

Turning language documentation into reader's and writer's software tools

21st Century Tools for Indigenous Languages

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21st Century Tools for Indigenous Languages

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- Community contacts
 - Miyo Wahkohtowin Education Board, Maskwacîs, AB
 - Etc.

Many shoulders to stand upon

- Cree elders, instructors, language activists, and speakers
- Alberta Elders' Cree Dictionary
 - Earle Waugh et al.
- Maskwacis Cree dictionary
 - Miyo Wahkohtowin Education
- Cree words
 - Arok Wolvengrey
- Cree grammatical descriptions
 - Jean Okimâsis, H. Christoph Wolfart
- Cree text collections
 - H. Christoph Wolfart, Kevin Russell
 - Patricia Demers, Naomi L. McIlwraith, Dorothy Thunder
 - Bloomfield
 - Hopefully many more ...
- Haida native speakers, elders and scholars
- Giallatekno/Divvun (UiT) work on language technology for the Indigenous Saami languages

Key themes

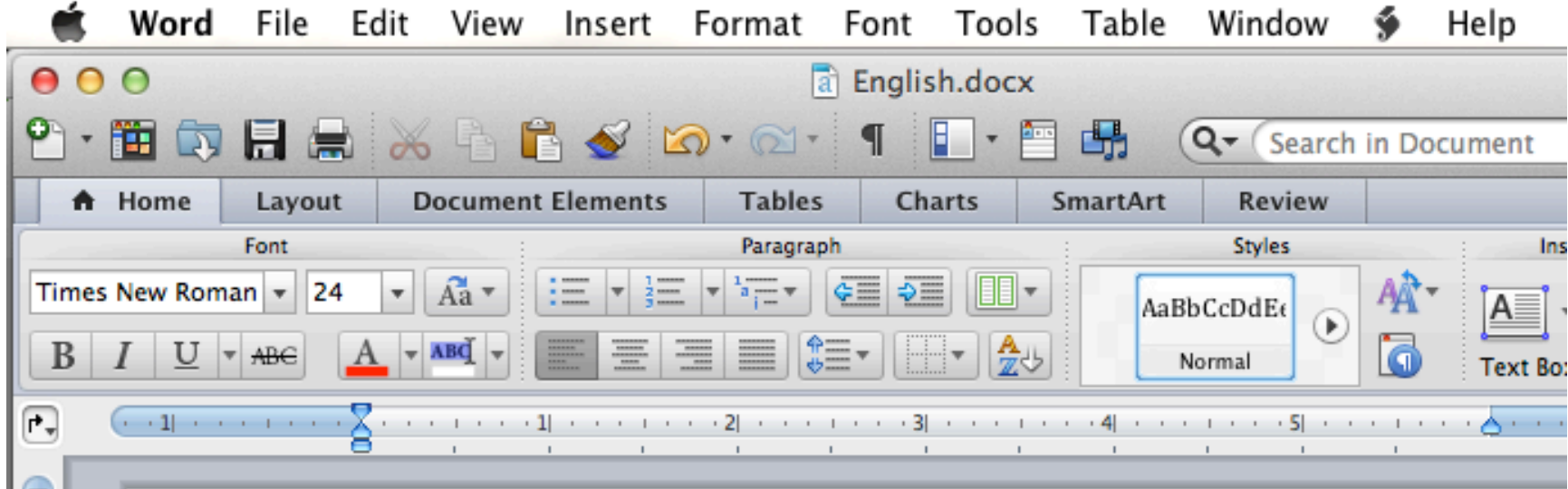
- Dating service for field linguists and computational linguists → desiderata for lexicographical documentation
- “Talking refrigerators” → language technological low-hanging fruits

Key message to field linguists – how to enable computational models?

- systematic, well-structured, and detailed descriptions of words and their structure
 - exhaustive descriptions of all word-class paradigm types
 - matched with comprehensive lexicon with paradigm type specifications

Low-hanging fruit

- Toolkit for Indigenous languages
 - Intelligent web-based dictionaries
 - linking any inflected form with the appropriate dictionary entry + generation of word paradigms → ease-of-use
 - Spell-checker
 - adherence with one or more existing orthographical conventions → production of good-quality texts
 - Intelligent language training and education applications
 - dynamic generation of large numbers of exercises based combining core vocabulary with a substantially smaller set of exercise templates
 - basic text-to-speech synthesizers
 - linguistic analysis tools

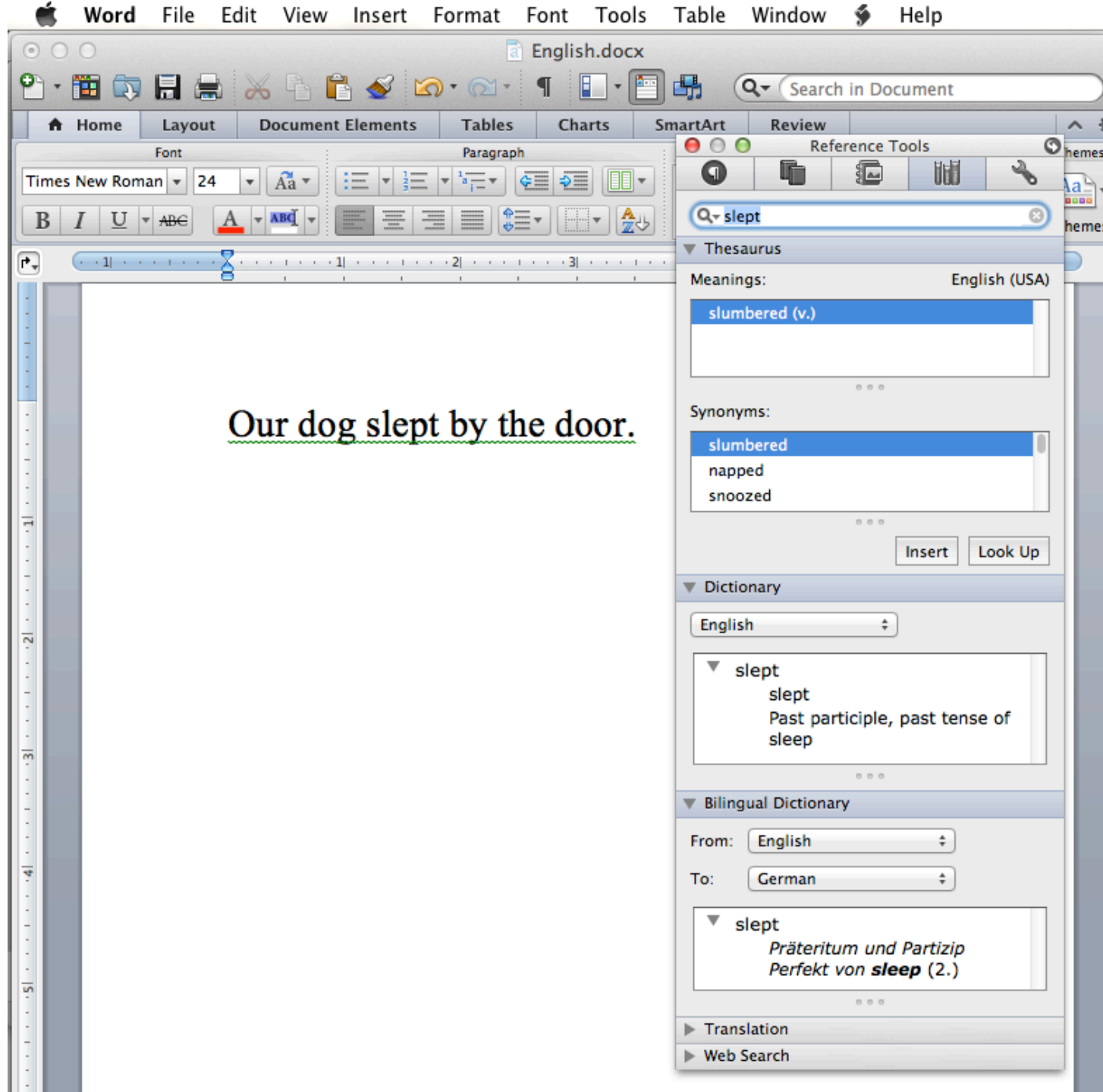


Our dog slept by the door.

slept
sleep
sleet
sleeps
sleepy

Ignore
Ignore All
Add

AutoCorrect
Spelling...



Our dog slept by the door.

Reference Tools

Our

Thesaurus

Dictionary

English

our (adjective)
our [aur]
1. belonging to us
2. belonging to everyone
3. refers to member of family

Bilingual Dictionary

From: English
To: French

our
notre, nos

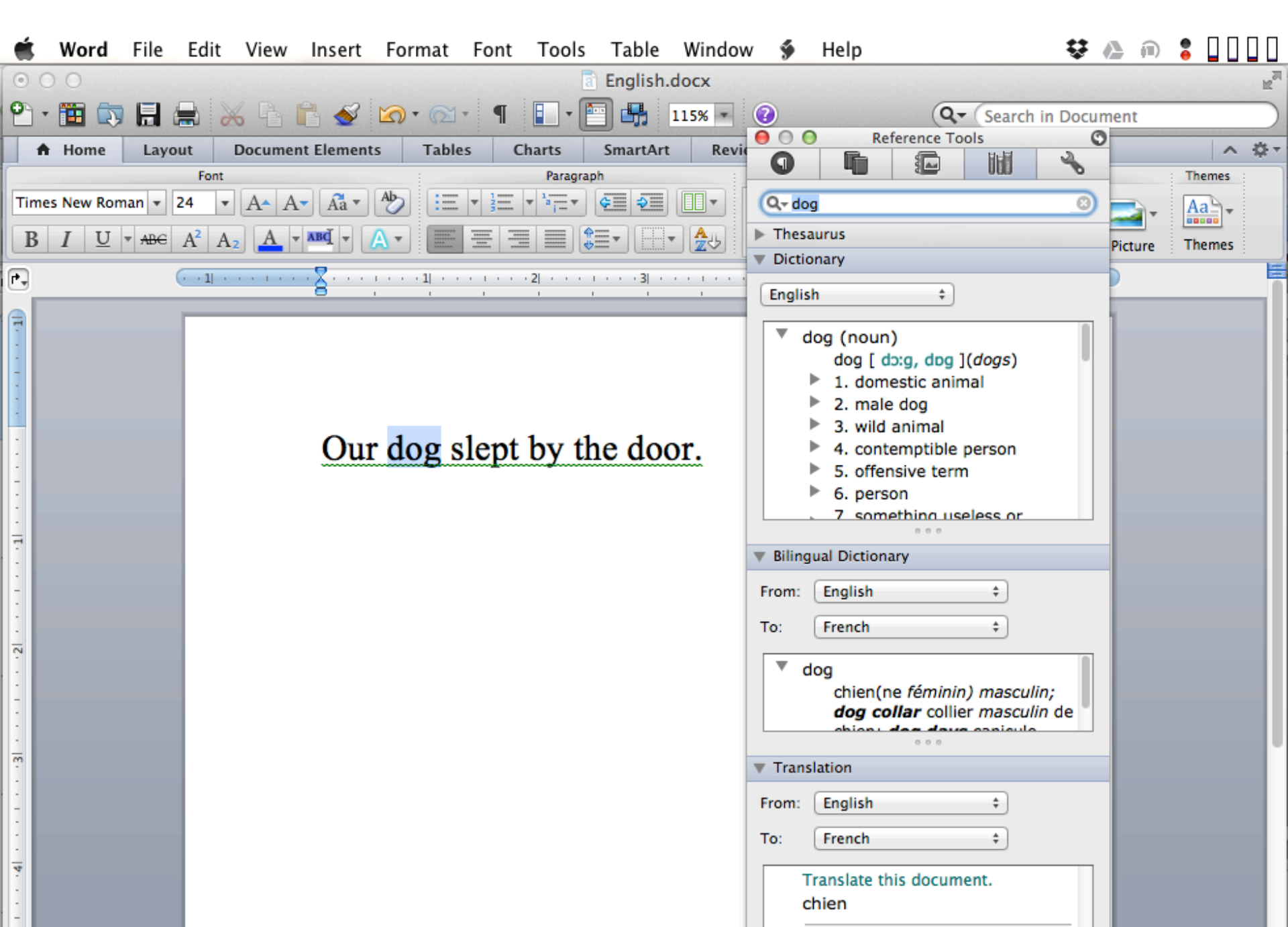
Translation

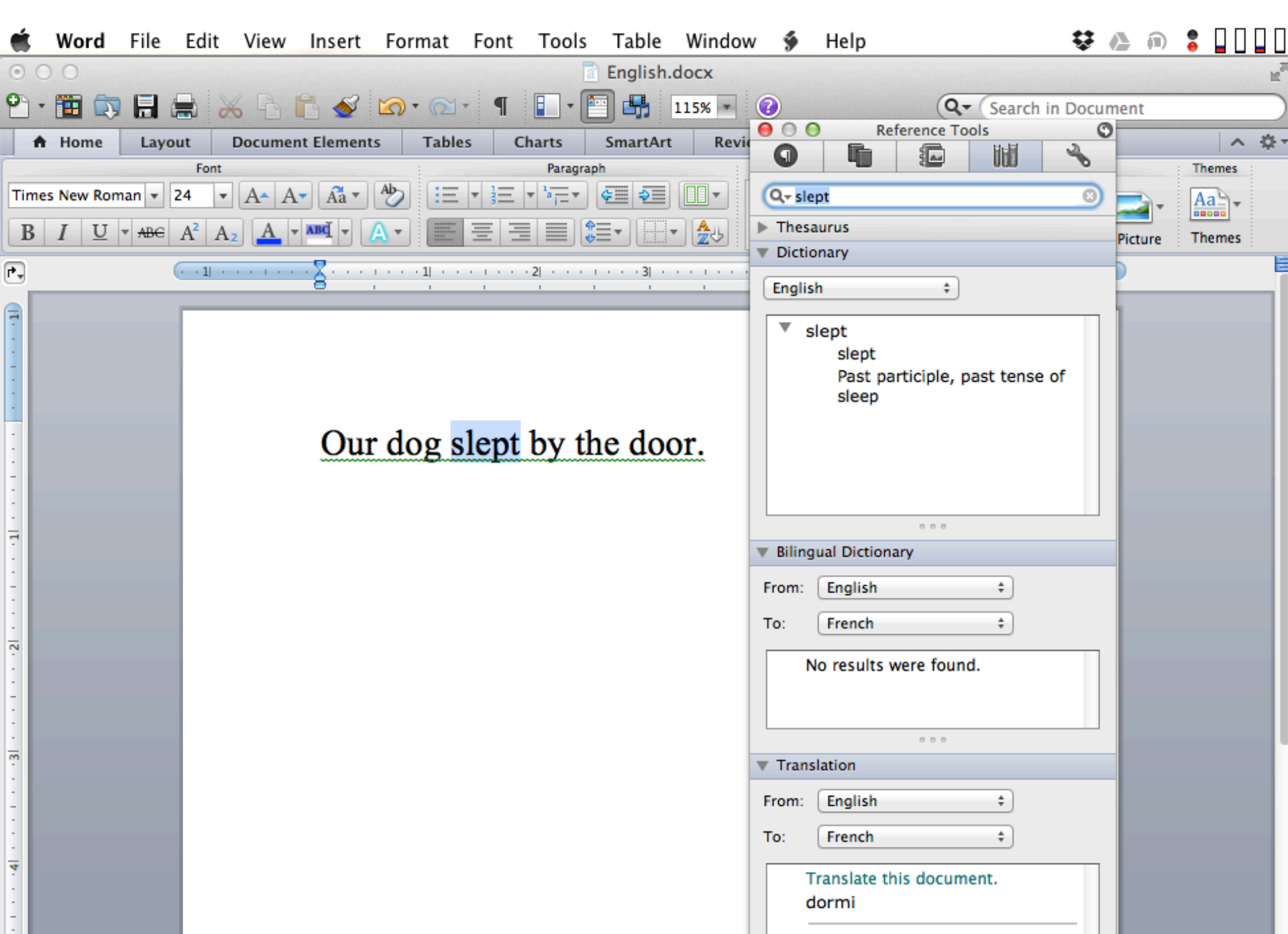
From: English
To: French

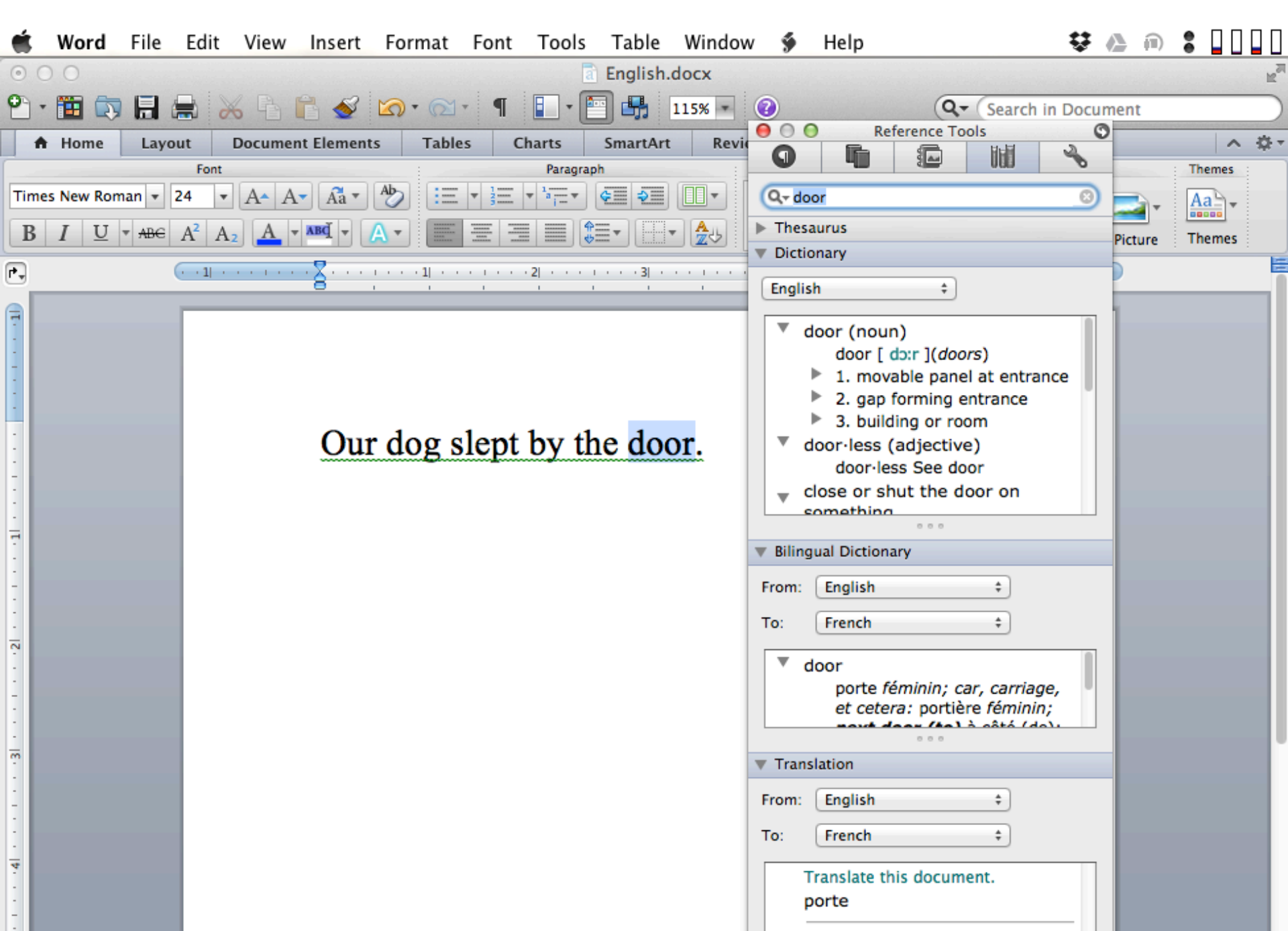
Translate this document.
Notre

Themes

Picture Themes







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https://translate.google.com/#en/fr/Our dog slept by th Search: honolulu luau

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Yiddish English Arabic Detect language



French Yiddish Finnish

Translate

Our dog slept by the door.



Notre chien dormait près de la porte.



Wrong?

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Did you mean: Our dog *sleeps* by the door.

Try a new browser with automatic translation. Download Google Chrome Dismiss x



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Translate



French English Finnish Detect language ▾



French English Finnish ▾

Translate

Notre chien a dormi près de la porte. x



Our dog slept near the door.



Wrong?

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Translate

Yiddish English Arabic Detect language



English Yiddish Finnish

[Translate](#)

Our dog slept by the door.



Meidän koira nukkuu oven.



Wrong?

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Did you mean: Our dog *sleeps* by the door.

Font: Times New Roman, 24, Bold, Italic, Underline, Text Color, Background Color, Paragraph: Bulleted List, Numbered List, Indentation, Alignment, Line and Paragraph Spacing, Styles, Language, Proofing, Reference Tools.

Notre chien dormait par la po

Reference Tools

Search: Notre

Thesaurus

Dictionary

French

notre

notre [*notr*]

adjectif possessif (nos)

1. sert à marquer le lien d'appartenance avec le groupe de personnes dont fait partie celui qui parle

- nous viendrons avec nos trois enfants

...

Bilingual Dictionary

From: French

To: English

No results were found.

...

Translation

From: French

To: English

Translate this document.

Our

Notre chien dormait par la po

Reference Tools

Search in Document

Q- dormait

Thesaurus

Dictionary

French

No results were found.

Bilingual Dictionary

From: French

To: English

No results were found.

Translation

From: French

To: English

Translate this document.
slept



Search in Document

door

Try a new browser with automatic translation. Download Google Chrome Dismiss



+Antti [Grid Icon] [Bell Icon] [Plus Icon] [Profile Icon]

Translate

French English Finnish Detect language



French English Finnish

Translate

Notre chien dormait près de la porte. x
[Speaker Icon] [Keyboard Icon]

Our dog was sleeping near the door.
[Star Icon] [List Icon] [Speaker Icon] Wrong?

Type text or a website address or [translate a document](#).
Did you mean: Notre chien **dort** près de la porte.

Similar language technological
tools for Indigenous languages?

Modeling word structure – morphology

- English
 - nouns: 4 forms
 - verbs: 4-5 forms
 - adjectives: 3 forms
- Morphological modeling for the 100k most frequent/common words
 - possible to list all forms
 - $90k \times 4 + 6k \times 5 + 4k \times 3 = 360k + 30k + 12k = 402k$

Cree word structure – verbs

- nipâw 's/he sleeps'
- ninipân 'I sleep'
- nikînipân 'I slept'
- nikînipânân 'we slept'
- niwînipân 'I will sleep'
- ninôhtênipân 'I want to sleep'
- nikîmâcinipân 'I started to sleep'
- nikînôhtêmâcinipân 'I wanted to start to sleep'

Cree word structure – nouns

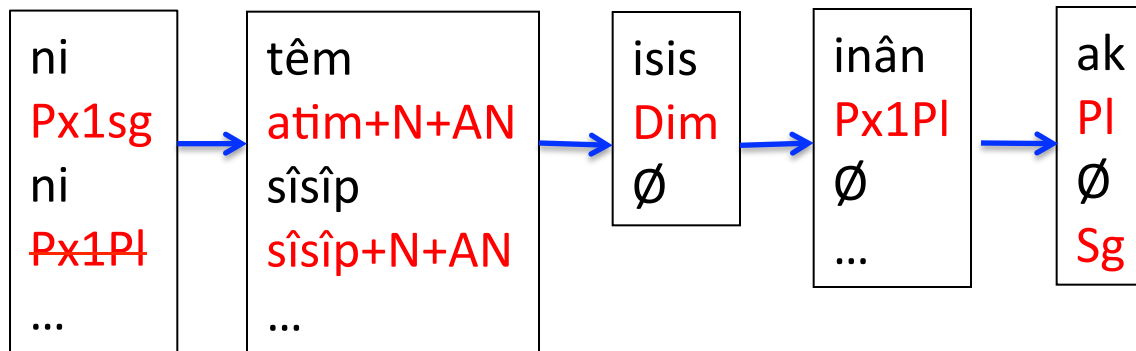
- maskisin ‘shoe’
- maskisina ‘shoes’
- nimaskisin ‘my shoe’
- kimaskisin ‘your (sg.) shoe’
- omaskisin ‘his shoe’
- nimaskisininâna ‘our shoes’
- kimaskisininawa ‘our and your shoes’
- kimaskisiniwâwa ‘your shoes’
- omaskisiniwâwa ‘their shoe’

How to deal with complex
morphology?

Finite state transducers – components

nicêmisisinânak

“surface” form



1. Affixation sequence rules (associated with morphological features)

$t \rightarrow c / _ \text{Dim}$
 ~~$i \rightarrow o / m _ \text{Dim}$~~

2. Morphophonological rules

ni...inân
 $Px1Pl + \dots + Px1Pl$
 ~~$Px1sg + \dots + Px1Pl$~~

3. Affix agreement rules “filters”

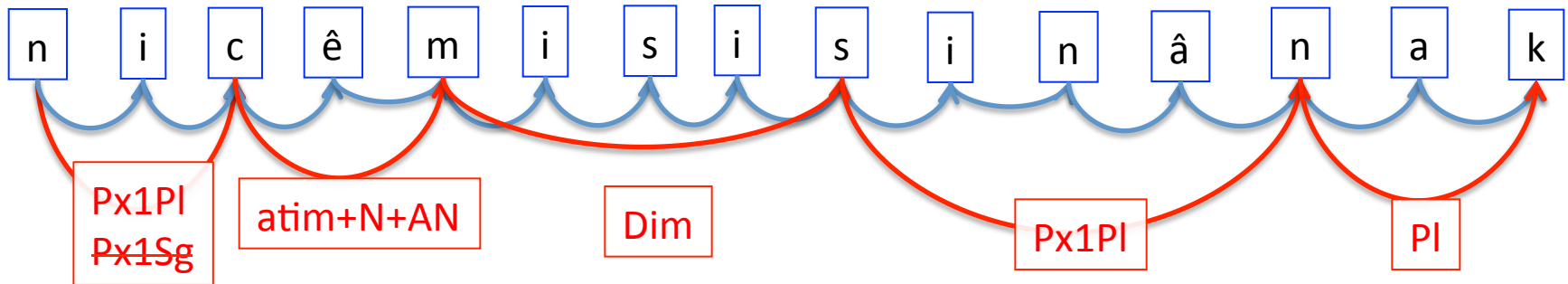
$atim+N+AN+Dim+Pl+Px1Pl$

“deep/underlying” form

Finite state transducers – resultant data structure

“character tree” with labeled arches + states

nicêmisisinânak



$atim+N+AN+Dim+PI+Px1PI$

Plains Cree – nominal morphotax

- *stem*+NUM
- *stem*+OBV
- *stem*+LOC

- *stem*+DIM+NUM
- *stem*+DIM+OBV
- *stem*+DIM+LOC

- POSS+*stem*+(POSS)+NUM
- POSS+*stem*+DIM+(POSS)+NUM
- POSS+*stem*+DIM+(POSS)+OBV
- POSS+*stem*+(POSS)+LOC
- POSS+*stem*+DIM+(POSS)+LOC

Modeling affix and stem variation

- In computational modeling, we are trying to model the entire lexicon
- Identifying the exhaustive set of all paradigm types covering the entire lexicon is indispensable
 - Specification of the full set of possible affix (sequence) realizations and the associated morphological features for each paradigm/stem type
 - Classification of stems per each word class according to paradigm types

Finite state transducers – word paradigms and rules (Okimâsis 2004)

Chapter 5: Diminutives

The term "diminutive" is used here to refer to nouns for items or objects that are smaller than the norm. This is represented by a sound change and the addition of suffixes. In some cases, adding a suffix is not enough so the "t" is replaced by "c." So, unlike English which uses entirely different words for objects smaller or younger than the mature version, (for instance, man-boy; cat-kitten; woman-girl), Cree uses suffixes. English also uses adjectives to show this concept as in: a box-a little box. As the following rules indicate a number of changes occur to the Cree nouns when the suffixes are added.

1. Add "-isis" or more often "-is" to most nouns:

Noun	Diminutive Noun
minōs	minōsis
a cat	a little cat/kitten
oyākan	oyākanis
a dish	a small dish
sisip	sisipisis
a duck	a little duck/duckling

2. If the noun contains "t," all are changed to "c," in addition to adding the suffix "is."

Noun	Diminutive Noun
mistikowāt	miskikowacis
a box	a little box
mistikwān	miskikwānis
a head	a little head
astotin	ascocinis
a hat/cap	a little hat
tēhtapiwin	cēhcapiwinis
a chair	a little chair
iskwāhtëm	iskwāhcēmī
a door	a small door

3. When the word ends in a vowel and a "w" drop the "w" and add "sis." If the vowel is short make it long then add "s" or "sis."

Noun	Diminutive Noun
nāpēw	nāpēsis
a man	a boy
iskwēw	iskwēsis
a woman	a girl
pihēw	pihēsis
a grouse	a little grouse (prairie chicken)
āmōw	āmōsis
a bee	a little bee
pikiw	pikis
gum	a bit of gum

4. For some nouns, the diminutive ending is "osis," after changing any "t"s to "c"s.

Noun	Diminutive Noun
atim	acimosis
a dog	a little dog/puppy
mistatim	miskatimosis
a horse	a little horse/pony

Chapter 31: Possession

Animate and Inanimate Nouns

It is important to know what is meant by dependent and independent when discussing animate or inanimate nouns. In this chapter each category is dealt with separately. In addition to the information on dependent and independent nouns a section is devoted to kinship terms in their possessed forms.

Nouns like verbs can be conjugated so it should not be too complicated an idea to understand who owns what or indeed, how many. But the word "declension" will be used, instead of conjugation, to describe this process.

Independent Nouns

An Independent noun, inanimate or animate, is one which makes sense on its own, without prefixes or suffixes. Nouns such as *awāsis* – a child, *masinahikan* – a book, and *okimāhkan* – a chief are examples.

To show possession of Independent nouns prefixes "ni-", "ki-", "o-" are attached to the beginning of nouns. These are used for two reasons: a) to show that they belong to someone; b) to specify who owns them.

Declension of Independent Nouns

Recall in the verb conjugation paradigms that: "ni-" is only for 1s or I; 1p or we; "ki-", is for 2s or you (sg); 2l or we; and 2p or you (pl). This same idea is applied to specify who the owner is when talking about possession but now:

1s	ni	=	my
1p	ni	=	our (excl)
2s	ki	=	your
2l	ki	=	our (incl)
2p	ki	=	your

To show that 3s, 3's, 3p, 3'p owns an inanimate noun a special prefix "o-" is attached to the inanimate nouns in the examples.

3s	o	=	his/her/its
3's	o	=	his/her/its
3p	o	=	their
3'p	o	=	their

To put all of this in a format that we have been using for the conjugation here is a paradigm for the declension of possession of a singular object:

1s	ni	1s	My
2s	ki	2s	Your
3s	o	3s	His/her/its
3's	o	3's	His/her/its
1p	ni	1p	Our (excl)
2l	ki	2l	Our (incl)
2p	ki	2p	Your
3p	o	3p	Their
3'p	o	3'p	Their

Finite state transducers – word paradigms

Word forms

atim # “dog” – animate noun
atimwak
atimohk # really rare form
nitêm
kitêm
otêma # final a is because of obviative 3-on-3 marking
otêmiyiwa # obviative possessor, always has -a suffix
nitêminân
kitêminaw
kitêmiwâw
otêmiwâwa
otêmiyiwa
nitêmak
kitêmak
otêma
otêmiyiwa
nitêminânak
kitêminawak
kitêmiwâwak
otêmiwâwa # final a is because of obviative 3-on-3 marking
otêmiyiwa
acimosis
acimosisak
acimosisihk #rare form, but theoretically correct
nicêmosis
kicêmosis
ocêmosisa
nicêmosisinân
kicêmosisinaw
kicêmosisiwâw
ocêmosisiwâwa

Analyses

atim+N+AN+Sg
atim+N+AN+Pl
atim+N+AN+Loc
atim+N+AN+Sg+Px1Sg
atim+N+AN+Sg+Px2Sg
atim+N+AN+Sg+Px3Sg+Obv
atim+N+AN+Sg+Px3iSg+Obv
atim+N+AN+Sg+Px1Pl
atim+N+AN+Sg+Px12Pl
atim+N+AN+Sg+Px2Pl
atim+N+AN+Sg+Px3Pl+Obv
atim+N+AN+Sg+Px3iPl+Obv
atim+N+AN+Pl+Px1Sg
atim+N+AN+Pl+Px2Sg
atim+N+AN+Pl+Px3Sg+Obv
atim+N+AN+Pl+Px3iSg+Obv
atim+N+AN+Pl+Px1Pl
atim+N+AN+Pl+Px12Pl
atim+N+AN+Pl+Px2Pl
atim+N+AN+Pl+Px3Pl+Obv
atim+N+AN+Pl+Px3iPl+Obv
atim+N+AN+Dim+Sg
atim+N+AN+Dim+Pl
atim+N+AN+Dim+Loc
atim+N+AN+Dim+Sg+Px1Sg
atim+N+AN+Dim+Sg+Px2Sg
atim+N+AN+Dim+Sg+Px3Sg+Obv
atim+N+AN+Dim+Sg+Px1Pl
atim+N+AN+Dim+Sg+Px12Pl
atim+N+AN+Dim+Sg+Px2Pl
atim+N+AN+Dim+Sg+Px3Pl+Obv

The necessity of fieldwork?

- Level of explicitness required for a computational model beyond many grammatical descriptions
 - Individual morphological phenomenon types (possession, locative, plural, obviation) are typically individually explained, but not all their possible combinations are necessarily covered
- For a computational model, one needs the paradigms in full
 - for all paradigm types
- “missing” theoretically possible morphological forms should be submitted to fluent native speaker scrutiny
 - But considerable variety among native speaker specialists regarding the acceptability of some non-core inflected forms
 - Individual speakers have only partial experience of the full possible extent of a language

The ideal solution?

- Exhaustive sets of full paradigms
- Corresponding sets of paradigm member words
- But are these abstractions/generalizations “creating” some individual forms which do not in practice exist in the linguistic system?

Plains Cree

Nominal inanimate morphotax – affix/feature bundles (Wolvengrey, p.c.)

NI₁ Consonant-Initial Regular NI Stem example: *cīmān*– “canoe, boat”

		Prefix	NI ₁ Stem	(–im)	Ending	Word	Translation
singular						<i>cīmān</i>	canoe
	1s	ni–		(–im)		<i>nicīmān</i>	my canoe
	2s	ki–		(–im)		<i>kicīmān</i>	your canoe
	1p	ni–		(–im)	–inān	<i>nicīmāninān</i>	our canoe
	2l	ki–		(–im)	–inaw	<i>kicīmāninaw</i>	our canoe
	2p	ki–		(–im)	–iwāw	<i>kicīmāniwāw</i>	your canoe
	3s	o–		(–im)		<i>ocīmān</i>	his/her canoe
	3p	o–		(–im)	–iwāw	<i>ocīmāniwāw</i>	their canoe
	4	o–		(–im)	–iyiw	<i>ocīmāniyiw</i>	another’s canoe
plural					–a	<i>cīmāna</i>	canoes
	1s	ni–		(–im)	–a	<i>nicīmāna</i>	my canoes
	2s	ki–		(–im)	–a	<i>kicīmāna</i>	your canoes
	1p	ni–		(–im)	–ināna	<i>nicīmānināna</i>	our canoes
	2l	ki–		(–im)	–inawa	<i>kicīmāninawa</i>	our canoes
	2p	ki–		(–im)	–iwāwa	<i>kicīmāniwāwa</i>	your canoes
	3s	o–		(–im)	–a	<i>ocīmāna</i>	his/her canoes
	3p	o–		(–im)	–iwāwa	<i>ocīmāniwāwa</i>	their canoes
	4	o–		(–im)	–iyiwa	<i>ocīmāniyiwa</i>	another’s canoes
locative					–ihk	<i>cīmānihk</i>	in the canoe(s)
	1s	ni–		(–im)	–ihk	<i>nicīmānihk</i>	in my canoe(s)
	2s	ki–		(–im)	–ihk	<i>kicīmānihk</i>	in your canoe(s)
	1p	ni–		(–im)	–ināhk	<i>nicīmānināhk</i>	in our canoe(s)
	2l	ki–		(–im)	–ināhk	<i>kicīmānināhk</i>	in our canoe(s)
	2p	ki–		(–im)	–iwāhk	<i>kicīmāniwāhk</i>	in your canoe(s)
	3s	o–		(–im)	–ihk	<i>ocīmānihk</i>	in his/her canoe(s)
	3p	o–		(–im)	–iwāhk	<i>ocīmāniwāhk</i>	in their canoe(s)
	4	o–		(–im)	–iyihk	<i>ocīmāniyihk</i>	in another’s canoe(s)
dim					–is(is)*	<i>cīmānis</i>	small canoe

*The Diminutive derivation will also convert any /t/ present in the stem
(and usually the prefix as well) to [c] (i.e. /t/ > [c]).

All derived diminutive verbs become regular stems of the appropriate animacy.

NI₁
Consonant-Initial Regular NI Stem
example: *cīmān*– “canoe, boat”

		Prefix	NI ₁ Stem	(-im)	Ending	Word	Translation
singular						cīmān	canoe
	1s	ni–		(-im)		nicīmān	my canoe
	2s	ki–		(-im)		kicīmān	your canoe
	1p	ni–		(-im)	–inān	nicīmāninān	our canoe
	21	ki–		(-im)	–inaw	kicīmāninaw	our canoe
	2p	ki–		(-im)	–iwāw	kicīmāniwāw	your canoe
	3s	o–		(-im)		ocīmān	his/her canoe
	3p	o–		(-im)	–iwāw	ocīmāniwāw	their canoe
	4	o–		(-im)	–iyiw	ocīmāniyw	another’s canoe
plural					–a	cīmāna	canoes
	1s	ni–		(-im)	–a	nicīmāna	my canoes
	2s	ki–		(-im)	–a	kicīmāna	your canoes
	1p	ni–		(-im)	–ināna	nicīmānināna	our canoes
	21	ki–		(-im)	–inawa	kicīmāninawa	our canoes
	2p	ki–		(-im)	–iwāwa	kicīmāniwāwa	your canoes
	3s	o–		(-im)	–a	ocīmāna	his/her canoes
	3p	o–		(-im)	–iwāwa	ocīmāniwāwa	their canoes
	4	o–		(-im)	–iyiwa	ocīmāniyiwa	another’s canoes
					–ihk	cīmānihk	in the canoe(s)
	1s	ni–		(-im)	–ihk	nicīmānihk	in my canoe(s)

Plains Cree nominal paradigm types (Wolvengrey, p.c. 2014)

- Inanimate: 10
 - NI1 C-Initial Regular NI Stem : **cîmân** “canoe, boat”
 - NI1 V-Initial Regular NI Stem : **astotin** “hat, cap”
 - NI2 C-Initial VW NI Stem : **mîkisasâkay** “beaded coat, beaded dress”
 - NI2 V-Initial VW NI Stem : **oskasâkay** “new coat, new dress”
 - NI3 C-Initial Cw NI Stem : **pahkêkin:pahkêkinw-** “leather, rawhide”
 - NI3 V-Initial Cw NI Stem : **askêkin:askêkinw-** “fresh rawhide”
 - NI4 C-Initial Single-Syllable NI Stem : **wâw-** “egg”
 - NI4 V-Initial Single-Syllable NI Stem : **osk-ây-** “new item, new thing”
 - NI4 V-Initial Single-Syllable irregular NI Stem : **ôsi:ôs-** “canoe, boat”
 - NI4w C-Initial Single-Syllable-/w/ NI Stem : **mihkw-** “blood”

Nominal animate morphotax – affix/feature bundles (Wolvengrey, p.c.)

NA₁ Consonant-Initial Regular NA Stem example: *pahkwēsikan*– “bannock”

		Prefix	NA ₁ Stem	(–im)	Ending	Example	Translation
singular						<i>pahkwēsikan</i>	bannock
	1s	ni–		(–im)		<i>nipahkwēsikanim</i>	my bannock
	2s	ki–		(–im)		<i>kipahkwēsikanim</i>	your bannock
	1p	ni–		(–im)	–inān	<i>nipahkwēsikaniminān</i>	our bannock
	21	ki–		(–im)	–inaw	<i>kipahkwēsikaniminaw</i>	our bannock
	2p	ki–		(–im)	–iwāw	<i>kipahkwēsikanimiwāw</i>	your bannock
plural					–ak	<i>pahkwēsikanak</i>	bannocks
	1s	ni–		(–im)	–ak	<i>nipahkwēsikanimak</i>	my bannocks
	2s	ki–		(–im)	–ak	<i>kipahkwēsikanimak</i>	your bannocks
	1p	ni–		(–im)	–inānak	<i>nipahkwēsikaniminānak</i>	our bannocks
	21	ki–		(–im)	–inawak	<i>kipahkwēsikaniminawak</i>	our bannocks
	2p	ki–		(–im)	–iwāwak	<i>kipahkwēsikanimiwāwak</i>	your bannocks
obviative					–a	<i>pahkwēsikana</i>	bannock(s)
	1s	ni–		(–im)	–a	<i>nipahkwēsikanima</i>	my bannock(s)
	2s	ki–		(–im)	–a	<i>kipahkwēsikanima</i>	your bannock(s)
	1p	ni–		(–im)	–ināna	<i>nipahkwēsikanimināna</i>	our bannock(s)
	21	ki–		(–im)	–inawa	<i>kipahkwēsikaniminawa</i>	our bannock(s)
	2p	ki–		(–im)	–iwāwa	<i>kipahkwēsikanimiwāwa</i>	your bannock(s)
	3s	o–		(–im)	–a	<i>opahkwēsikanima</i>	his/her bannock(s)
	3p	o–		(–im)	–iwāwa	<i>opahkwēsikanimiwāwa</i>	their bannock(s)
	4	o–		(–im)	–iyiwa	<i>opahkwēsikanimiyiwa</i>	another’s bannock(s)
locative					–ihk	<i>pahkwēsikanihk</i>	in the bannock(s)
	1s	ni–		(–im)	–ihk	<i>nipahkwēsikanimihk</i>	in my bannock(s)
	2s	ki–		(–im)	–ihk	<i>kipahkwēsikanimihk</i>	in your bannock(s)
	1p	ni–		(–im)	–ināhk	<i>nipahkwēsikanimināhk</i>	in our bannock(s)
	21	ki–		(–im)	–ināhk	<i>kipahkwēsikanimināhk</i>	in our bannock(s)
	2p	ki–		(–im)	–iwāhk	<i>kipahkwēsikanimiwāhk</i>	in your bannock(s)
	3s	o–		(–im)	–ihk	<i>opahkwēsikanimihk</i>	in his/her bannock(s)
	3p	o–		(–im)	–iwāhk	<i>opahkwēsikanimiwāhk</i>	in their bannock(s)
	4	o–		(–im)	–iyihk	<i>opahkwēsikanimiyihk</i>	in another’s bannock(s)
dim					–is(is)*	<i>pahkwēsikanis</i>	small piece of bannock

*Remember the Diminutive derivation /t/ > [c]

NA₁
Consonant-Initial Regular NA Stem
 example: *pahkwēsikan*– “bannock”

		Prefix	NA ₁ Stem	(-im)	Ending	Example	Translation
singular						pahkwēsikan	bannock
	1s	ni–		(-im)		nipahkwēsikanim	my bannock
	2s	ki–		(-im)		kipahkwēsikanim	your bannock
	1p	ni–		(-im)	–inān	nipahkwēsikaniminān	our bannock
	21	ki–		(-im)	–inaw	kipahkwēsikaniminaw	our bannock
	2p	ki–		(-im)	–iwāw	kipahkwēsikanimiwāw	your bannock
plural					–ak	pahkwēsikanak	bannocks
	1s	ni–		(-im)	–ak	nipahkwēsikanimak	my bannocks
	2s	ki–		(-im)	–ak	kipahkwēsikanimak	your bannocks
	1p	ni–		(-im)	–inānak	nipahkwēsikaniminānak	our bannocks
	21	ki–		(-im)	–inawak	kipahkwēsikaniminawak	our bannocks
	2p	ki–		(-im)	–iwāwak	kipahkwēsikanimiwāwak	your bannocks
obviative					–a	pahkwēsikana	bannock(s)
	1s	ni–		(-im)	–a	nipahkwēsikanima	my bannock(s)
	2s	ki–		(-im)	–a	kipahkwēsikanima	your bannock(s)
	1p	ni–		(-im)	–ināna	nipahkwēsikanimināna	our bannock(s)
	21	ki–		(-im)	–inawa	kipahkwēsikaniminawa	our bannock(s)
	2p	ki–		(-im)	–iwāwa	kipahkwēsikanimiwāwa	your bannock(s)
	3s	o–		(-im)	–a	opahkwēsikanima	his/her bannock(s)
	3p	o–		(-im)	–iwāwa	opahkwēsikanimiwāwa	their bannock(s)
	4	o–		(-im)	–iyiwa	opahkwēsikanimiyiwa	another’s bannock(s)
					–ihk	pahkwēsikanihk	in the bannock(s)
	1s	ni–		(-im)	–ihk	nipahkwēsikanimihk	in my bannock(s)

Plains Cree nominal paradigms types (Wolvengrey, p.c. 2014)

- Animate: 10
 - NA1 C-Initial Regular NA Stem : **pahkwêsi**kan “bannock”
 - NA1 V-Initial Regular NA Stem : **asi**kan “sock”
 - NA2 C-Initial V-Glide NA Stem : **kih**c-ô**ki**niy “tomato”
 - NA2 V-Initial V-Glide NA Stem : **aya**piy “net”
 - NA3 C-Initial C-/w/ NA Stem :
masina**hi**kanâ**ht**ik:**masina****hi**kanâ**ht**ikw- “pencil”
 - NA3 V-Initial C-/w/ NA Stem : **aski****h**k:**aski****h**kw- “kettle, pail”
 - NA4 C-Initial Single-Syllable NA Stem : **niska**:**nisk**- “goose” (and **siht**- “spruce”)
 - NA4 V-Initial Single-Syllable NA Stem : **êsa**:**ês**- “clam; shell”
 - NA4w C-Initial Single-Syllable-/w/ NA Stem : **wâh**kwa:**wâh**kw- “roe, fish eggs; lump of roe”
 - NA4w V-Initial Single-Syllable-/w/ NA Stem : **ih**kwa:**ih**kw- “louse”

Nouns classified according to paradigm types in *Cree: Words* (Wolvengrey 2001)

NI-1 **acâwêwikamikos** little store, shop

NI-1 **acikâsimin** evergreen berry;
kinnikinnick berry, ground cedar berry

NI-3 **acikâsipakwa:acikâsipakw-** bearberry
leaves; plant-like evergreen (mixed with
tobacco); *Arctostaphylos uva-ursi*

NI-1 **acimomêyisimin** cactus berry, red
berry from a cactus; literally: "little dog-
feces berry"

NI-1 **ahcahkowin** spirituality

NI-2 **ahcâpahciy** bowstring

NI-3 **ahcâpâhtik:ahcâpâhtikw-** bow stick,
stick previously used as a bow

NI-2 **ahcâpiy** bow

NI-2 **ahkâmasiniy** round stone for breaking
bones

...

NA-1 **acâhkos** star

NA-1 **acihkos** caribou calf, fawn

NA-1 **acihkosis** caribou calf, fawn

NA-1 **acimosi** pup, puppy; small dog

NA-1 **acos** arrow, little arrow

NA-1 **acosis** arrow, little arrow

NA-3 **ahcahk:ahcahk-** soul, spirit

NA-1 **ahpihc** tobacco

NA-1 **ahpihcis** pouch, tobacco pouch

NA-1 **ahpiht** pouch, tobacco pouch

NA-2 **ahtay** pelt; fur, animal skin

NA-2 **akahkway** bloodsucker

NA-1 **akahkwayimin** spiral shell

NA-3 **akask:akaskw-** knobbed arrow,
knob-shaped arrowhead

...

Nouns classified according to paradigm types (Wolvengrey 2001)

$$\|s\| \leq C \|u\|$$

```
\def star
```

\dl Cree: wC

\stm acâhkos-

\mrp atâhkw-

\alt

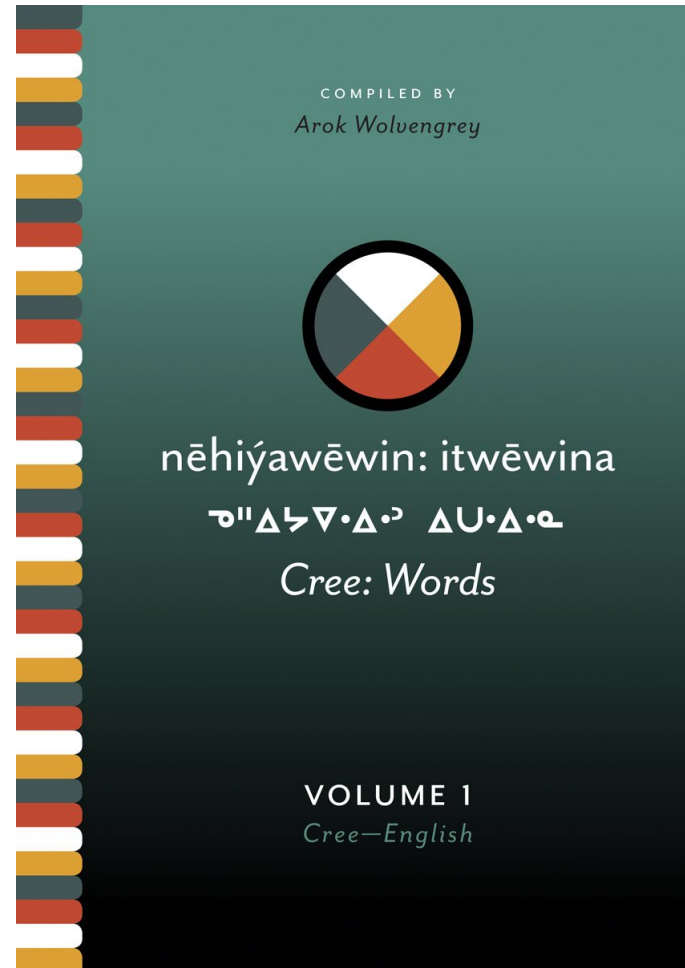
\sem Sky

\gl little star

\his *aθa:nkwa

\his Saulteaux: Anna

\dt 25/May/2009



[Toolbox]

“New” possible variation and subparadigms

- Determinants of *-im-* affix in possessive forms
- Determinants of short vs. long diminutive affix *-is* vs. *-isis*
- animate nouns and the locative form
 - e.g. *atimohk*
- animate nouns and the distributive form
 - groups of people and buffalos but not any other animals (bears, beavers, geese, etc.) or plants (trees)?
- mass nouns → only singular

Northern Haida

Northern Haida – 75 verb paradigms (Lachler, p.c.)

- AAHL_STEM_1 • AS_STEM_1 • ID_STEM_1 • UD_STEM_1
- AAHL_STEM_2 • AS_STEM_2 • ID_STEM_2 • UD_STEM_2
- AAL • AS_STEM_3 • IHL_STEM_1 • UHL_STEM_1
- AANG • AW_STEM_1 • IHL_STEM_2 • UHL_STEM_2
- AAN • AW_STEM_2 • IHL_STEM_3 • UHL_STEM_3
- AAW • AYD • IID • UNG_STEM_1
- AAY • AY_STEM_1 • IIHL_STEM_1 • UNG_STEM_2
- AA • AY_STEM_2 • IIHL_STEM_2 • UN_STEM_1
- AD_STEM_1 • A_STEM_2 • IIHL_STEM_3 • UN_STEM_2
- AD_STEM_2 • A_STEM_3 • II_STEM_1 • US_STEM_1
- AHL_STEM_1 • E.EHL_STEM_2 • II_STEM_2 • US_STEM_2
- AHL_STEM_2 • E.EHL_STEM_3 • ING_STEM_1 • US_STEM_3
- AHL_STEM_3 • E.E_STEM_2 • ING_STEM_2 • UUHL_STEM_1
- AH • E.E_STEM_3 • IN_STEM_1 • UUHL_STEM_2
- AL_STEM_1 • EED • IN_STEM_2 • UUHL_STEM_3
- AL_STEM_2 • EEHL_STEM_1 • IS_STEM_1 • UU_STEM_1
- AN_STEM_1 • EEHL_STEM_2 • IS_STEM_2 • UU_STEM_2
- AN_STEM_2 • EE • IS_STEM_3 • U
- • I

Northern Haida – ~152 forms per verb paradigm (Lachler, p.c.) – AAHL-STEM1

- 0
- 0
- s
- áng
- äsáa
- äs
- äsáang
- äsga
- äsáas
- äsáa.ang;
- áng % ^WSñasa'áa
- áng% % ^WSñasa'áang
- áng% % ^Wsñasaasdláa
- áng% % ^Wsñasaasdláang
- 'úu
- 'úujang
- äsáa'uujang
- 'us
- 'ujáa
- 'úujaangaa
- äsáa'us
- 'ahlánggang
- 'ahlánggan
- 'ahlánggíinii
- ...
- +V+SINGULAR+IMPERATIVE
- +V+INTERROGATIVE+SIMPLE+PRESENT
- +V+RELATIVE
- +V+NON_FACTIVE
- +V+INTERROGATIVE+FUTURE+LONG
- +V+INTERROGATIVE+FUTURE+SHORT
- +V+SIMPLE+FUTURE
- +V+IMMEDIATE+FUTURE
- +V+RELATIVE+FUTURE
- +V+FUTURE+NON_FACTIVE
- +V+INTERROGATIVE+NEAR+FUTURE
- +V+NEAR+FUTURE
- +V+INTERROGATIVE+VERYNEAR+FUTURE
- +V+VERYNEAR+FUTURE
- +V+BIASED+IMMEDIATE+PRESENT
- +V+BIASED+SIMPLE+PRESENT
- +V+RESIGNED_OBLIGATION
- +V+BIASED+INTERROGATIVE+PRESENT
- +V+BIASED+INTERROGATIVE+PAST;
- +V+BIASED+INTERROGATIVE+PAST+HABITUAL
- +V+BIASED+INTERROGATIVE+FUTURE
- +V+CERTAIN+PRESENT
- +V+CERTAIN+PAST;
- +V+CERTAIN+PAST+HABITUAL
- ...

Northern Haida – ~152 forms per verb paradigm (Lachler, p.c.) – AAHL-STEM1

- skyáahl
- skyáahl
- skyáahls
- skyáahlang
- skyáahläsaa
- skyáahläs
- skyáahläsaang
- skyáahläsga
- skyáahläsaas
- skyáahläsaa.ang
- skyáahlang
- skyáahlang
- skyáahlang
- skyáahlang
- skyáahl'uuj
- skyáahl'uujang
- skyáahläsaa'uujang
- skyáahl'us
- skyáahl'ujaa
- skyáahl'uujaangaa
- skyáahläsaa'us
- skyáahl'ahlanggang
- skyáahl'ahlanggan
- skyáahl'ahlanggiinii
- ...
- skyáahl+V+SINGULAR+IMPERATIVE
- skyáahl+V+INTERROGATIVE+SIMPLE+PRESENT
- skyáahl+V+RELATIVE
- skyáahl+V+NON_FACTIVE
- skyáahl+V+INTERROGATIVE+FUTURE+LONG
- skyáahl+V+INTERROGATIVE+FUTURE+SHORT
- skyáahl+V+SIMPLE+FUTURE
- skyáahl+V+IMMEDIATE+FUTURE
- skyáahl+V+RELATIVE+FUTURE
- skyáahl+V+FUTURE+NON_FACTIVE
- skyáahl+V+INTERROGATIVE+NEAR+FUTURE
- skyáahl+V+NEAR+FUTURE
- skyáahl+V+INTERROGATIVE+VERYNEAR+FUTURE
- skyáahl+V+VERYNEAR+FUTURE
- skyáahl+V+BIASED+IMMEDIATE+PRESENT
- skyáahl+V+BIASED+SIMPLE+PRESENT
- skyáahl+V+RESIGNED_OBLIGATION
- skyáahl+V+BIASED+INTERROGATIVE+PRESENT
- skyáahl+V+BIASED+INTERROGATIVE+PAST
- skyáahl+V+BIASED+INTERROGATIVE+PAST+HABITUAL
- skyáahl+V+BIASED+INTERROGATIVE+FUTURE
- skyáahl+V+CERTAIN+PRESENT
- skyáahl+V+CERTAIN+PAST
- skyáahl+V+CERTAIN+PAST+HABITUAL
- ...

Northern Haida – ~152 forms per verb paradigm (Lachler, p.c.) – AAHL-STEM1

- -0
- -0
- -s
- -áng
- -äsáa
- -äs
- -äsáang
- -äsga
- -äsáas
- -äsáa.ang
- -áng %^WSñasa'áa
- -áng%
%^WSñasa'áang
- -áng%
%^WSñasa'áang
- +V+SINGULAR+IMPERATIVE
- +V+INTERROGATIVE+SIMPLE
+PRESENT
- +V+RELATIVE
- +V+NON_FACTIVE
- +V+INTERROGATIVE+FUTURE
+LONG
- +V+INTERROGATIVE+FUTURE
+SHORT
- +V+SIMPLE+FUTURE
- +V+IMMEDIATE+FUTURE
- +V+RELATIVE+FUTURE
- +V+FUTURE+NON_FACTIVE
- +V+INTERROGATIVE+NEAR
+FUTURE

How about the low-hanging
fruits?

Dictionaries

Plains Cree → English

WRITTEN VARIANT

Standard (aâ)

Mobile friendly (a → a ~ â)

We have updated our URL to itwewina.oahpa.no, please update your bookmarks.

Plains Cree (Standard) → English

â ê î ô hide

Search

Search texts

Search for a word, or an inflected form. Click the word for a list of inflected forms.

You can also search for the word in a text corpus, or for all inflected forms of the word by clicking the 'texts' link next to it in the search results.

Dictionaries

Plains Cree → English

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â ê î ô hide

Search for a word, or an inflected form. Click the word for a list of inflected forms.

You can also search for the word in a text corpus, or for all inflected forms of the word by clicking the 'texts' link next to it in the search results.

crk nêhiyawêwin

 English

itwêwasinahikana

nêhiyawêwin → âkayâsimowin

NAWASÔNA TÂNISI KÂ-ISI-
NÊHIYAWASINAHIKÊYAN

papêyâhtak nêhiyawasinahikêwin (aâ)

wêhci-masinahikêwin (a → a ~ â)

nêhiyawêwin (papêyâhtak nêhiyawasinahikêwin) → âkayâsimowin

â ê ↑ Ô hide

itwêwin

nitona

nitona masinahikêwinihk

nitona nêhiyaw-itwêwin ta-miskaman
âkayâsiwascikêwin (êkwa mîna tânisi kâ-isi-
âniskôpitamihk).

We have updated our URL to
itwewina.oahpa.no, please update your
bookmarks.

itwêwasinahikana

nêhiyawêwin → âkayâsîmowin

NAWASÔNA TÂNISI KÂ-ISI-
NÊHIYAWASINAHIKÊYAN

papêyâhtak nêhiyawasinahikêwin (aâ)

wêhci-masinahikêwin (a → a ~ â)

nêhiyawêwin (wêhci-masinahikêwin) → âkayâsîmowin (⇌ Swap)

â ê î ô hide

nikî-nitawi-kiskinwahamâkosin

nitona

nitona masinahikêwinihk

nitona nêhiyaw-itwêwin ta-miskaman
âkayâsiwascikêwin (êkwa mîna tânisi kâ-isi-
âniskôpitamihk).

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â ê î ô hide

nikî-nitawi-kiskinwahamâkosin|

nitona

nitona masinahikêwinihk

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bookmarks.

itwêwasinahikana

nêhiyawêwin → âkayâsimowin

NAWASÔNA TÂNISI KÂ-ISI-
NÊHIYAWASINAHIKÊYAN

papêyâhtak nêhiyawasinahikêwin (aâ)

wêhci-masinahikêwin (a → a ~ â)

We have updated our URL to
itwewina.oahpa.no, please update
your bookmarks.

nêhiyawêwin (papêyâhtak nêhiyawasinahikêwin) → âkayâsimowin (⇌ Swap)

â ê î ô hide

itwêwin

nitona

nitona masinahikêwinihk

kiskinwahamâkosiw (verb)

- s/he learns; s/he is a student, s/he attends school; s/he is taught

nêhiyawêwin : itwêwina / Cree : Words

nikî-nitawi-kiskinwahamâkosin is a possible form of ...

kiskinwahamâkosiw

[Texts →](#)

PV/nitawi Verb AI Indicative
Past Subject: 1st person singular

itwêwasinahikana

nêhiyawêwin → âkayâsimowin

NAWASÔNA TÂNISI KÂ-ISI-
NÊHIYAWASINAHIKÊYAN

papêyâhtak nêhiyawasinahikêwin (aâ)

wêhci-masinahikêwin (a → a ~ â)

nêhiyawêwin (papêyâhtak nêhiyawasinahikêwin) → âkayâsimowin (⇌ Swap)

â ê î ô hide

itwêwin

nitona

nitona masinahikêwinihk

napew is a possible form of ...

nâpêw (noun)

- man, male adult, male being; husband

nêhiyawêwin : itwêwina / Cree : Words

nâpêw [Texts →](#)
Noun Animate Singular

We have updated our URL to
itwewina.oahpa.no, please update
your bookmarks.

Monolingual texts | [Parallel texts](#)

English | French



2 corpora selected (all) — 992 tokens

Search history

Simple Extended **Advanced**

CQP query:

[lemma = "nâpêw"]

Search

KWIC: hits per page: 25 sort within corpora: not sorted Statistics: compile based on: word

KWIC Statistics **Word picture**

Results: 8

[Show context](#)

PLAINS CREE CORPUS (does not support extended context)

êkwa mâna âtiht kê-misikitik	nâpêsisak	kî-kah-kitimahêwak anihi nâpêsi
nâna âtiht kê-misikitik nâpêsisak	kî-kah-kitimahêwak anihi nâpêsisak	nawac kê-apisîsiyit.
êkwa mîna kî-nâh-nôtinitowak	nâpêsisak	mahti awîna nawac kê-maskawî
pêyak awa nâpêsis		nikî-pakwâtik, kapê mâna ê-kî-k
ê-kiskinwahamâkosiw, ayaya, nikî-kostâcin, nikî-kostâw awa nâpêsis		kâ-kî-kakwê-nôtinit.
Frank Misti cikâk nika isiwihkâtâw awa nâpêsis		kapê kê kalavê nôtinit êkwa lo

Corpus

Plains Cree Corpus

text attributes

title: Dog biscuits - Salamô âcimow
author: Solomon Ratt
url: <http://creeliteracy.org/2014/01/20/dog-biscuits-y-dialect-with-audio/>
language: crk

Cree Literacy Network

Creating connections that promote literacy in Cree language and culture

miywâsin, kîspin ta-kakwê-nisitohtamêk êkwa mîna ta-kakwê-mitoni-wîchisoyêk anima, ôma nêhiyawêwin kîspin kinôhtê-kiskêyihtênâwâw.

There is value indeed in trying to understand the Cree language and also in trying to study it in earnest if you want to learn it.

About our Network Reading Plains Cree in SRO Listen to Spoken Cree For language learners Cree Cultural Teachings Books in Cree
Christmas in Cree Songs for Kids Read along with audio Plains Cree Texts

← Solomon Ratt: The Old Man and the Wihtikow - Th Dialect - With Audio

Neil Young's Pocahontas - via Art Napoleon, in Cree →

Dog Biscuits - Y-dialect - With Audio

Posted on January 20, 2014



Thanks to Solomon Ratt for preparing this y-dialect (Plains Cree) version - in print and audio - of this original Residential School story, written in his own th-dialect (Woodlands Cree) and translated into English. Click the audio link to listen and read along!



Dog Biscuits - Salamô âcimow

[1] ispihk kâ-kî-awâsisîwiyân nîkî-nitawi-kiskinwahamâkosin ohpimê nitiskonikanihk ohci. kistapinânihk mâna kâ-kî-nitawi-kiskinwahamâkosiyân, êkota Residential School ê-kî-itohtahikawiyân. mistahi mâna nîkî-kitimâkîhikawinân, mâka namôya êwako niwî-âtotên, niwî-âcimâwak nîci-kitimâkîsak, nîci-okiskinwahamâkanak.

Aboriginal Books for Children

- American Indians in Children's Literature Blog
- First Nations Writer

Blogroll

- Miyo Wahkohtowin Education: Ermineskin

Cree Language and Literacy Supports

- Aboriginal Circle of Educators
- Burnaby Aboriginal Literacy Blog
- Chelsea Vowel's inventory of Cree language resources on the web
- Cree Linguistic Atlas
- Cree Literacy Network
- First Nations Literacy : Ningwakwe Learning Press
- GlobalLang
- Indspire
- Michif Language Dictionary
- nêhiyawêwin (Cree) Word/Phrase of the Day on Facebook -

Cree Links

- kepin omasinahikewin

Sound Recordings: Listen to Elders

- Cathy Wheaton's Sound Cloud Files
- First Nation Speaking Project, Inc.

Follow

Dog Biscuits – Salamô âcimow

[1] ispîhk kê-kî-awâsisîwiyân nikî-nitawi-kiskinwahamâkosin ohpimê nitiskonikanihk ohci. kistapinânihk mâna kê-kî-nitawi-kiskinwahamâkosiyân, êkota Residential School ê-kî-itohtahikawiyân. mistahi mâna nikî-kitimâkihikawinân, mâka namôya êwako niwî-âtotên, niwî-âcimâwak nîci-kitimâkisak, nîci-okiskinwahamâkanak.

Δ^Λ^ b̂ p̂ <Δ̂/Δ̂> σ̂ σ̂CΔ̂ P^PΔ̂<Δ̂d̂> Δ̂^Λ̂ σ̂P^dσ̂bσ^ Δ̂^P̂ P^CΛ̂σ^ Λ̂Δ̂ b̂
p̂ σ̂CΔ̂ P^PΔ̂<Δ̂d̂>, Δ̂d̂C Residential School ∇̂ p̂ Δ̂C^C^Δ̂bΔ̂>x Γ^C^Δ̂ Λ̂Δ̂
σ̂P̂ P̂N̂P̂^Δ̂bΔ̂>, Λ̂b Δ̂Ĵ ∇̂Δ̂d̂ σ̂Δ̂ <Δ̂Û>, σ̂Δ̂ <Δ̂L̂Δ̂> σ̂P̂ P̂N̂P̂^,
σ̂P̂ Δ̂P^PΔ̂<Δ̂bΔ̂>x

When I was a child I went to school away from my reserve. It was at Prince Albert where I went to school, there was a Residential School there where I went. There was a lot of ill treatment, but I'm not going to talk about that, I'm going to tell a story about my fellow pitiful ones, my fellow students.

Dog Biscuits – Salamô âcimow

[1] ispîhk kê-kî-awâsisîwiyân nikî-nitawi-kiskinwahamâkosin ohpimê nitiskonikanihk ohci. kistapinânihk mâna kê-kî-nitawi-kiskinwahamâkosiyân, êkota Residential School ê-kî-itohtahikawiyân. mistahi mâna nikî-kitimâkihikawinân, mâka namôya êwako niwî-âtotên, niwî-âcimâwak nîci-kitimâkisak, nîci-okiskinwahamâkanak.

Δ^Λ^ b̂ p̂ <Δ̂r̂Δ̂> σ̂p̂ σ̂CΔ̂ P^PΔ̂"Δ̂Ld̂r̂ >Δ̂^Λ̂ σ̂P̂^dσ̂bσ̂^ >Δ̂^r̂x P^CΛ̂Δ̂σ̂^ L̂Δ̂ b̂
p̂ σ̂CΔ̂ P^PΔ̂"Δ̂Ld̂r̂>, Δ̂dC Residential School ∇̂ p̂ Δ̂>C"Δ̂bΔ̂>x Γ^C"Δ̂ L̂Δ̂
σ̂p̂ P̂N̂L̂P"Δ̂bΔ̂Δ̂>, L̂b Δ̂Ĵ> ∇̂Δ̂d σ̂Δ̂ <Δ̂>Û>, σ̂Δ̂ <Δ̂r̂L̂Δ̂> ô̂r̂ P̂N̂L̂P̂<̂,
ô̂r̂ >P^PΔ̂"Δ̂L̂bΔ̂>x

When I was a child I went to school away from my reserve. It was at Prince Albert where I went to school, there was a Residential School there where I went. There was a lot of ill treatment, but I'm not going to talk about that, I'm going to tell a story about my fellow pitiful ones, my fellow students.

Follow

Dog Biscuits – Salamô âcimow

[1] ispîhk kâ-kî
ohci. kistapinâ
ê-kî-itohtahika
niwî-âtotên, ni

Δ^Λ^ b p <Δ
p σCΔ p^pΔ
σp pNLP^ΔbΔ^, Lb ΔJ ∇Δd σΔ <ΔU, σΔ <ΔLΔ^ σr pNLP^,
σr Δp^pΔ^ΔLbΔ^x

âcimow
âcimow (verb) — s/he tells,
s/he tells a story; s/he tells
news, s/he gives an account,
s/he narrates; s/he tells
his/her own story

wahamâkosin ohpimê nitiskonikanihk
namâkosiyân, êkota Residential School
ihikawinân, mâka namôya êwako
i-okiskinwahamâkanak.

ΛΓ σN^dσbσ^ Δ^r^ p^CΛΔσ^ LΔ b
∇ p ΔC^C^ΔbΔ^x Γ^C^Δ LΔ

When I was a child I went to school away from my reserve. It was at Prince Albert where I went to school, there was a Residential School there where I went. There was a lot of ill treatment, but I'm not going to talk about that, I'm going to tell a story about my fellow pitiful ones, my fellow students.

Dog Biscuits – Salamô âcimow

[1] *ispîhk* kinwahamâkosin ohpimê nitiskonikanihk
ohci. kistapi *ispîhk* (particle) — when wahamâkosiyân, êkota Residential School
ê-kî-itohtahikawiyân. mistahi mâna nikî-kitimâkihikawinân, mâka namôya êwako
niwî-âtotên, niwî-âcimâwak nîci-kitimâkisak, nîci-okiskinwahamâkanak.

Δ^Λ^ b̂ p̂ <Δ̂<Δ̂Δ̂Δ̂ σ̂ p̂ σ̂ CΔ̂ P^PΔ̂<Δ̂Δ̂Δ̂ Δ̂^Λ^ σ̂ P^dσ̂ bσ̂^ Δ̂^P^x P^C^Δ̂Δ̂σ̂^ Δ̂Δ̂ b̂
p̂ σ̂ CΔ̂ P^PΔ̂<Δ̂Δ̂Δ̂, Δ̂dC Residential School ∇ p̂ Δ̂Δ̂C^Δ̂bΔ̂Δ̂x Γ^C^Δ̂ Δ̂Δ̂
σ̂ p̂ P^PΔ̂Δ̂bΔ̂Δ̂, Δ̂b Δ̂Δ̂Δ̂ ∇Δ̂d σ̂Δ̂<Δ̂Δ̂, σ̂Δ̂<Δ̂Δ̂Δ̂ Δ̂P^PΔ̂Δ̂,
Δ̂P^PΔ̂Δ̂<Δ̂Δ̂Δ̂x

When I was a child I went to school away from my reserve. It was at Prince Albert where I went to school, there was a Residential School there where I went. There was a lot of ill treatment, but I'm not going to talk about that, I'm going to tell a story about my fellow pitiful ones, my fellow students.

Dog Biscuits – Salamô âcimow

[1] ispîhk kê-kî-awâsisîwiyân ***nikî-nitawi-kiskinwahamâkosin*** ohpimê nitiskonikanihk
ohci. kistapinânihk mâna kê-kî-awâsisîwiyân. kistapinânihk Residential School
kê-kî-itohtahikawiyân. mistahi kiskinwahamâkosin. kiskinwahamâkosin âka namôya êwako
niwî-âtôtên, niwî-âcimâwak n kiskinwahamâkosiw (verb) — mâkanak.

ልሳኦ ከሶ ልገረሰ፤ ማሪ ማሪ
 ሶ ማሪ ሶሞ፤ ልገረሰ፤ ልገረሰ
 ማሪ ሶሞ፤ ልገረሰ፤ ልገረሰ
 ማሪ ሶሞ፤ ልገረሰ፤ ልገረሰ

nikî-nitawi-kiskinwahamâkosin

kiskinwahamâkosiw (verb) —
s/he learns; s/he is a student,
s/he attends school; s/he is
taught

$\sigma^x \triangleright \Gamma_X \text{ } P^{\circ} C \wedge \dot{\sigma}^x \text{ } \dot{L} a \text{ } b$
 $\Delta \dot{\gamma}_X \text{ } \Gamma^{\circ} C^{\parallel} \Delta \dot{L} a$
 $\text{ } P \cap \dot{L} P^{\vee},$

When I was a child I went to school away from my reserve. It was at Prince Albert where I went to school, there was a Residential School there where I went. There was a lot of ill treatment, but I'm not going to talk about that, I'm going to tell a story about my fellow pitiful ones, my fellow students.

[+ Follow](#)

Dog Biscuits – Salamô âcimow

[1] ispîhk kê-kî-awâsisîwiyan nikî-nitawi-kiskinwahamâkosin **ohpimê** nitiskonikanihk ohci. kistapinânihk mâna kê-kî-nitawi-kiskinwahamâkosin nitiskonikanihk school ê-kî-itohtahikawiyân. mistahi mâna nikî-kitimâki niwî-âtotên, niwî-âcimâwak nîci-kitimâkisak, nîci

Δ^Λ^ b̂ p̂ <Δ̂îr̂Δ̂î> σ̂p̂ σ̂CΔ̂ P^PQ̂<Δ̂Ld̂r̂> Δ̂î
p̂ σ̂CΔ̂ P^PQ̂<Δ̂Ld̂r̂>, Δ̂d̂C Residential School
σ̂p̂ P̂N̂LP̂Δ̂b̂Δ̂â̂, L̂b̂ Q̂Ĵ> ∇̂Δ̂d̂ σ̂Δ̂ <Δ̂ĴÛ>, σ̂Δ̂ <Δ̂r̂L̂Δ̂> ô̂r̂ P̂N̂LP̂Δ̂î,
ô̂r̂ Δ̂P̂P̂Q̂<Δ̂L̂b̂Q̂>^x

ohpimê

ohpimê (particle) — off, away, to the side; at another place, elsewhere, somewhere else

When I was a child I went to school away from my reserve. It was at Prince Albert where I went to school, there was a Residential School there where I went. There was a lot of ill treatment, but I'm not going to talk about that, I'm going to tell a story about my fellow pitiful ones, my fellow students.

[+ Follow](#)

Á

Dog Biscuits – Sala

[1] ispîhk kâ-kî-awâsis
ohci. **kistapinânihk**
ê-kî-itohtahikawiyân.
niwî-âtotên, niwî-âcin

Δ^Λ^ b̂ p̂ <Δ̂r̂Δ̂>
p̂ σCΔ P^PΔ̂<L̂d̂r̂>
σp̂ P̂N̂L̂P̂Δ̂b̂Δ̂, L̂b̂ Δ̂Ĵ> ∇<Δ̂d̂ σΔ̂ <Δ̂Û>, σΔ̂ <Δ̂L̂Δ̂> ôr̂ P̂N̂L̂P̂,
ôr̂ >P̂P̂Δ̂<L̂b̂Δ̂>

kistapinân (noun) — Prince
Albert, SK; literally: place of
wealth; meeting place;
gathering place
kistapinânihk (noun) — Prince
Albert, SK; literally: place of
wealth; meeting place;
gathering place

kosin ohpimê nitiskonikanihk
osiyân, êkota Residential School
inân, mâka namôya êwako
inwahamâkanak.

Π^dσbσ^ Δ̂r̂x P^CΛΔ̂σ^ L̂Δ̂ b̂
Δ̂ĈΔ̂b̂Δ̂>x Γ^ĈΔ̂ L̂Δ̂

When I was a child I went to school away from my reserve. It was at Prince Albert where I went to school, there was a Residential School there where I went. There was a lot of ill treatment, but I'm not going to talk about that, I'm going to tell a story about my fellow pitiful ones, my fellow students.

[ol nah nialike mâne nîkê kîânimikawinân nâwâwân kâ it

Follow

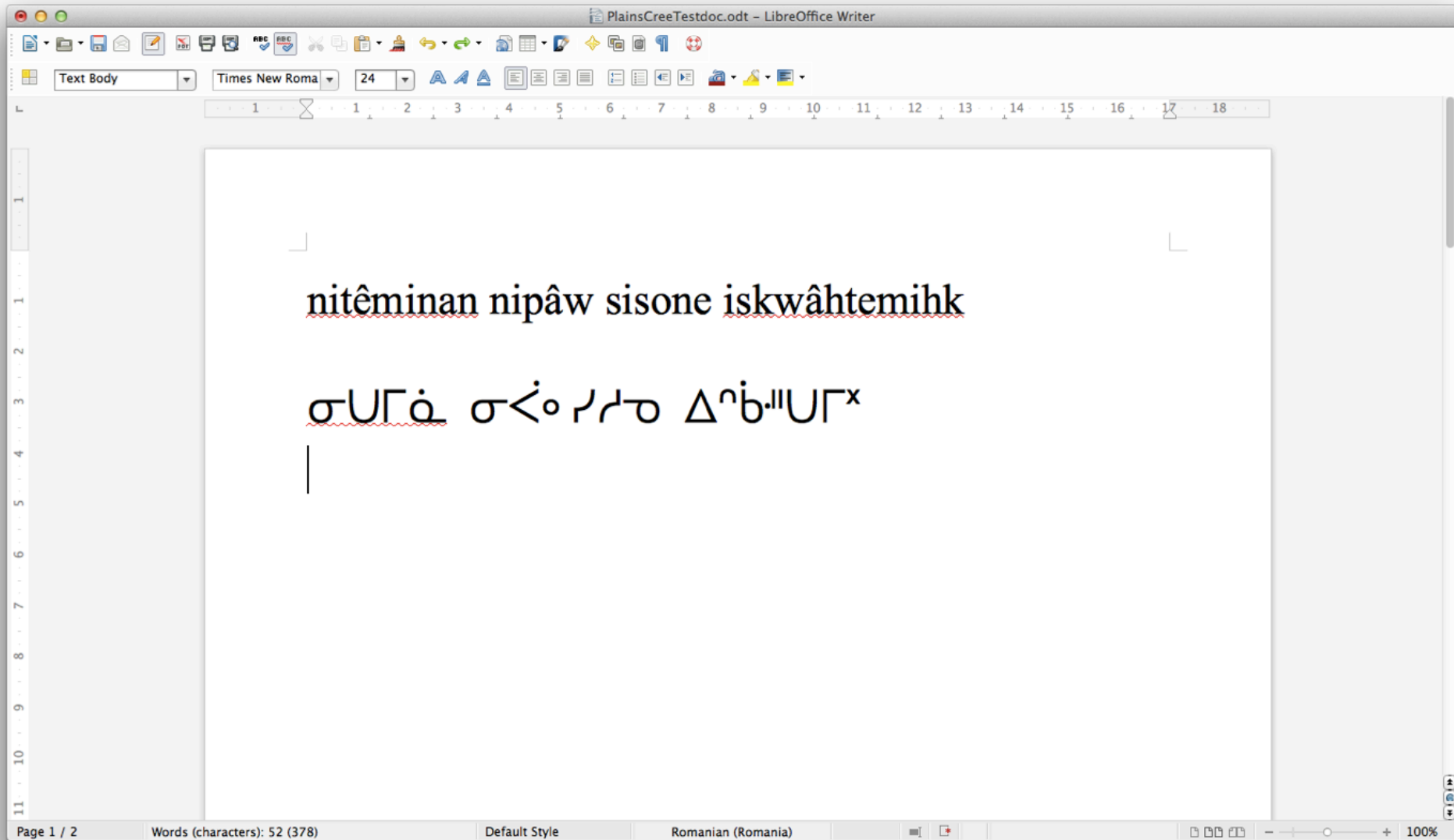
Dog Biscuits – Salamô âcimow

[1] ispîhk kê-kî-awâsisîwiwân nikî-nitawi-kiskinwahamâkosin ohpimê nitiskonikanihk ohci. kistapinânihk **mâna** kê-kî-nitawi-kiskinwahamâkosiyân, êkota Residential School ê-kî-it... -kitimâkihikawinân, mâka namôya êwako niwî-â... kisak, nîci-okiskinwahamâkanak.

mâna

mâna (particle) — to be feared, trouble ahead
mâna (particle) — usually, habitually, generally, always; used to

When I was a child I went to school away from my reserve. It was at Prince Albert where I went to school, there was a Residential School there where I went. There was a lot of ill treatment, but I'm not going to talk about that, I'm going to tell a story about my fellow pitiful ones, my fellow students.



nitêminan nipâw sisone iskwâhtemihk

σUΓà σ<° ρρσ Δ^b.¶UΓ^x

LibreOffice File Edit View Insert Format Table Tools Window Help

PlainsCreeTestdoc.odt - LibreOffice Writer

Default Style Times New Roma 24

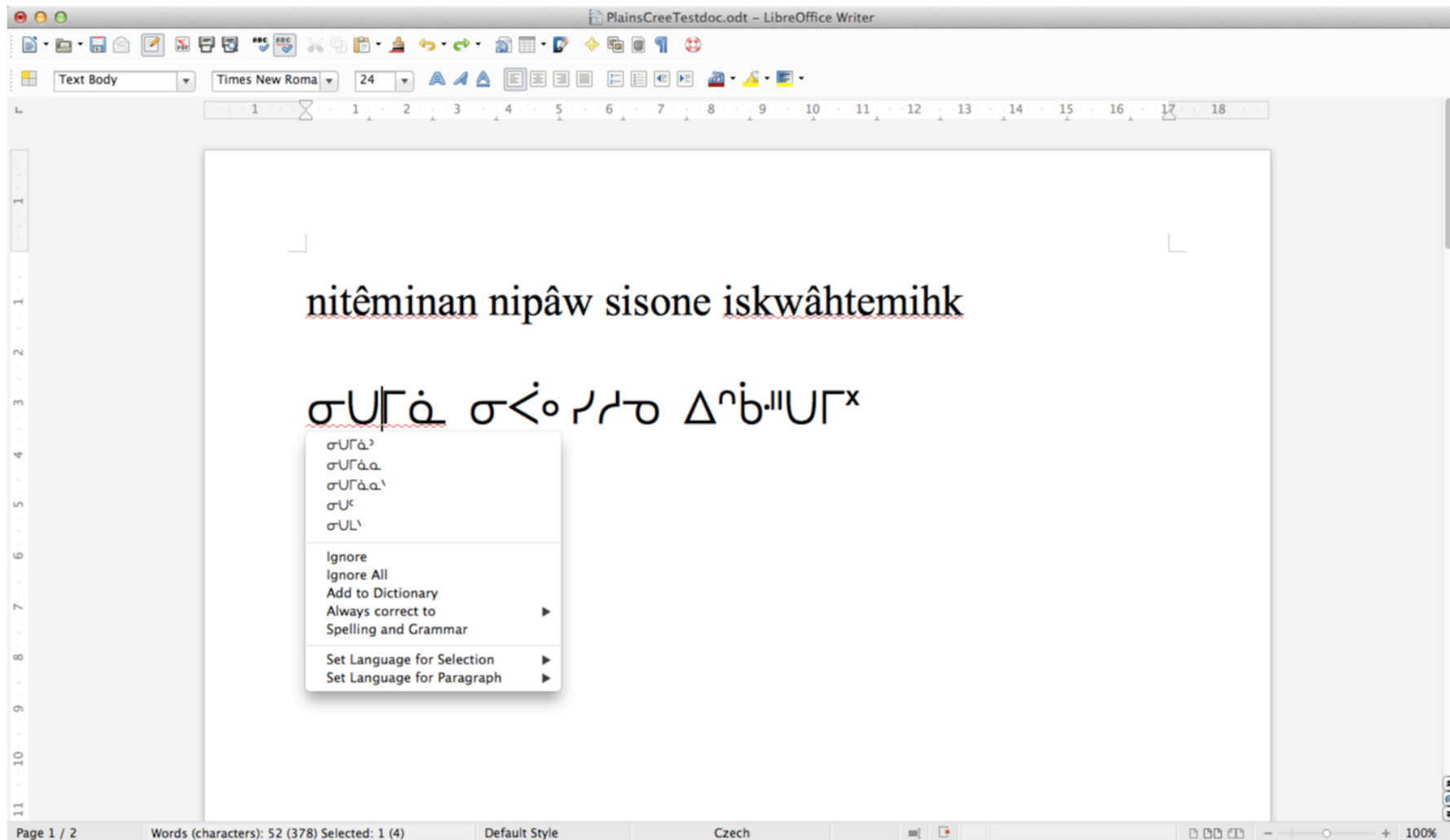
nitêminan nipâw sisone iskwâhtemihk

nitêminân
kitêminaw
nitêminâna

Ignore
Ignore All
Add to Dictionary
Always correct to
Spelling and Grammar

Set Language for Selection
Set Language for Paragraph

Page 1 / 2 Words (characters): 52 (378) Selected: 1 (9) Default Style Romanian (Romania) 100%



nêhiyawêtan

Interface language

English

tânisi

LEKSA



Words and translations

MORFA-S



Inflect words

MORFA-C



Inflect words in sentences

NUMRA



Practice numerals

nêhiyawêtan is an internet program for learners of Plains Cree. The program can be adjusted to different topics and levels of difficulty, and it generates new task sets automatically. This is a beta demo version.

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Contact oahpa@uit.no

nêhiyawêtan



MORFA-C



MORFA-S



LEKSA



NUMRA



MORFA-S

Nouns

Verbs

Possessives

Reference
materials

Dictionary

Type

Plural ▾

Book

all ▾

New set

ôtênaw

ôtênawa

wiyâkan

wiyâkana

okimâw

okimawak

anikwacâs

wayasit

Test answers

Show the correct answers

Your score: 3/5

Practise plural nouns

Put the nouns in the correct forms. You get a translation if you click on a word.

nêhiyawêtan



MORFA-C



MORFA-S



LEKSA



NUMRA



MORFA-S

Nouns

Verbs

Possessives

Reference materials

Dictionary

Tense

Book

present ▾

Book1 ▾

New set

nipâw

(kîyânaw) anohc kinipanaw

(kinipânaw, kinipânânaw)

pâhpiw

(kîya) anohc kîpahpin

(kîpâhpin)

masinahikêw

(kîyânaw) anohc

kimasinahikânaw, kimasinahikânânaw

pîhtokwêw

(kîyawâw) anohc

kîpîhtokwânâwâw

minihkwêw

(wîya) anohc mîhihkwew ✗

minihkwêw

Practise present tense

Add verbs in correct forms. You get translation if you click the word.

Your score: 2/5

nêhiyawêtan



MORFA-C



MORFA-S



LEKSA



NUMRA



MORFA-C

Nouns

Verbs

Reference
materials

Dictionary

Tense

present ▾

New set

kipâhpin cî anohc
ehâ, **nipâhpin** anohc.

Practise present tense

kinipân cî anohc
namoya, namoya **ninipân** anohc.

kinîmihitonâwâw cî anohc
ehâ, **kinîmihitonânân** anohc. ✖

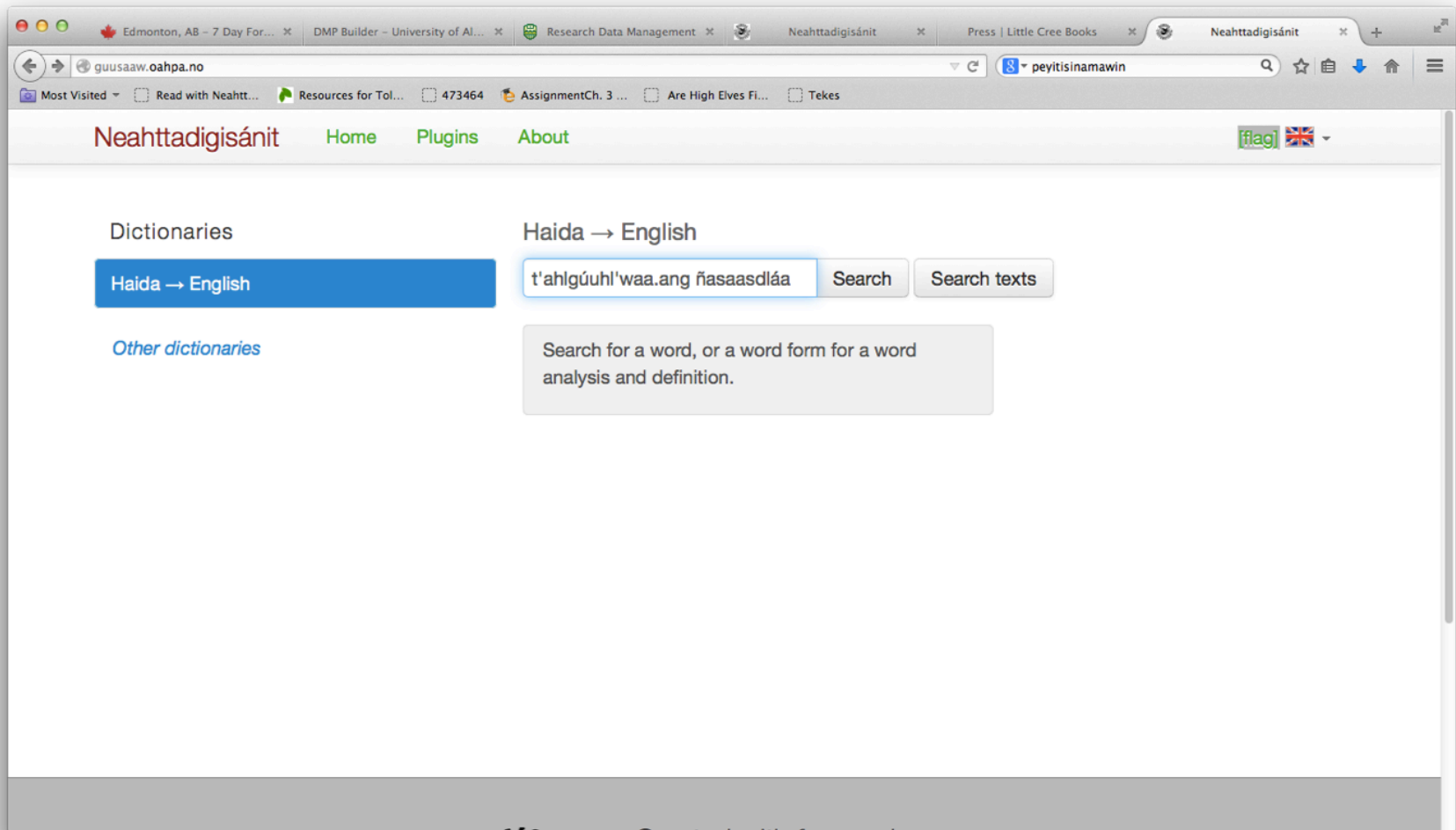
ninîmihitonân

kitayamihcikân cî anohc
ehâ, _____ anohc.

nitayamihcikân

kinikamon cî anohc
namoya, namoya **ninikamon** anohc.

Your score: 3/5



Edmonton, AB – 7 Day For... x DMP Builder – University of Al... x Research Data Management x Neahttadigisánit x Press | Little Cree Books x Neahttadigisánit x

guusaaw.oahpa.no/hdn/eng/ peyitisinamawin

Most Visited Read with Neahtt... Resources for Tol... 473464 AssignmentCh. 3... Are High Elves Fi... Tekes

Neahttadigisánit Home Plugins About [flag] 

Dictionaries

Haida → English

Haida → English

Other dictionaries

Haida → English

t'ahlgúuhl'waa.ang ñasaasdláa Search Search texts

t'ahlgúuhl (verb)

- for S to put or wrap O around their shoulders

t'ahlgúuhl'waa.ang ñasaasdláa is a possible form of ...

t'ahlgúuhl Texts →

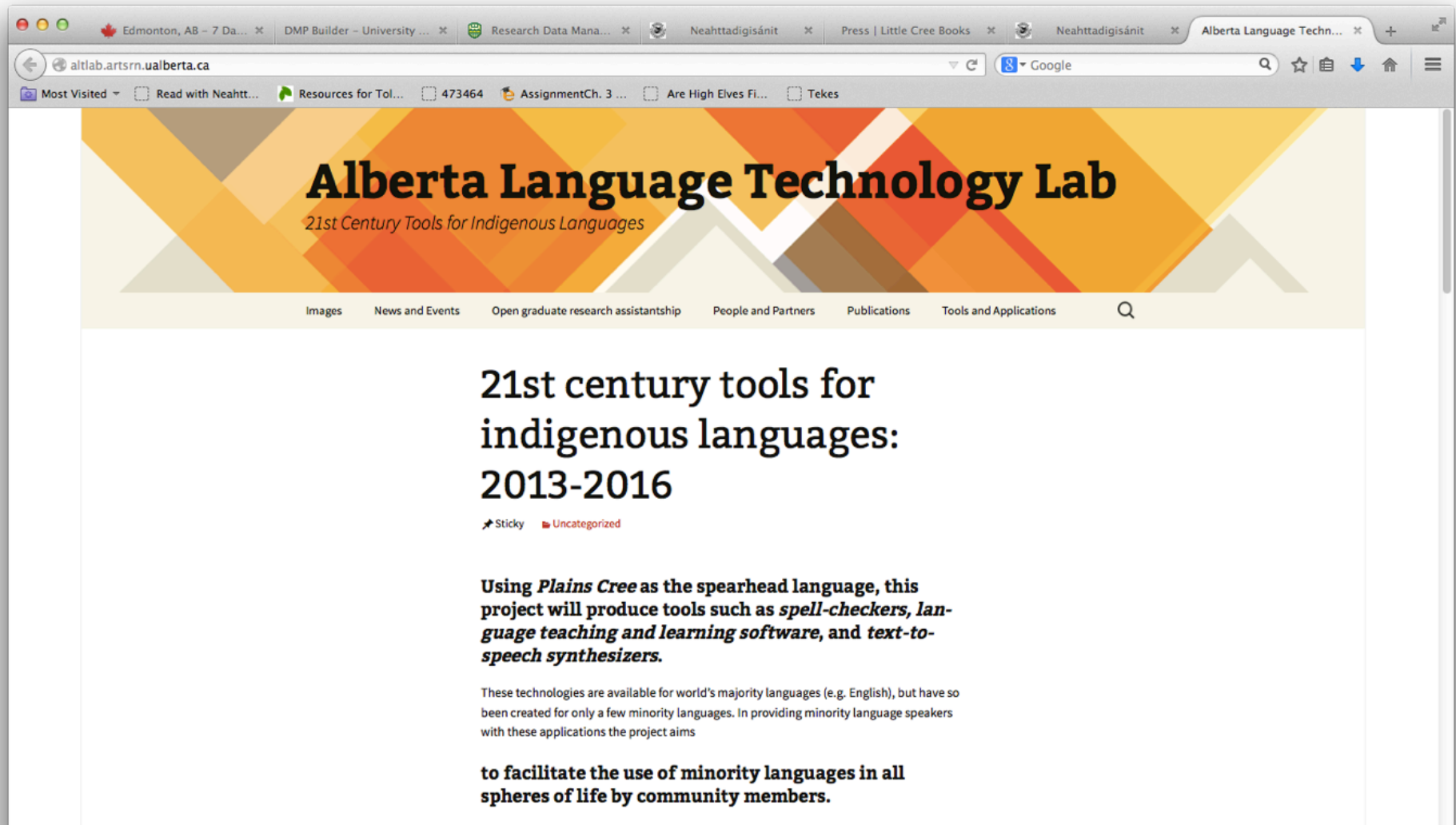
verb third plural interrogative
very near future

Tools – accessibility

- publicly available over the Internet
- integrated as part of general software applications such as web browsers and word processors
- with little or no cost
- by any speakers or language-learners in the respective communities as well as any researchers, anywhere
 - instead of remaining on an individual researcher's computer drive or on a library bookshelf.

Key message to field linguists again – how to enable computational tools?

- systematic, well-structured, and detailed descriptions of words and their structure
 - exhaustive descriptions of all word-class paradigm types
 - matched with comprehensive lexicon with paradigm type specifications



WWW: altlab.artsrn.ualberta.ca