Blackfoot reflexes of Proto-Algonquian clusters

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Overview

- A closer look at reflexes of clusters in *ʔ.
- Data handout: http://linguistics.ubc.ca/person/natalie-weber/

This paper

Clusters in *ʔ preserve some elements of C₁ and C₂:

- Bf \textit{sst} (after Bf *i, iː; V is shortened by a mora)
- PA *ʔt
- Bf \textit{ht} (elsewhere)

PA *ʔs, *ʔθ, *ʔr → Bf ?s
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PA *t $\rightarrow$ Bf $s$

PA *s, *θ, *r $\rightarrow$ Bf $s$
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*contra* Berman (2006)

Massive neutralization of Proto-Algonquian clusters

PA *C₁C₂

\[
\begin{align*}
\text{Bf } ssC₂ \text{ (after Bf } *i, *i:)} \\
\text{Bf } hC₂ \text{ (elsewhere)}
\end{align*}
\]
Outline

Introduction

Proto-Algonquian

Clusters in Proto-Algonquian and Blackfoot

What happened to all those PA clusters?

Reconstructions

Conclusions
Introduction
Introduction
Proto-Algonquian

Blackfoot

Plains Algonquian ← Cheyenne

Proto-Algonquian ← Central Algonquian ← Arapaho-Atsina

Proto-Eastern Algonquian

(Goddard 1996; Mithun 1999; Oxford 2015)

* Plains Algonquian and Central Algonquian are areal groupings.
Goddard (1994) shows that sound changes are shared among neighboring languages, smeared from west-to-east (oldest to youngest).

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>(*θ ≠ *r)</td>
<td>(*?C ≠ *hC)</td>
<td>(shared CC reduction)</td>
<td>(many)</td>
<td>(Goddard 2015a)</td>
</tr>
</tbody>
</table>
Blackfoot as ‘innovative’

- ‘Blackfoot is perhaps the most innovating of all the Algonquian languages’ (Berman 2006: 264).
- ‘The most divergent Algonquian language is clearly Blackfoot. The difficulty in working with Blackfoot materials has been that the innovations are so great that any putative archaisms are difficult to identify’ (Goddard 1994: 187).
- ‘It seems probable that among the unique morphology and lexicon of Blackfoot enough archaic precursors of more widespread Algonquian features will eventually be identified to support the at present reasonable hypothesis that Blackfoot represents the oldest layer of Algonquian’ (Goddard 1994: 189).

- ...but it is definitely Algonquian (Berman 2006; Bliss, Ritter, & Wiltschko 2010; Déchaine, Johnson, et al. 2012; Déchaine & Weber In press; Déchaine & Wiltschko 2010; Goddard 2015b).
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Proto-Algonquian-Blackfoot Hypothesis (Goddard 2015b)

- Based on morphological evidence
- Research question: can we find phonological evidence from clusters?
Why clusters?

- Historically, they have been useful in reconstructions.
- cf. Siebert Jr (1941) evidence from eastern Algonquian for *θk

<table>
<thead>
<tr>
<th>PA</th>
<th>F</th>
<th>C</th>
<th>M</th>
<th>O</th>
<th>P</th>
<th>Ms.</th>
<th>D</th>
<th>Pw.</th>
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</thead>
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<tr>
<td>*θk</td>
<td>hk</td>
<td>sk</td>
<td>hk</td>
<td>kk</td>
<td>sk</td>
<td>sk</td>
<td>xk</td>
<td>sk</td>
</tr>
<tr>
<td>*xk</td>
<td>hk</td>
<td>sk</td>
<td>hk</td>
<td>kk</td>
<td>hk</td>
<td>hk</td>
<td>hVk</td>
<td>sk</td>
</tr>
<tr>
<td>*xp</td>
<td>hp</td>
<td>sp</td>
<td>hp</td>
<td>pp</td>
<td>hp</td>
<td>hp</td>
<td>hVp</td>
<td>hp</td>
</tr>
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</table>
# Clusters in Proto-Algonquian and Blackfoot

**Table 1:** Proto-Algonquian clusters of true consonants (after Goddard 1979: 71)

<table>
<thead>
<tr>
<th></th>
<th>p</th>
<th>k</th>
<th>t</th>
<th>č</th>
<th>s</th>
<th>š</th>
<th>θ</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>?</td>
<td></td>
<td>-</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>m/n</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
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<td>s</td>
<td>✓</td>
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<td>-</td>
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<td>-</td>
</tr>
<tr>
<td>š</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>θ</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>č</td>
<td>✓</td>
<td>✓</td>
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<td>r</td>
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<td>-</td>
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</tr>
</tbody>
</table>

* Single consonants or clusters could be followed by *w or *y.
Clusters in Proto-Algonquian and Blackfoot

Table 2: Blackfoot heterosyllabic clusters (Elfner 2006; Weber in prep)

<table>
<thead>
<tr>
<th></th>
<th>m</th>
<th>n</th>
<th>w</th>
<th>y</th>
<th>p</th>
<th>t</th>
<th>s</th>
<th>k</th>
<th>ks</th>
</tr>
</thead>
<tbody>
<tr>
<td>' [?]</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
</tr>
<tr>
<td>ss</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>h</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
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What happened to all those PA clusters?


Bf $ssC_2$ (after Bf $^\cdot i$, $^\cdot i:\$; V is shortened by a mora)

PA $^*C_1C_2$

Bf $hC_2$ (elsewhere)

*$ni\cdot\emptyset ka\cdot na$ ‘my fellow clansman (M spkr)’ >
nisskána ‘my younger sibling (M spkr)’

*$no\cdot ntawe\cdot wa$ ‘he hears him’ >
iiyóóhtoyiiwa ‘he heard her’
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- Basic sound changes in Berman (2006).
- Major ones included in data handout.
- Vowel syncope of short vowels in second syllable.

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</tr>
</thead>
<tbody>
<tr>
<td>*ketem-</td>
<td>‘miserable’</td>
<td>kimm-</td>
<td>‘pity’</td>
</tr>
<tr>
<td>*temi-</td>
<td>‘deep’</td>
<td>immi-</td>
<td>‘deep’</td>
</tr>
<tr>
<td>*pen-</td>
<td>‘down’</td>
<td>inn-</td>
<td>‘down’</td>
</tr>
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kimm- ‘pity’
imm-i- ‘deep’
What happened to all those PA clusters?

- Vowel syncope between C and CC (Berman 2006).

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<td>*atehtéwi</td>
<td>‘it is ripe, dyed’</td>
<td>-i’tsii-</td>
<td>VII ‘be ripe, be cooked’</td>
<td>(Br12)</td>
</tr>
<tr>
<td>*tepeskwi</td>
<td>‘it is night’</td>
<td>ko’kóyi</td>
<td>‘last night’</td>
<td>(Br66)</td>
</tr>
<tr>
<td>*metempi</td>
<td>‘brain’</td>
<td>mo’pi</td>
<td>‘brain’</td>
<td>(Br107)</td>
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- The glottal stop in Bf is not a reflex of C₁ in the PA cluster.
- But Bf C₂ is a reflex of PA C₂.
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<tr>
<td>*ateh\textsuperscript{e}\textsuperscript{wi}</td>
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<tr>
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</tbody>
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<td>‘brain’       (Br107)</td>
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- But Bf C₂ is a reflex of PA C₂.
Clusters in Proto-Algonquian and Blackfoot

Table 3: Number of Blackfoot reconstructions containing PA clusters from Berman (2006)

<table>
<thead>
<tr>
<th></th>
<th>p</th>
<th>k</th>
<th>t</th>
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<td>0</td>
<td>0</td>
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<td>1</td>
<td>0</td>
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<td>0</td>
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</tr>
</tbody>
</table>
Clusters in *?

PA *?t

Bf $sst$ (after Bf *i, i:\)

Bf $ht$ (elsewhere)

PA *?s, *?θ, *?r $\rightarrow$ Bf *s
Clusters in *?

<table>
<thead>
<tr>
<th>Sound change</th>
<th>Number of reconstructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ʔt &gt; sst (after i, i')</td>
<td>2</td>
</tr>
<tr>
<td>*ʔt &gt; ht (elsewhere)</td>
<td>4</td>
</tr>
<tr>
<td>*ʔr</td>
<td>1</td>
</tr>
<tr>
<td>*ʔs</td>
<td>2</td>
</tr>
<tr>
<td>*ʔθ</td>
<td>2 (+1 partial evidence)</td>
</tr>
</tbody>
</table>
(1) PA *piʔt- in *piʔteʔwi ‘froth, foam’ (A1883) > Bf pisst- [Reconstr. Taylor (1960: 16)]

(2) PA *sakiʔtanro ‘bite it!’ (Goddard 2015b) > Bf sikstsít ‘bite it!’ [Reconstr. Goddard (2015b)]

(3) PA *aʔtahamwa ‘extinguish by tool’ > Bf ááhtsima ‘extinguish’
*?r, *?s, *?θ clusters

(7) PA *aʔrapya ‘net’ (A162) >
Bf aʔsipísa ‘thread, sinew used for sewing’

(8) PA *seʔsw- ‘scatter, sprinkle’ (H2972) >
Bf soʔsatóót ‘sprinkle liquid on it!’

(10) PA *neʔθ- ‘my older brother’ (A1496) >
Bf níʔs- ‘my older brother’ [Reconstr. Taylor (1960)]
Summary

- Bf $sst$ (after Bf *i, iː)
- Bf $ht$ (elsewhere)
- PA *ʔt
- PA *ʔs, *ʔθ, *ʔr → Bf ?s

- Bf preserves some distinctions in clusters.
- No evidence to support the Proto-Algonquian-Blackfoot hypothesis.
- Still, clusters in Bf reveal more of Bf historical phonology...
Summary

- Bf preserves some distinctions in clusters.
- No evidence to support the Proto-Algonquian-Blackfoot hypothesis.
- Still, clusters in Bf reveal more of Bf historical phonology...
Future work

Preliminary data on other PA clusters may also have reflexes with glottal stop:

- PA *wešk- ‘young, new’ > Bf o’k- ‘raw’
- PA *kwečpan- ‘fear’ (Pentland 1979: 383) > Bf ko’po- ‘fear’
- PA *merkw- ‘red’ > Bf maohk- ‘red’ and Bf mi’k- ‘red’ (in compounds)

More work needs to be done on clusters!
In other places, Bf has a cluster ’C or *hC where PA does not.

- PA *rekw- ‘cover’ (H1426) > Bf si’k- ‘cover’
- PA *mekiwa ‘he barks’ (A1204) > Bf ohkít ‘bark!’

Evidence of a Proto-Algonquian-Blackfoot sound(s) that was lost in PA?
More work needs to be done on clusters!
Acknowledgements

- Howard Berman
- Richard Rhodes
- Ives Goddard
- David Pentland
- Rose-Marie Déchaine,
- Gunnar Hansson
- Donald Frantz
- Inge Genee
- Conor Quinn

Nitsíkohtaahsi’taki!
References I


References II


References III


