Namaqualand (Northern Cape, South Africa)
The Khoisan languages of southern Africa: a brief introduction.

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Our core topics for today

- Early documentation, distribution and present day status of the !Ui languages.
- General typological properties of !Ui languages.
- Debate: how best to analyse clicks.
Distribution

• It is not easy to give an accurate picture of the former range of the South African !Ui languages.

• The so-called ‘Bushmen’ of the Cape tended to live in small but mobile bands, and may have covered an extensive territory as they moved after the changing vegetation of the different seasons, and the associated migrations of game animals.
• Their small groups were originally often closely associated with individual clans of the Khoi.

• Dutch settlers, organised into quasi-military groups called commandos, conducted vicious raids aimed at destroying their communities.
Dorothea Bleek’s *Comparative Vocabularies* (1929)

- S1 = |Xam
- S2 = ‡Ungkwe +
- S3 = ‖Xegwi +
Distribution and status

• Almost all varieties are now extinct.

• |Xam was documented extensively by Wilhelm Bleek and Lucy Lloyd, from the 1870s onward. Their consultants came from the Kenhardt district in the Northern Cape, among other places.

• Various |Nuu-like dialects (and some eastern outliers) were documented from c.1911 – 1936, by Dorothea Bleek, Carl Meinhof, Clement Doke and Louis Maingard, and later also by Ernst Westphal.

• Following the rediscovery of about two dozen elderly speakers in 1997, linguists over the past decade have worked to document N|uu (or Nǁng), now spoken by only a few remaining elders of the ǂKhomani San.
The |Xam legacy from the 19th century

Wilhelm Bleek and his sister-in-law, Lucy Lloyd, who documented |Xam. Lloyd continued Bleek’s work after his death, and was later assisted by her niece, Dorothea.
The |Xam legacy from the 19th century

Wilhelm Bleek originally came out to South Africa to be of assistance to the new British governor, George Grey, although he began by assisting Bishop Colenso in Natal with work on Zulu.
Wilhelm Bleek was at first more interested in comparative Bantu studies: he named the family, worked out various sound correspondences, and devised the system of noun class numbering.
The |Xam legacy from the 19\textsuperscript{th} century

He also corresponded with missionaries, and learned more about Nama – and a variety of N\|uu – from Krönlein.
The |Xam legacy from the 19th century

• Bleek began to obtain access to other speakers of ‘Bushman’ languages
• The ‘Breakwater’ was a project to build a sea-arm that would protect ships entering Table Bay. The work involved heavy labour, and was considered fit for prisoners from the Breakwater gaol.

• Some of the prisoners came from up country, and while a few may have committed murders, most were guilty of small crimes – such as stealing a sheep for food.
The |Xam legacy from the 19th century

• The Bleek-Lloyd notebooks contain an extensive repertoire of narratives in |Xam. This manuscript material can now be freely accessed online through the Digital Bleek and Lloyd.

• Some of the stories were published in 1911, as the Specimens of Bushman Folklore. (Available from the Internet Archive)
From the published version of the story in the *Specimens of Bushman Folklore* (Bleek and Lloyd, 1911).
Page from Lucy Lloyd’s manuscript notebook, on the Digital Bleek and Lloyd.
The |Xam legacy from the 19th century

- Multi-disciplinary interest: rock art, history, archaeology, literature
- Actual analysis of the language - not so much!
The legacy from the 20\textsuperscript{th} century

- Dorothea Bleek (1873 – 1948) was the daughter of Wilhelm Bleek and Jemima Lloyd. Returned to South Africa and carried out field work from about 1911 onwards.
- Came up with the classification ‘Southern Bushman’ for the languages later renamed !Ui-Taa.
- Her \textit{Bushman Dictionary} (1956), is available from the \textit{Internet Archive}. 
Dorothea Bleek in the field c. 1911-1916
A legacy from the late 20th century

• Various other scholars working in the 1920s and 1930s collected a few short narratives and wordlists for !Ui languages such as ŽUngkwe, and a variety spoken by the ŽKhomani San.

• The documentation of ŽKhomani took place when the community was assembled at Bain’s Camp in 1936 – along with some speakers of ŽAuo. (Some members of the ŽKhomani San were taken to Johannesburg to take part in the (British) Empire Exhibition in the same year!)

• During the 1960s, Ernst Westphal collected data for a language he called N|huki. (Now digitised and available online.)

• By the end of this era, it was generally assumed that the last of the South African ‘Bushman’ languages had vanished. Most speakers switched to Afrikaans or Nama.
The rediscovery of N|uu speakers!

• In 1997, people from various advocacy groups who were assisting theǂKhomani San with a land rights claim discovered that one of the elders, Elsie Vaalbooi, could still speak the language!

• Soon afterwards, other speakers started to come forward, and eventually about two dozen frail and elderly speakers were identified.

• Efforts to record the language slowly got underway over the next decade.

• A preliminary grammar has been published by Chris Collins and Levi Namaseb (2011), and the preparation of a dictionary is in progress. Other work is also still in progress.
The rediscovery of N|uu speakers!

Ouma |Una Rooi of the ḂKhomani San was one of the last fluent speakers of N|uu. She died on 3 March 2012.
The rediscovery of N|uu speakers!

- Ouma Antjie Kassie, died 7 January 2013.
The rediscovery of Nǀuu speakers!

Ouma ǀUna (in black) with two of her sisters, telling Levi Namaseb (far right) and local children about the time her parents went with Donald Bain to Johannesburg in 1936 for the Empire Exhibition.
**Film Clip: 2001_06-03 [10:46 mins]** Filmed inside the cave.

<table>
<thead>
<tr>
<th>Levi: So, Ouma, tell us, what is this here?</th>
<th>Levi: (Tom, are you ready?) So Ouma, vertel vir ons, wat is hierdie?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Una: House ... quartz-rock.</td>
<td>Una: Ng ...uru.</td>
</tr>
<tr>
<td>Una: Quartz-rock ... rock.</td>
<td>Una: !uru ... !ao.</td>
</tr>
<tr>
<td>Note</td>
<td>Xam !kau ka !neing ‘cave’.</td>
</tr>
<tr>
<td>Levi: Whose it is it?</td>
<td>Levi: Wie s’n is dit?</td>
</tr>
<tr>
<td>Sister: It was ours.</td>
<td>Sister: Dit was ons s’n.</td>
</tr>
<tr>
<td>Una: It ... was ours. Khais and me, Una. We went to Johannesburg, from the game reserve, with Bain. So then we got there. The</td>
<td>Una: I ... naku. Khais</td>
</tr>
<tr>
<td>Una: Ons het Johannesburg toe gegaan, uit die wildtuin uit, met Bain. Toe ons daar kom. Die Boesman meide is</td>
<td></td>
</tr>
<tr>
<td>This would have been in 1936, for the Empire Exhibition.</td>
<td></td>
</tr>
</tbody>
</table>
The rediscovery of N|uu speakers!

• A preliminary grammar has been published by Chris Collins and Levi Namaseb (2011), and the preparation of a dictionary is in progress. Other work is also still in progress.

• The discovery of the speakers has enabled linguists to undertake sophisticated phonetic studies using modern techniques.
Let’s now take a closer look at some of the specific features of !Ui languages.
Much as before, we can only take a brief safari tour.
Common properties of JU and TUU languages

i.  Multiple gender systems *not* based on masculine and feminine sub-categorisation of nouns.

ii. SVO pattern.

iii. Some true adjectives; many other descriptive stems used in relative constructions.

iv. Suppletive patterns of plural formation in the case of certain nouns and verbs (?).

v. Inclusive/exclusive distinction in 1st and 2nd person.

vi. Use of compound verbs (serial verb constructions?)

vii. Introduction of an additional argument by means of a special morpheme.

viii. Use of a wider range of contrastive vowel colourations and click accompaniments than KHOE languages.
Aspects of nouns, pronouns and the noun phrase
One of the features that distinguishes !Ui from Taa languages is that they seem to have only two genders, whereas Taa languages have at least five, and possibly more.

<table>
<thead>
<tr>
<th>3rd</th>
<th>Sing</th>
<th>Pl</th>
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</thead>
<tbody>
<tr>
<td>&lt;Animate&gt;</td>
<td>ha</td>
<td>hi</td>
</tr>
<tr>
<td>&lt;Inanimate&gt;</td>
<td>hi</td>
<td>hi</td>
</tr>
</tbody>
</table>
Gender system typical of !Ui

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<tr>
<td>&lt;Inanimate&gt;</td>
<td>hi</td>
<td>hi</td>
</tr>
</tbody>
</table>

- Gender apparently is *not overtly indexed* in !Ui languages, but seems to be reflected only in the choice of pronouns.
- There *may* be vestigial suffixes on nouns that have not yet been recognised!
- There *may* be a more complicated system of agreement that has not yet recognised!
Gender system typical of !Ui

Page from Bleek and Lloyd’s *Specimens of Bushman Folklore.*

*ha*(ng) is the pronoun used for Animate singulars, and here refers to the |Xam man.
Inclusive/Exclusive distinction in !Ui

<table>
<thead>
<tr>
<th></th>
<th>1st pers. Incl.</th>
<th>1st pers. Excl.</th>
<th>2nd pers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st pers. Incl.</td>
<td>-</td>
<td>i</td>
<td></td>
</tr>
<tr>
<td>1st pers. Excl.</td>
<td>η</td>
<td>si</td>
<td></td>
</tr>
<tr>
<td>2nd pers.</td>
<td>a</td>
<td>u</td>
<td></td>
</tr>
</tbody>
</table>

The pronouns illustrated are from !Xam, but similar ones are used in the other !Ui languages.
**Singular-plural noun suppletion**

<table>
<thead>
<tr>
<th>Xam (!Ui):</th>
<th>Sing</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>person, man</td>
<td>!kui</td>
<td>!k'e:</td>
</tr>
<tr>
<td>man</td>
<td>!kwi gwai</td>
<td>!k'e-ta tu:ken</td>
</tr>
<tr>
<td>man (N</td>
<td>uu)</td>
<td>ŋoo</td>
</tr>
<tr>
<td>woman</td>
<td></td>
<td>aiti</td>
</tr>
<tr>
<td>child</td>
<td>!khwā</td>
<td>!kaukən</td>
</tr>
</tbody>
</table>
Singular-plural noun suppletion

<table>
<thead>
<tr>
<th>Xam:</th>
</tr>
</thead>
<tbody>
<tr>
<td>!kui</td>
</tr>
<tr>
<td>!ke</td>
</tr>
</tbody>
</table>

|Xam ka !kui | ‘one person of the |Xam’ |
|Xam ka !ke  | ‘many people of the |Xam’ |
Descriptive stems

• We might expect to find perhaps a handful of ‘true’ adjectives ...
• Wilhelm Bleek made some early observations:

\[ \text{+énn} \ '\text{small, little}', \text{ pl. of } +\text{érri}. \text{ The adjectives of size have in the plural different forms from the singular. Thus: } \\
\text{túrrí} \ '\text{short}', \text{ pl. túttén; } \\
túttén \\
\text{!χówa} \ '\text{tall, high}', \text{ pl. !χó!χóka}; \]
Descriptive stems

• We might expect to find a handful of ‘true’ adjectives ...
• Wilhelm Bleek made some early observations:

ütia ‘great, large, big, stout’, pl. ütikütita;
Yauki ts’erré ‘not small’, pl. Yauki ts’éttén;
korre-korré ‘round’, pl. korritten-korrēten.

This last is not exactly an adjective, but a noun indicating a ball or round thing.

All other adjectives besides these of size have the same form in the singular and plural.
And the Lioness caught hold of his head. She exclaimed: ( ) “χάβαββου” (growling) to the other (8194) one’s head. And she exclaimed: “Oh! Oh dear! Oh dear! Oh dear! Oh dear! my teeth! This must be why this cursed (?) man’s big head came to sit in front of my house!” ( ) While Ddi-χέρreten said: (8195)
Descriptive stems in relative constructions

Hiŋ |ku ||i, hiŋ |kānn|kānn ākkën ||ko hĩ
au Ṣho-kën ē ākën.

‘It by itself was placing itself nicely upon bushes which were comfortable.’

Hiŋŋ
3rd II. Sg. |ku ||i,
PROG self

hiŋŋ
3rd I. Sg. |kānn|kānn ākkën ||ko hĩ
step.along be.nice put 3rd II. Sg.

au Ṣho-kën ē ākën.
AP bush-Pl. REL. be.nice

||i = ‘possess’, also used as ‘self’, with resumptive PRO after Verb.
The official motto of the new South Africa is in \(|\text{Xam}\)

\(\text{!Ke e: |xarra ||ke}\)

‘People who are different are the same’

(NB: \(|\text{xara} \) ‘other’ is in fact a loan from a Khoekhoe source.)
Adpositions?

• Very few adpositions have been identified. For the most part they appear to be prepositions.

• Most of the relations that might be expressed by adpositions are instead expressed via the verbal system.
Aspects of verbs and the verbal system
‘A little whirlwind comes to them;
‘it blows up the Ostrich feathers […]
‘it blows up the little feather
‘into the sky.’
### SVO pattern

<table>
<thead>
<tr>
<th>go</th>
<th>go-Ωŋa-kën</th>
<th>ne</th>
<th>ss’a</th>
<th>hĩ-hĩ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whirlwind-DIM-?</td>
<td>TA</td>
<td>come</td>
<td>PRO3rdIpl.redupl</td>
<td></td>
</tr>
</tbody>
</table>

| Ha-ŋ | ne | ts’ú-hhó | tōi-|kú |
| PRO3rdIsg-? | TA | blow-take.up | ostrich-feather(s) |

| Ha-ŋ | ne | ts’ú-ki | kāi-|tën |
| PROIsg-? | TA | blow-? | go.up-? |

| kú-këŋ-Ωŋá | feather-?-DIM |

au | !gwā-xu |
AU | sky |

Note also the use of the special morpheme **au** to introduce an additional argument.
Singular-plural verb suppletion (Nǀuu)

• It seems that there are not as many suppletive verbs in !Ui as we have seen in Taa and JU – but new studies may find more.

• Are there ‘ergative-like’ alignments in !Ui, similar to those we have seen in JU? We don’t know yet!
|go|go-ŋa-kən
Whirlwind-DIM-?

|ne ss’ā hī-hī
TA come PRO3rdIpl.redupl

Ha-ŋ
PRO3rdIsg-?
TA

|ne ts’ú-hhó tōi-|kú
blow-take.up ostrich-feather(s)

Ha-ŋ
PROIsg-?
TA

|ne ts’ú-ki |kāi-ten|kú-kən-ŋa
blow-? go.up-? feather-?-DIM

au !gwā-xu
AU sky
is commuted into $t$. The noun $\dhyi$ ‘man’ is very irregular in its declension:

**Singular.**
- Acc. (& Nom.) $\dhyi$ ‘man’.
- Nominative $\dhyit\dhyen$ ‘man’.
- Genitive $\dhyita$ ‘man’s’.
- Vocative $\dhyuv\dhye$ ‘O man!’
- Alternative $\dhyu\dhyk\dhyo$ ‘another man’.

**Plural.**
- Acc. (& Nom.) $\dhy(e) or $\dhy\dhyi$ ‘men’.
- Nominative $\dhy(e)\dhyten$ or $\dhyit\dhyen$ ‘men’.
- Genitive $\dhy(e)\dhyta$ ‘men’s’.
- Vocative $\dhy(e)\dhyuw\dhye$ ‘O men!’
- Alternative $\dhy(e)\dhyuit\dhyen$ ‘other men’.

$\dhyi$ ‘to kill’. Another form is $\dhy\dhya$, used in the perfect 2. and subjunctive.

to $\dhy$ ‘ostrich, ostriches’, the same in singular and plural 3.
(nom. to$\dhyten$, gen. to$\dhyta$ ‘ostrich’s’ or ‘ostriches’).

to $\dhy$ a preposition with a very general meaning ‘with 4.
reference to, with regard to, at, on’, etc.
8. ukámminı́ ‘to carry’, ukámmin-tı́ ‘carries taking’. This is ukámmin-ki in Flat-Bushman dialect, whilst the Brinkkop Bushmen say ukámmin-ki.

9. ḫa ‘away, thither’. Verbs of motion end generally either in sha ‘towards, hither’ or ḫa, just as such Hawaiian verbs end either in mai ‘hither’ or aku ‘thither, away’.

10. ḫnaín ‘house, home’, gen. ḫnaín-ta ‘house’s’, pl. ḫnaínə́ ḫnaín ‘houses’, etc.

11. ḫe e conjunction ‘and’, really ‘this (or then) it is’.

12. ḫán nominative of ḫá́ ‘consort, wife, husband’, the termination -ken after the very short vowel being usually contracted to -n; yet one hears also ḫáken. The nouns indicating relationship, as well as those expressing members of the body, have generally
THE GIRL OF THE EARLY RACE, WHO MADE STARS.*

(2505) Ǹ ƙọ́ọ́ ƙákkà kè, tì ē, ƙuitialá kkojìnn ihin; hānn ƙi leya hā ƙkàkkà ko ƙuí; hānn ƙkaù ki ƙkàitten ƙuí au ƙwàxù. Hānn ƙákkà ƙuí: “ƙuí é á, hî ƙwàám ssì ƙóá-kèn ddí ƙôo. ( ) Hî ssì̀ ƙwàám ƙe ƙuíten ƙa ttà ƙwàxù, ƙuàlƙuàtten ssì ƙhexi ƙuhí ttìn ƙôo, au ƙówàkèn ƙe ƙôo, au hî ssìì ƙe ƙuí.”
A Story of the girl who made the Milky Way (related to Janji Tooren by his Brother).

*This girl is said to have been one of the first girl to have acted ill; she was finally shot by her husband. She is now

The girl, she said, "I have been stupid, I must have understood things well.

My brother said to me, "I am here."

That the girl arose, "It is!" Nui t'ai kham ni she just in

1. Her hands into the Ya hâ Thâ-a Tha au word

2. Ashes; she threw! Nui, Nui Thau-hi

word up the ashes into Kha ten! Nui is all

15. The sky; she said, "I'm sad." Nui that

word to the ashes, "The hâ! Nui," "Nui e" word" ashes let? (are)

20. Where, they shall be. Nui Khwani see

Who a-kaen do? Yes.
Complex predicates

- In |Xam it is not unusual to find several verbs as part of a (seemingly) single construction.

- This is usually because |Xam uses verb-like forms to express Tense, Aspect, Modality and Polarity (positive or negative status of the proposition).

(The sequences of verbs greatly resemble similar patterns found in the Bantu languages, where they are usually referred to as multi-verb constructions. The Bantu constructions differ from serial verb constructions in that there is a dependency relation between V1 and V2.)
From Tom Güldemann’s analysis (in Vossen, ed. (2013)
Some specific features of |Xam, within !Ui

• Use of **au** to introduce an additional argument (e.g. a phrase expressing instrument or place, or even a clause of reason or purpose).

• Negative with **kx’au(ki)**.
Additional argument in |Xam introduced by *au*

Hĩŋ |ku ||i, hĩŋ |kánŋ|kánŋ ákkẽn ||ko hĩ
au Ûhokẽn ē ākẽn.

‘It by itself was placing itself nicely upon bushes which were comfortable.’

| Hi-ŋ   | |ku ||i, PROG self |
|---|---|
| 3rd II.Sg. | 3rd I.Sg. | step.along | be.nice | put 3rd II.Sg. |

| au     | Ûho-kẽn ē ākẽn. |
| AP bush-Pl. REL. be.nice |

||i = ‘possess’, also used as ‘self’, with resumptive PRO after Verb.
Compare Nǀuu use of /ŋa

Na |²ue |ŋa |khou
Na |²ue |ŋa |khou
PRO₁ˢᵗsg shoot INSTR? bow

‘I shoot with a bow.’
Note the form of the verb meaning ‘eat’ ...
(Recalling negation in Taa)

TUU: ||qhúa

ũ à ||qhúa |née ʻOnàje  ‘I did not see the tree’

ũ PRO.1st sg à ||qhúa |naV ʻOnàje tree.-
Past NEG see-OC

ʻOnàje (sg.) ʻOnàã (pl) (èh/ ãh) ‘tree’

[Traill 1994: 119]
Agreement pattern in !Xoon

ñ í bá kx’âm ‘ēe Ṇàje, ||án kx’áhe tîî
‘I am first eating meat, later drinking tea’

ñ ń bá kx’âm ‘ēe Ṇàje, ||án kx’áhe tîî
1st Sg TAM TAM do.first ‘ēe eat.OC
V Ṇà.je, meat
O

||án kx’áhe tîî.
do.later drink.OC tea

Ẓàje (èh/ ăh) ‘meat’ –je one of the suffixes associated with singular nouns in this gender.

Citation form for ‘eat’ is: ʹâā
Citation form for ‘drink’ is: kx’āhā
Aspects of the sound system

Debate: Analysing clicks as clusters or contours.
Clicks as clusters ...

Tom Güldemann, Hirosi Nakagawa, Anne Fehn, Bernd Heine and Christa König.
Heine and König (2015) for !Xun

<table>
<thead>
<tr>
<th>Simple stops</th>
<th>Plain</th>
<th>t</th>
<th>ts</th>
<th>tc</th>
<th>l</th>
<th>l</th>
<th>!</th>
<th>!!</th>
<th>Ë</th>
<th>k</th>
<th>'</th>
<th>[?]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voiced</td>
<td>b</td>
<td>d</td>
<td>dz</td>
<td>dj</td>
<td>gl</td>
<td>gl</td>
<td>g!</td>
<td>g!!</td>
<td>g+</td>
<td>g</td>
<td></td>
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<table>
<thead>
<tr>
<th>Complex stops</th>
<th>Plain + Gl</th>
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<th>tc’</th>
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<th>!!’</th>
<th>Ë’</th>
<th>kx’</th>
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<tr>
<td>Voiced + Gl</td>
<td>dz’</td>
<td>dc’</td>
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<td>Plain + As</td>
<td>ph</td>
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<td>lh</td>
<td>kh</td>
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<td>Voiced + As</td>
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<td>dsh</td>
<td>dch</td>
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<td>n lh</td>
<td>n lh</td>
<td>n lh</td>
<td>n lh</td>
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</tbody>
</table>
Heine and König (2015) for !Xun

| Stop clusters          | tx or [tk]² | tsx | tcx | l|x | l|x | l|x | l|x | ±x |
|------------------------|-------------|-----|-----|-----|-----|-----|-----|-----|
| Plain + /x/            |             |     |     |     |     |     |     |     |
| Voiced + /x/           | dx          | dzx | djx | g\|x | g|x | g\|x | g\|x | g\|±x |
| Plain + /x’/           | tx’         |     |     |     |     |     |     |     |
| Voiced + /x’/          |             |     |     |     |     |     |     |     |
Heine and König (2015) for !Xun

<table>
<thead>
<tr>
<th>Nasals</th>
<th>Regular</th>
<th>Voiceless</th>
<th>Voiceless nasal</th>
<th>Voiceless labial nasal</th>
<th>Voiceless bilabial nasal</th>
<th>Voiceless labiodental nasal</th>
<th>Voiceless alveolar nasal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain</td>
<td>m</td>
<td>n</td>
<td>ny [n]</td>
<td>n!</td>
<td>n!!</td>
<td>n+</td>
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<td>Voiced</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Complex nasals</th>
<th>Nasal + stop</th>
<th>Nasal + Ass</th>
<th>Gl + nasal</th>
</tr>
</thead>
<tbody>
<tr>
<td>mb</td>
<td>nd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mh</td>
<td>nh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'m</td>
<td>'n</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Jong</th>
<th>ng</th>
</tr>
</thead>
<tbody>
<tr>
<td>n+g</td>
<td></td>
</tr>
</tbody>
</table>
Fehn (2014) for Ts’ixa (Kalahari KHOE)

Table 9: Click accompaniments as represented in the orthography used in this grammar and the Applied Community Orthography, exemplified by the dental click and its accompaniments

<table>
<thead>
<tr>
<th></th>
<th><strong>Orthography used in this grammar</strong></th>
<th><strong>Applied Community Orthography</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stop segments</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>plain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>voiced</td>
<td>g</td>
<td></td>
</tr>
<tr>
<td>voiceless ejective</td>
<td>’</td>
<td></td>
</tr>
<tr>
<td>voiceless aspirated</td>
<td>h</td>
<td></td>
</tr>
<tr>
<td><strong>Stop cluster</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>plain + x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>plain + q</td>
<td>q</td>
<td></td>
</tr>
<tr>
<td>plain + o</td>
<td>g</td>
<td>q</td>
</tr>
<tr>
<td>plain + ?</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td><strong>Nasal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>voiced</td>
<td>n</td>
<td></td>
</tr>
<tr>
<td><strong>Pre-nasalised</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Clicks as clusters ...

• Allows clicks to be treated in parallel with the rest of the consonantal inventory.

• Results in a smaller overall inventory of segments.
Clicks as contours ...

- Lingual ingressives.
- Neutralises supposed contrast between velar and uvular closures.
- Introduces new class of contour.

\( \text{\textcircled{q}h \ \text{\textquotesingle\textprime\textquotesingle}h \ \text{\textquotesingle\textprime\textquotesingle}h \ \text{\textquotesingle\textprime\textquotesingle}h} \)

These transcriptions show that the secondary closure is released as an aspirated uvular stop. The transcription is undoubtedly "too phonetic" and reflects the evidence from cineradiology that the articulation is indeed uvular. From a systematic point of view this release could just as well be transcribed with an aspirated velar stop, but in keeping with the tradition of my own practice I have preserved the transcription with the aspirated uvular stop.

\( \text{g\textcircled{q}h \ g\text{\textquotesingle\textprime\textquotesingle}h \ g\text{\textquotesingle\textprime\textquotesingle}h \ g\text{\textquotesingle\textprime\textquotesingle}h \ g\text{\textquotesingle\textprime\textquotesingle}h} \)

The voicing leads the release of the click which is voiceless and is followed by an aspirated uvular stop. Again, the transcription with a uvular stop, is too phonetic from a systematic point of view, and like the voiceless aspirated stop above could be transcribed with a velar stop.
## Clicks as contours

<table>
<thead>
<tr>
<th><strong>Pulmonic</strong></th>
<th><strong>Bilabial</strong></th>
<th><strong>Alveolar</strong></th>
<th><strong>Palatal</strong></th>
<th><strong>Velar</strong></th>
<th><strong>Uvular</strong></th>
<th><strong>Glottal</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Central</td>
<td>Lateral</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stop</strong></td>
<td>p</td>
<td>b</td>
<td>(t)</td>
<td>(d)</td>
<td>c</td>
<td>c\textsuperscript{h}</td>
</tr>
<tr>
<td><strong>Affricate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nasal</strong></td>
<td></td>
<td></td>
<td>m</td>
<td>n</td>
<td>j\textsuperscript{n}</td>
<td>(\eta)</td>
</tr>
<tr>
<td><strong>Fricative</strong></td>
<td>(f)</td>
<td></td>
<td>s</td>
<td>z</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Liquid</strong></td>
<td></td>
<td>r</td>
<td>(l)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Glottalic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 3:** N\textsuperscript{uu} pulmonic and glottalic consonants
Clicks as contours

<table>
<thead>
<tr>
<th>LINGUAL</th>
<th>Labio-uvular</th>
<th>Denti-pharyngeal</th>
<th>Alveo-uvular</th>
<th>Palato-pharyngeal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop</td>
<td>⊙</td>
<td></td>
<td></td>
<td>!</td>
</tr>
<tr>
<td>Nasal</td>
<td>δ⊙?</td>
<td>δ⊙</td>
<td></td>
<td>δ!^</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LINGUO-PULMONIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop</td>
</tr>
<tr>
<td>Affricate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LINGUO-GLOTTALIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affricate</td>
</tr>
</tbody>
</table>

Table 4: N|uu lingual, linguo-pulmonic and linguo-glottalic consonants
Lingual stops

**Figure 11:** Four lingual stop release types in words extracted from the frame sentence [na ka ____] ‘I say ____’: (a) [\textipa{|a|}/\textipa{|e|}] ‘sister’, (b) [\textipa{|b|}/\textipa{|a|}] ‘break’, (c) [\textipa{|\theta|}/\textipa{|\alpha|}] ‘uterus’ and (d) [\textipa{|\eta|}/\textipa{|\alpha|}] ‘dead’. Labels indicate the locations of vowels (V), closures (C), bursts (B) and releases (R) (Speaker GS).

‘my sister’s child’

‘break’
Lingual stops

Figure 11: Four lingual stop release types in words extracted from the frame sentence [na ka ___] ‘I say ___’: (a) [aaχe] ‘sister’, (b) [ha] ‘break’, (c) [sasi] ‘uterus’ and (d) [a] ‘dead’. Labels indicate the locations of vowels (V), closures (C), bursts (B) and releases (R) (Speaker GS).
**Figure 12:** N\u0101u linguo-pulmonic and linguo-glottallic releases in words excerpted from the frame sentence [na ka ___] ‘I say ___’; (a) [\textipa{qaq}] ‘shiny’, (b) [\textipa{qʰəisi}] ‘bird’, (c) [\textipa{xaan}] ‘sack’ and (d) [\textipa{χ′aa}] ‘hand’. Labels indicate the locations of vowels (V), closures (C), bursts (B) and releases (R) (Speaker GS).

\begin{itemize}
  \item \textipa{qaq} ‘shiny’
  \item \textipa{qʰəisi} ‘bird’
  \item \textipa{xaan} ‘sack’
  \item \textipa{χ′aa} ‘hand’
\end{itemize}
Linguo-pulmonic and linguo-glottalic contours

**Figure 12:** N\u0111u linguo-pulmonic and linguo-glottalic releases in words excerpted from the frame sentence [na ka ____] ‘I say ____’; (a) [qaa] ‘shiny’, (b) [qʰəisi] ‘bird’, (c) [χaaⁿ] ‘sack’ and (d) [χ’a] ‘hand’. Labels indicate the locations of vowels (V), closures (C), bursts (B) and releases (R) (Speaker GS).
Clicks as contours

- Allows clicks to be treated in parallel with the rest of the consonantal inventory.
- Eliminates the need for the term ‘accompaniments’ and describes clicks in terms of existing parameters (place, manner, phonation type – and airstream).
An illustrative text for !Ui

Text 5: !Ui TUU: |Xam. ‘The Children are Sent to Throw the Sleeping Sun into the Sky’, from Bleek and Lloyd, (Specimens of Bushman Folklore (1911), 44-55). Dictated by ||Kabbo.
A short documentary clip (4 mins) about the rediscovered speakers of Nǀuu. (Nǀu language)
A short documentary clip (2 mins) about the rediscovered speakers of Nǀuu. (Nǀu ≠Khomani San)
A short documentary clip (5 mins) about the rediscovered speakers of Nǀuu. (Disappearing Nǀu)