Challenges of an Athabaskan grammar

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Plan of talk

I. Basic information about Upper Kuskokwim
II. Premises of the descriptive project
III. Challenges of the language
   § Typological non-transparency
   § Morphological complexity
   § Unusual patterns of conceptualization
IV. Open questions
V. Conclusion
I. Basic information

- **Athabaskan (≈ Dene)**
  - About 40 languages in western North America

- **Belong to the larger Na-Dene language family**

- **Three groups**
  - Northern (Alaska, Canada)
  - Pacific
  - Southern, or Apachean

- **Among the most morphologically complex languages of the world**
Native languages of Alaska (M. Krauss)

Eskimo-Aleut

Athabaskan
Upper Kuskokwim, Central Alaska: the village of Nikolai
Upper Kuskokwim

Among the 11 (or 12) Athabaskan languages of Alaska

Traditionally, a few hundred people occupied a territory of the size of southern Finland
Upper Kuskokwim

- Overall number of the living people of UK descent – about 380 (Raskladkina 2018)
- Everyday use of UK – almost none
  - Was used in four households in 2014
- Less than 20 speakers left
  - The youngest fully-fledged speaker born in 1952
  - Teaching UK at school since 1973, no result
- Prior work – Collins and Petruska 1979
- Our team (A. Kibrik, M. Bergelson and M. Raskladkina) - seven field trips between 1997 and 2017
Grammar: crash introduction

Long verbs
Many morphological positions in the verb
Almost exclusive prefixation (unusual)
Complex verb lexeme derivation
Derivation and inflection are intermingled
One grammatical meaning is conveyed by several devices (multiple exponence)
Complex morphophonemics: s+l > j

\[ nontinghiji’el \]
\[ no- ni- ti- ni- ghi- s- l- ’el \]
\[ \text{again- 2Sg.Acc- Inc- Cl.Roundish Prog- 1Sg.Nom- Detrans.Trans- act:Prog} \]

‘bye’, ‘I will see you next time’
II. Premises of the descriptive project

IIa. Ecological groundedness
IIb. Variation
IIC. Corpus
IId. Form and function in the organization of description
IIa. Ecological groundedness

- Multimodal communication
  - Prosody
  - Gesture

- Culture
  - General Northern Athabaskan, e.g. hunting beliefs and taboos
  - Religion: Russian Orthodox (since the 19th century)

- Social structure
  - Seven families comprising the modern community
    - All are related
  - Full coverage of the population of speakers in the descriptive project

- Natural environment
  - Survival in subarctic conditions
  - Use of resources
IIb. Variation

Very high variation in the older generations (born before 1930)

Uniform merger A in younger speakers

<table>
<thead>
<tr>
<th>Interdental</th>
<th>Dental</th>
<th>Retroflex</th>
<th>Alveolar</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘my tongue’</td>
<td>‘snow’</td>
<td>‘raven’</td>
<td>‘stick’</td>
</tr>
<tr>
<td>sit_ulu</td>
<td>t_set_</td>
<td>dot_ron</td>
<td>dichinh</td>
</tr>
<tr>
<td>sit_ulu</td>
<td>t_set_</td>
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<td>dichinh</td>
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<td>t_set_</td>
<td>dot_</td>
<td>dichinh</td>
</tr>
</tbody>
</table>
Variation

Explanation

- Traditional seasonal-nomadic life style
  - Bands only met occasionally
  - Hence strong dialectal variation: each speaker is a dialect
- School in Nikolai starting from 1948
  - First generation of speakers who formed a stable speech community
1c. Multi-genre corpus

- Spoken discourse
  - personal stories
  - history
  - folklore
  - interview
  - conversation
  - comments on a film
  - sermon

- Written discourse
  - personal letters
  - a variety of school materials
IId. Form and function in the organization of description

Part/chapter structure is largely based on formal categories

This is partly compensated for by Part XI.

Part V: Verb
- 20. Root
- 23. Basic inflection
- 26. Conjugation
- 29. Incorporation

Part XI: Linguistic phenomena in discourse
- 64. Reference
- 65. Information flow
- 66. Use of verb forms
- 67. Clause combining
- 68. Local coherence
- 69. Global coherence
III. Challenges of the language

- IIIa. Typological non-transparency
- IIIb. Qualitative morphological complexity
- IIIc. Unusual patterns of conceptualization
Ill.a. Typological non-transparency

Obscure terminology that emerged and became entrenched in early 20th century

Example: so-called “classifiers”
  Immediate pre-root position
  Four options:
  - ø-
  - di-
  - ł-
  - l-
“Classifiers”

duł di-Ø-gwnh  
‘the wood is drying’

causativization

+ Trans

duł di-I-gwnh  
‘s/he is drying the wood’

reversive

-Trans

tsa no-di-di-gwnh  
‘the rock dried (back)’

autobenefactive

-Trans

duł di-I-gwnh  
‘s/he is drying the wood for his/her own benefit’

More appropriate term: transitivity indicators
True classifiers

Classificatory verb roots – ‘lie’, ‘move’

- ‘it lies’
  - zi-tanh – a living thing
  - zi-tonh – an elongated object
  - zi-konh – an object in an open container
  - ..........

Classificatory prefixes – “gender”

- ghisdlał ‘I am carrying multiple objects’
- di-ghisdlał ‘I am carrying wooden, growing objects’
- ni-ghisdlał ‘I am carrying roundish objects’

Much confusion about Athabaskan in typological literature (on both transitivity-related derivations and on classifiers)
IIIb. Morphological complexity

- Quantitative
- Qualitative

Discussions of complexity, when made empirical, involve quantitative features in the first place

“A definition of grammatical complexity can be based on the usual understanding of a complex system as one consisting of many different elements <...> The features surveyed were <...> numbers of elements in the system” (Nichols 2009: 110, 113) [note caveats there]
Quantitative complexity: verb form template

<table>
<thead>
<tr>
<th>15</th>
<th>14</th>
<th>13</th>
<th>12</th>
<th>11</th>
<th>10</th>
<th>9</th>
<th>8</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
<th>-1</th>
<th>-2</th>
<th>-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>preverbal pronoun</td>
<td>preverb</td>
<td>locative</td>
<td>iterative/reversive</td>
<td>incorporate</td>
<td>dative pronoun</td>
<td>accusative pronoun</td>
<td>nominative pronoun</td>
<td>gender</td>
<td>inceptive</td>
<td>negation</td>
<td>mode</td>
<td>perfective</td>
<td>nominative pronoun</td>
<td>transitivity indicator</td>
<td>ROOT</td>
<td>mode</td>
<td>negation</td>
<td>nominalizer</td>
</tr>
</tbody>
</table>
Quantitative complexity is often called polysynthesis.

However:
- North America is generally a polysynthetic area.
- Athabaskan languages are polysynthetic, but not extremely polysynthetic.
  
  [Link](http://wals.info/feature/22A#2/34.5/143.6)

There are more spectacular polysynthetic languages:
- length of morphemes
- average number of cooccurrent morpheme positions
Eskimo polysynthesis

ayag-qaqu-cuar-yuumiite-qapiar-llru-yugnarq-u-q-qaa
travel-now.and.then-little-want.not-very-Past-probably-Indic-3Sg-Qu

‘I guess she probably did not really want to go for those short trips, did she?’

(Central Yup’ik, Eskimo, Alaska, Mithun 1999: 408)
### Qualitative complexity

- Athabaskan morphology is much more special from the point of view of **qualitative** complexity.
- In order to not overcomplicate things, I use terminology from Bickel and Nichols 2007.

| 1. Exponence: meaning-to-form relationship | Opaque: cumulative and multiple |
| 2. Distinctiveness | Many meanings are conveyed by similar forms (homophony) |
| 3. Degree of freedom | Fusion |
| 4. Regularity | Variance, allomorphy, sensitivity to inflectional classes |
| 5. Position | Prefixation |
| 6. Obedience to scope | Violations of scope principles |
| 7. Structure | Templatic |
Illustration: Root allomorphy

<table>
<thead>
<tr>
<th>“Mode”</th>
<th>2Sg n-e-kash</th>
<th>2Pl n-wh-dał</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impfv</td>
<td>‘you arrive paddling’</td>
<td>‘you guys arrive’</td>
</tr>
<tr>
<td>Pfv</td>
<td>3Sg n-e-kanh</td>
<td>3Pl hi-n-e-datł’</td>
</tr>
<tr>
<td></td>
<td>‘he arrived paddling’</td>
<td>‘they arrived’</td>
</tr>
<tr>
<td>Prog</td>
<td>3Sg to-kał</td>
<td>3Pl h-o-dił</td>
</tr>
<tr>
<td></td>
<td>‘he will paddle’</td>
<td>‘they are walking’</td>
</tr>
</tbody>
</table>
# Suffixation treatment

(Koyukon, Axelrod 1993)

<table>
<thead>
<tr>
<th>Movement Type</th>
<th>Impfv</th>
<th>Pfv</th>
<th>Prog=Opt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuter</td>
<td>nh</td>
<td>CÉ</td>
<td>CÉ</td>
</tr>
<tr>
<td>Transitional</td>
<td>h</td>
<td>t~CÉ</td>
<td>h</td>
</tr>
<tr>
<td>Momentan.</td>
<td>sh</td>
<td>nh</td>
<td>É</td>
</tr>
<tr>
<td>Peramb.</td>
<td>sh</td>
<td>nh</td>
<td>ch</td>
</tr>
<tr>
<td>Continuative</td>
<td>p</td>
<td>nh</td>
<td>Ë</td>
</tr>
<tr>
<td>Persistive</td>
<td>h</td>
<td>h</td>
<td>h</td>
</tr>
<tr>
<td>Reversative</td>
<td>h</td>
<td>nh</td>
<td>h</td>
</tr>
<tr>
<td>Durative</td>
<td>p</td>
<td>CÉ</td>
<td>CÉ</td>
</tr>
<tr>
<td>Consecutive</td>
<td>CÉ</td>
<td>CÉ</td>
<td>CÉ</td>
</tr>
<tr>
<td>Repetitive</td>
<td>sh</td>
<td>ch</td>
<td>ch</td>
</tr>
<tr>
<td>Directive/repet.</td>
<td>sh</td>
<td>CÉ</td>
<td>ch</td>
</tr>
<tr>
<td>Semelfactive</td>
<td>CÉ</td>
<td>CÉ</td>
<td>CÉ</td>
</tr>
<tr>
<td>Biseptive</td>
<td>p~nh</td>
<td>p~nh</td>
<td>p~nh</td>
</tr>
</tbody>
</table>
Root allomorphy

Diachronically:
- suffixation, dependent on “mode” and lexical aspect

Synchronously:
- suffixes can only be partly discerned
- there are other operations, such as alternation
- extreme allomorphy of verb root
- allomorphy is irregular

Many-to-many correspondences between meanings and forms
- One meaning (e.g. imperfective) is conveyed by many suffixes
- One suffix corresponds to several mode-aspect combinations, often unrelated
IIIc. Unusual patterns of conceptualization

- Athabaskan verbs are complex in terms of derivation
- Index of verb complexity (IVC, Kibrik 2012)
  - Number of lexical (root and derivational) morphemes per verbal lexeme
  - English: 1.09
  - Russian: 1.48
  - Koyukon: 2.52
- English ‘see’ vs. Upper Kuskokwim lit. ‘act with roundish things upon X’
- English ‘hunt’ vs. Upper Kuskokwim ‘act with a wooden object upon an area in concealment’
- Root semantics is relatively general and abstract
IV. Open questions

Glossing
- Qualitative morphological complexity makes morphological glossing problematic
- For example, because tense-aspects meanings are often conveyed in two or more different parts of the verb form

Lexicon
- Extreme derivational potential makes it difficult to enumerate lexemes derived from one root
- Root allomorphy makes it difficult to enumerate either basic roots or all root forms
V. Conclusion

In this descriptive project, I aim at creating an Athabaskan grammar providing insight into this rather peculiar language family opening Athabaskan data to a wider range of linguists, including typologists
To the memory of
Bobby Esai Sr.
Philip Esai
Nick Dennis
Willie and Betty Petruska
Jim Nikolai