Shape-based semantic categorization in Atlantic languages of the Jóola group

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INTRODUCTION

• Noun class semantics controversy
  – Niger-Congo noun classes historically semantically based but conventionalized over time (Givon, 1971: 33; Schadeberg, 2001: 8)
  – Historical cognitive distinctions are human, shape, size, plants, animal etc.
  – For examples body parts are in different classes

• We argue that criteria for semantic categories are still productive in Jóola languages

• Body parts in Eegimaa and Fogny are classified based on shape
Structure of Talk

• Shape in language
  – in general
  – in Niger-Congo noun class systems
  – in Atlantic noun class systems
  – in Jóola languages

• Eegimaa/Banjal & Fogny
  – body parts and parts of things
  – evvaluative morphology
  – child language data

• Summary
SHAPE IN LANGUAGE
SHAPE IN LANGUAGE

• Shape is coded in Grammar (Friedrich 1970)
• Allan (1977: 297): there are seven parameters of semantic classification found in nominal classification systems.
  – Material, shape, consistency, size, arrangement, quanta
• Semantic parameters found in nominal classification systems
  – Physical properties e.g. shape and size (Adams & Conklin 1973, Allan 1977, Craig 1986; Senft 2000, Seifart 2005)
Shape in Niger-Congo noun class systems
Shape in Niger-Congo noun class systems

- ‘The Bantu gender categories [...] involve categories of “inanimate, non-human, abstract, common”, and the like, and do not appear to be defined in terms of shape’ (Friedrich, 1970: 403).
- ‘[...] I argue that shape does NOT [emphasis from author] play a role in noun class systems, and hence noun class systems are much more different from numeral classifier systems in their semantics than is generally assumed’ (Croft, 1994: 148).

See e.g. Contini-Morava 1997 for semantic analysis in Niger-Congo
Shape in Atlantic noun class systems

  - Most body parts are assigned to the default – unless they are semantically categorized
  - Shape and size are important and still productive parameters of semantic categorization in Eegimaa
  - They account for the classification of body parts and loanwords in different classes

- Shape and size also important categorization properties
  - in Bainounk (Cobinnah 2013)
  - In Kujireraay (Watson 2015)
Eegimaa

Straightforward relationship between singular and plural
(1) fu-how ‘head’    gu-how ‘heads’
(2) fu-la ‘buttock’  gu-la ‘buttocks’

Same singular, different plural prefixes
(3) ba-jur ‘young woman’    su-jur ‘young women’
(4) ba-giŋ ‘chest’        u-giŋ ‘chests’

Same plural, different singular prefixes
(5) ga-nen ‘hand’    gu-nen ‘hands’
(6) fu-la ‘buttock’  gu-la ‘buttocks’
Eegimaa

(7) su-humba sasu su-non-e
CL4-pig(II.PL) II.PL.DEF II.PL-enter-CPL
‘The pigs have gone in.’

(8) bu-bah bu-ffan bu-lo-e
CL5a-baobab(III.SG) III.SG-old III.SG-fall-CPL
‘An old baobab tree has fallen.’
Eegimaa

(9) **e-jjamen yayu mat’ e-çet**
   CL3-goat(II.SG) II.SG.DEF FUT.NEG II.SG-die
   ‘The goat will not die.’

(10) **bá-jur babu a-juh**
    CL5b- girl(III.SG/I.SG) III.SG-DEF I.3SG-see
    á-pur
    CL1-boy(I.SG)
    ‘That young woman went to see a young man.’
HOW IS SHAPE CODED?
# Round shape classification – Fogny & Eegimaa

Round shape is coded with \textit{fu-}/\textit{ku} or \textit{fu-}/\textit{gu}-

<table>
<thead>
<tr>
<th>Fogny</th>
<th>Eegimaa/Banjal</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>\textit{fú-kaw} (\textit{kú-})</td>
<td>\textit{fu-how} (\textit{gu-})</td>
<td>head</td>
</tr>
<tr>
<td>\textit{fu-pat} (\textit{ku-})</td>
<td>\textit{fu-la} (\textit{gu-})</td>
<td>buttock</td>
</tr>
<tr>
<td>\textit{fu-sink} (\textit{ku-})</td>
<td>\textit{fi-ssih} (\textit{gu-})</td>
<td>finger</td>
</tr>
<tr>
<td>\textit{fu-boŋ} (\textit{ku-})</td>
<td>\textit{fu-boŋ} (\textit{gu-})</td>
<td>thigh</td>
</tr>
<tr>
<td>\textit{jí-kil} (\textit{kú-})</td>
<td>\textit{jí-čil} (\textit{gu-})</td>
<td>eye</td>
</tr>
<tr>
<td>\textit{ku-peret}</td>
<td>\textit{gu-ffot}</td>
<td>testicles</td>
</tr>
<tr>
<td>\textit{e-font}</td>
<td>\textit{fu-ttun} (\textit{gu-})</td>
<td>penis</td>
</tr>
</tbody>
</table>
Flat shape classification – Fogny & Eegimaa

<table>
<thead>
<tr>
<th>Fogny</th>
<th>Eegimaa/Banjal</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>ka-raab (u-)</td>
<td>ga-rab (u-)</td>
<td>cheek</td>
</tr>
<tr>
<td>ka-ñen (u-)</td>
<td>ga-ñen (gu-)</td>
<td>hand</td>
</tr>
<tr>
<td>ká-kanum (ú-)</td>
<td>ga-at (gu-)</td>
<td>foot</td>
</tr>
<tr>
<td>ka-wos (u-)</td>
<td>ga-nnu (gu-/u-)</td>
<td>ear</td>
</tr>
<tr>
<td>ká-pongol (u-)</td>
<td>ga-pol (u-)</td>
<td>skin</td>
</tr>
</tbody>
</table>

Flat shape is coded with ka-/u or ga-/u-
Parts of non-humans

<table>
<thead>
<tr>
<th>Eegimaa</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>ga-pal</td>
<td>‘bark’</td>
</tr>
<tr>
<td>ga-bes</td>
<td>‘oil palm leaf’</td>
</tr>
<tr>
<td>ga-toj</td>
<td>‘leaf’</td>
</tr>
<tr>
<td>gá-ssit</td>
<td>‘feather’</td>
</tr>
<tr>
<td>ga-yew</td>
<td>‘scale’</td>
</tr>
<tr>
<td>ga-baŋ</td>
<td>‘hide’</td>
</tr>
<tr>
<td>fu-ruňul</td>
<td>‘pig’s snout’</td>
</tr>
<tr>
<td>fí-lej</td>
<td>‘tail’</td>
</tr>
</tbody>
</table>
“La classe des fruits”

<table>
<thead>
<tr>
<th>Fogny</th>
<th>Eegimaa</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>fu-mangu</td>
<td>fu-mangu</td>
<td>‘mango’</td>
</tr>
<tr>
<td>fu-sarans</td>
<td>fu-sorans</td>
<td>‘orange’</td>
</tr>
<tr>
<td>fu-mandarin</td>
<td>fu-mandarin</td>
<td>‘mandarin’</td>
</tr>
<tr>
<td>fu-limoŋ</td>
<td>fu-llemuña</td>
<td>‘lemon’</td>
</tr>
<tr>
<td>fi-bbeterav</td>
<td></td>
<td>‘beetroot’</td>
</tr>
<tr>
<td>fu-çuppome</td>
<td></td>
<td>‘Cabbage’</td>
</tr>
</tbody>
</table>

Augmentative with *fu-* expresses round/fat meaning

See Sapir 1965 for a discussion of fruits in Fogany
# Parts of borrowed objects

<table>
<thead>
<tr>
<th>Eegimaa</th>
<th>French</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>fú-ru</td>
<td>roue</td>
<td>‘wheel'</td>
</tr>
<tr>
<td>fu-çambraer</td>
<td>chambre à air</td>
<td>‘air tube'</td>
</tr>
<tr>
<td>fi-serkal</td>
<td>cercle</td>
<td>‘rim'</td>
</tr>
<tr>
<td>fu-vvolan</td>
<td>steering will</td>
<td>‘steering wheel'</td>
</tr>
<tr>
<td>gá-kkappo</td>
<td>capot</td>
<td>‘bonnet’</td>
</tr>
<tr>
<td>ga-pparabris</td>
<td>pare-brise</td>
<td>‘windscreen’</td>
</tr>
<tr>
<td>ga-plaque</td>
<td>Plaque d’immatriculation</td>
<td>‘number plate’</td>
</tr>
<tr>
<td>ga-vvitré</td>
<td>vitre</td>
<td>‘glass window’</td>
</tr>
</tbody>
</table>

**fu-/fi- = round shape**  
**ga- = round shape**
Evaluative morphology: augmentative & round/fat

<table>
<thead>
<tr>
<th>Fogny (AUG)</th>
<th>Eegimaa (AUG)</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-ñiil (fu-)</td>
<td>a-ññil (fu-)</td>
<td>(fat) child</td>
</tr>
<tr>
<td>a-seek (fu-)</td>
<td>a-are (f-)</td>
<td>(fat) woman</td>
</tr>
<tr>
<td>á-niine (fú-)</td>
<td>á-ine (f-)</td>
<td>(fat) man</td>
</tr>
<tr>
<td>ga-ñen (fu-)</td>
<td></td>
<td>(fat) hand</td>
</tr>
<tr>
<td>ga-rab (fu-)</td>
<td></td>
<td>(fat/thick) cheek</td>
</tr>
<tr>
<td>ga-vvul (fu-)</td>
<td></td>
<td>(fat/thick) bone</td>
</tr>
</tbody>
</table>

Augmentative with fu-expresses round/fat meaning
<table>
<thead>
<tr>
<th>SG</th>
<th>Semantic</th>
<th>PL</th>
<th>Semantic</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-nde</td>
<td>human</td>
<td>a-nde-i</td>
<td>human</td>
</tr>
<tr>
<td>e-nde</td>
<td>default</td>
<td>si-nde</td>
<td>default</td>
</tr>
<tr>
<td>bi-nde</td>
<td>trees, enormous size, &amp; mostly conventional</td>
<td>u-nde</td>
<td>trees, enormous size, mostly conventional</td>
</tr>
<tr>
<td>ga-nde</td>
<td>Flat, big size, wide &amp; mostly conventional</td>
<td>u-nde</td>
<td></td>
</tr>
<tr>
<td>fi-nde</td>
<td>Round &amp; mostly conventional</td>
<td>gu-nde</td>
<td>Round &amp; mostly conventional</td>
</tr>
<tr>
<td>ji-nde</td>
<td>diminutive</td>
<td>mi-nde</td>
<td>Diminutive</td>
</tr>
<tr>
<td>ñi-nde</td>
<td>social organization</td>
<td>u-nde</td>
<td>trees, enormous size, mostly conventional</td>
</tr>
<tr>
<td>ti-nde</td>
<td>precise location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dí-nde</td>
<td>location inside</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
STATISTICS OF 152 EEGIMAA WORDS
Body parts and parts of things

SG

Dimensionality_Shape1 = flat, Noshp

Consistency = Noshp

Dimensionality_Shape1 = flat

Noshp

bu-
7 / 10
7%
e-
18 / 22
15%
ga-
44 / 47
31%
fu-
58 / 72
48%

round

flxbl, rigid
Body parts and parts of things
SG
Body Parts and Parts of Things

Dimensionality_Shape1 = round

Consistency = Noshp

Dimensionality_Shape1 = Noshp

flat

flat, Noshp

flxb, rigid

gu- 62 / 72
48%

su- 18 / 22
15%

u- 10 / 10
7%

u- 44 / 47
31%
Body Parts and Parts of Things

PL

Dimensionality\_Shape1 = round

- gu-
  - 62 / 72
  - 48%

- flat, Noshp

- u-
  - 57 / 79
  - 52%
CHILD DIRECTED SPEECH
‘Thingamajig’ in child speech

\begin{align*}
\text{a-ŋaj} & \quad \text{ja-nde} \quad \text{jaj} \quad \ldots \quad \text{ga-nde} \\
\text{3.SG-take} & \quad \text{SG-thingamajig} \quad \text{that} \quad \text{SG-thingamajig} \\
\text{gaa} & \quad \text{a-kkan-om} \quad \text{wuuuu} \\
\text{that} & \quad \text{3.SG-do-OBJ} \quad \text{woooo}
\end{align*}

‘She took that thing ... that thing, did wooo.’

(Mun, 3;1.10)
Over-generalisation of *ga-*

\[\text{ga-jeŋ} \quad \text{gá-mah} \quad \text{uge}\]

\text{sg-thorn} \quad \text{V.sg-big} \quad \text{here}

‘A big thorn, here it is.’

(Mun, 3;1.10)
Summary

• Most of the noun class system is however conventionalised
• There is more semantic classification than is generally assumed
  – Categorization of body parts and parts of things not random
  – Evaluative morphology
  – “Thingamajig” exemplifies semantics and pragmatics use of noun class prefixes
• But some semantic criteria are still productive
• One of these criteria is shape and also size
References


References


