OLD WRITTEN ARCHIVES IN LANGUAGE DOCUMENTATION:
Lucy Lloyd’s !Xuun notebooks

Florian Lionnet
Fforum, October 26, 2011
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THE

BLEEK & LLOYD

COLLECTION
Lucy Lloyd's !Xun notebooks

1. The Bleek and Lloyd Collection

• Linguistic archive, i.e. archived fieldnotes
  o texts
  o wordlists
  o drawings

• The fieldworkers:
  o Wilhelm Bleek (1827-1875), German linguist, father of the term “Bantu”, and first Khoisanist.
  o Lucy Lloyd, his sister-in-law (1834-1914)
Lucy Lloyd's !Xun notebooks

1. The Bleek and Lloyd Collection

Wilhelm Bleek

Lucy Lloyd
Lucy Lloyd's !Xun notebooks

1. The Bleek and Lloyd Collection

- 1870-1885, W. Bleek († 1875) and L. Lloyd extensively documented |Xam (Tuu, aka Southern Khoisan).

|Xam ceased to be spoken in the early 20th century.

- 1879-1884: L. Lloyd also documented another click language, spoken in Northern Namibia: !Xuun (Juu, aka Northern Khoisan).

Juu dialects are still spoken nowadays in Northern Namibia, Southern Angola and Eastern Botswana.
Lucy Lloyd's !Xun notebooks
Lucy Lloyd's !Xun notebooks

1. The Bleek and Lloyd Collection

• Consultants:
  o |Xam: men from Breakwater prison (+ family)
Lucy Lloyd's !Xun notebooks

1. The Bleek and Lloyd Collection

• Consultants:
  o |Xam: men from Breakwater prison (+ family)
  o !Xuun: 4 boys

N!ani (late teens)     Tame (mid-teens)     |’Uma (early teens) (ca.7 yrs old)     Daqa
Lucy Lloyd's !Xun notebooks

1. The Bleek and Lloyd Collection

• Consultants:
  o |Xam: men from Breakwater prison (+ family)
  o !Xuun: 4 boys

N!ani (late teens)  Tame (mid-teens)  |’Uma (early teens)  Daqa (ca.7 yrs old)

• Fieldwork conditions: interviews take place in Cape Town, in Bleek & Lloyd’s house
Lucy Lloyd's !Xun notebooks

1. The Bleek and Lloyd Collection

• Late 19th century = a time of great social upheaval in Southern Africa
  
  ○ !Xam culture and language were already dying out  
    (colonization by the Boers)
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1. The Bleek and Lloyd Collection

• Late 19th century = a time of great social upheaval in Southern Africa
  
  o !Xam culture and language were already dying out (colonization by the Boers)

• San populations were already at the bottom of the ethnic/social hierarchy: dominated by Bantu-speaking groups, and later by European colonists
Lucy Lloyd's !Xun notebooks

1. The Bleek and Lloyd Collection

• Bleek and Lloyd collection is
  o the only historical record of the |Xam
  o the oldest record of !Xuun culture and history
1. The Bleek and Lloyd Collection

• Bleek and Lloyd collection is
  o the only historical record of the |Xam
  o the oldest record of !Xuuun culture and history

• Key to understanding
  o history: what happened in this region in the late 19th century

  o culture: the |Xam culture were the last San (hunter/gatherer) culture of South-Africa
1. The Bleek and Lloyd Collection

• Bleek and Lloyd collection is
  o the only historical record of the |Xam
  o the oldest record of !Xuun culture and history

• Key to understanding
  o history: what happened in this region in the late 19th century
  o culture: the |Xam culture was the last San (hunter/gatherer) culture of South-Africa
  o linguistics:
    ▪ |Xam = the only extensively documented !Ui (Tuu) language besides N|uu
    ▪ !Xuun = a Juu dialect spoken 130 years ago, which has a few features that are unattested in the other dialects that we know of
Lucy Lloyd's !Xun notebooks

1. The Bleek and Lloyd Collection

• The Bleek and Lloyd collection was recognized as a UNESCO site of the Memory of the World in 1997.

• Entirely digitized by the University of Cape Town
  ○ DVD
  ○ available online
2

!XUUN

AND THE

JUU FAMILY
Lucy Lloyd's !Xun notebooks
Dialectal classification:

Sands (forth.)
phonological criteria
- (SE) Southeastern
- (C) Central
- (NC) North-Central
  (very close to N)
- (N) Northern

3 dialects are described
(gramm + dict)
- Juǀ'hoan (SE)
- Ovamboland !Xun (NC)
  (O !Xun)
- Ekoka !Xun (NC)
  (E !Xun)
3
FROM LLOYD’S
TRANSCRIPTION
TO !XUUN
PHONOLOGY
### Lucy Lloyd's !Xun notebooks

#### 3. From Lloyd’s transcription to !Xuun phonology

<table>
<thead>
<tr>
<th>Consonant inventory</th>
<th>EGRESSIVE</th>
<th>INGRESSIVE (CLICKS)</th>
<th>EGRESSIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>labial</td>
<td>alveolar</td>
<td>palatal</td>
</tr>
<tr>
<td>Oral Stops</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plain (vl.) Voiced</td>
<td>p</td>
<td>t</td>
<td>ts</td>
</tr>
<tr>
<td>Aspirated</td>
<td>(ph)</td>
<td>th</td>
<td>tsh</td>
</tr>
<tr>
<td>Vd. aspirated</td>
<td>(bh)</td>
<td>(dh)</td>
<td>(dsh)</td>
</tr>
<tr>
<td>Ejective</td>
<td>ts’</td>
<td>(ds’)</td>
<td>tc’</td>
</tr>
<tr>
<td>Nasal Stops</td>
<td>m</td>
<td>n</td>
<td>(ny)[n]</td>
</tr>
<tr>
<td>Aspirated</td>
<td>(mh)</td>
<td>(ny)[n]</td>
<td></td>
</tr>
<tr>
<td>Glottalized</td>
<td>(’m)</td>
<td>(’n)</td>
<td></td>
</tr>
<tr>
<td>Fricatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plain (vl.) Voiced</td>
<td>s</td>
<td>c</td>
<td>[ʃ]</td>
</tr>
<tr>
<td>Sonorants</td>
<td>Approximant</td>
<td>w</td>
<td>y</td>
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<tr>
<td></td>
<td>tap</td>
<td>r</td>
<td></td>
</tr>
<tr>
<td>Obstructive Clusters</td>
<td>Plain +/x/</td>
<td>tx</td>
<td>(tx)</td>
</tr>
<tr>
<td></td>
<td>Voiced +/x/</td>
<td>(tx)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plain +/kx’/</td>
<td>(tx’)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Voiced +/kx’/</td>
<td>(tx’)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plain +/h/</td>
<td>hh</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Voiced +/h/</td>
<td>hh</td>
<td></td>
</tr>
</tbody>
</table>

Pan Juu
**Lucy Lloyd's !Xun notebooks**

3. *From Lloyd’s transcription to !Xuun phonology*

Pan Juu Vowel inventory

<table>
<thead>
<tr>
<th>Modal Vowels</th>
<th>Front</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td><em>i</em></td>
<td><em>u</em></td>
</tr>
<tr>
<td>Mid</td>
<td><em>e</em></td>
<td><em>o</em></td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td><em>a</em></td>
</tr>
</tbody>
</table>

Vowel colourings

<table>
<thead>
<tr>
<th></th>
<th>+ Nas.</th>
<th>+ Glott.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nasalisation</td>
<td><em>Vn</em></td>
<td></td>
</tr>
<tr>
<td>Glottalisation</td>
<td><em>V’</em></td>
<td></td>
</tr>
<tr>
<td>Breathy voice</td>
<td><em>Vh</em></td>
<td><em>Vhn</em></td>
</tr>
<tr>
<td>Pharyngealisation</td>
<td><em>Vq</em></td>
<td><em>Vqn</em></td>
</tr>
</tbody>
</table>
Lucy Lloyd's !Xun notebooks

3. From Lloyd’s transcription to !Xuun phonology

4 Tones:

SH  ã

• H  á

• L  à

• SL  ã
3. From Lloyd’s transcription to !Xuun phonology

L. Lloyd had an excellent ear → very good transcriptions

Lloyd's transcriptions is purely phonetic: no phonological analysis.

They are:
  - **sometimes inaccurate** (some phonological contrasts are not identified)
  - **inconsistent:**
    - many different transcriptions are used for each lexical item
    - tones are not consistently transcribed
Luce Lloyd's !Xun notebooks

3. From Lloyd's transcription to !Xuun phonology
Lucy Lloyd's !Xun notebooks

3. From Lloyd’s transcription to !Xuun phonology
Lucy Lloyd's !Xun notebooks

3. From Lloyd's transcription to !Xuun phonology

ex1: 'to sit':

|nǐ́̂|
|nǐ́|
|nì́|
|nǐ́̂|
|nǐ́|

ex2: 'sinew'

tsső̂

ssǭ̄̂

ssǭ̀

s’ǭ́
3. *From Lloyd’s transcription to !Xuun phonology*

twofold method:

- A systematic *internal statistical comparison* between all the occurrences of each lexical item, to identify the most frequently used transcription;
Lucy Lloyd's !Xun notebooks

3. From Lloyd’s transcription to !Xuun phonology

twofold method:

- A systematic **internal statistical comparison** between all the occurrences of each lexical item, to identify the most frequently used transcription;

- A systematic comparison of every item with its cognate forms in **modern dialects**.
Lucy Lloyd's !Xun notebooks

3. From Lloyd’s transcription to !Xuun phonology

twofold method:

- A systematic internal statistical comparison between all the occurrences of each lexical item, to identify the most frequently used transcription;

- A systematic comparison of every item with its cognate forms in modern dialects.

+ Adoption of a standard orthography (based on Güldemann's (1998) recommendation for South African Khoisan, close to the one developed for Ju"hoan by Dickens)
3. From Lloyd’s transcription to !Xuun phonology

Systematic internal statistical comparison:

ex1: 'to sit'  |nǐ ~ |ní ~ |nǐ ~ |nǐ ~ |niṅ ~ |nǐ ~ |nì
3. From Lloyd’s transcription to !Xuun phonology

Systematic internal statistical comparison:

ex1: 'to sit'  |nĩ̆ | ní | nĩ̆̀ | nĩ̀ | nin̊́ | nĩ̀̆ | nì

Common elements:

- nasalized dental click [ nǀ ]
- nasalized vowel [ ĭ ]
Lucy Lloyd's !Xun notebooks

3. From Lloyd’s transcription to !Xuun phonology

Systematic internal statistical comparison:

ex1: 'to sit'  |nĩ̆ ~ |ní ~ |nĩ ~ |nĩ ~ |niṅ ~ |nĩ ~ |nì

Common elements:
- nasalized dental click [ nǀ ]
- nasalized vowel [ ĭ ]

Inconsistently noted elements:
- tone marks (´;` )
- brevity (´ )
- final velar nasal (ṅ)
Lucy Lloyd's !Xun notebooks

3. From Lloyd's transcription to !Xuun phonology

Systematic internal statistical comparison:

ex1: 'to sit' \[\text{nǐ} \sim \text{ní} \sim \text{nǐ} \sim \text{nǐ} \sim \text{niń} \sim \text{nǐ} \sim \text{nǐ} \sim \text{nì}\]

Common elements:  
- nasalized dental click [ n| ]
- nasalized vowel [ į ]

Inconsistently noted elements: (temporarily ruled out)  
- tone marks (´ ;` )
- brevity (¨ )
- final velar nasal (ŋ)

1\text{st} step towards standardization: \text{n/in}

- nasal dental click = n/ (instead of Lloyd's /n)
- nasalized vowels = Vn (instead of Lloyd's V + tilde)
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3. From Lloyd’s transcription to !Xuun phonology

2nd step: Comparison with modern dialects
3. From Lloyd’s transcription to !Xuun phonology

2nd step: Comparison with modern dialects

Ovamboland !Xun: $n\bar{\eta} = [n/\ddot{j}]$
Ekoka !Xun: $n/\ddot{j}$
Ju′hoan: $n/\dddot{a}ng = [n/\ddot{j}]$
3. *From Lloyd’s transcription to !Xuun phonology*

2nd step: *Comparison with modern dialects*

Ovamboland !Xun: \( n/\ddot{\text{i}}\eta = [n/\dot{\text{j}}] \)
Ekoka !Xun: \( n/\dot{j} \)
Ju’hoan: \( n/\acute{\text{\text{\text{a}}}ng} = [n/\dot{j}] \)

→ Dental click \( [n|] + \) syllabic nasal \( [\eta] \)
   (+ possibly an underlying vowel \( [a] \) reduced to schwa)
3. From Lloyd’s transcription to !Xuun phonology

2nd step : Comparison with modern dialects

Ovamboland !Xun:  \( n/i\eta = [n/i\eta] \)
Ekoka !Xun:  \( n/i\acute{\eta} \)
Juǀ’hoan:  \( n/\acute{\alpha}ng = [n/i\eta] \)

\( \rightarrow \) Dental click \([n|] + \) syllabic nasal \([\eta] \)
\( (+ \) possibly an underlying vowel \([a] \) reduced to schwa)\n
\( \rightarrow \) The velar nasal \([\hat{n}] \) that was ruled out during the 1st step should be kept.
3. From Lloyd’s transcription to !Xuun phonology

2nd step: Comparison with modern dialects

Ovamboland !Xun:  \( n/iŋ = [n/ŋ] \)
Ekoka !Xun:  \( n/ŋ \)
Juǀ'hoan:  \( n/áŋ = [n/ŋ] \)

→ Dental click \([n]\) + syllabic nasal \([ŋ]\)
(+ possibly an underlying vowel \([a]\) reduced to schwa)

→ The velar nasal \([n̊]\) that was ruled out during the 1st step should be kept.

Final standardization:  \( n/ing \) (not \( n/in \), \( n/ang \))
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3. From Lloyd’s transcription to !Xuun phonology

Limits:

- Internal statistical comparison does not apply to less frequently used words.
3. From Lloyd’s transcription to !Xuun phonology

Limits:

- Internal statistical comparison does not apply to less frequently used words

- Comparison with modern dialects is dangerous: risk of imposing on Lloyd's data an analysis that is only valid for modern dialects, and thus erasing possible dialectal differences
3. From Lloyd’s transcription to !Xuun phonology

Ex: cluster /Plain click + h/
phonetic realization: $\eta$CLICKh (ex: $+$ $h = [\eta|h]$)
(aka delayed aspirated click)
Lucy Lloyd's !Xun notebooks

3. From Lloyd's transcription to !Xuun phonology

Ex: cluster /Plain click + h/

phonetic realization: \( \eta \text{CLICK}h \) (ex: / + h = [\( \eta/h \)])

(aka delayed aspirated click)

Standard orthography: |hh|

(Dickens' Ju|h|hoan orthography: ’h)
Lucy Lloyd's !Xun notebooks

3. From Lloyd’s transcription to !Xuun phonology

Ex: cluster /Plain click + h/
phonetic realization: \( \eta \text{CLICK}h \) (ex: / + h = [\( \eta|h \)])
(aka delayed aspirated click)

Standard orthography: \( |hh| \)
(Dickens' Ju'hoan orthography: |’h|)

- Not clearly identified by Lloyd.
- However, systematic correspondence:
  \( |V_1hV_2| \) (Lloyd) → \( |hhV_1V_2| \) (modern dialects)
3. From Lloyd’s transcription to !Xuun phonology

Ex: cluster /Plain click + h/
phonetic realization: $\eta$CLICK$h$ (ex: / + h = [$\eta$/h])
(aka delayed aspirated click)

Standard orthography: $\vert$hh
(Dickens' Juǀ'hoan orthography: $\vert$'h)
  • Not clearly identified by Lloyd.
  • However, systematic correspondance:
    $\vert V_1hV_2$ (Lloyd) $\rightarrow$ $\vert hhV_1V_2$ (modern dialects)

<table>
<thead>
<tr>
<th></th>
<th>Lloyd</th>
<th>E-!Xun</th>
<th>Juǀ'hoan</th>
</tr>
</thead>
<tbody>
<tr>
<td>'mouse'</td>
<td>ühí</td>
<td>/'hùí</td>
<td>?</td>
</tr>
<tr>
<td>'ear'</td>
<td>ühì</td>
<td>/'húí</td>
<td>/'húí</td>
</tr>
<tr>
<td>'real'</td>
<td>ühá</td>
<td>/'hòàn</td>
<td>/'hòàn</td>
</tr>
</tbody>
</table>
Lucy Lloyd's !Xun notebooks

3. From Lloyd’s transcription to !Xuun phonology

Ex: cluster /Plain click + h/
phonetic realization: ƞCLICKh (ex: / + h = [ƞ|h])
(aka delayed aspirated click)

Standard orthography: |hh|
(Dickens' Ju|h|hoan orthography: |'h|)
  • Not clearly identified by Lloyd.
  • However, systematic correspondance:

|V₁hV₂ (Lloyd) →|hhV₁V₂ (modern dialects)

|           | Lloyd | E-!Xun | Ju|h|hoan       | standardized form |
|-----------|-------|--------|--------------|-------------------|
|'mouse'    | |uhí    | |'hùùi'       | ?                 | |hhui          |
|'ear'      | |uhì    | |'húuí'       | |'húúí'        | |hhui          |
|'real'     | |uhá    | |'hòàn'       | |'hòàn'        | |hhua(n)       |
3. From Lloyd’s transcription to !Xuun phonology

Ex: cluster /Plain click + h/

phonetic realization : \( \eta \text{CLICK}h \) (ex: / + h = [\(\eta/h\)])

(aka delayed aspirated click)

Standard orthography: |\(hh\)

(Dickens' Juǀ'hoan orthography: |’h)

- Not clearly identified by Lloyd.
- However, systematic correspondance:

\( |V_1hV_2 \) (Lloyd) \( \rightarrow |hhV_1V_2 \) (modern dialects)

<table>
<thead>
<tr>
<th></th>
<th>Lloyd</th>
<th>E-!Xun</th>
<th>Juǀ'hoan</th>
<th>standardized form</th>
</tr>
</thead>
<tbody>
<tr>
<td>'mouse'</td>
<td></td>
<td>uhí</td>
<td></td>
<td>'hùï</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>hhui or uhi</td>
</tr>
<tr>
<td>'ear'</td>
<td>uhì</td>
<td></td>
<td>'húí</td>
<td>/'húï</td>
</tr>
<tr>
<td>'real'</td>
<td>uhá</td>
<td></td>
<td>'hòàn</td>
<td>/'hòàn</td>
</tr>
</tbody>
</table>
Lucy Lloyd's !Xun notebooks

3. From Lloyd’s transcription to !Xuun phonology

Ex: ‘sinew’
N!ani:  tssó̱
Tame:  ssó̱
|’Uma:  s’ō̱
Daqa:  zō̱, tsó̱
3. From Lloyd’s transcription to !Xuun phonology

Ex: ‘sinew’
N!ani: tssó
Tame: ssó
ǀ’Uma: s’ô
Daqa: zô, tsó

Gr. !Xuun: tso’o
O !Xuun: tsò
E !Xuun: tcô’ô ~ tcô
Juǀ’hoan: tsô
Lucy Lloyd's !Xun notebooks

3. From Lloyd’s transcription to !Xuun phonology

Ex: ‘sinew’
N!ani: tssó
Tame: ssó
ǀ’Uma: s’ō
Daqa: zō, tsó

Gr. !Xuun: tso’o
O !Xuun: tsò
E !Xuun: tcò’ò ~tcò
Juǀ’hoan: tsò

→ /s’/ not attested until it was recently heard in one dialect (B. Sands, p.c.)
3. From Lloyd’s transcription to !Xuun phonology

Ex: ‘sinew’

<table>
<thead>
<tr>
<th>!Xuun</th>
<th>N!ani: tssó</th>
<th>Tame: ssó</th>
<th>!Uma: s’ō</th>
<th>Daqa: zō, tsō</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>→ ts(’)/oo</td>
<td>→ s(’)/oo</td>
<td>→ s’/oo</td>
<td>→ s(’)/oo, ts(’)/oo</td>
</tr>
<tr>
<td>soo</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tsoo</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>s’oo</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

→ /s’/ not attested until it was recently heard in one dialect (B. Sands, p.c.)

Gr. !Xuun: tso’o
O !Xuun: tsò
E !Xuun: tcò’ò ~tcò
Juǀ’hoan: tsè
3. From Lloyd’s transcription to !Xuun phonology

Precautionary principle:
The transliteration changes must be minimal and consistent:
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The transliteration changes must be minimal and consistent:

- Interpretation and new transcriptions: only when evidenced or suggested by the transcription itself, and a thorough but cautious comparison with the modern dialects (take as many dialects as possible, “keep an open mind”)

Lucy Lloyd's !Xun notebooks

3. From Lloyd’s transcription to !Xuun phonology
Precautionary principle:
The transliteration changes must be minimal and consistent:

- Interpretation and new transcriptions: only when evidenced or suggested by the transcription itself, and a thorough but cautious comparison with the modern dialects (take as many dialects as possible, “keep an open mind”)
- Otherwise: original phonetic/phonological analysis showed by the transcription should be kept (only changed towards modern orthography), despite possible correspondences with modern dialects.
Lucy Lloyd's !Xun notebooks

3. From Lloyd’s transcription to !Xuun phonology

Two more conventions:

• Brackets

• Superscripts
From Lloyd’s transcription to !Xuun phonology

- **Brackets** = phonemes or features of which there is no sign in Lloyd’s transcription, but which must have been there, as a thorough comparison with modern dialects shows
Lucy Lloyd's !Xun notebooks

3. From Lloyd’s transcription to !Xuun phonology

- **Brackets** = phonemes or features of which there is no sign in Lloyd’s transcription, but which must have been there, as a thorough comparison with modern dialects shows

  ‘house’

Lloyd  **tshú**
Lucy Lloyd's !Xun notebooks

3. From Lloyd’s transcription to !Xuun phonology

- Brackets = phonemes or features of which there is no sign in Lloyd’s transcription, but which must have been there, as a thorough comparison with modern dialects shows

‘house’

<table>
<thead>
<tr>
<th>Lloyd</th>
<th>tshú</th>
</tr>
</thead>
<tbody>
<tr>
<td>O-!Xuun:</td>
<td>ts’ù  [ts’ùù]</td>
</tr>
<tr>
<td>E-!Xuun:</td>
<td>tc’ù  [tc’ùù]</td>
</tr>
<tr>
<td>Juǀ’hoan:</td>
<td>tjù  [tc’ùù]</td>
</tr>
</tbody>
</table>
• Brackets = phonemes or features of which there is no sign in Lloyd’s transcription, but which must have been there, as a thorough comparison with modern dialects shows

‘house’

Lloyd  \textit{tshú}  \rightarrow  \textit{tc(’)}uu

O-ǃXuun:  \textit{ts’ù}  \quad [\textit{ts’ùù}]

E-ǃXuun:  \textit{tc’ù}  \quad [\textit{tc’ùù}]

Juǀ’hoan:  \textit{tjù}  \quad [\textit{tc’ùù}]

\textit{Lucy Lloyd's ǃXun notebooks}

3. From Lloyd’s transcription to ǃXuun phonology
3. From Lloyd’s transcription to !Xuun phonology

• **Superscripts** = phonetic details (co-articulation etc.) that would be lost in a phonological transcription (important for dialect identification)

  ‘country’

Lloyd  !nuérre
3. From Lloyd’s transcription to !Xuun phonology

- **Superscripts** = phonetic details (co-articulation etc.) that would be lost in a phonological transcription (important for dialect identification)

  ‘country’

<table>
<thead>
<tr>
<th></th>
<th>Lloyd</th>
<th>!nuérre</th>
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<tr>
<td>O-!Xuun:</td>
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<td>Juǀ’hoan:</td>
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3. From Lloyd’s transcription to !Xuun phonology

- **Superscripts** = phonetic details (co-articulation etc.) that would be lost in a phonological transcription (important for dialect identification)

  ‘country’

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<th>!nüérre</th>
<th>→</th>
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### Lucy Lloyd's !Xun notebooks

#### 3. From Lloyd’s transcription to !Xuun phonology

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### Pan Juu Vowel inventory

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### Vowel colourings

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4

THE EDITION AND LINGUISTIC ANALYSIS
Lucy Lloyd's !Xun notebooks

4. Edition and linguistic analysis

So far: 100 pages edited (out of 1300) in Toolbox (one toolbox project per informant)

• dictionary: 550 entries

• 6 texts + many isolated sentences

• sketch grammar (130p, comparative Juu grammar)