I. INTRODUCTION

1. Goal of the talk
   - First field report on Southern Seeku [sēē'-ku], a Mande language of Burkina Faso.
   - Give a descriptive account of verbal paradigm structure, which can be understood as a hierarchy, branching based on valency, tone, morphological complexity, and inflectional features.
     - Suggest semantic principles driving the splits.

2. Overview of paradigm structure

<table>
<thead>
<tr>
<th>Category:</th>
<th>Verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valency:</td>
<td>Intransitive</td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
<tr>
<td>Stem form:</td>
<td>Stem 1</td>
</tr>
<tr>
<td>Morphology:</td>
<td>Postpositional</td>
</tr>
<tr>
<td>TAM:</td>
<td>Recent past</td>
</tr>
</tbody>
</table>

3. Seeku (Northwestern Mande, Burkina Faso)
   - ISO 639-3 [sos]
   - Exonym: Sambla/Sembla
   - Other languages in the Samogo subfamily:
     - Dzuungoo (Solomiac 2007)
     - Duungooma
     - Bankagooma
     - Jowulu (Djilla et al. 2004)
   - Two main dialects:
     - Southern Seeku (Gbeneku, the focus of my fieldwork, 12,000 speakers)
     - Northern Seeku (Timiku, Prost 1971, 5,000 speakers)
   - Speakers of Seeku all are bilingual in Dioula; the future vitality of the language is not clear.
4. Fieldwork (2012-present)
- Contacts made and preliminary work (4 days) done in January 2012
- Six weeks in Bobo Dioulasso/Boundé from August-September 2013
- Worked primarily with two consultants:
  - Sy Clément Traoré (22 years old)
  - Gni Emma Traoré (17 years old)

5. Phonology
- Vowels:
  - 7 oral vowels: /i, e, ɛ, a, o, ɔ, u/
    - ka²¹ ‘sweet potato’
    - ku² ‘language’
    - ko³ ‘door’
    - ko¹ ‘on’
    - ke³ ‘go!’
    - ki² (possibly /ki/, /tsi/, etc.) ‘house’
    - ke² ‘it is’
  - Length is distinctive:
    - bee¹ ‘pig’ vs. be¹ ‘give’
  - 5 nasal vowels: /ĩ, õ, ã, õ, ũ/
• First attempt at consonant phonemes (subject to change):

<table>
<thead>
<tr>
<th></th>
<th>Bilabial</th>
<th>Alveolar</th>
<th>Velar</th>
<th>Labiovelar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop</td>
<td>p \ b</td>
<td>t \ d</td>
<td>k \ g</td>
<td>kp \ gb</td>
</tr>
<tr>
<td></td>
<td>b^w \ b̃</td>
<td>t̃ \ d̃</td>
<td>k̃ \ g̃</td>
<td></td>
</tr>
<tr>
<td>Affricate</td>
<td>ts \ dz</td>
<td>ts' \ dz'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasal</td>
<td>m \ n</td>
<td>n \ n, \ η</td>
<td>ηm</td>
<td></td>
</tr>
<tr>
<td>Fricative</td>
<td>f \ f̃</td>
<td>s \ s̃</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approximant</td>
<td>w \ l/r</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

• Tone:
  o H (3), M (2), L (1): bi̊^3 ‘goats’, beẽ^2 ‘pigs’, beẽ^1 ‘pig’
  o Contour tones:
    ▪ LH (13): gõ̃^13 ‘dry’
    ▪ ML (21): bi̊^21 ‘goat’
    ▪ HL (31): gõ̃^31 ‘wood’
    ▪ LML or MHM?: p̃̃̃̃^121 ‘donkey’

• Word shape is mostly monosyllabic, with some bisyllabic stems and even fewer trisyllabic.

6. Typological features
• S Aux O V X word order.
  o X = PP, negation, etc.

  mi̊^3 !na^3 bi̊^3 s̃̃^3 η^2
  1PL FUT goats sell NEG
  ‘We will not sell goats.’

• Isolating morphology
• Alienable/inalienable distinction in possession
• No noun classes

II. Stem 1 Forms

7. Phonological form
• Stem 1 is distinguished from Stem 2 by two phonological factors: the existence of lexical tone and (on some stems) palatalization of the initial consonant.
• Two tonal classes (that I have found): H and L

(a) | H verbs | L verbs |
---|---|---|
$sɔɔ^3$ ‘sell’ | $sā^1$ ‘buy’ |
$bā^3$ ‘hit’ | $gɡ̱^5$ ‘grill’ |
$b^rɔ^3$ ‘kill’ | $sɔ̱re^1$ ‘pound’ |
$kaa^3$ ‘chase’ | $kpɔɔ^1$ ‘sew’ |

• Palatalized Stem 1 (contrasted with non-palatalized Stem 2)

(b) | Stem 1 | Stem 2 | Gloss |
---|---|---|---|
$s^̃ė^1$ | $sē$ | ‘dig’ |
$n^rɔ^3$ | $nɔ$ | ‘eat’ |
$s^is^ė^i$ | $sase$ | ‘look at’ |

8. **Postpositional vs. non-postpositional**

• Stem 1 forms are used in two different constructions, one involving the locative postposition $nɛ$ and one bare.

• Postposition or suffix?
  o Same construction appears to be used with nouns and verbs, so I analyze it as a postposition.

  (a) $n^2$ $sĩ^3$ $sɔ̱g^r^1$ $nɛ^1$
    \[1SG\] be market in
    ‘I am at the market.’

  (b) $n^2$ $sĩ^3$ $bee^1$ $kaa^3$ $nɛ^3$
    \[1SG\] be pig chase in
    ‘I am chasing a pig.’

• After nouns, the postposition appears to take on the final tone (perhaps indicating underlying tonelessness).

• After verbs, it is always H.
  o Perhaps the lexical distinction in verbs is between H and LH, rather than H and L?

• Postpositional forms both involve an auxiliary; the nonpostpositional form does not.

9. **Postpositional: Progressive**

• Schematic translation: \[S \text{ be } O \text{ V in}\]

• Paradigm for ‘be’:

<table>
<thead>
<tr>
<th>Tense</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present affirmative</td>
<td>$sĩi^{13}$</td>
</tr>
<tr>
<td>Present negative</td>
<td>$ña^3$ … $nɛ^2$</td>
</tr>
<tr>
<td>Past affirmative</td>
<td>$le^3$ $sĩi^{13}$</td>
</tr>
<tr>
<td>Past negative</td>
<td>?</td>
</tr>
</tbody>
</table>
• Examples:

(a)  
\[ a^1 \text{sī}^3 \text{mo}^2 \text{bā}^3 \text{ne}^3 \]  (Present affirmative)  
3SG be 1SG hit in  
‘S/he is hitting me.’

(b)  
\[ n^2 \text{sī}^3 \text{dz}s^jo^3 \text{mī}^1 \text{ne}^3 \]  (Present affirmative)  
1SG be water drink in  
‘I am drinking water.’

(c)  
\[ \text{mi}^3 \text{njā}^3 \text{be}^e^1 \text{sā}^1 \text{ne}^3 \text{ne}^2 \]  (Present negative)  
1PL be.NEG pig buy in NEG  
‘We are not buying a pig.’

(d)  
\[ \text{mo}^2 \text{le}^3 \text{sī}^jo^3 \text{bā}^a^3 \text{bərē}^3 \text{ne}^3 \]  (Past affirmative)  
1SG PST be xylophone play in  
‘I was playing the xylophone.’

10. Postpositional: Recent past  
• Schematic translation:  \( S \text{arrive} O V \) in  
  o  \( \text{Arrive} \) is in italics, since the auxiliary is not exactly identical to the intransitive verb.  
  o  The recent past auxiliary is \( [s\text{o}^3] \), while ‘arrive’ has the Stem 1 form \( [s\text{ɔ}^2] \).  
  ▪  While there has been some divergence, I believe the two likely have the same origin.  
• Examples:

(a)  
\[ \text{mi}^3 \text{!sō}^3 \text{so}^3 \text{koo}^1 \text{ne}^3 \]  
1PL REC.PST song sing in  
‘We just sang a song.’

(b)  
\[ \text{mo}^2 \text{sō}^3 \text{be}^e^1 \text{kaa}^3 \text{ne}^3 \text{si}^3\text{zaa’}^ne^2 \]  
1SG REC.PST pig chase in just.now  
‘I just now chased a pig.’

(c)  
\[ n^2 \text{sō}^3 \text{ble}^3\text{ku}^1 \text{b”o}^3 \text{ne}^3 \]  
1SG REC.PST duck kill in  
‘I just killed a duck.’

11. Non-postpositional: Past  
• The one non-postpositional form I have found with Stem 1 is the (distant) past.  
• Schematic translation:  \( S-\mu/le^3 O V \)  
  o  The vowel can be lengthened (e.g. \( \text{mi}^3 \rightarrow \text{mii}^3 \), only possible with pronouns)  
  o  The particle \( le^3 \) can be used (e.g. \( \text{mi}^3 \le^3 \))  
  o  We saw the latter strategy in past progressives.
• One open question is the tone of H stems: do they surface as H or M?
  o Sometimes pronounced at the same pitch level as following negative ŋɛ́, but
    sometimes pronounced higher than preceding M tone words.
  o Often pronounced lower than a preceding H tone word, but this could be due to
    either downstep of H (H !H) or a lowering to M (H M).
  o Tonal phonology is still under investigation.

H stem examples

(a) kɔʔroʊ̞ mii3 bɛɛ2 ɔɔ3
   yesterday 1PL.PST pigs sell
   ‘Yesterday we sold pigs.’

   -but-

   bɛɛ2 le3 bi3 bâ2
   pigs PST goats hit
   ‘Pigs hit goats.’

(b) mii3 gɔɔ31 tsi2 ŋɛ́2
   1PL.PST wood cut NEG
   ‘We didn’t cut wood.’

L stem examples

(c) mii3 fo̞2ɡ̊21 fɔ̞1
   1PL.PST cashew uproot
   ‘We uprooted the cashew tree.’

(d) mii3 bɛɛ2 sâ1
   1PL.PST pigs buy
   ‘We bought pigs.’

III. Stem 2 Forms

12. Stem form and tonal compounding
• Stem 2 is characterized by an absence of lexical tone (i.e. the distinction between H
  tone and L tone verbs is neutralized).
  o I haven’t yet found a tonal minimal pair in verbs, though, so the risk of
    ambiguity appears to be low.
• The tone of the preceding object spreads onto the verb stem:

   O    V
   |----
   T
• If the object is a light syllable with a contour tone, the second tone of the contour is shifted to the verb:

\[ \text{‘goat’} \rightarrow \text{‘chase’} \]

\[
\begin{array}{c|c}
\text{bi}^{21} & \text{kaa} \\
\text{M} & \text{L}
\end{array} \rightarrow \begin{array}{c|c}
\text{bi}^{2} & \text{kaa}^{1} \\
\text{M} & \text{L}
\end{array}
\]

• This “tonal compounding” of the object and verb will be represented schematically as (O V).
  o Tonal compound is also found with N + N compounds (used also for inalienable possession).
• Stem 2 is used in two TAM conditions: future and imperative.

13. Future
• Future can be schematized as: S come (O V)
  o As with the recent past auxiliary, come appears to be etymologically related to ‘come’, but it is slightly modified.
    ▪ Stem 1 form of ‘come’ is L-toned, as in moo\(^{2}\) na\(^{1}\) l\(^{2}\) ‘I came here’
    ▪ Future auxiliary is always H-toned na\(^{3}\).
• Examples:

H-toned stem /s\(\ddot{a}\)\(\ddot{a}\)/ ‘sell’

(a) mi\(^{3}\) !na\(^{3}\) (bee\(^{1}\) s\(\ddot{a}\)\(\ddot{a}\))
1PL FUT pig sell
‘We will sell a pig.’

(b) mi\(^{3}\) !na\(^{3}\) (bee\(^{2}\) s\(\ddot{a}\)\(\ddot{a}\))
1PL FUT pigs sell
‘We will sell pigs.’

(c) mi\(^{3}\) !na\(^{3}\) (bi\(^{3}\) s\(\ddot{a}\)\(\ddot{a}\))
1PL FUT goats sell
‘We will sell goats.’

L-toned stem /s\(\ddot{a}\)\(\ddot{a}\)/ ‘buy’

(d) mi\(^{3}\) !na\(^{3}\) (bee\(^{1}\) s\(\ddot{a}\)\(\ddot{a}\))
1PL FUT pig buy
‘We will buy a pig.’

(e) mi\(^{3}\) !na\(^{3}\) (bee\(^{2}\) s\(\ddot{a}\)\(\ddot{a}\))
1PL FUT pigs buy
‘We will buy pigs.’
14. Imperative
   • Affirmative imperative (2sg): \((O \ V)\)
   • Negative imperative (2sg): \(a^{23} (O \ V) \text{ Neg}\)
     o I don’t have any examples of 2pl imperatives with transitive verbs, but based on the form of intransitives, I suspect the 2pl pronoun \(i^2\) is simply used in both the affirmative and negative.
   • Examples:
     (a) \((\text{be}^1 \ s\circ^1) /\circ\circ^3/\) pig sell ‘Sell a pig!’
     (b) \((\text{bi}^3 \ s\circ^3) /\circ\circ^1/\) goats buy ‘Buy goats!’
     (c) \(a^2 (\text{bi}^3 \ s\circ^3) \, \eta\circ^2\) 2SG goats buy NEG ‘Don’t buy goats!’

V. Discussion

15. Hierarchical splits in the paradigm: driven by semantics?

![Diagram]

- Verb
  - Intransitive
  - Transitive
    - Stem 1: Actions that have started
    - Stem 2: Actions that have not started
  - Postpositional: Relevant to the time under discussion
  - Nonpostpositional: Irrelevant to T.U.D.
    - Recent past
    - Progressive
    - Past
    - Future
    - Imperative
• In other words, the branching of the paradigm is not random. Similar forms share similar semantics.

16. **Comparison with Dzùngoo (Solomiac 2007)**

• Of closely related (Samogo) languages, the only available description of the verbal system is that of Dzùngoo.

• Dzùngoo has more stem inflection for TAM:
  - Imperfective stem, suffixed with -ra
  - Perfective stem, suffixed with -u(ŋ)
  - “Retrospective” stem, suffixed with -r (corresponds to French imparfait)
  - “Unaccomplished” stem, suffixed with -na
  - etc.

• There is not that much overlap in form, as shown in the following table:

<table>
<thead>
<tr>
<th></th>
<th>Dzùngoo</th>
<th>Seeku</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive</td>
<td>S O V-IMPF</td>
<td>S sǐi O V ne³</td>
</tr>
<tr>
<td>Recent past</td>
<td>S O V-PFV ?</td>
<td>S sół O V ne³</td>
</tr>
<tr>
<td>Past</td>
<td>S na³ O V(-Suff)</td>
<td>S -µ/le³ O V</td>
</tr>
<tr>
<td>Future</td>
<td>S na¹ O V</td>
<td>S na³ (O V)</td>
</tr>
<tr>
<td>Imperative</td>
<td>O V</td>
<td>(O V)</td>
</tr>
</tbody>
</table>

17. **Future directions**

• Test the semantics of the recent past.
  - Is it imperfective?
  - What are the cut-off times of being able to use it?
  - Is there a past form? (e.g. “He had just arrived”)?

• Analyze the resulting tone patterns when verbs form a tonal compound with pronouns.
  - Verbs fall into three classes, one for L-toned stems and two for H-toned stems:

<table>
<thead>
<tr>
<th></th>
<th>/L/</th>
<th>/H/- 1</th>
<th>/H/- 2</th>
<th>/L/</th>
<th>/H/- 1</th>
<th>/H/- 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg mo²</td>
<td>H</td>
<td>L</td>
<td>L</td>
<td>1pl mi³</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>2sg a²</td>
<td>H</td>
<td>L</td>
<td>L</td>
<td>2pl i² yo² kwe³</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>3sg a¹</td>
<td>L</td>
<td>L</td>
<td>M</td>
<td>3pl i³</td>
<td>L</td>
<td>L</td>
</tr>
</tbody>
</table>

• Dive into texts to see what other inflections are lurking.
REFERENCES

