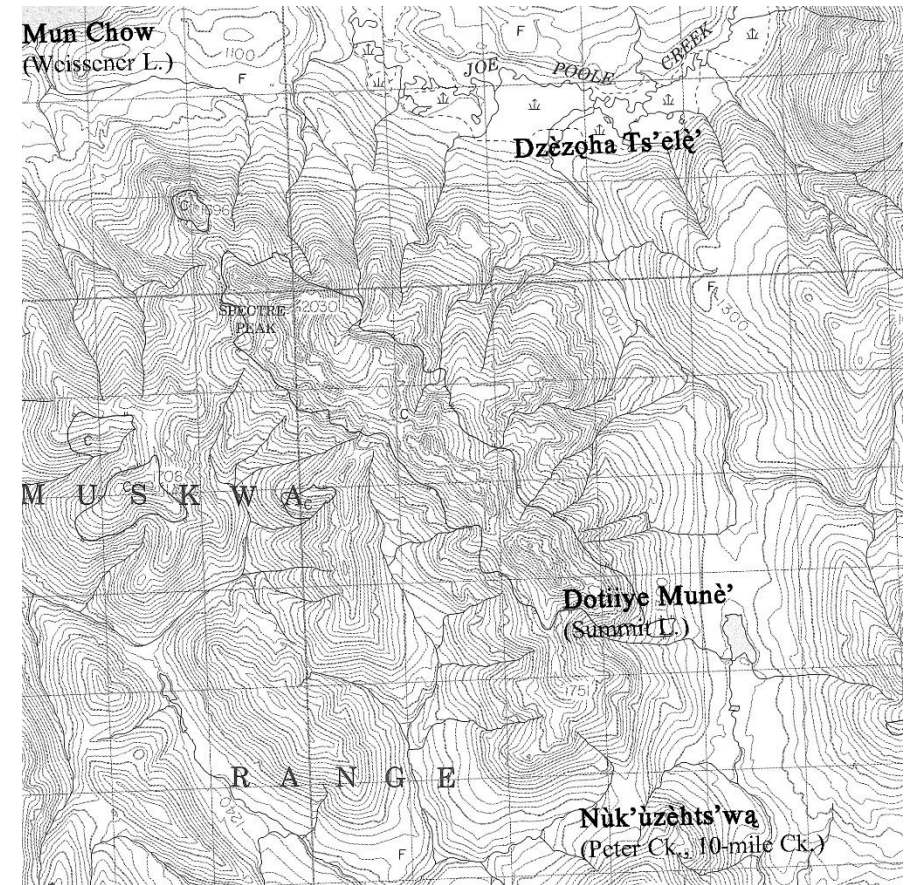d drying yet. —**'Utsùn sugwun.** The meat dried out. —**'Utsùn 'enììgwun.** The meat started to dry. —**Su'ejè' nugwun.** ⊙^{ma}

IMAGES

- **tsàhyona** marmot ("groundhog") skin blanket.

- **Dotiiye Munè'** Summit L.
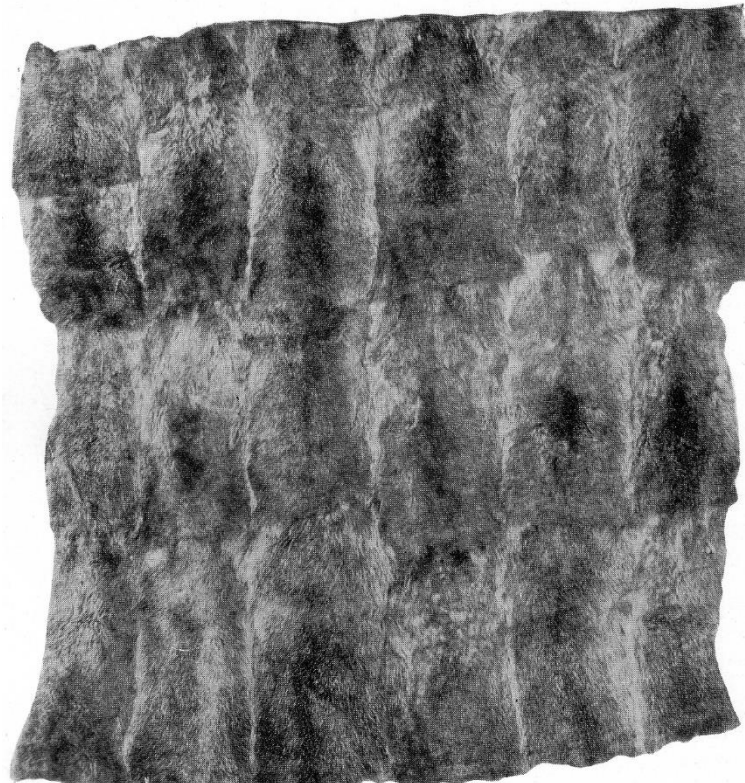
Tsàhyona. Dude zùs yoohtèl ghidèt'ę. (Groundhog skin blanket. They used groundhog skins as a mattress.)
(Jenness 1937: "A Sekani robe of groundhog skins")

Scanned portion of "Mount Chief Davie" (1:50,000 map 94 F/12, 2nd ed., Energy, Mines and Resources Canada), showing location of **Dotiiye Munè'** (Summit L.) at the head of **Nùk'ùzèhts'wą.**

SOUND

----**Titsighghnìi'o.** 🔊 She criticized her.

----**Ya k'ida so titsighghnìi'ò̜?**🔊 What did she criticize her over?

----**Dedzii wuts'eh kìiyà?** 🔊 Where did he come from?

----**N**aw**zudìì wukayniizu̜.** 🔊 **N**aw**zudìì wukayniizun.** 🔊 'He wants to stand up.'

----**Ya ka n**àoo**zuda?** 🔊 🔊'Why does he want to stand up?'

Kwadacha, Mike Abou

SOFTWARE

"lexicographic projects take many years and certain methodological decisions must be made at the beginning of a project, such as the selection of a software package. As technology changes, the lexicographer must weigh the advantages of adopting a new technology against the time lost to the project in learning new software and converting data files." (Hargus)

Lexware, Robert Hsu

http://depts.washington.edu/sahaptin/Images/LG_Hsu_Full.jpg

Hargus, Sharon. 2008. Review of William Frawley, Kenneth C. Hill and Pamela Munro (eds.) Making Dictionaries: Preserving Indigenous Languages of the Americas. *International Journal of American Linguistics* 74. 141-46.
Hsu, Robert. 1985. *Lexware Manual*. Honolulu: University of Hawaii Ms.

.rt   gwu`gwun
..n   gwu`gwun
rec   ma gwugwun_ma.wav
gl   scary *animal, *monster
com   "anything that's grizzly or bear, or something like that, anything that's scareful out in the bush they call [gwu`gwun]" MA
sf   animals
3dex   gwu`gwun chow
3rec   ma gwugwun_chow_ma.wav
3rec   mc gwugwun_cho_mc.wav
3deng   big scary creature
3genilx   chow$1, cha`'/chow

.rt   gwun$1
..ono   gwun
sp   ma
gr   hollow, exploding sound
8sp   mc
8note   not recognized

.rt   gwun$2, go`~'
pcat   tone-glot
sets
conc   gwun gwun gwun gwun
mom   .   gwun .   .

LEXICOGRAPHIC DECISIONS

Headword choice

Representation of discontinuous lexical items

Hargus, Sharon. 2012. 'Design Issues in Athabaskan Dictionaries.' *Northwest Journal of Linguistics* 6 (2):1-15.

HEADWORD

- Verb: root
  - ≈ final, stressed syllable
  - **c'oniyïn** 'she's picking berries (while stationary)'
  - **siyïn** 'she's standing'
- humorous Witsuwit'en **tinec'itas***wash*
  - cf. regular Wit. **tinec'itasggis** 'I'm going to wash (something)'
- borrowing: Kwadacha **k'ìdajùme** 'he's going to jump around'
  - *jump* > **-jùm**

- Other categories: word
  - noun
    gwùgoon *n.* scary animal, monster.
  - adverb
    'usanii *adv.* alone.
  - number
    tak'iy *num.* three.

30

OTHER HEADWORD SOLUTIONS

Headword as Dene word

Carrier

> **'undunut'íh** (v); (**-t'ih**): he is stealing [for himself]

Headword as English word

Deg Xinag

STEAL Gini'eyh [JD+ED] lit. S/he steals.

DISCONTINUOUS LEXICAL ITEMS

Some forms of 'pick berries while stationary'

c'oniyïn, c'oyïn 'she's picking berries'

unïnyïn '(you) pick berries'

digï ts'oniyïn 'we're picking huckleberries'

wec'its'onïyïl 'we didn't pick berries'

digï ts'ontayïlh 'we're going to pick huckleberries'

…

o/u, yïn

u-yïn 'pick berries while stationary'

INTERLOCKING DISCONTINUITY

negative

round

1 sg.
subject

we- c'- o- n- t- [i] z- i- s- yï -t -l

unspecified
object

'pick (berries) while
stationary'

future
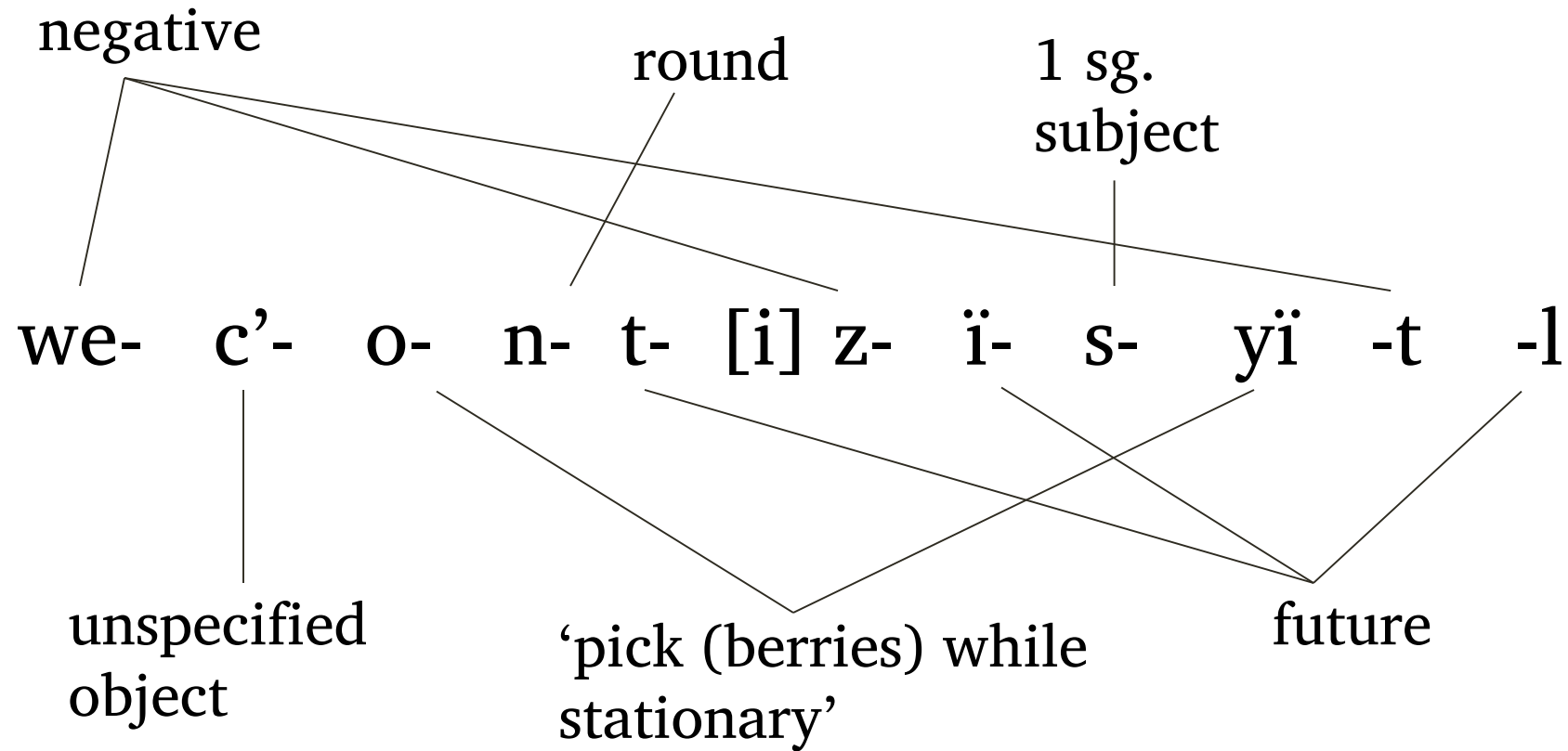
'I'm not going to pick berries (while stationary)'

VERB STRUCTURE

Witsuwit'en:

Prefix positions	Root	Suffix positions
postposition/adverbial$_{12}$ – iterative$_{11}$ – multiple$_{10}$ – negative$_9$ – incorporated root$_8$ – inceptive$_7$ – distributive plural$_6$ # pronominal object/subject$_5$ – qualifier$_4$ – TAM/neg$_3$ – subject$_2$ – voice/valence$_1$		TAM/ negative

outer prefix boundary

APPROACHES TO DISCONTINUITY

- Show the pieces

  O-u-jïn v. pick O (berries) (while stationary). (commonly occurs with **n-** round object)

  Ahtna (Kari 1990), Navajo (Young and Morgan 1992)

- Random form approach

  so' tsalhtsë uniyïn 'she's good at picking cranberries'

Deg Xinag (MacAlpine, Taff et al. 2007), Dene Sųłiné (Elford and Elford 1998)

Carrier (Antoine, Bird, Isaac, Prince, Sam, Walker and Wilkinson 1974: 38)

- Citation form approach

  c'its'onïnjïn' ~ **c'its'onjïn'** 'we picked berries'

South Slavey (Howard 1990)

INNER VS. OUTER PREFIXES

Kwadacha

d–bùt 'be hungry'

dusbùt 'I'm hungry'

dinbùt 'you're hungry'

dubùt 'he/she is hungry'

ts'idubùt 'we're hungry'

dahbùt 'you (pl.) are hungry'

ghidubùt 'they're hungry'

inner subject
outer subject

nù#tsut 'be strong'

nùstsut 'I'm strong'

nuntsut 'you're strong'

nùtsut 'he/she is strong'

nùts'utsut 'we're strong'

nàhtsut 'you (pl.) are strong'

nùghutsut 'they're strong'

DESIGN DECISIONS SUMMARY

- Verb root as headword organizes verb under most meaningful element
  - But verb root is word-final syllable
  - For other categories, headword = word (unless derived)

- Discontinuous verbs represent the language
  - But are not pronounceable, intimidating?

- Two types of prefix boundaries help conjugate verb
  - But #, - are not pronounceable, intimidating?

- ➢ Learning curve to using dictionaries, hopefully balanced by large number of sound files provided

SUMMARY

Solving the Kwadacha origin puzzle requires lexical information, from

- Tsek'ene dialects (McLeod Lake, Tsay Keh)
- Beaver
- Tahltan and Kaska
- and Kwadacha