What happens to a language under pressure: Discriminatory language policy and language change in North Saami

Laura A. Janda
Lene Antonsen
Overview

- Facts about the Samis (sociolinguistic situation)
- An ongoing language change: ReflN is replacing NPx
  - two possessive constructions in competition
  - one construction is morphologically more complex
- Data and analysis
- Conclusions
What do YOU associate with the Saami People?
Facts about the Saamis

- Reindeer
- Skis
- Joik
- Colorful Clothing
- Far North
- Exotic Language
Reindeer: *bohccot*

- Reindeer herding is a traditional way of life
- Involves semi-annual migrations
- Saamis also work in fishing and farming
- Herding reindeer remains a popular choice for young Saamis
- Reindeer herding can be studied at the Saami University of Applied Sciences in Kautokeino
Skis: **sabehat**

- Saamis are believed to have invented skis
- Petroglyphs show Saamis on skis approx 5000 years ago
- Norway’s famous Arctic explorer, Fritjof Nansen (1861-1930) had Saami skiers on his expeditions and popularized the sport
Joik: *luohti, juoigat*

- Traditional way of singing among the Saami people
- The most famous modern joiker was Nils-Aslak Valkeapää (aka Áillohaš, 1943-2001), who used joik to prove that the Saami are an indigenous people at the meeting of the World Council of Indigenous Peoples in Canada in 1975
- The most famous living joiker is Mari Boine
Colorful Clothing: *biktasat*

- A woolen or fur cloak, called *gákti*, can be brightly colored, and both decorations and accessories (especially hats) vary from one region to another.
- Modern Saamis experiment with traditional themes.
Far North: *davvin*

- The Saami lands (called Sápmi) are mostly above the Arctic Circle in the territories of Norway, Sweden, Finland, and Russia
- This is the land of both northern lights (in winter) and midnight sun (in summer)
Exotic Language: eksohtalaš giella

- Saami forms its own branch on the Finnic trunk of the Uralic tree
- Not comprehensible to speakers of any other Uralic languages
- North Saami is the only minority language of Europe that is in a contact situation with majority languages from two different families: Indo-European (Norwegian & Swedish), and Uralic (Finnish)
In other words, although Saami covers a big territory, it is less than 1% of the Uralic family.
Exotic Language: eksohtalaš giella

- There are 9-10 Saami languages
- The largest is North Saami, with about 20,000 speakers
- North Saami has a very complex system of morphophonemic alternations (literally hundreds of them) that depend on the number of syllables in a word, but these alternations are entirely regular
- North Saami expresses dual in verbs, but not in nouns

- There are no words for ‘no’ and ‘yes’ or ‘maybe’ in North Saami – these are expressed with verbs
- ‘Wetness’ can be expressed by using singular vs. plural with non-count nouns
Facts about the Saamis

Fun Facts
• Reindeer
• Skis
• Joik
• Colorful Clothing
• Far North
• Exotic Language
# Facts about the Saamis

<table>
<thead>
<tr>
<th>Fun Facts</th>
<th>Not So Fun Facts</th>
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<tbody>
<tr>
<td>Reindeer</td>
<td>Threats to Reindeer</td>
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<td>Residential Schools</td>
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<td>Joik</td>
<td>Racism</td>
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<td>Colorful Clothing</td>
<td>Suicide</td>
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<td>Far North</td>
<td>Climate Change</td>
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<tr>
<td>Exotic Language</td>
<td>Language Endangerment</td>
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</table>
Threats to Reindeer: áitagat boazodollui

- Reindeer need a lot of space
- Mining, on-shore windmill parks, high-tension electric wires, development threaten the grazing lands
- www.prospecting.no provides one-stop interactive “shopping” for mining companies
- Statnett is planning a 420kw electric line, and has transported the building materials before the trial that the Saamis have brought has even begun…
Threats to Reindeer: áitagat boazodollui

- Norwegian government is forcing herders to slaughter their animals, claiming that the reindeer are a threat to the environment
- Saamis believe they are being driven off their lands, just as Europeans drove Native Americans off by killing off the buffalo
Residential Schools: *skuvlainternáhtat*

- In much of the 20th century, Saami children were forcibly removed from their families and put in schools where they were not allowed to speak their language.
- This trauma is shared by virtually all Samis age 60+.
Racism: *nállevealaheapmi*

- Saamis were displayed in zoos and exhibitions until the end of WWII and were the object of “scientific racism”
- Stigmatism continues
Racism: *nállevealaheapmi*

- “Lapp” and “finn” (in Norwegian) are the equivalent of the “n-word”
Please remember this for later…

North Saami can be understood as comprising two regions:

**East** = North Saami spoken in Finland

**West** = North Saami spoken in Norway + Sweden
Racism: *nállevealaheapmi*

- Saamis were literally erased from official maps
- In 1975 Hans Ragnar Mathisen made a map of Saami lands using original Saami toponyms
Suicide: *iešsorbmen*

- Saamis, men especially, are at higher risk of suicide
- Saamis also suffer other social ills at higher rates than majority populations, such as: alcoholism, teenage pregnancy, etc.
Global Warming: *globála liegganeapmi*

- Climate change is faster and more severe in the *Arctic* than in most of the rest of the world. The *Arctic* is warming at a rate of almost twice the global average.
- This is another threat to reindeer herding and other traditional ways of life
Threatened Language: áitatvuološ giella

- Sociolinguistic landscape of North Saami today is highly heterogeneous: there are native speakers; people who heard or spoke North Saami as children, shifted to a majority language during school years, later reacquired the language; and people who learned the language as adults.

- Most speakers of North Saami have not received education in the language and are literate only in a majority language.
Threatened Language: áitatvuološ giella

- Trudgill (2002) and McWhorter (2007, 2011) argue that the ‘normal’ state of language is highly complex, and that languages that are most exposed to contact and adult learners show evidence of simplification.

- On Trudgill’s (2011: 147) six-point scale of communities, where ‘1’ is the type of language that tends most toward complexification, North Saami would rank as a ‘4’, with a small size, loose network and high level of contact.
An ongoing language change in North Saami: NPx is being replaced by ReflN

Two examples from Elle Márjá Vars’ novel Kátjá

NPx (possessive suffix, HIGH morphological complexity):
(1a) Kátjá... ollii latnjasis
   Kátjá.NOM reach.IND.PRET.3S room.ILL.SG.PX.3S
   ‘Kátjá... got to her room’

ReflN (analytic construction with reflexive genitive pronoun):
(1b) Kátjá... ollii iezäs latnjii
    Kátjá.NOM reach.IND.PRET.3S REFL.GEN.3S room.ILL.SG
    ‘Kátjá... got to her room’
WALS Feature 57a: Possessive affixes
RefIN components = 9 + 10 items otherwise needed reflexive Genitive pronoun + noun inflection

<table>
<thead>
<tr>
<th>Paradigm of reflexive genitive pronoun</th>
<th>Paradigm of noun guoibmi “partner”</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG ieža-n</td>
<td>NOM.SG guoibmi</td>
</tr>
<tr>
<td>2SG ieža-t</td>
<td>GEN.SG=ACC.SG guoimmi</td>
</tr>
<tr>
<td>3SG ieža-s</td>
<td>ILL.SG guoibmáá-i</td>
</tr>
<tr>
<td>1DU ieža-me</td>
<td>LOC.SG guoimmi-s</td>
</tr>
<tr>
<td>2DU ieža-de</td>
<td>COM.SG=LOC.PL guimmi-in</td>
</tr>
<tr>
<td>3DU ieža-ska</td>
<td>NOM.PL guoimmi-t</td>
</tr>
<tr>
<td>1PL ieža-met</td>
<td>GEN.PL=ACC.PL guimmi-id</td>
</tr>
<tr>
<td>2PL ieža-det</td>
<td>ILL.PL guimmi-ide</td>
</tr>
<tr>
<td>3PL ieža-set</td>
<td>COM.PL guimmi-iguin</td>
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Use of the NPx requires mastery of **81** additional unique forms, or a noun paradigm with **130** slots (instead of just 13)

Imagine that you are reclaiming or learning North Saami as an adult

Which possessive construction would **you** choose?
Morphological complexity in the face of intense contact

- NPx is much more morphologically complex than RefIN.
- North Saami is under intense pressure from both Germanic (Norwegian and Swedish) and Finnish.
- Many North Saami speakers have reclaimed the language as adults.
- Language contact and 2nd language learners can lead to morphological simplification (Trudgill 2002, McWhorter 2007, Bentz & Winter 2013).
- In this situation, there may be an advantage for the morphologically simpler form: RefIN.
An example of an S-curve (cited by Blythe & Croft 2012)

Figure 1. Trajectory of the evolution of four variants of the future in Brazilian Portuguese. Although three variants compete with the original synthetic future, the incoming *ir* ‘go’ periphrastic future is propagated following an S-curve. Data from Poplack & Malvar 2007:144.
The S-curve in our Data

- **Literary texts**: 530,000 words, three age groups, two geographic regions
  - 2,272 examples, full analysis by hand
  - 1,530 examples, full analysis by hand
- **Newspapers**: 10M words from three newspapers (1997-2011)
  - 29,964 examples of words with frequency ≥5, partial automatic analysis, a lot of cleaning by hand

- **Total**: 33,633 examples

*Our S-curve is from this data*
<table>
<thead>
<tr>
<th>Author</th>
<th>Year of Birth</th>
<th>Geography</th>
<th>Number of words</th>
<th># NPx exx</th>
<th># ReflN exx</th>
<th>Proportion ReflN</th>
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<td>A. Larsen</td>
<td>1870</td>
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Mid Generation speakers were removed from their L1 environment during their school years, creating a sociolinguistic situation in which morphological complexity is disadvantaged.

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Our S-curve: longitudinal data from literary texts

The timing of the change aligns with discriminatory policies
Our S-curve: longitudinal data from literary texts

The timing of the change aligns with discriminatory policies

But: how important is Generation in relation to other factors?
Statistical analysis: Factors and levels

- Possessum (the one that is possessed; PM):
  - Case: Nom, Acc, Gen, Ill, Com, Loc, Ess
  - Number: Sg, Pl
  - Semantic Class: Kin, Human, Body...
- Possessor (the one that possesses; PR):
  - Case: Nom/Verb, Acc, Gen, Ill, Loc
  - Person and Number: 1Sg, 2Sg, 3Sg, 1Du, 2Du, 3Du, 1Pl, 2Pl, 3Pl
  - Semantic Class: Human, Animal, Nature...
- Generation: Old vs. Mid vs. Young
- Geography: East vs. West
Five factors turned out to be significant
Statistical analysis: Factors and levels

• Possessum (the one that is possessed; PM):
  – Case: Nom, Acc, Gen, Ill, Com, Loc, Ess  PMCase
  – Number: Sg, Pl
  – Semantic Class: Kin, Human, Body...

• Possessor (the one that possesses; PR):
  – Case: Nom/Verb, Acc, Gen, Ill, Loc  PRCase
  – Person and Number: 1Sg, 2Sg, 3Sg, 1Du, 2Du, 3Du, 1Pl, 2Pl, 3Pl
  – Semantic Class: Human, Animal, Nature...

• Generation: Old vs. Mid vs. Young

• Geography: East vs. West
We ran this analysis with just the authors’ names instead of Generation and Geography and got the exact same results. It is possible to sort authors according to both factors based only on their use of NPx vs. RefiN.
Measure of Variable Importance

PMClass
Generation
PMCase
Geography
PRCase
Let’s look at PMClass, PMCase, and PRCCase in a little more detail.
Semantic Class of Possessum

Old
Mid
Young

ReflN
NPx

Other
Abstraction
Place
Event
Human
Property
Body
Kin
Other
Abstraction
Place
Event
Human
Property
Body
Kin
Other
Abstraction
Place
Event
Human
Property
Body
Kin
Other
Abstraction
Place
Event
Human
Property
Body
Kin

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
ReflN is well represented across classes, especially where possession is atypical (abstraction).
RefInN is well represented across classes, especially where possession is atypical (abstraction).

For Young generation, NPx is retained mostly for Kin and Human.
The Case of the Possessum

ReflN is well represented across the spectrum of cases, and predominates in Nominative, where NPx is rare.

Greater syntactic flexibility of ReflN probably gives it a competitive advantage.
The Case of the Possessor

RefiN prevails in the Locative and Genitive cases, which are peripheral for possessors. Peripheral uses are more vulnerable to linguistic change.
For both PMCase and PRCase, ReflN is robustly attested across the spectrum of syntactic environments. ReflN is actually preferred precisely in the syntactic environments that are most atypical for the expression of possession, making ReflN the construction of choice in the environments that are likely to be most influential in language change.

Peripheral uses are more vulnerable to linguistic change.
What about frequency?

- It is often the case that high frequent lexemes are more resistant to language change.
- Given the nature of our longitudinal data (mostly gathered by hand from books), it is not possible to measure the frequencies of lexemes in that data.
- However, it is possible to measure frequencies in the newspaper data.
- **Newspapers**: 10M words from three newspapers (1997-2011)
  - 29,964 examples of words with frequency ≥5, partial automatic analysis, a lot of cleaning by hand.
Distribution of possessive constructions in newspaper data is similar to Young generation.
No evidence that frequency helps retain NPx

News data
Pearson's correlation = -0.14
p = 0.0001
95% confidence interval:
-0.2    -0.07
Conclusions

- North Saami sociolinguistics
  - contact pressure from Norwegian, Swedish, and Finnish
  - suppressed through discriminatory policies in mid 20th century
- When a language is under pressure, morphology tends to simplify
- North Saami has two possessive constructions
  - NPx = Noun + Possessive suffix, high morphological complexity
  - ReflN = Genitive Reflexive Pronoun + Noun, compositional without added complexity
- Simpler ReflN replaces NPx simultaneous with policies that removed Mid Generation speakers from L1 environment during their school years
Conclusions

• North Saami sociolinguistics – contact pressure from Norwegian, Swedish, and Finnish – suppressed through discriminatory policies in mid 20th century

• When a language is under pressure, morphology tends to simplify

• North Saami has two possessive constructions – NPx = Noun + Possessive suffix, high morphological complexity – ReflN = Genitive Reflexive Pronoun + Noun, compositional without added complexity

• Simpler ReflN replaces NPx simultaneous with policies that removed Mid Generation speakers from L1 environment during their school years

It is likely that this linguistic change was catalyzed by discriminatory policy
Conclusions

• Frequency does not play a role
• ReflN is well represented across the semantic spectrum, with particular strength precisely where possession is less typical, namely with abstract nouns.
• ReflN is particularly strong precisely in syntactic situations that are unusual for possession.
• Syntax, semantics, morphological complexity in a heterogeneous sociolinguistic situation, geographic, and pragmatic tendencies seem to have aligned in North Saami to promote ReflN