Noowo3ineheeno’ Language
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Noowó3inehééé-no’ (henceforth NO)

• Noowo3inehee is actually the name of the tribe, -no’ is plural.
• Cf. Kóówunéhee-no’ = Blood Indians (Blackfoot) for final morpheme, documented only for these two words in Arapaho.
• Noow- = ‘south’
• Kroeber 1916 provides 67 forms in NO.
• Michelson wrote in 1935 "it is useless to speculate whether a more extended vocabulary would tell us more."
• Work in the National Anthropological Archives results in finding Kroeber's original notes (MS 2560a, NB 10, p. 30 verso)
• Kroeber actually documented 145 total forms, 127 lexical items.
Dating the language’s disappearance:

- p. 31 recto, Big Mouth listed as a speaker of NO, but already deceased at the time (1899).
- “No one alive can talk it fluently. Tall Bear says he can talk it some,” Kroeber notes.
- Incidentally, Kroeber also records that Walter Finley and Bow of Thunder were Ho’onoxuwu’ (HA) individuals, “but speak Arapaho only” and that “this dialect forgotten, only children of those who spoke it alive.”
- Thus both NO and HA likely ceased to be spoken fluently by anyone sometime around the middle of the nineteenth century at the very latest.
Sources for the language:

• Tall Bear born 1829, according to the 1903 Arapaho census.

• On p. 32 verso, Kroeber notes that “Tall Bear’s gr[and] f[ather] was a N[oowo3ineheeno’]," so this was likely the source of Tall Bear’s knowledge of the language. Suggests language was actively used by at least a few people in the first half of the 19th century.

• On p. 33 Kroeber notes that “Striped Woman’s father was N[owoo3ineheeno’].” The 1903 census does not list a "Striped Woman," but does list a "Spotted Woman," and the Arapaho root kokut- can mean either 'striped' or 'spotted', so this may be the woman Kroeber refers to. She is listed as born in 1869.

• Mooney noted (Mich 1945:131) that "The Southern Arapaho...in addition to their everyday dialect, they are said to have an archaic dialect, some words of which approximate closely to Cheyenne." This is almost certainly a reference to NO.
DATA: English: Kroeber, phonemicized. PA. AR, CH.

• 14) bow: mă´axtá, móhto(?). PA *meʔtekwí. AR bêete', CH ma’ta.
• 13) blue, it is: tcäätäxtä´nie, čeeeteh té(é)n’e(e)(?). AR čeenêeteeyoo’ (with initial change), CH -otá’tav-. A Proto-AR/NO/CH root *pereʔteen- can be reconstructed for ‘blue/green’.
• 30) dog: hă´tam, hótoₜ. PA *aθemwa. AR he3, CH hotame.
• 36) elk: himäxsö´ut, himohsóut. PA *wemaškooswa. AR hiwóxuu, CH mo’ehe.
• 61a) love, I/you: miihāⁿtētîn, miihoot-etin. PA *moohθaaθ-eθε-yani 'I admire you'. AR bíixo3-é3en, CH méhót-etse
Kroeber’s orthography

\[hǐV = hʔV\]  
Cf. grmother: \(iʔhǐʔm\), \(h)ihʔím < PA \ast ooḥkom-ehsa\)

Cf. woman: \(hǐhǐʔi\), \(hihʔíí < PA \ast eθkweewa\)

\[Ci(h)V = C^yV\]  
Cf. black, it is: \(môʔxtsiāⁿ\), móóʔ(o)hts\(y\)ee-ʔ.

Cf. wind: \(hācīhēⁿ\), he\(i\)ee(h) < PA \ast kešy-eeʔθenwi\)

\[x(V)C = hC\]  
Cf. horse, his/her: \(hǐxtănǎ́\), hihtonóh < PA \ast itayahi\)
VV = long or double vowels -- or sometimes VʔV or even VhV
Cf. you(PL): nänäănų′nää, neneení-nee.

-VV# (sometimes -VV^n#) = -Vʔ# most commonly -- but also sometimes -VV or VʔV or VhV
Cf. PA *atehkwa: hôxtá´hää^n, hohtéhe? (caribou/deer)
Kroeber notes (p. 32 verso) that “b + m often interchangeable,” though he records /b/ on only two occasions. None of the examples of /Ө/ can be securely traced back to PA – they seem to all be due to borrowings or influence from other Arapahoan languages. #79 and 122 provide the only examples of /x/ other than as pre-consonantal aspiration, and the exact source and nature of the two forms is unclear (one written /q/, the other /x/ but possibly pre-consonantal), so this is a questionable additional phoneme.
## Innovations in PA consonants

<table>
<thead>
<tr>
<th></th>
<th>G1998*PA</th>
<th>AR</th>
<th>NO</th>
<th>CH</th>
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</thead>
<tbody>
<tr>
<td>5</td>
<td>*w</td>
<td>n</td>
<td>n</td>
<td>v</td>
</tr>
<tr>
<td>5</td>
<td>*y</td>
<td>n</td>
<td>n</td>
<td>t/s[y]</td>
</tr>
<tr>
<td>5</td>
<td>*Cw/y</td>
<td>Ø/y (&lt; *ny)</td>
<td>Ø/y</td>
<td>Ø/y</td>
</tr>
<tr>
<td></td>
<td>*θ</td>
<td>Θ</td>
<td>t</td>
<td>t/s[y]</td>
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<tr>
<td>7</td>
<td>*r</td>
<td>n</td>
<td>t</td>
<td>t/s[y]</td>
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<tr>
<td>10</td>
<td>*k</td>
<td>Ø</td>
<td>Ø</td>
<td>Ø/k/ky</td>
</tr>
<tr>
<td>11</td>
<td>*p</td>
<td>c/k</td>
<td>c/k/ts</td>
<td>Ø/p</td>
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<tr>
<td>12</td>
<td>*s</td>
<td>h/n (&lt; *#s)</td>
<td>t</td>
<td>h</td>
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<tr>
<td>13</td>
<td>*č</td>
<td>Θ</td>
<td>ts</td>
<td>s</td>
</tr>
<tr>
<td>21</td>
<td>*š</td>
<td>s/x</td>
<td>s/s</td>
<td>x/š/s[y]</td>
</tr>
<tr>
<td>21</td>
<td>*m</td>
<td>b/w</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td>(21)</td>
<td>*t</td>
<td>t</td>
<td>t/ts[y]</td>
<td>t/ts/s[y]</td>
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</table>
Key cluster rule differences, NO and AR:

- Arap *θ in clusters > *š, NO *θ in clusters > *h
- Arap *k in clusters > Ø (as elsewhere), NO *k in clusters > *ʔ
- Arap *ʔC, *nš > *:C, NO *ʔC, *nš > *hC
### Set 1: *hC:

NO: *hθ > hh; *hC > C

<table>
<thead>
<tr>
<th></th>
<th>PA</th>
<th>AR</th>
<th>NO</th>
<th>CH</th>
<th>NO Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*hθ</td>
<td>s/x</td>
<td>h</td>
<td>h, n?</td>
<td>PA *nyiिखwaatahθwi &gt; niिखyoo(to(h) ‘seven’</td>
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<td>PA *metaatahθwi &gt; mohtóhtoh-ehe? ‘ten’</td>
</tr>
<tr>
<td></td>
<td>*hs</td>
<td>h</td>
<td>t</td>
<td>h</td>
<td>PA *nnoohšihs-ehsa &gt; niिखit-ehe? ‘my grandfather’</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>PA *ešihsa &gt; he(h)िखist  ‘your uncle’</td>
</tr>
<tr>
<td></td>
<td>*hš</td>
<td>s/x</td>
<td>s/s̃</td>
<td>š/x</td>
<td>PA *eमeहšoom-ehsa &gt; (h)ोmosिखim ‘greatgrandchild’</td>
</tr>
<tr>
<td></td>
<td>*hm/n</td>
<td>m/n</td>
<td>m/n?</td>
<td>m/n</td>
<td>PA *akweहmi &gt; hोोo?o(n) ‘blanket’</td>
</tr>
</tbody>
</table>
Set 2: *ʔC, *nC:
NO: *Cθ > Ch; *ʔC (other than h)> hC, *nC > hC; *ʔh > h?

• PA  AR  NO  CH  NO examples
• *ʔθ  :s/x  h'  [']h, 'n, š/x?  PA *kiišoʔwa > hişihiʔ  ‘sun’
• *ʔt  :t  ht  't  PA *meʔtekwi > móhto?  ‘bow’
• *ʔs  h'  ht  'h, 'n  PA *neʔθeʔs-ehsa > níhʔ(h)tsʔo  ‘my o.br.’
• PA *aʔsenyi > hoht-όʔ  ‘stone’
• *ʔš  :s/x  hs/s  š/x  PA *šiiʔšiipa > sǐhšič  ‘duck’
• *ʔr  h'  ht  'h, 'n  PA *maaskiʔreewa > mooʔúhtʔee  ‘mag’
• *ns  h'  ht  'h, š/x?  PA *miinsyi > mihts(y?) > mihs(y?)  ‘bush’
• *nš  :s/x  hs/s  š/x  PA *meškiinšekwi > mesí(h)seʔ  ‘eye’
Set 3: *Ck:
NO:*Θk > *hk; *Ck > *Cʔ; *r/sʔ > ?, *šʔ > š

<table>
<thead>
<tr>
<th></th>
<th>PA</th>
<th>AR</th>
<th>NO</th>
<th>CH</th>
</tr>
</thead>
</table>
| *hk | Ø  | h' | Ø/(hk) | PA *oohkombesa > (h)ihʔím ‘gr.m’
|    |    |    |      | PA *atehkwa > hohtéheʔ ‘deer’ |
| *šk | s/x | s/s | '(k) | PA *wemaškooswa > himohsout ‘elk’
|    |    |    |      | PA *eškweteewi > (h)ihšiteee(n) ‘fire’ |
| *Θk | s/x | h' | '(k), (hk) | PA *maΘkwa > mohóʔ ‘bear’
|    |    |    |      | PA *eΘkweewa > hihiíí ‘woman’ |
| *rk | ′   | ′   | '(k) | PA *merkw- > moʔ-ohtohé.iniʔ ‘red’ |
| *sk | ′   | ′   | '(k) | PA **mweʔt-askamikwi > mihtomuʔ |

(Note last two, same result, but from different rules)
General Conclusions

• Phonologically, NO, AR and CH are about equally distant. Looking at the reflexes of PA simple consonants, and shared innovations, we find:

• AR and CH = 4 shared innovations
• AR and NO = 5 shared innovations
• NO and CH = 6 shared innovations

• In its treatment of consonant clusters, NO is substantially different from both CH and AR as well.
General conclusions (cont.)

• All three languages show independent phonological innovations.
• To the extent that innovations are shared, there is no strong basis for treating any of the languages as intermediate to the other two.
• Thus the languages appear to have been in a “triangular” phonological relationship, with innovations flowing from any of points of the triangle:

  ARAP  < 4 >  CHEY
     <5>   <6>
    NOOW
General conclusions (cont.)

• NO is clearly an Arapahoan language from a morphological perspective however: it used PA changed conjunct forms in its independent order verbs:

• 61a) love, I/you: \textit{miihāⁿtētîn}, miihoot-etin. PA *moohθaaθ-eθe-yani 'I admire you'. AR bííxoo3é3en.

• 61b) love, I/him/her: \textit{mi’ihāⁿtǎn}, míihoot-oʔ. PA *moohθaaθ-aka. AR bííxoo3ó’.

• 61c) love, s/he/me: \textit{miihāⁿtē’inaⁿ}, miihoot-é.inoo. PA *moohθaaθ-eko-yaana. AR bííxoo3é.inoo.

• 61d) love, s/he/us(incl.): \textit{miihāⁿtä’ñaan}, miihoot-e.ínoʔ. PA *moohθaaθ-eko-yankwe. AR bííxoo3é.ino'.
Question:

• Is the morphology a recent borrowing, due to Arapaho contact?
• Note that the phonology of NO begins to diverge from the other Arapahoan languages (AR, GV, BS) almost from the very first rules that can be posited.
Remaining issues: Kroeber’s ĉ

• 79) rainbow: nǎxǔĉŏ´xt,
• noxoðóht, or perhaps simply nohðóht?
• PA **nakwee-ʔtwini 'snaring things', which gives AR noyôot.
• 38d) father, his/her: hini´iĉê,
• hiniið-e?.
• PA **o-noohθenaana, which gives AR AR hiniisόnoon.
• 42) flour: taĉahēiaⁿ,
• toðoheyoo or more likely toðohyoo.
• AR θo'ohó.e. Cf. PA *takwah-am- VTI ‘break s.t. up’
Kroeber’s I

- 75) one: tcääcila’hä,
- čeesiγ-óhe?.
- PA *peešekwanwi. AR čeesey.
- 80) raining, it is: hānsi’laxtα,
- hoosíyoht(i)?.
- The form appears likely related to AR hoosôoti-’ of the same meaning.
References:


