Kalahari Basin area: a ‘Sprachbund’ on the verge of extinction

Contact influences on Hoan
Introduction

Hoan language, language area & classification 1

• moribund language: approx. 50 speakers most of them between 60 and 70 years old
• ‘Khoisan’ language spoken in southern Botswana at the fringe of the Kalahari
• ‘Khoisan’ as a macro-family was established Greenberg (1963); consisting of three sub-families in Southern Africa, i.e. Northern, Central and Southern Khoisan
• nowadays there is no convincing linguistic evidence for ‘Khoisan’ as a language family (e.g. Güldemann 2008); three probably unrelated language families (that roughly correspond to Greenberg’s subfamilies) called Kx’a, Khoe-Kwadi, and Tuu
Kalahari Basin area:

- **Kx’a** (former Ju-ǂHoan)
  - ŃHoan
  - Ju’hoan

- **Khoe-Kwadi**
  - Shua
  - N|ui
  - Naro

- **Tuu**
  - Taa

(bold italics = core area)

Güldemann (1997)
Güldemann & Loughnane (2011)
Introduction

ǂHoan language, language area & classification 2

• first reported by Traill (1973) as Southern or Northern Khoisan (i.e. related to either Tuu or Ju (Kx’a language); Westphal (1974) argued for association with Northern Khoisan languages

• remained unclassified until establishment of Kx’a family (covering Ju languages & ǂHoan, Heine & Honken 2010) based on sound correspondences and reconstructions
Introduction

ǂHoan language contact

- within Kalahari Basin area, ǂHoan has been in contact with at least G|ui and Taa
- linguistic evidence points to different levels of contact:
  - local contact: contact phenomena that involve ǂHoan and predominantly directly neighboring dialects of G|ui (i.e. Khute) or Taa (i.e. Tshaasi)
  - wider contact: contact phenomena that involve languages belonging to all three language families
Lexical contact

Lexical contact 1

• local contact: shared vocabulary between any two languages in contact (e.g. Güldemann & Loughnane (2011), Sands & Honken (forthcoming))

• wider contact: a strikingly high amount of lexemes is shared between many languages belonging to all three families
**Lexical contact**

### Lexical contact 2

- some examples of wider contact
- color-coded: Kx’a, Khoe-Kwadi, and Tuu

| Taa   | Naro | G||ana | G|ui | †Hoan | Ju     | gloss       |
|-------|------|--------|-----|-------|--------|------------|
| $k^h\hat{u}b\hat{u}$ | $k^h\hat{u}b\hat{u}$ | kubu   | $k^h\hat{u}b\hat{u}$ | $k^h\hat{u}b\hat{u}$ | $k^h\hat{ob}\hat{e}$* | ‘sweat’ |
| kúrí  | kúri | kuri   | kúrí | kúrí  | kúrí ** | ‘year’     |
| †ábè | †ébè | !ebe   | †ébè | †ébè  | †ábè ** | ‘black person’ |

**Data sources:**
- Taa: West-Taa: Güldemann & Naumann (2011)
- Naro: Visser (2001); G||ana: Tanaka (1978), G|ui: Nakagawa (p.c.)
- †Hoan (Khekheny variety): own data
Phonological contact

Palatalization 1

• palatalization of alveolar stops /t, d/ → /c, j/
• can be found in two unrelated languages, ṭHoan (Kx’a) and G|ui (Khoe-Kwadi)
• local contact phenomenon, i.e. mainly involves two neighboring varieties: ṭHoan and Khute dialect of G|ui
• other G|ui dialects or languages closely related to G|ui (e.g. G∥ana, Naro) are not or much less involved
### Phonological contact

**Palatalization 2**

- some examples of palatalization
- color-coded: Kx’a, Khoe-Kwadi, and Tuu

| Taa  | Naro | G||ana | G|ui-A | G | u i - B (Khute) | ‡Hoan-A | ‡Hoan-B (Sasi) | Ju    | gloss          |
|------|------|--------|-------|-------|----------------|----------|----------------|-------|----------------|
| tào °  | dào  | dáò   | jiò   | jìò   | jèò           | dāò      | -              | ‘path’ |               |
| tʰúa ° ° | tʰùi | cʰúí  | cʰúí  | cʰúí  | cʰùí          | -        | tʰúi**         | ‘s o r e, wound’ |               |
| dàⁿà °  | -    | dàⁿà  | dàⁿà  | jáⁿà  | jòⁿà          | dòⁿà     | dòⁿà*         | ‘leaf’ |               |

**data sources:**

*Taa: ° West-Taa: Güldemann & Naumann (2011); ° ° !Xoon of Lone Tree: Traill (1994)*

*Naro: Visser (2001); G||ana, G|ui-A, G|ui-B: Nakagawa (2006)*

‡Hoan-A (Khekhenye variety): own data; ‡Hoan-B (Sasi): Collins (2012)

Phonological contact

Diphthongization

• local contact phenomenon, only involves two neighboring languages: ṭHoan (incl. Sasi, Kx’a) and G|ui (all dialects, Khoe-Kwadi)

• diphthongization: rounded vowels (i.e. /u/ or /o/) before /m/ (or /n/ in G|ui) → [ua] or [oa]

 ṭHoan: /nɗöm/ → [nɗàm] ‘mould’ (own data)
(Ju’hoan [nɗm] ‘mould’ (Dickens 1994))

G|ui: /χúm/ → [χú́m] ‘sand’ (Nakagawa p.c.)
(Naro [xóm] ‘sand’ (Visser 2001))
Structural comparison

Adverbialization & nominal modification

• A great number of Khoisan languages make use of morphological devices to derive adverbs and nominal modifiers
• A form of the marker SV is used to derive adverbs from verbs and adjectives in languages of all three Khoisan lineages
• A marker xa is used to derive nominal modifiers from nouns in Khoe languages
• The distribution of these markers is suggestive of both local contact between neighboring languages and wider contact
Hoan makes use of a marker sà or its allomorph xà sà in order to derive adverbs from verbs; these adverbs have the status of peripheral participants and are therefore introduced by the oblique marker kì.

(1)  

a. yà séen kì dyéé sà  
   3S    die   OBL  be.slow ADVZ  
   ‘(S)he/it dies slowly.’

b. yà séen kì dyéé xà sà  
   3S    die   OBL  be.slow ADVZ  
   ‘(S)he/it dies slowly.’

c. ārì dzààn /àà kx’āî à !ōà kì dzà̈à sà  
   man    paint   PRF    house  OBL  be.blue ADVZ  
   ‘The man has painted the house in blue.’
Adverbialization

**Ju (related)**

- according to Heine & König (forthcoming: 220) a marker -SV serves as a deverbal adverbializer and a nominalizer in all Ju dialects (with varying degrees of productivitity)

(2)  

a. W2 dialect of !Xun (Heine & König forthcoming: 220)  

\[ n!\ddot{o}'\ddot{o}-\text{cí} \quad g/è \]

hurry-ADVZ come  

‘Come quickly.’

b. W2 dialect of !Xun (Heine & König forthcoming: 220)  

\[ n!\ddot{a}\ddot{o} \quad m\acute{a} \quad !\dddot{x}àù \quad !\ddot{a}\ddot{o} \quad \text{cí} \quad t\acute{i} \]

house TOP smear be.white ADVZ PASS  

‘The house is painted white.’
**Adverbialization**

**G|ui** (contact language)

- **G|ui** makes use of an adverbializer –sí that attaches to adjectives and verbs to derive adverbs

(3) a. **G|ui** (Nakagawa p.c.)

\[ ?\text{àbì} /q\text{ç’áré-sí} t\text{àū} \]

3s small-ADVZ be.tired

‘He is slightly tired.’

b. **G|ui** (Nakagawa p.c.)

\[ ?\text{àbì} /\text{úū-sí} t\text{àū} \]

3s walk-ADVZ be.tired

‘He is tired of walking.’

- **sí** attaches to adjectives

- **sí** rarely attaches to verbs (perhaps unproductive)
Adverbialization

**Taa (contact language)**

- Taa has a nominalizer `-sà` that attaches to verbs, when attached to verbs it serves as an adverbializer (Traill 1994: 29ff)
- for the West !Xoon dialect of Taa, an adverbializer –sì has been reported (Naumann p.c.)

(4) a. Taa (!Xoon), Güldemann n.d.

\[
\begin{array}{llll}
\text{ùh} & //\text{áli-sà} & \text{bà} & //\text{nà.e} \\
\text{4ANA} & \text{be.many-ADVZ} & \text{IPFV} & \text{sing}
\end{array}
\]

‘He sings intensively.’

b. Taa (West !Xoon), Güldemann & Naumann (2011)

\[\ddagger'\áú ‘be.slow’ \quad \ddagger'\áú –sì ‘slowly’\]
Khwe (unrelated, no direct contact)

- Kilian-Hatz (2008: 218) reports a marker -ca /-ça/ that “marks the purpose or intention of a verbal event”
- this marker is not productive, it only attaches to a small amount of state verbs
- the tone depends on the preceding segment, between the Khwe dialects there is a variation of [s] vs. [ʃ] vs. [ç]

(5) a. /éú-ca
    be.big-ADVZ  kx’úú  è
    ‘Speak loudly!’

    -ca /-ça/
    attaches to a
    number of verbs
    (non-
    productive)

b. kú-ca
    be.small-ADVZ  kx’óá  è
    ‘Wait a moment!’
Nominal modification

‡Hoan, Ju and Taa

• ‡Hoan does not possess a word-class of adjectives; nouns are modified by stative verbs occurring in a relative clause construction

• Ju and Taa have a small amount of adjectives; nouns can alternatively be modified by stative verbs (Heine & König forthcoming: 191f; Güldemann & Naumann: 2011)
Nominal modification

**Khoe languages**

- Khoe languages possess a marker –*xa* that derives adjectives
- A more specific meaning of this marker might be ‘to be full of’
- This marker might be reconstructed for proto-Khoe as it occurs in a great number of Khoe languages
Nominal modification

**G|ui** (contact language)

- besides a class of adjectives, there is a marker 
  
  \(-\chi\dot{\alpha}\) that attaches to nouns in order to derive 
  nominal modifiers

(6)  

a. G|ui (Nakagawa p.c.)

\[
\eta/i \quad \text{sì} \quad /\chi\dot{\alpha}\dot{\alpha} \quad \text{sì} \quad \eta//ûi-\chi\dot{\alpha}
\]

this PGN meat PGN fat-MOD

‘This meat is fatty.’

b. G|ui (Nakagawa p.c.)

\[
\eta/i \quad \text{sì} \quad \text{kúbí} \quad \text{sì} \quad /q\chi'úrī-\chi\dot{\alpha}
\]

this PGN cup PGN dirt-MOD

‘This cup is dirty.’
Nominal modification

**Khwe** (unrelated, no direct contact)

- besides a class of adjectives, Kilian-Hatz (2008: 203) reports a marker `-xa` that attaches to nouns that function as nominal modifiers

(7) a. qàñ-\(x\)a
dánd-MOD
dáó  à  
‘sandy way’

b. tè-\(x\)a
bow-MOD
kó-mà  person-3S.M
‘armed man’
Nama (unrelated, no direct contact)

- according to Hagman (1977: 31ff) adjectives can be derived from nouns by the marker -xà

(8) a. //am-xà  !xáis
   water-MOD place
   'The watery place.'

b. //xaé-xà  tàop
   sand-MOD road
   'The sandy road.'
### Summary

**Adverbs & nominal modification in ‘Khoisan’**

|                | Ju  | ᵃHoan | Taa  | G|ui                               | Khwe (similar to other Khoe languages, e.g Nama) |
|----------------|-----|-------|------|----------------------------------|-----------------------------------------------|
| **ADVZ**       | cí  | sà/ xà sà | -sà  | -sí                              | (-ca)                                         |
| **host verbs** | verbs | verbs | verbs/ adjectives | verbs/ adjectives | verbs (non-productive) |
| **nominal modification** | ---- (predominantly stative verbs) | ---- (stative verbs) | ---- (predominantly stative verbs) | -xà | -xa |

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Falko Berthold & Linda Gerlach
## Summary

### Adverbs & nominal modification in ‘Khoisan’

<table>
<thead>
<tr>
<th></th>
<th>Ju</th>
<th>ǂHoan</th>
<th>Taa</th>
<th>Gǀui</th>
<th>Khwe (similar to other Khoe languages, e.g Nama)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADVZ</td>
<td>cí</td>
<td>sà/ xà sà</td>
<td>-sà</td>
<td>-sí</td>
<td>(-ca)</td>
</tr>
<tr>
<td>host verbs</td>
<td>verbs</td>
<td>verbs</td>
<td>verbs/ adjectives</td>
<td>verbs/ adjectives</td>
<td>verbs (non-productive)</td>
</tr>
<tr>
<td>nominal modif.</td>
<td>----</td>
<td>(stative verbs)</td>
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<td>(stative verbs)</td>
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<td></td>
<td>(predominantly stative verbs)</td>
<td></td>
<td>-xà</td>
<td>-xa</td>
<td></td>
</tr>
</tbody>
</table>

**ADVZ** stands for adverbial verb. **Host verbs** refer to verbs that can be modified by adverbs. **Nominal modification** indicates how adverbs modify nominal elements.
### Summary

**Adverbs & nominal modification in ‘Khoisan’**

|                | Ju | ‡Hoan | Taa | G|ui | Khwe (similar to other Khoe languages, e.g Nama) |
|----------------|----|-------|-----|-----|-----------------------------------------------|
| ADVZ           | cí | sà/ xà sà | -sà | -sí | (-ca)                                         |
| host verbs     |    | verbs   | verbs/ adjectives | verbs/ adjectives | verbs (non-productive)                       |
| nominal modifier | ---- | (predominantly stative verbs) | ---- | (predominantly stative verbs) |        |
|                |    |         |                  | -xà | -xa                                           |
## Summary

### Adverbs & nominal modification in ‘Khoisan’

|                  | Ju |ǂHoan| Taa | G|ui | Khwe (similar to other Khoe languages, e.g Nama) |
|------------------|----|-----|-----|-----|-----------------------------------------------|
| **ADVZ**         | cí | sà/ xà sà | -sà | -sì | (-ca)                                         |
| **host**         | verbs | verbs | verbs/adjectives | verbs/adjectives | verbs (non-productive) |
| **nominal modification** | ---- (predominantly stative verbs) | ---- (stative verbs) | ---- (predominantly stative verbs) | -xà | -xa |

**Notes:**
- ADVZ columns represent adverbial forms.
- Host verb columns indicate the modal nature of the adverbial forms.
- Nominal modification columns specify the type of modifiable elements (statives vs. non-statives).

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Summary

Adverbs & nominal modification in ‘Khoisan’

• language contact must have led to the presence of the component xà of the adverbializer xà sà in ‡Hoan
• this is supported by the fact that the sound [χ] is very rare in ‡Hoan, most words containing [χ] are shared with Khoe languages
• the language donating ‡Hoan xà is most likely G|ui
• however, the contact scenario is unknown
• ‡Hoan might have borrowed G|ui words including -xà, and then attached the adverbializer sà to these words, in a following process of reinterpretation, xà sà was analyzed as an allomorph of sà
Conclusion

Local and wider contact

• we presented some outcomes of local as well as wider language contact involving the language Hoan and languages of the Kalahari Basin area
• in our data, phonology reveals most interesting examples for local contact phenomena while lexical as well as structural investigations show both local and wider contact phenomena involving most of the languages of the Kalahari Basin area
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References

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