

Blackfoot (Siksiká)

And the misbehavior of preverbs

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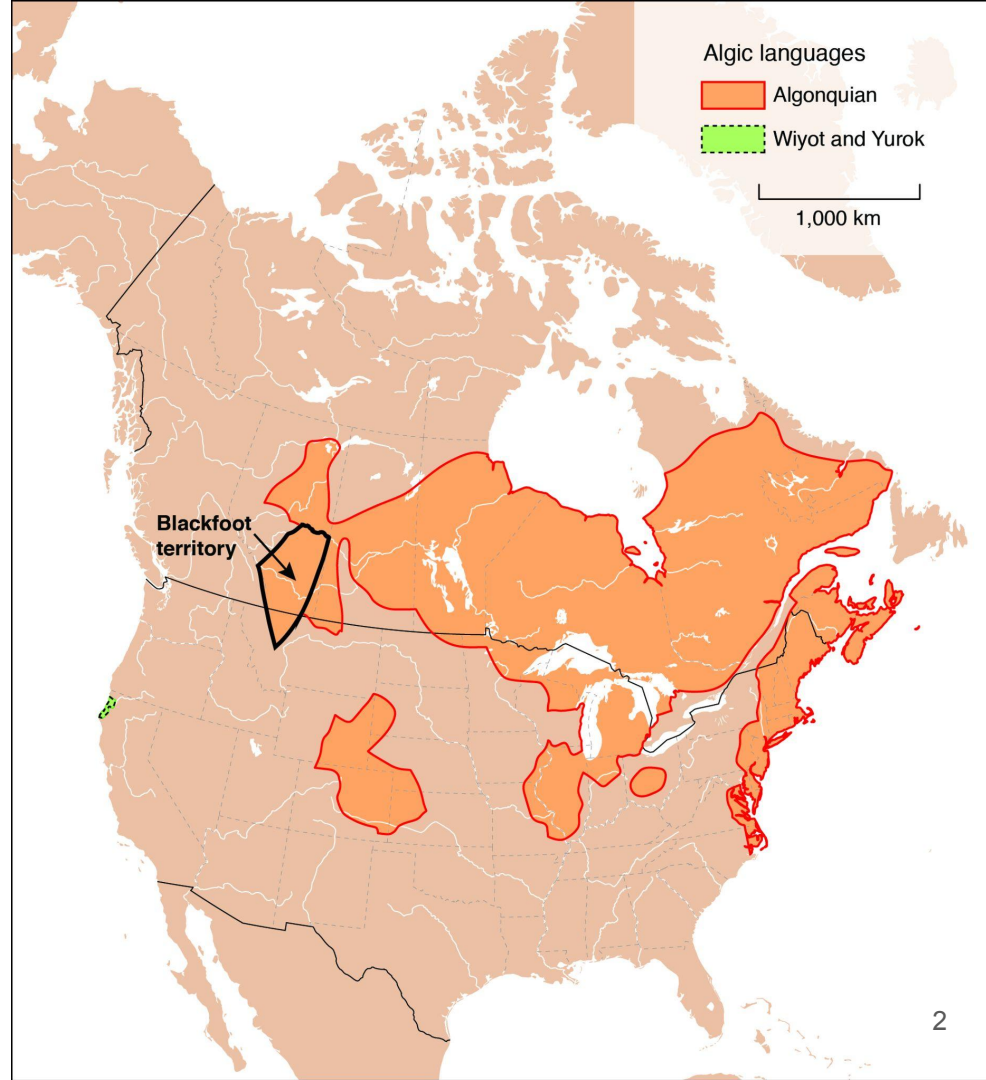
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Language location

- map = pre-settler contact
- westernmost Algonquian language
- “Plains Algonquian” (areal group)
 - w/ Cheyenne, Arapaho

(Frantz: 2017; Goddard 1975; Mithun 1999: 336–337)

[Map by Eric Leinberger]



Methods: sources

- Dictionary (Frantz & Russell 2017)
 - largely stem-based + some roots (initials, preverbs, concrete finals) have a separate entry
 - broad phonetic or phonemic orthography
 - stress = acute accent
- Current report:
 - based on orthography only
 - non-systematic combinations of morphemes, based on Weber (2020)
 - gaps in dictionary: not all roots occur after *C* and *V*, or as initials and preverbs

Dictionary is largely stem-based

opakso'tsi *vti*; break apart (a wooden object) by hand; **opaksó'tsit anní ataksáákssini!** break apart the box!; **áakopaksó'tsima** she will break it apart; **iipaksó'tsima anni nistsíipisskaani** he broke the fence apart; **nitsíipaksó'tsii'pa** I broke it apart.

opam *adt*; across from one side to the opposite side, over, or through, usually a body of water; **apámoohsi** in the direction of across; **áakopamipihtakiwa** he will take something across; **iipamóówa** he went across (the ocean) to the other side; **ákaopamohpai'pi'wa** he has jumped across (the ditch) to the other side; **i'kakoyi ki nítohkottopamáatoo'pa** it was flooded and I was able to cross.

“adt.” = salient verb roots that can be used as preverbs (and often initials)

Breaking down a verb stem

<u>Prefixes-</u>	<u>[Init-</u>	<u>-med-</u>	<u>-CF</u>	<u>-AF/THM]</u>	<u>-suf</u>	<u>Translation</u>
	opa-	-hkim-	-ínn	-aki	-t!	‘plow!’
	opa-	-ks-	-ó’ts	-i	-t!	‘break it (wooden) apart!’
	opa-	-n-	-ó’ts	-i	-t!	‘tear it (sealed wrapping) open!’
áak-	opa-	-n-	-ó’ts	-i	-m-a	‘she will tear it open’

Note: **opa** is not listed under a separate entry!

(Words: Frantz & Russell 2017: 204)

(Template: Bliss 2013; Louie 2008; Frantz 2017; Taylor 1969; Uhlenbeck 1938; Weber 2020)

The initial-final juncture

- Vowel hiatus is tolerated (later made opaque via coalescence).
- Epenthetic [i] between consonants.
- Evidence: two different patterns in finals

Finals pattern #1: Some finals begin in a consonant

- Finals concatenate directly after vowels.
- Epenthetic [i] between consonants

<u>Prefixes</u>	<u>[Init</u>	<u>–med</u>	<u>–CF</u>	<u>–AF/THM]</u>	<u>–suf</u>	<u>Translation</u>
	aawá		–pist	–aa	–t!	‘make a cradle swing!’
nits–	íppot–	–sski–	–pist	–a	–wa	‘I put something over his face’
	amó–		–píst	–aa	–n–i	‘ceremonial bundle’
nit–áaks–	oohks–		–ipist	–aa		‘I will close the tipi flap’
	óóhk–	–an–	–ínn	–i	–t	‘shut it! (e.g. window)’

(Frantz & Russell 2017: 298, 95, 13, 319, 318)

Finals pattern #2: Some finals begin in a vowel

- Finals begin in a short vowel {a, i, o} after vowels.
- Finals concatenate directly after consonants.

<u>Prefixes</u>	<u>[Init</u>	<u>-med</u>	<u>-CF</u>	<u>-AF/THM]</u>	<u>-suf</u>	<u>Translation</u>
	sa-		-ipíí		-s!	'bring her out!'
	ihtsí-		-ípíi		-sa!	'bring her to town!'
	amó-		-ípíi		-s-aawa	'gather them!'
	o'ts-		-ípíi		-sa!	'transport him here!'
n-iká-	ó't-		-oo			'I have arrived'

(Frantz & Russell 2017: 236, 28, 195, 223, 222)

Synchronic analysis: two groups of finals

	<u>After V</u>	<u>After C</u>	<u>UR</u>	<u>Gloss</u>	
C-initial	-pist	- i pist	/-pist/	‘tie’	(concrete final)
V-initial	-ipi	-ipi	/-ipi/	‘bring’	(concrete final)
	-ap-	-ap-	/-ap-/	‘CORD’	(medial)
	*-p	*-p			

Note: epenthetic [i] only occurs in 1 of the 4 cases (between consonants)

Generalization: Avoid CC sequences between initial and final positions.

(Weber 2020: 234ff; in press)

The left edge of stems and preverbs

- Vowel hiatus is tolerated (later made opaque via coalescence).
- Consonants avoided at the left edge (conspiracy of processes)
 - Epenthetic [i] after prefix before roots that begin in consonants.
 - Nasals delete after prefix
- Evidence: two different patterns in roots (initials and preverbs)

Obstruents avoided at the left edge of roots after a prefix

Left edge

pon-iht-áá-t

‘pay!’

After prefix

áaks-ipon-iht-aa-wa

‘she will pay’

After C

áká-ipon-ihtsi-wa

‘he is dead’

After V

Note: root is underlined; only considering patterns for roots with an initial light syllable.

(Frantz & Russell 2017: 91)

Nasals avoided at the left edge of roots after a prefix

Left edge

mokákit!

‘be smart!’

After prefix

áakokakiwa

‘she will be smart’

After C

n-iká-ókaki-ssko-a-wa

‘I have “wised him up”’

After V

Note: root is underlined; only considering patterns for roots with an initial light syllable.

(Frantz & Russell 2017: 182–183)

Synchronic analysis: two groups of roots

	<u>Left edge</u>	<u>After C</u>	=	<u>After V</u>	<u>UR</u>	<u>Gloss</u>
C-initial	p on-	i pon-		i pon-	/p o n-/	'cease' (root)
	m okaki-	okaki-		okaki-	/m o kaki-/	'bring' (root)
V-initial	ipotsim-	ipotsim-		ipotsim-	/ipotsim-/	'poison' (root)
	ok-	ok-		ok-	/ok-/	'rope' (root)
	*p, *m	*p, *m		*p, *m		

Note: epenthetic [i] occurs in 2 cases (after a C **AND** after a V).

Generalization: Avoid [+cons] after a juncture.

(Weber 2020: 260ff, 350ff; in press)

Processes at the left edge of stems and preverbs

- Conspiracy of processes (epenthesis, deletion)
- Also occurs at the left edge of preverbs (Weber 2022).
- Not driven by phonotactics or syllable structure.
- Conclusion?
 - morphophonological process that occurs at morphological junctures outside of the stem
 - (contra Weber 2022)

P-phrase is the domain of phonotactic constraints

- Syllable structures: CV, CVV, CVC, *CVVC
- This holds across the entire verbal complex
- Maintained via:
 - vowel coalescence (and other vowel hiatus resolutions)
 - epenthesis between consonants (but this is bled by juncture processes outside the stem)

(Bliss 2013; Elfner 2006; Weber 2020)

Prosodic structure (prosody) [to be revised]

P-phrase

- no CC or VV (epenthesis, coalescence)

(prefixes– # preverb– # (initial –final –suffixes)_{P-word}) P-phrase

Boundaries w/i P-phrase

- no [+cons] after boundary
- nasal deletion
- epenthesis before plosives

P-word

- no CC or VV (epenthesis, coalescence)
- no morphophonological processes

Predictions for preverbs

- preverbs are not parsed into a P-word
- do **NOT** expect phonological generalizations to hold across preverbs
 - no minimal size constraints
 - no stress generalizations
 - no edge restrictions

Preverbs have no minimal size constraints

- Preverbs do not have the same minimal size constraints as stems or verbs

Preverbs		Verb Stems		Inflected Verbs	
V	a- ‘IPFV’	CVV	píí-	CVVC	píít ‘enter!’
CV	sa- ‘out’	CVV	sóó-*	CVVC	sóót ‘go to war!’
VC	on- ‘hurry’	CVC	sim-	CVCVC	simís ‘stab him!’
no minimum		bimoraic		larger than bimoraic	

*variant: sowóó-

Preverbs have no stress generalizations

- Obligatory over entire verbal complex but not on preverbs or stem

<i>Orthography</i>	<i>preverbs–</i>	<i>[init–fin]–suf</i>	<i>Translation</i>
isstaáwa		[<u>isst–aa</u>] <i>–wa</i>	‘she wants’ [FR 272]
iksímsstaawa	<u>iksim–</u>	[sst–aa] <i>–wa</i>	‘he thought’ [FR 61]
itanístsiksimsstaya	it- <u>anist</u> -iksim-	[sst–aa] <i>–yi=aawa</i>	‘they decided thus’ (BB, 2013-02-13)

Preverbs have no edge restrictions

- Right edge can end in **V** or **C** or **CC** (clusters, geminates)
- Preverbs can end in

V	sa-	'out'	C	ikkam-	'fast'	CC	ipo't-	'reciprocal'
	isimi-	'secretly'		paahtsik-	'barely'		pisst-	'inside'
	ka'to-	'assist'		miistap-	'away'		ikkahs-	'humorous, funny'
				sska'-	'extremely'			
							iss-	'young, in front'
							kipp-	'might' (please)
							matt-	'again'

Summary of diagnostics

Diagnostic	Preverb	Verb Stem	Inflected Verb
Minimal size?	none	bimoraic	larger than bimoraic
Obligatory stress?	x	x	✓
Right edge restrictions?	none	<i>(other)</i>	<i>(other)</i>

Prosodic structure (prosody) [new items bolded]

P-phrase

- no CC or VV (epenthesis, coalescence)
- **obligatory stress**
- **min. size: bigger than bimoraic**

(prefixes– # preverb– # ((initial –final)_{P-word}
–suffixes)_{P-word})_{P-phrase}

Boundaries w/i P-phrase

- no [+cons] after boundary
- nasal deletion
- epenthesis before plosives

P-word

- **min. size: bimoraic**

Extended P-word

- no CC or VV (epenthesis, coalescence)
- no morphophonological processes

Summary

- Blackfoot is compatible with H2
 - there is a boundary between the preverb and stem
 - the evidence is morphophonological in nature (irregular phonology)
 - but preverbs are not parsed into a P-word
 - no minimal size constraints
 - no stress generalizations
 - no edge restrictions
- evidence for two processes of epenthesis:
 - “regular”: between consonants, inside stem and suffixes
 - “morphophonological”: at morphological junctures to the left of stems beginning in obstruents
- later, regular process of coalescence makes epenthesis opaque

Some interesting notes

- proliferation of domains?
 - need an internal P-word or possibly a P-stem
 - shares properties with the (extended) P-word, which includes the suffixes
- P-phrase is larger than bimoraic!
 - perhaps because phrases must be internally-branching
- alternations affect the left edge of roots rather than the right edge of preverbs
- Blackfoot “fits more in”
 - Stem+suffixes processes in other langs (stress, devoicing) apply to the entire verbal complex.
 - Root generalizations in other languages (bimoraicity) apply to the entire stem.
 - Imagine: you took a P-word unit, and Blackfoot “fits” more morphology into this unit.
 - Maybe the P-phrase should be labelled the “P-word”??

Future work

- Systematic morphemic analysis
 - dictionary is being digitized into Blackfoot Words as we speak!
 - next step: link all words with the same initial or medial or final together
- Look across multiple sources to fill in “gaps”
- Consider the same root in initial vs. preverb position (minimally different sets)
- Work with native speakers, esp. because there is so much variation!

Thank you!

References

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