Shared retentions cannot support subgrouping in Algonquian: Against Goddard (2018)

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Overview

• Recent argument in Goddard (2018) that Blackfoot is a sister to the rest of the Algonquian family
  • Blackfoot split first from a putative Proto-Algonquian-Blackfoot
  • Remaining Algonquian languages form a subgroup

• Two claims supporting this argument

• This paper: neither claim provides evidence for subgrouping
  • Today: just the first claim
Outline

1. Blackfoot’s position in Algonquian

2. Claim #1: Shared innovation in Proto-Algonquian
   - Goddard’s (2018) proposal
   - Problems with the proposal
   - An alternative analysis

3. Discussion
Blackfoot’s position in Algonquian
Algonquian

- Blackfoot = westernmost language
- Spoken in:
  - Alberta, Canada
  - Montana, USA

[Map by Eric Leinberger]
Blackfoot

- Four sovereign Nations
  - 3 reserves in Canada
  - 1 reservation in USA ("Blackfeet")

- [Map by Kevin McManigal]
Proto-Algonquian (subset of languages shown)

Proto-Algonquian
  Blackfoot
  Arapaho
  Cheyenne
  Cree-Menominee
  Ojibwe-Potawatomi
  Meskwaki
  Shawnee
  Miami-Illinois
  Eastern Algonquian

Plains Algonquian (area)

Central Algonquian (area)

Micmac
Abenaki
Malecite-Passamaquoddy
Massachusetts
Lenape
Proto-Algonquian

• Proto-Algonquian is well-established (cf. Aubin 1975; Bloomfield 1925, 1946; Goddard 1979; Hewson 1993; Hockett 1942; Michelson 1935; Miller 1959; Pentland 1979; Siebert 1941, 1975; Silver 1960; Voegelin 1941)

• Internal structure is rather flat
  • Only Eastern Algonquian is a subgroup (Goddard 1974, 1980)
  • But contested (Pentland 1992; Proulx 1984)

• Areal groupings (cf. Mithun 1999)
Innovations and archaisms in Blackfoot

• Innovative sound changes “all contribute towards making Blackfoot vocabulary as a whole appear as un-Algonquian” (Michelson 1935: 142-143).
• “There are some apparent lexical archaisms in Blackfoot” (Goddard 1994: 188)
• “Blackfoot is clearly the most divergent language in the Algonquian family” (Goddard 2018).
Blackfoot’s position is contested!

• Various relationships have been proposed:
  • A branch of its own (Michelson 1912)
  • Grouped with Cree and Cheyenne (Hayden 1863)
  • Grouped with Conoy and Beothuk (Pentland 1979)
  • Oldest dialectal layer of Algonquian (Goddard 1994)

• “Blackfoot is by far the most divergent of the Algonquian languages […] and it remains to be shown whether […] Blackfoot is a sister language of PA rather than a daughter” (Proulx 1980)
Goddard’s (2018) proposal

Traditional family tree
Proto-Algonquian
  Blackfoot
  etc...

Goddard (2018)
Proto-Algonquian-Blackfoot
  Blackfoot
  Proto-Algonquian
    etc.
Two arguments for shared innovations

1. Proto-Algonquian deletes #i / __C
2. Proto-Algonquian restructures an older paradigm of “post-inflectional suffixes” into the so-called absentative paradigm

This talk: just the first claim
Shared innovations in Proto-Algonquian

Roots with initial *iC
Blackfoot has many stems and roots in #iC

- PA *po·n- ‘cease’
  - cf. Meskwaki po·nikegwa ‘he pays his debt’

- Blackfoot ipon- ‘terminate, end, be rid of’
  - ponihtáát ‘pay!’
  - nitsipónihta ‘I paid’
  - iipónihtaawa ‘he paid’

“Independently, under synchronic conditions that have not been described, word-initial Bl |iC-| is sometimes realized as C-” Goddard (2018).
Blackfoot has many stems and roots in #iC

- PA *ketem- (root)
  - Meskwaki *keteminaw* - ‘take pity on, bless with supernatural power’

- Blackfoot *ikimm* - TA ‘show kindness to, bestow power on’
  - ikímmisa! ‘bestow power on him!/care for her!’
  - ikímmiiwa ‘he bestowed power on him’
  - nitsíkimmoka ‘he bestowed power on me’
Initial *i is rare in Proto-Algonquian

- No PA short *i in the first syllable, except:
  - before consonant clusters (some but not all);
  - before PA *r only reconstructible in PA *iren- ‘ordinary’
  - in demonstratives e.g. *iyog ‘this (inan.)’, *ini ‘that (inan.)’
  - and in relative roots e.g. *iθ- ~ *iš- ‘{so}; to {somewhere}’

- But no lexical roots begin in *ip-, *ič-, *it-, *ik-, *is-, *iš-, *im-, or *in-.
Initial syllables in PA are weak

- No true consonant clusters
- No contrast between *i and *e
- Relative roots beginning in *t, e.g. PA *taθ- ‘somewhere’

<table>
<thead>
<tr>
<th></th>
<th>PA</th>
<th>Unami Delaware</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>*taθ-</td>
<td>té·kane talá·wsu</td>
<td>‘he lives in the woods’</td>
</tr>
<tr>
<td>Non-initial</td>
<td>*entaθ-</td>
<td>ntəntalá·wsí·ne·n</td>
<td>‘for us to live there’</td>
</tr>
<tr>
<td>Changed†</td>
<td>*e·ntaθ-</td>
<td>yú entala·wsíenk</td>
<td>‘here where we live’</td>
</tr>
</tbody>
</table>

† initial change = morphological ablaut of initial syllable (Costa 1998)
Motivation for proposal

- Case study: PA *taθ- ‘somewhere’

<table>
<thead>
<tr>
<th></th>
<th>PA</th>
<th>pre-PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>*taθ-</td>
<td>*entaθ-</td>
</tr>
<tr>
<td>Non-initial</td>
<td>*entaθ-</td>
<td>*entaθ-</td>
</tr>
<tr>
<td>Changed†</td>
<td>*e·ntaθ-</td>
<td>*e·ntaθ-</td>
</tr>
</tbody>
</table>

reduction
Proposal: innovation in Proto-Algonquian

No stems in *#C!

Proto-Algonquian-Blackfoot

*#iC

i > ∅ / #__ (in most cases)

Blackfoot

*#iC

Proto-Algonquian

*#C

No change in Blackfoot

Innovation in PA

One aspect of general phonetic reduction in initial syllables
Problems with proposal

1. Blackfoot *also* has initial weak syllables
2. Blackfoot has C-initial nouns (and other non-verbal categories)
3. Blackfoot has C-initial verbs (sometimes)
1. Blackfoot *also* has initial weak syllables

- No true consonant clusters
- No contrast between *i* and *e* (> B i)
- Relative roots show reduction, e.g. *oht-* ‘instrumental, source’

<table>
<thead>
<tr>
<th>Type</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>tsítskixpissi</td>
<td>‘when he danced by’</td>
</tr>
<tr>
<td>Non-initial</td>
<td>áxkuxtsitokoopsskaʔwa</td>
<td>‘so she can make broth with (them)’</td>
</tr>
<tr>
<td>Changed</td>
<td>ixtsítsksspaiʔwa</td>
<td>‘he is looking past’</td>
</tr>
</tbody>
</table>

[Blackfoot Words: word-AT1969-0758, word-AT1969-0016, word-AT1969-0293]
1. Blackfoot *also* has initial weak syllables

- Case study: *oht*- ‘instrumental, source’

<table>
<thead>
<tr>
<th></th>
<th>Blackfoot$^+$</th>
<th>pre-Blackfoot</th>
<th>reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td><em>ts</em>-</td>
<td>&lt;</td>
<td><em>oht</em>-</td>
</tr>
<tr>
<td>Non-initial</td>
<td><em>uxts</em>-</td>
<td>&lt;</td>
<td><em>oht</em>-</td>
</tr>
<tr>
<td>Changed</td>
<td><em>ixts</em>-</td>
<td>&lt;</td>
<td><em>e·ht</em>-</td>
</tr>
</tbody>
</table>

$^+$ /t/ $\rightarrow$ [ts] / {i, j}
2. Blackfoot has C-initial nouns

- Nouns begin in C, not iC
- Unexpected if Blackfoot reflects PAB forms in *iC!

<table>
<thead>
<tr>
<th>Blackfoot</th>
<th>Proto-Algonquian</th>
</tr>
</thead>
<tbody>
<tr>
<td>kóóna</td>
<td>*ko·na</td>
</tr>
<tr>
<td>mííni</td>
<td>*mi·ni</td>
</tr>
<tr>
<td>miistsísáa</td>
<td>*mi·twiya</td>
</tr>
<tr>
<td>ksísskstakiwa</td>
<td>*ki·šk-</td>
</tr>
<tr>
<td>pisstóóhtsi</td>
<td>*pi·nt-</td>
</tr>
<tr>
<td></td>
<td>‘ice’</td>
</tr>
<tr>
<td></td>
<td>‘berry’</td>
</tr>
<tr>
<td></td>
<td>‘tree’</td>
</tr>
<tr>
<td></td>
<td>‘beaver’</td>
</tr>
<tr>
<td></td>
<td>‘inside’</td>
</tr>
<tr>
<td></td>
<td>‘snow’</td>
</tr>
<tr>
<td></td>
<td>‘berry’</td>
</tr>
<tr>
<td></td>
<td>‘quaking aspen’</td>
</tr>
<tr>
<td></td>
<td>‘cut, chop, sever’</td>
</tr>
<tr>
<td></td>
<td>‘inside’</td>
</tr>
</tbody>
</table>
3. Blackfoot has C-initial verbs (sometimes)

• Imperatives and subjunctions (with no prefixes)
  • PA *po·n- ‘cease’
  • B ponihtáát ‘pay!’

• Statives (with no prefixes)
  • PA *ra·nk- ‘light in weight’
  • B saahksstssímma anná pookááwa ‘the child is light in weight’ (Frantz & Russell 2017: 232)
Summary: Problems with proposal

• Blackfoot shows synchronic reduction in initial syllable
  • This was motivation for *i > Ø / #__ in Proto-Algonquian
  • So why doesn’t Blackfoot delete...?

• Blackfoot must delete in many cases
  • Nouns and non-verbs
  • Imperatives and subjunctives
  • Statives
An alternative analysis

Proto-Algonquian-Blackfoot

i > Ø / #iC

Blackfoot
#C (nouns)
#C (imp, subj)
#C (statives)
#iC (???)

Proto-Algonquian

i > Ø / #iC

Proto-Algonquian

#C

Blackfoot
#C ~ iC

etc...

*#C

innovation
Synchronic analysis: roots in #C ~ #iC

<table>
<thead>
<tr>
<th>Initial</th>
<th>Non-initial</th>
<th>After C</th>
<th>After V</th>
</tr>
</thead>
<tbody>
<tr>
<td>ponihtáát</td>
<td>áaksiponihtaawa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘pay!’</td>
<td>‘she will pay’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ákáíponihtsiwa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘he is dead’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Frantz & Russell 2017: 91)
Synchronic analysis: non-alternating roots

**Initial**

- ipótsimatsísa!
- ‘poison him!’

**Non-initial**

- áaksipótsimatsiwa
- ‘she’ll poison him’

*(none found)*

*(Frantz & Russell 2017: 92)*
Synchronic analysis: two groups of roots

<table>
<thead>
<tr>
<th>Initial</th>
<th>Non-initial</th>
<th>UR</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>pon-</td>
<td>-ipon-</td>
<td>/pon-/</td>
<td>‘cease’</td>
</tr>
<tr>
<td>ipotsim-</td>
<td>-ipotsim-</td>
<td>/ipotim-/</td>
<td>‘poison’</td>
</tr>
<tr>
<td>*p</td>
<td>*-p</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- NB: very few roots in #iC under this analysis
- Similar to Proto-Algonquian
Historical record

• For roots with invariant #i, often possible to show this is a recent addition by looking at the historical record.
• Tool: Blackfoot Words database ([https://www.blackfootwords.com/](https://www.blackfootwords.com/))
Historical record: Blackfoot Words

- relational database of inflected words and phrases, and their subparts
- 63,493 lexical forms have been digitized to date from 30 sources
- timespan: 1743–2017 (almost 300 years!)
- Version 1.1 includes 9 of 30 sources

- F&R 2017 = Frantz & Russell (2017)
- word-AB1234-000789 = unique id from the database
Historical record: kimm- ‘pity’

- ikímmisa!  ‘bestow power on him!/care for her!’ [F&R 2017: 46]

- kímmisa! pity thou him! [word-AT1969-1405]
- kǐmʼis pity him! [word-JT1889-6231]

- kǐmʼokĭt pity me! [word-JT1889-6232]
- kímmokit pity me! [word-CU1938-13981]
Morphological ablaut (“initial change”)

• Initial change = morphological ablaut of first syllable (Costa 1996)
• In C-initial stems, initial change has been restructured:
  • Archaic: first vowel ablauts (~100 stems; Taylor 1967)
  • Novel: add an initial \textit{i}- or \textit{ii}-

• Archaic changed forms can diagnose whether a syllable is initial
• Not all stems have archaic changed forms

(aspects of Blackfoot initial change in Berman 2006; Frantz 2017; Proulx 2005; Taylor 1967, 1969)
Root: ipotsim- ‘poison’

Plain:  
ipótsimatsísa!  ‘poison him!’  [F&R 2017: 92]  
ipótsimatsiwiwáyi  ‘she poisoned it’  [F&R 2017: 92]

Changed:  
iipotsímatsiway  ‘he poisoned him’  [word-AT1967-105]  
náápotsimatsiway  ‘he poisoned him’  [word-AT1969-2978]  
niiipotsímsisa  ‘poison thou him!’  [word-AT1967-107]
Root: pon- ‘cease’ is C-initial

Plain:  
ponihtáát! ‘pay!’ [F&R 2017: 91]  
poonixtátsisa ‘pay thou him!’ [word-AT1967-112]

Changed forms:

• Archaic: paanixtátsisa ‘pay thou him!’ [word-AT1967-111]
• New: iiipónihtaawa ‘he paid’ [F&R 2017: 91]

• If this root were /ipon-/, it should pattern with other i-initial roots
• Initial change only affects first syllable, showing that p is initial
Summary

• Evidence that Blackfoot roots begin in *C
  1. Synchronic analysis explains roots in #C ~ #iC
  2. Historical record explains roots in invariant #iC
  3. Morphological ablaut additional evidence
An alternative analysis

Proto-Algonquian-Blackfoot

#iC

Blackfoot

#C (nouns)

#C (imp, subj)

#C (statives)

%iC

Proto-Algonquian

#C

Blackfoot

#C ~ iC

= /#C/

Proto-Algonquian

#C

etc...

*#C
An alternative analysis

• Blackfoot roots are **shared retentions from PA** with additional innovations within the verbal system
  • Roots in non-initial position have initial #i
  • Some roots reanalyzed as truly #i-initial, contrasting with C-initial roots
  • Initial change in C-initial roots was restructured

• Shared retentions cannot support subgrouping (cf. Atkinson & Gray 2005; Koch & Bowern 2004).
Discussion
Synchronic analysis

- Synchronic analysis is necessary!
  - Morphophonological alternations
  - Phonological underlying forms
  - Internal reconstruction

- Cannot look at words in isolation without considering their place in the system.
Historical record

• Digitizing and annotating the historical record is necessary!
  • Blackfoot Words aims to do this (Weber et al. 2022)
  • Huge task!
  • Two years and counting...
Comparative method

• New cognate sets are needed!
  • Many papers on historical phonology in Algonquian compare forms in a language to the established Proto-Algonquian reconstructions
  • But new data might reveal new things!
  • Need new cognate sets and correspondence sets
Summary

• No evidence for Proto-Algonquian-Blackfoot
  • No major prevalence of #iC roots in Blackfoot
  • Determined by synchronic analysis
  • Alternative: Blackfoot continues PA roots in #C
In memoriam

Donald Frantz (d. 2021)

David Pentland (d. 2022)

Photo by Arden Ogg
Nítohtsikaahsi’taki! Thank you!