

Dictionaries and linguists:
Some methods and results of
*Ichishkíin Sínwit**

Sharon Hargus

10-15-10

Beavert, V. and S. Hargus (2010). Ichishkíin Sínwit Yakama/Yakima Sahaptin Dictionary. Toppenish and Seattle, Heritage University and UW Press.

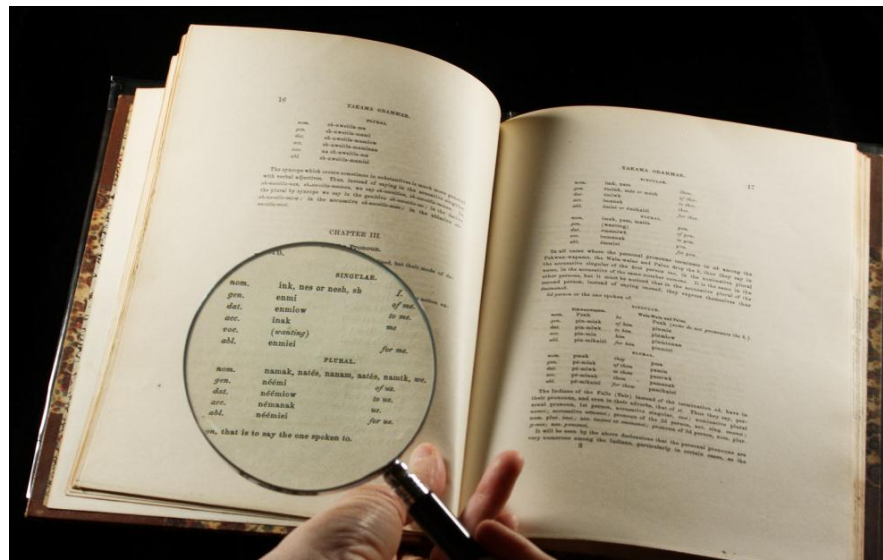
Acknowledgements

- UW people who helped with *Ichishkíin Sínwit*
 - Russ Hugo
 - Bill McNeill
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 - Julia Herschensohn
 - Paul Aoki
 - Marlin Eller
 - Miles Miller

Outline of this presentation

- Linguists and language documentation
- History and methods of compiling *Ichishkíin Sínwit*
- Some results of *Ichishkíin Sínwit*
- Nostrand acceptance speech

Linguists and language documentation



Case-inflected paradigms of first person singular (**ink** etc.) and plural (**namák** etc.) pronouns from Pandosy 1862, p. 16. University of Washington Libraries, Special Collections. Photo by Dave Paul Nelson.

Goals of language documentation

- Generally attributed to Franz Boas
 - Grammar
 - Dictionary
 - Texts

“We have vocabularies; but, excepting the old missionary grammars, there is very little systematic work. Even where we have grammars, we have no bodies of aboriginal texts.” (Boas 1917:1)



Two views of linguists and dictionaries

- Discouraging views
 - ‘in the writer’s view, the primary task of fieldworker linguists is to write a grammar’ (Tsunoda 2005:246)
 - ‘Resource development is often deprecated in the academic community’ (Richard Sproat, 2010 p.c. to Julia Herschensohn)
 - “dictionaries are often undeservedly considered low-value products for such considerations as promotion and tenure in the academic world” (Hinton and Weigel 2002: 167)
 - “With today’s urgency to document endangered and moribund languages, it is not uncommon for the speech community to have disappeared and the language consultant not to have actually said anything to anybody in the language for years. Situations like that cannot produce state-of-the-art lexicography no matter how qualified the linguist investigating them is; the necessary data simply are not there . . .” (Grimes 2002:76)

Grimes, J. E. (2002). Lexical Functions as a Heuristic for Huichol. Making Dictionaries: Preserving Indigenous Languages of the Americas. W. Frawley, K. C. Hill and P. Munro. Berkeley, University of California Press: 70-85.

Hinton, L. and W. F. Weigel (2002). A Dictionary for Whom? Tensions between Academic and Nonacademic Functions of Bilingual Dictionaries. Making Dictionaries: Preserving Indigenous Languages of the Americas. W. Frawley, K. C. Hill and P. Munro. Berkeley, University of California Press: 155-170.

Tsunoda, T. (2005). Language endangerment and language revitalization. Berlin; New York, Mouton de Gruyter.

- More positive view
 - “It’s the same thing” (grammatical and lexicographical research) (Jeff Leer, p.c.)

Leer, J. (2006-2010). Comparative Athabaskan Lexicon. with the assistance of G. Oliverio. Fairbanks, Alaska, Alaska Native Language Center. Ms.

Leer, J. (2008). "Proto-Athabaskan-Eyak nasal codas and Eyak aspirated vowels." Linguistic Typology of the North **1**: 1-16.

How to compile a bad dictionary

- Don't transcribe accurately and consistently
- Don't have a good understanding of word formation
- Don't include illustrative sentences
- Use a word processor

ask náxaw-náwaw- (vt), ask someone to come with or accompany one

attachment attach pítkw'ít- (vt), something put together or stuck together

attack wátkw'na- (vt), aggression

wách'ak- 'attach' (v)

attack wách'akt (n), an occurrence or happening of a disease

attack, charge wátkw'na- (vi), attack, charge

attack, fight tiwi- (n)^(v), attack, fight

náwnak'i-

attain náwnak'i (vt), achieve

attempt ináwi- (v) try
ináwit (n), try, to endeavor

attend to náktkwanin (adv)^(v)

attend school skúuli-
skúuli- (vi), go to school

attention páyknim (adj), pay attention to me

This is a colloquial imperative!

attention tmáak- (n)^(v), respect, courtesy

yík- hear

attention páyk- (vt), thought, notice, hear, pay attention

attention páyknim (adj), command

noun!

míts'ixwa- (v) listen

attentive person pamt'sixwalá (n), attentive person

attitude pxwí
pxwí- (n), one's thought

no!

attract celebrate, enjoy
ayáya- (vt)

(ayáyat (adj) beautiful (inanimate))

Bruce Rigsby



Rigsby, B. (1965). "Continuity and change in Sahaptian vowel systems." International Journal of American Linguistics **31**: 306-311.

Rigsby, B. and N. Rude (1996). Sketch of Sahaptin, a Sahaptian Language. Languages. I. Goddard. Washington DC, Smithsonian Institution: 666-692.

Rigsby, B. (2010). The Origin and History of the Name "Sahaptin". Ichishkiin Sinwit Yakama/Yakima Sahaptin Dictionary. V. Beavert and S. Hargus. Toppenish and Seattle, Heritage University and University of Washington Press: xvii-xxi.

Rigsby, B. (2010). The Origin and History of the Name "Yakima"/"Yakama". Ichishkiin Sinwit Yakama/Yakima Sahaptin Dictionary. V. Beavert and S. Hargus. Toppenish and Seattle, Heritage University and University of Washington Press: xxii-xxiv.

With Alex Saluskin



U. of Wash. Lib., Special Coll., Seattle:303.

Fig. 3. Alex Saluskin, secretary of the Yakima Indian Council in 1955. He worked with Rigsby from 1964 to about 1970, helping to develop the Yakima practical alphabet, and dictated to him lexical and grammatical materials including chiefs' and other personal names, place-names as well as historical texts. Photograph by John W. Thompson, 1955.

p	t	ts	tʈ	ch	k	kw	<u>k</u>	<u>kw</u>	'
p'	t'	ts'	tʈ'	ch'	k'	kw'	<u>k'</u>	<u>kw'</u>	
		s	ʈ	sh	x	xw	<u>x</u>	<u>xw</u>	h
m	n		l	y		w			

i ii	ɨ	u uu
	a aa	

History and methods of compiling *Ichishkíin Sínwit*



Ititamatpamá (time ball). Yakima Valley Museum 0056-001-014: “1850-1900; string is made from wild nettle, spun by hand and added to as needed.” (*At puberty “a young woman usually began her **ititamatpamá**, which was like a diary. For each significant event in her life, a young woman tied a knot in a piece of hemp string, sometimes adding a shell or bead, gradually winding it into a ball.” Schuster*) Photo by Dave Paul Nelson.

Ichishkíin Sínwit characteristics

- 3 sections (Sah-Eng, Eng-Sah index, root index)
- Print and web versions
(<http://depts.washington.edu/lc/olr/sahaptin>) (Marlin Eller, Paul Aoki, Russ Hugo)
 - Web version currently Sah-Eng only
- 3562 headwords (roots, affixes)
- 4998 lexical items (nouns, verbs, adjectives, suffixes...)
- 4711 example sentences
- 9830 accompanying sound files
 - On CD, linked to text on web version
- 105 images (editing by Russ Hugo)

History of *Ichishkíin Sínwit*, part 1

- 1987 Virginia Beavert to UW Ling
- 1990 (1998)-2001, filed morphophonological research data (built database) (Hargus and Beavert 1990, 2002 a,b)

Hargus, S. and V. Beavert (1990). Sahaptin Vowels and Syllable Structure. Society for the Study of the Indigenous Languages of the Americas, University of British Columbia, Vancouver, B.C.

Hargus, S. and V. Beavert (2002a). "Yakima Sahaptin clusters and epenthetic [ɨ]." Anthropological Linguistics **44**: 1-47.

Hargus, S. and V. Beavert (2002b). "Predictable vs. underlying vocalism in Yakima Sahaptin." International Journal of American Linguistics **68**: 316-340.

Virginia Beavert

2009 Doctor of Humane Letters
recipient, U.W.
([http://depts.washington.edu/
honord/index.shtml](http://depts.washington.edu/honord/index.shtml))



2-3-81 tribal resolution

WHEREAS, the Yakima Tribal Council has expressed that it's number one priority is the preservation of the cultures and heritages of the Yakima Indian Nation, and

WHEREAS, the various Yakima Languages are extremely vital to the preservation of the cultures and heritages of the Yakima Indian Nation, and

WHEREAS, a Yakima Language program would be extremely beneficial in attaining the number one priority, and

WHEREAS, it is readily apparent that we have the available qualified Tribal members to develop and maintain a meaningful languages program, and

WHEREAS, this language program would be an element of the Yakima Tribal Education Division.

NOW, THEREFORE, BE IT RESOLVED by the Yakima Tribal Council meeting in regular session this 3rd day of February, 1981, at the Governmental Headquarters, a quorum present, that submission of a proposal designed to provide a Yakima Indian Language program to be submitted to respective funding agencies.

BE IT FURTHER RESOLVED, that this action supercedes any previous action taken by the Yakima Tribal that pertains to the moritorium, and further authorizes the Tribal Education Committee to seek funds and/or funding sources to fund the proposal, which will be submitted to the Yakima Tribal Council for final approval.

BE IT FURTHER RESOLVED, that all printed materials or manuscripts compiled in book form, photos, illustrations, and any unique methodology developed in this language program are to be the property of and copyrighted in the name of the Yakima Indian Nation.

BE IT FURTHER RESOLVED that in line with Tribal tradition and heritage, the Yakima languages will be taught to enrolled members of the Yakima Indian Nation only.

DONE AND DATED on this ___ day of _____, 1981, by the Yakima Tribal Council by a vote of 13 for and none against.

Sahaptin grammars

- Pandosy 1862
- Jacobs 1931
- Rigsby 1974 (eventually published as Rigsby and Rude 1996)
- (lately, Jansen 2010)

Jacobs, M. (1931). "A sketch of Northern Sahaptin grammar." University of Washington Publications in Anthropology 4: 85-291.

Jansen, J. (2010). A Grammar of Yakima Ichishkiin/Sahaptin. Linguistics. Eugene, University of Oregon. PhD dissertation.

Pandosy, M.-C. (1862). Grammar and Dictionary of the Yakama Language. New York, Cramoisy Press.

Rigsby, B. (1974 (to appear)). Sahaptin Grammar. Languages. Washington D.C., Smithsonian Institution.

Rigsby, B. and N. Rude (1996). Sketch of Sahaptin, a Sahaptian Language. Languages. I. Goddard. Washington DC, Smithsonian Institution: 666-692.

Building database

- Review of
 - grammatical materials
 - Beavert and Rigsby 1975
 - Beavert's pedagogical materials
 - other work by Rude, Rigsby, Jacobs, Hunn
- Observation of spontaneous productions

- 2001 RRF and 2004 NEH grants
 - More sentences
 - Most created by VB, words flagged in database print-outs
 - Some adapted from texts
 - More lexicon < dictionary sentences, texts
 - More grammatical research (e.g. Hargus and Beavert 2005, 2006)

Hargus, S. and V. Beavert (2005). A note on the phonetic correlates of stress in Yakima Sahaptin. University of Washington Working Papers in Linguistics. D. J. Jinguji and S. Moran. **24**: 64-95.

Hargus, S. and V. Beavert (2006). "Word-initial clusters and minimality in Yakima Sahaptin." Phonology 23: 21-58.

Technical challenges

- “...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 2008: 145)
- “sometimes a lexicographer has to be an amateur software engineer just to keep up” (Frawley et al. 2002: 19)

Frawley, W., K. C. Hill, et al. (2002). Making a Dictionary: Ten Issues. Making dictionaries: Preserving Indigenous Languages of the Americas. W. Frawley, K. C. Hill and P. Munro. Berkeley, University of California Press: 1-22.

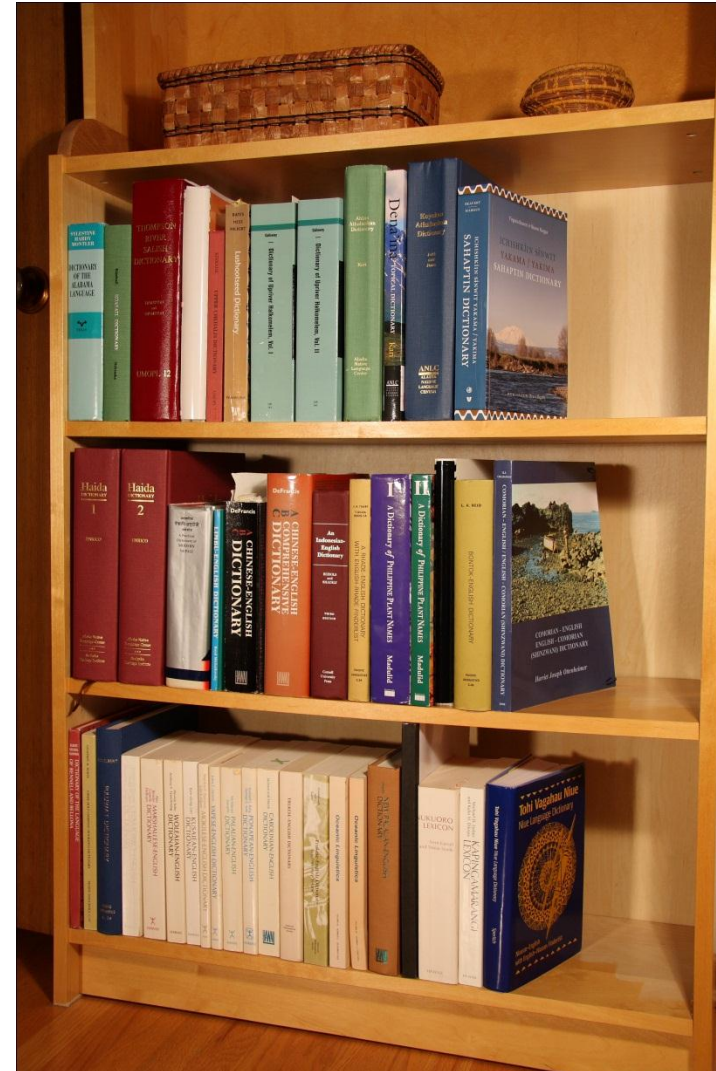
Hargus, S. (2008). "Review of *Making dictionaries: Preserving Indigenous Languages of the Americas*." International Journal of American Linguistics 74: 141-146.

Lexware

Robert Hsu, retired professor of linguistics from the University of Hawaii, developed the Lexware suite of programs, which have been used to create many bilingual dictionaries for diverse languages and language families. Bob also consulted on appropriate structuring of the data in the database, and made many useful organizational suggestions.

The databases from which the dictionaries on this bookcase were produced were all managed at some stage, if not entirely, with Lexware programs or their precursors. The first published dictionary in the bookcase is Vern Carroll and Tobias Soulik's (1973) Nukuoro Lexicon (University of Hawaii Press). This dictionary was created with a precursor to Lexware, which ran on the University of Hawaii mainframe. The data and programs were at first stored on punch cards, beginning in 1967. The latest published dictionaries are Beavert and Hargus 2010 and Galloway 2010.

Galloway, B. D. (2010). Dictionary of Upriver Halkomelem. Berkeley, University of California Press.



Database outputs

Engl-Sah index

Root index

(Lex. sorting, formatting modules)

(Lex. sorting, formatting modules)

Sah-Engl .htm

(Ruby) Marlin Eller

plain text database

cross-ref generation (Lexware)

(Lex. formatting, incl. image insertion)

Sah-Engl dictionary .rtf --> .doc (--> .indd)

Sample database entry

>: Acute accent (stress)

\: Voiceless lateral fricative

x_: voiceless uvular fricative

': glottal stop

., .., etc.: level of derivation

groups related lines for formatting

```
.rt chi>i-
..v chi>i-
gl *drink
hab chi>ix_a
past chi>ina
9dex Tu>nnam a>tk_'ix_sha chi>it?
9deng What do you want to drink?
..n chii\a>
gl *drunkard, *alcoholic
..n chi>ish
gl *water, *drink
2dex Chi>ishaash chi>ish.
2deng I'm drinking water.
..n chi>it
gl *drink, beverage
...n chiitpama>
gl *bar, watering hole, drinking *water
lit for drinking
..v pina>chii-
gl give oneself a *drink, drink by oneself
com drink alcohol
genxr
...
```

Headword

Verb derived from headword

Gloss of verb

Attested derived forms of verb

Example sentences

Nouns derived from verb

Literal translation of preceding gloss

Verb derived from verb

Cross-reference generation

Sahaptin-English formatted output

chíi- (v) drink. (*hab chíixa, past chíina*) — **Túnnam átk'ixsha chíit?** What do you want to drink? — **Chíitxawyaw iyúushna.** He only paid for the drink. (*nothing else*)

chiiłá (n) drunkard, alcoholic.

chiiish (n) water, drink. — **Chiiishaash chíish.** I'm drinking water.

chiiit (n) drink, beverage.

chiiitpamá (n) bar, watering hole, drinking water. (*lit. "for drinking"*) — **Áw ipaláyn chiiitpamápa.**
Now he's drunk in the bar.

chiiit'a- (v) be thirsty. (*lit. "want to drink"*) (*hab chíit'axa*) — **Mishnam chíit'asha'?** Are you thirsty? — **Chiiłáma pachiiit'asha láamyaw.** The alcoholics are thirsty for whiskey.

pináchii- (v) give oneself a drink, drink by oneself. (*drink alcohol*) — **Mish ixwi pináchiiisha Cháan'?** Is John still drinking? — **Iwínana táwnkan anakwnák pináchiixa.** He went to town where he usually drinks.

pinachiiłá (n) drunkard, alcoholic.

shapáchii- (v) make drink, water, put gasoline in. — **Washat'uyłáma pashapáchiiisha k'úsima.** The cowboys are watering the horses. — **Ishapáchiiitasha k'úsi pt'íniks wánayaw.** The girl is taking the horse to water at the river. (*lit. "...is making the horse go drink..."*) — **Túnnam ishapáchiiina?** What has he made you drink? — **Áwna shapáchiiitasha káa.** Let's go put gas in the car.

shapáchiiit (n) gasoline.

shapachiiitpamá (n) watering hole, trough, gas station. (*lit. "for making drink"*) — **Winátt iwachá niimí shapachiiitpamá.** The spring used to be our watering hole. — **Pt'íniks itamántati k'úsi shapachiiitpamáyaw.** The girl has led the horse to the watering trough.

Sorting the database

- “For proofing and checking that is not tied directly to a source, but done by scanning a printout or file, any format that serves to focus the reader’s attention on some limited aspect of the data can be very effective...”
- “Any rearrangement that tends to bring together similar features in the data is useful in making errors and inconsistencies easier to spot...” (Hsu 1985:82)
- For *Ichishkíin Sínwit*, used Lexware programs, regular expression searches with text editor

English-Sahaptin index

drink: **chíi-**.

drink, beverage: **chíit** (< chíi-).

give oneself a drink, drink by oneself: **pináchii-** (< chíi-).

make drink, water, put gasoline in: **shapáchii-** (< chíi-).

siphon, drink through a straw: **súkw'k-**.

stop and have a drink: **wyáwaax-**.

water, drink: **chúish** (< chíi-).

Great interest in dictionaries

- Speakers of languages
- Descendants of speakers
- Anthropologists
- Linguists
- Others

History of *Ichishkíin Sínwit*, part 2

- 2004: 2900 headwords, 2100 derived words, 3000 example sentences
- Heritage College meeting May 2004
 - revamping 1975 dictionary with Mellon Foundation support

State of Heritage dictionary project 2004

á'a, (n) crow a black bird, native to this area

áan, (n) sun a star that is the source of heat to the earth.

aanpamá, (n) clock, timepiece; an instrument to measure time,
minutes, hours.

áay, () hello an initial greeting before introductions; meeting a
friend, relative.

ánakw-, (vt) abandon, leave forever

áchaash, (n) eye part of body related to sight.

achaashpamá, (n) eyeglasses; perscription glasses for vision.

áchawiilxw (vt) turn on the light; turn the key to start the motor.

achch'íix, (adj) tattered; The curtain's all tattered and torn.

ák'paash, (n) lining of the stomach; animal tripe.

ákak, (n) Canadian goose. The Canada geese fly south in
wintertime.

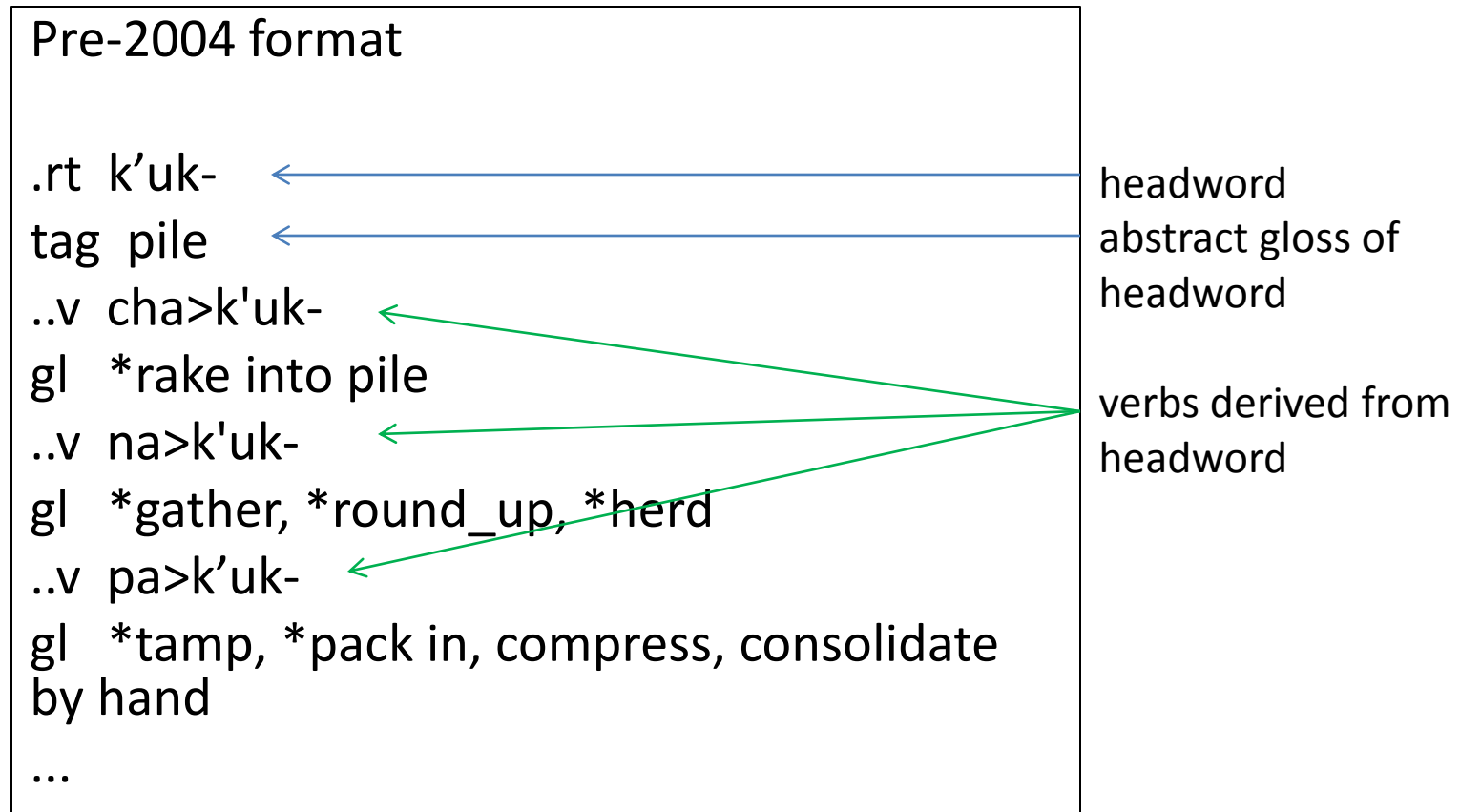
akísh, (n) pus The cat has pus in its eyes.

akú, (adj) sng. heavy; pertaining to weight.

“I was invited to revise and expand their Sahaptin-English word list in Microsoft Word and Workbook format to prepare it for publication along with a set of accompanying sound files...Initially I thought I would just correct mistakes, standardize the level of detail in the dictionary, record the sound files, and then get back to the original, more analytical project. To make the level of detail within the Heritage dictionary more consistent, I copied a substantial number of entries from our earlier database into the Heritage dictionary. Then in 2005 I was told that Heritage had intended to include an English-Sahaptin section with their dictionary. At that point I realized that there was too much overlap between the two projects...I subsequently transformed the Heritage files into a structured lexical database. I then began to incorporate more material from the earlier database into the new one, rechecking and adding to the material, identifying places where more example sentences were needed...” (Hargus 2010:lvii)

Hargus, S. (2010). Design, Organization and History of Ichishkiin Sínwit. Ichishkiin Sínwit Yakama/Yakima Sahaptin Dictionary. V. Beavert and S. Hargus. Toppenish and Seattle, Heritage University and University of Washington Press: xxxv-lxi.

Another entry



DeLancey, S. (1996). Penutian in the bipartite stem belt: disentangling areal and genetic influences. Proceedings of the 22nd annual meeting of the Berkeley Linguistics Society: Special session on historical topics in Native American languages. D. Librik and R. Beeler. Berkeley, Department of Linguistics, University of California Berkeley.

Reformatted

.rt pa>k'uk-	←	Headword
..v pa>k'uk-	←	Verb derived from headword
gl *tamp, *pack in, compress, consolidate by hand	←	Gloss of verb
imper pa>k'uk	←	Attested derived form of verb
root [k'uk] "pile"	←	Rightmost root of verb
9dex Cha>w wa>awk'a a>pak'uk.	←	Example sentence
9deng Don't pack too much in it.		

Entry in root index

k'uk “pile”

chák'uk- (v) rake into pile.

ík'uk- (v) pile, heap together.

nák'uk- (v) gather, round up, herd.

pák'uk- (v) tamp, pack in, compress, consolidate by hand.

páwyak'uk- (v) gather, congregate.

sapák'uk- (v) pile, group, gather small objects.

súk'uk- (v) push back, into pile.

shapák'uk- (v) pile, group, gather together.

tinák'uk- (v) kick into pile, pile with foot.

twák'uk- (v) sweep, rake into pile, pile.

twápk'uk- (v) chase together, round up.

wilák'uk- (v) pile, gather by the wind.

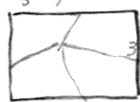
wílwik'ukt (n) wind storm.

wíik'uk- (v) pile quickly.

wyák'uk- (v) stop by (for), stop on one's way, gather as group.

More lexical review

- Pandosy 1862
 - e.g. "knife" krwt-krwt-li
 - kwtkwtlí 'serrated' (< kwtkwít 'thorn')
- Bruce Riggsby field notebooks (1960s-1970s)

k'á'y xw  *net basket for lifting fish
out of runs*

- Eugene Hunn place names files
- Anthropological literature (e.g. Schuster 1998)

Pandosy, M.-C. (1862). Grammar and Dictionary of the Yakama Language. New York, Cramoisy Press.
Schuster, H. H. (1998). Yakima and Neighboring Groups. Plateau. J. Walker, Deward E. Washington DC, Smithsonian Institution. **12**: 327-351.

Sound files

- Recorded as .wav
 - “Recording studio” behind Virginia’s house on Hwy. 97

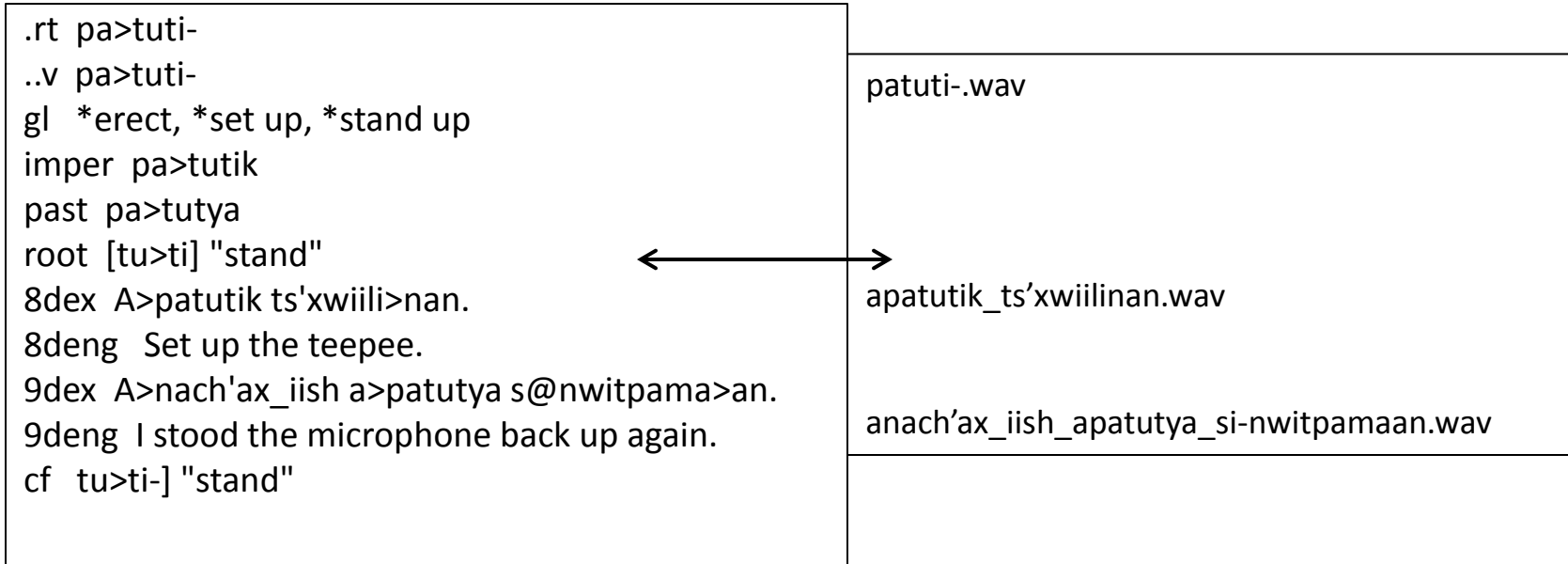


- Joshua Crowgey (QC)

- Distributed as .mp3
- On CD, linked to text on web site

- Database

Sound files



Scripts by Bill McNeill, Marlin Eller.

Translations

- Speaker translations a “clue”, not a “result”
(Matthewson 2004)
- Refining word translations
 1. Beavert’s translation
 2. Compare with
 - meaning of word in example sentences
 - related English words in Engl-Sah index

- Beware of polysemy (Vaux and Cooper 1999)
 - **ánut’at**
 - VB: “orphan”
 - Eventually: ‘person without relatives, child who has lost one or both parents, orphan’ (especially refers to child whose deceased parent was the breadwinner or primary caretaker of the family)
- Beware of flora and fauna
 - **chcháya**
 - VB: “juneberries”
 - Eventually: ‘juneberry, serviceberry, saskatoon berry’ (*Amelanchier alnifolia*)
- Beware of sparsely attested grammatical patterns
 - **túun**
 - VB: “what, selective” (vs. **tún** ‘what’)
 - **-nan** acc., **pt’íniks** ‘girl’, **pt’íniksaan** (acc.)
 - Eventually: ‘what’ (acc.)

Sentence translations

1. Beavert's translation
2. Compare with translations of every morpheme in S
3. Change 1 as needed to fit 2



P. 155

áwátiwa wafting odor

(does not have to be bad odor)

Wít nam áwátiwa ts'apx-mí

lát'ilk-t.

smoke from cedar ashes

you are spreading smells good.

łwít=nam á-watiwa ts'apx-mí lát'ilk-t.

fresh=2SG 3ABS-waft cedar-GEN smoke-GER.NOM

wátiwa- (v) smell, scent wafts. (pf **wátiwa**) — **łwít nam áwátiwa ts'apx mí lát'ilk t.** The smoke from your cedar smells good. (lit. “Your cedar smoke smells **łwít**.”) (cedar burning for religious or spiritual purposes) [cf. **tíwa-** “smell, have scent”]

Later stages of grammatical research

- “Strong” roots (Hargus and Beavert 2006)
- Intonation (Hargus and Beavert 2009)
- Locational words (Hargus and Beavert 2007)

Á-nich-k	<i>ts’áa</i>	aykáwaas-yaw.
ABS-place-IMP.SG	near(by)	chair-DAT
Verb	?	Noun

‘Put it near the chair.’

- Hargus, S. and V. Beavert (2006). High-ranking Affix Faithfulness in Yakima Sahaptin. Proceedings of the 25th West Coast Conference on Formal Linguistics. D. Baumer, D. Montero and M. Scanlon. Somerville, MA, Cascadilla Proceedings Project: 177-185.
- Hargus, S. and V. Beavert (2007). The case against adpositions in Yakima Sahaptin. Society for the Study of the Indigenous Languages of the Americas, Anaheim, CA.
- Hargus, S. and V. Beavert (2009). Sahaptin Intonational Phonology. SSILA, San Francisco.

Are locational words adpositions?

- there are ‘...languages which **do not have adpositions**, or at least appear not to...This type is underrepresented on the map because *grammars do not generally say if a language lacks adpositions* and one can only infer the absence of adpositions from a thorough grammar.’ (Dryer 2005)
- Previous studies of Sahaptin
 - Jacobs 1931 root inventory
 - verb, noun, pronoun, adjective, numeral, and kin-term
 - Rude 1996 Umatilla lexical categories
 - adv. (e.g. *c’áa* ‘near, close by, near by’)
 - Tsunoda 1991; Tsunoda, Ueda, and Itoh 1995
 - Sahaptin lacks adpositions
 - Beavert and Rigsby 1975
 - *ts’áa* ‘near’ (adv.), *xwíimi* ‘above’ (n), *xwíimichnik* (adv), *xwimitxaw* ‘above, higher than, over’ (prep.)

Dryer, M. S. (2005). 85. Order of Adposition and Noun Phrase. The World Atlas of Language Structures. M.

Haspelmath, M. S. Dryer, D. Gil and B. Comrie. Oxford, Oxford University Press: 346-349.

Tsunoda, T. (1991). Sekai no Gengo to Nihongo [The world's languages and Japanese]. Tokyo, Kuroshio.

Tsunoda, T., S. Ueda, et al. (1995). "Adpositions in Word-order Typology." Linguistics **33**: 741-761.

Recognizing adpositions

- ‘There must be some reason to believe that they [adpositions] have grammaticalized to some extent, that they are to some extent grammatically distinct from other nouns (or verbs).’ (Dryer 2005:346)
- ‘linguists differ in the criteria that they use in determining the existence of adpositions in a language’ (Bakker 2005:199)

Bakker, D. (2005). 48. Person Marking on Adpositions. The World Atlas of Language Structures. M. Haspelmath, M. S. Dryer, D. Gil and B. Comrie. Oxford, Oxford University Press: 198-201.

Locational words are N or Adv

	one or more case suffixes possible?	-pamá word exists?
1. háaw, íip, ílp	no	no
2. támiwnat, ts'áapa, wáaykyaw, <u>x</u>álukt, <u>x</u>wíimichan, <u>x</u>wíimichnik	yes	no
3. ámchnik, ánachnik, ásht, á<u>x</u>mi, imíti, imítichan, imítichnik, ktí<u>x</u>knik, páchu, papáchu, ts'áa, wát'uy, wát'uychnik, wáayk, wáaykyaw, wíyat, <u>x</u>wayayáam, <u>x</u>wíimi	yes	yes

➤ 1 = adverb; 2-3 = noun

Locational words and structural case suffixes

- **-in** obviative ergative

— **Imítichnik-in pá-shapashuy-sha.**

below-OBV.ERG INV-punish-IMPV

‘He’s being punished by the devil.’ (lit. ‘below is punishing him’)

- **-nmí** genitive

— **Papachu-nmí ítwash i-wá shíx-txaw.**

middle-GEN seasoning 3NOM-be good-COMPAR

‘Half the seasoning is best.’

-pamá ‘for, pertaining to’

- Denominal noun/adj-forming instrumental suffix
 - áchaash ‘eye’
 - achaashpamá ‘eyeglasses’ (lit. ‘for eyes’)
 - Iwínsh i-wakít-sha achaashpamá.
man 3sNOM-look.for-IMPV eyeglasses
‘The man is looking for his glasses.’
- Strictly denominal
 - k’álak- ‘pack, carry on back’
 - k’álak-t ‘packing, carrying on back’ (-t GER.NOM)
 - k’alaktpamá ‘backpack’, *k’alakpamá
- Locational
 - imitichnik-pamá itít ‘lower tooth’
below-pertaining.to tooth

Some results of *Ichishkíin Sínwit*



University of Washington Libraries, Special Collections Division, NA665: “Family of Chief Nouh ”Jimmy“ Sluisin, ...[Yakama] Indian tribe.” 1915. Two of the women (left, center) and the girl (center) are wearing **tapch’kí**. The elder lady on the right (**Atwatúxs**, wife of **Núwa**) is wearing a **t’púip** (wing dress). Photo by Asahel Curtis.

Giving back to the community

- Wolfram 1993: principle of linguistic gratuity
- Wilkins 1992: linguists who study endangered languages should even take on applied linguistic projects

Wilkins, D. (1992). "Linguistic research under Aboriginal control: A personal account of fieldwork in Central Australia." Australian Journal of Linguistics **12**: 171-200.

Wolfram, W. (1993). "Ethical considerations in language awareness programs." Issues in Applied Linguistics **4**: 225-255.

Dictionary as research tool

- Sahaptin word order
 - ‘free’ (Rude 1994, Rigsby and Rude 1996)
 - ‘serves only a discourse-pragmatic function...in both Sahaptian languages’ (Rude 1999)
 - patterns in 149 clauses of Jacobs 1929 texts (Rude 2009)

SVO	SOV	VSO	VOS	OVS	OSV
50	9	36	34	16	4

- Rigsby, B. and N. Rude (1996). Sketch of Sahaptin, a Sahaptian Language. Languages. I. Goddard. Washington DC, Smithsonian Institution: 666-692.
- Rude, N. (1994). Direct, Inverse and Passive in Northwest Sahaptin. Voice and Inversion. T. Givón. Amsterdam, John Benjamins. **viii**: 101-119.
- Rude, N. (1999). External Possession in Sahaptian. External Possession. D. L. Payne and I. Barshi. Amsterdam, John Benjamins. **vii**: 403-427.
- Rude, N. (2009). "Transitivity in Sahaptin." Northwest Journal of Linguistics **3**(3): 1-37.

VB judgements about word order

- All are possible and ‘understood’:
- ‘The woman is summoning her relatives.’

– SVO: **Áyat i-wánpi-sha xítway-ma.**

woman 3sNOM-summon-IPV relative-PL

“most
modern”

– SOV: **Áyat xítwayma iwánpisha.**

– VSO: **Iwánpisha áyat xítwayma.**

“oldest”

– VOS: **Iwánpisha xítwayma áyat.**

preferred

– OVS: **Xítwayma iwánpisha áyat.**

– OSV: **Xítwayma áyat iwánpisha.**

On a different occasion

SVO Skw'ííłapt-in pá-'itł'yawy-a tíin-in-an.

whirlwind-OBV.ERG

INV-kill-PST

person-DU-ACC

'The whirlwind (i.e. tornado) killed two people.'

SOV Skw'ííłaptin tíininan pá-'itł'yawya.

VSO Pá-'itł'yawy-a skw'ííłapt-in tíin-in-an.

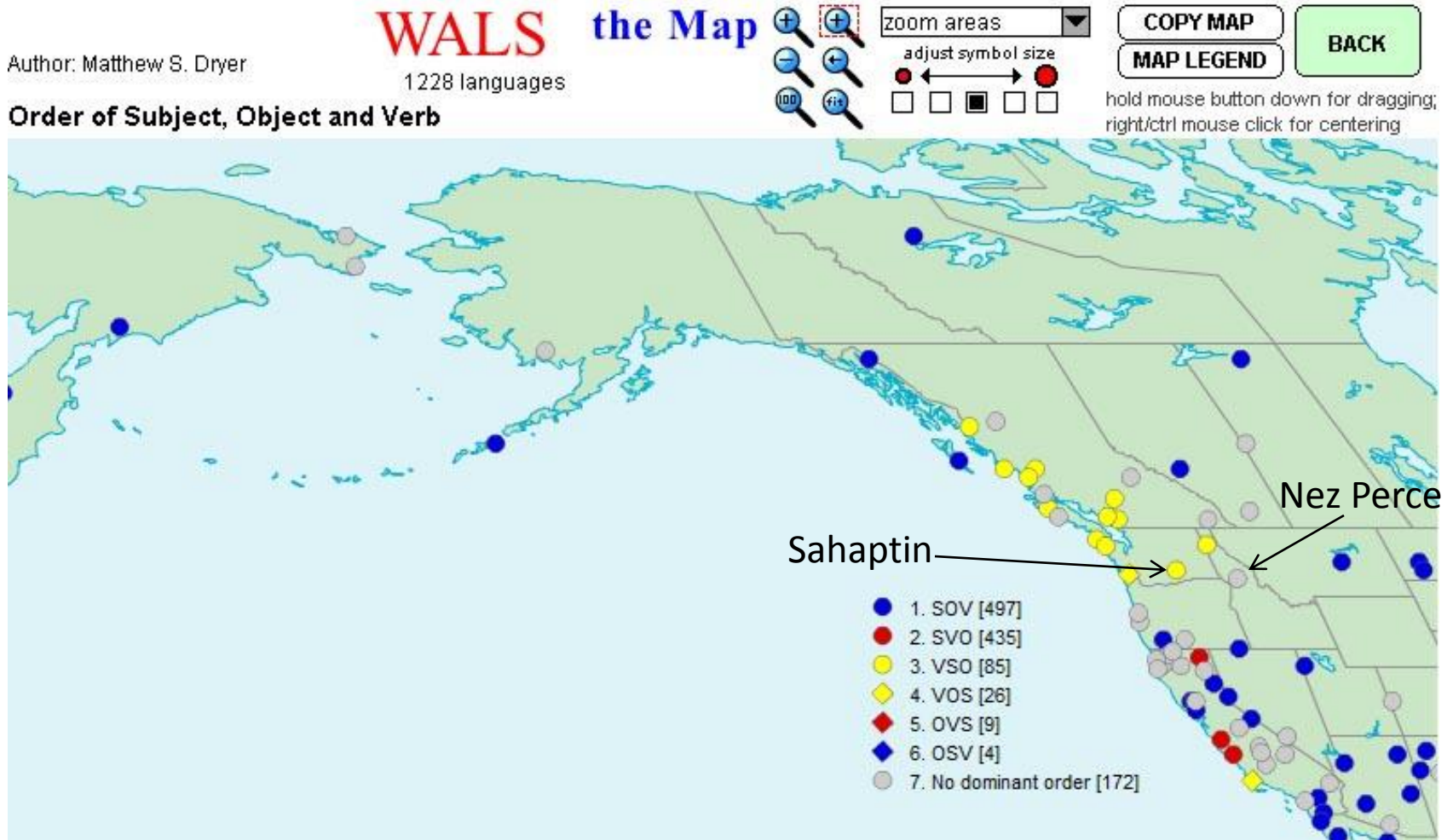
VOS Pá-'itł'yawya tíininan skw'ííłaptin.

preferred

OSV Tíininan skw'ííłaptin pá-'itł'yawya.

OVS Tíininan pá-'itł'yawya skw'ííłaptin.

Sahaptin WO according to *WALS*



Dryer, M. S. (2005a). 81. Order of Subject, Object, and Verb. *The World Atlas of Language Structures*. M. Haspelmath, M. S. Dryer, D. Gil and B. Comrie. Oxford, Oxford University Press: 330-331.

Determining dominant word order

- ‘The rule of thumb employed is that if text counts reveal one order of a pair of elements to be more than twice as common as the other, the language is treated as lacking a dominant order for that pair of elements. For sets of three elements, one order is considered dominant if text counts reveal it to be more than twice as common as the next most frequent order; if no order has this property, then the language is treated as lacking a dominant order for that set of elements.’ (Dryer 2005b)

Morphemes of *inverse* and *direct* constructions

	S	V	O
inverse	N-in	pá-V	N-nan
direct	N	i-V	N-nan
direct	N	i-V	N

inverse: involves ‘topic switching’ to object (Rude 1994:106), objects are topics (Rigsby and Rude 1996)

direct: subjects are topics (Rigsby and Rude 1996)

Verbal **i-** 3sNOM vs. **pá-** INV

Direct

łwínsh i-k'ínu-na twít'ash ku kuunák í-tł'yawy-a.*

man 3sNOM-see-PAST grizzly and that.ACC TRANS-kill-PAST

'The man saw a grizzly bear and he killed that.'

Inverse

łwínsh i-k'ínu-na twít'ash ku kwiiník pá-'i-tł'yawy-a.

man 3sNOM-see-PAST grizzly and that.OBV.ERG INV-TRANS-kill-PAST

'The man saw a grizzly bear and that killed him.'

***i-'i** --> **i**

(VB versions of Umatilla Sahaptin sentences provided by Rude 1994:104-105)

Inverse

- Frequency in 22-page text sample (Rude 1994)
 - active-direct 57.2% (n = 99)
 - inverse 42.8% (n = 74)
 - passive <1.0% (n = 0)
- Not uncommon in dictionary sentences

Átawit-in **sxíxni pá-tkw'a'anakw-a pt'íniksaan.**

sweetheart-OBV.ERG angry INV-walk.away-PAST girl.ACC

‘The girl’s angry sweetheart left her.’

Questions about word order

- What are word order patterns in dictionary sentences? (“out-of-the-blue”, discourse factors at a minimum)
- Does direct vs. inverse affect word order patterns?
- Data: 452 of 4711 example sentences
 - Sentences with “double objects” (Rude 1992) excluded.

WO percentages

	SVO	SOV	VSO	VOS	OVS	OSV
n=	330	9	48	39	19	7
Observed/ Expected	4.4	0.1	0.6	0.5	0.3	0.1
cf. Rude 2009	2.0	0.4	1.4	1.4	0.6	0.2

‘Of course, unless one examines a large number and a broad variety of texts, one cannot be sure that differences in frequency may not occasionally reflect the idiosyncratic properties of a particular set of texts.’ (Dryer 2005b)

Inverse and direct percentages

	Rude 1994	<i>Ichishkíin Sínwit</i>
direct	57% (n = 99)	77% (n = 346)
inverse	43% (n = 74)	23% (n = 106)

WO patterns subdivided by inverse/direct

		SVO	SOV	VSO	VOS	OVS	OSV
direct	n=	286	3	22	20	10	5
	O/E	5.0	0.1	0.4	0.3	0.2	0.1
inverse	n=	44	6	26	19	9	2
	O/E	2.5	0.3	1.5	1.1	0.5	0.1

- Exceeds expectations: direct SVO, inverse SVO
- As expected: inverse VSO, VOS
 - unlike direct VSO, VOS

Summary of word order

- What is Sahaptin word order?
 - which are possible? all 6
 - which is preferred? no clear preference
 - which is dominant? SVO (for VB, also Jacobs 1929 sample)
- Does inverse/direct affect WO?
 - in inverse, VO more common than in direct
- Other factors surely affect word order
 - adverb in S

Summary of *Ichishkíin Sínwit*

- The cons
 - Took many hours of my time
 - ‘Resource development is often deprecated in the academic community but that is completely unjustified’ (Richard Sproat)
 - Locally considered “Virginia’s dictionary”
 - “Why haven’t you sent it off yet?” (HU)

- The pros
 - Resource for linguistic research
 - Resource for other academics
 - Resource for language pedagogy
 - “No book---except for, perhaps, religious documents...---has a shelf life longer than a dictionary.” (Frawley, Hill and Munro 2002:22)
 - The most fun that can be had in linguistics



Frawley, W., K. C. Hill, et al. (2002). Making a Dictionary: Ten Issues. Making dictionaries: Preserving Indigenous Languages of the Americas. W. Frawley, K. C. Hill and P. Munro. Berkeley, University of California Press: 1-22.

Postscript

- Ongoing interlinear glossed text preparation
- Adding to dictionary
 - lexical semantic refinements
 - new lexical items
 - more sentences
 - more sound files
- New module written by Hsu generates cross-references to example sentences in other entries

Nostrand acceptance speech



K'ixli (small tule mat) lying against tules growing in Toppenish National Wildlife Refuge. Photo by Dave Paul Nelson.

Howard and Frances Nostrand

- The Nostrand Endowed Professorship 'to encourage research and teaching in language competence and cultural competence'



Cultural competence

- A necessary part of compilation of *Ichishkíin Sínwit*
 - Being deferential to elders
 - Dictionary hopefully a cultural as well as linguistic record

Kw'alanúushamatash

kw'alanúu-sha=matash

thank-IPV=2.OBJ

'I/we thank you (pl.)'



...recording for the dictionary at Virginia's house in Toppenish. We kept the overhead fluorescent light turned off during recording sessions because of its buzz, which would have added noise to the recordings. Photo by Dave Paul Nelson.