This work, as part of the European Science Foundation EUROCORES Programme EuroBABEL, was supported by funds from the DFG (German Research Foundation).

1 Juu Click C₁, without glottalisation, tone patterns; pharyngealised after slash (Elderkin 1988)

<table>
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<td>9</td>
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*HH *HL *LH *LL

2 Juu Basic System at C₁

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<th>Aspiration/</th>
<th>Breathness (Plain)</th>
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</table>

3 Juu Phonation Types cooccurring with Basic System

4 !Xóó C₁ (orthography, not transcription) cooccurrences with Phonation Type

5 !Xóó Nasalised C₁

6 !Xóó Velarisation of C₁ and Glottality
7 protoKhoe C₁; percentages of non click pKhoe starred forms;
percentages of click, but non velarised, starred forms

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(56) (113)

8 Sandawe; percentages of click initial forms

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9 Hadza, non borrowed (Elderkin 1978); click effluxes after Sands forthcoming

10 Dahalo click system;

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11 Realisations of pKhoe tones

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*Voiced C₁

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*Aspirated C₁

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<td>13</td>
<td>ML</td>
<td>MM</td>
<td>HM</td>
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*Narrowed/2ndDepressor

|   |   |   |   |   |
|---|---|---|---|
| *HL | 12 | LL | LL | MH/(HL) |
| *LL | 13 | LM | LM | HM/(HM) |

(Realisations in parenthesis are alternatives for 2nd depressor in Khwe)
12a Narrowing, with potential sources:

cWKhoe *\[4\] tof grasshopper, locust (SNK N G| Kh)

preJuu *\[4\] tof Juu *\[4\] tof grasshopper

cWKhoe *\[4\] tof to project into air (SNK N Kh)

!Xóó [\[4\] tof strong blowing of wind, rain, sand;

 drive at speed

pWKal *\[4\] Acacia hebeclada (N G| Kh)

Acacia hebeclada

cWKhoe *\[4\] tof forest, thicket (SNK N Kh)

[!Xóó [\[4\] tof G\ui Bushmen]

[Juu [\[4\] tof wood, area with big trees]

cWKhoe *\[4\] tof rainy season (SNK N G| Kh)

!Xóó [\[4\] tof rainy season

cKhoe *\[4\] tof kraal (SNK Kh)

Juu [\[4\] tof kraal

cKhoe *\[4\] tof shoe, sandal (SNK N G| Kh)

!Xóó [\[4\] tof 3 e/u II shoe, traditional sandal

pWKal *\[4\] red

[preSNK dep*\[4\] tof SNK [\[4\] tof to become partially dry]

Naro [\[4\] tof red [Skewed by pharyngealisation]

12b Second depressor, Khwe with one of two realisations

Khwe depressed realisation with *HL

*KH

pKhoe *\[4\] àmá tof beetle (SNK N G| Kh)

Khwe \[4\] àmá 1 black beetle, scarab 2 beetle (gen)

Khwe \[4\] àmá-\[4\] àmá dung beetle

Khwe \[4\] àmá-\[4\] àmá black beetle sp

Khwe *\[4\] tof to move away (SNK N G| Kh)

Khwe *\[4\] tof 1 vi move away, migrate 2 vt transfer

*LL

cSWFri *\[4\] tof to compete, quarrel (SNK N G| Kh)

Khwe [\[4\] tof war, quarrel

!Xóó [\[4\] tof aggression, dispute

Khwe *\[4\] tof carry/take in hand (SNK N G| Kh)

Khwe [\[4\] tof to carry with the hand

preJuu *\[4\] tof Juu [\[4\] tof lei (‘n perd); lead by hand (e.g.

blind person), lure (with food)

Some conventions

Khoe ht-t\[4\] tof

The form inKhoe is probably borrowed (horizontal transmission) from a form which had the approximate phonetic shape shown.

Khwe nondepressed realisation with *HL

*KH

cNKhoe *\[4\] àmá tof track (D ||A Kh)

Khwe k\[4\] àmá [\[4\] tof to follow a trail

(esp of game)

!Xóó [\[4\] tof follow in the spoor, tracks; retrace

one’s tracks, go back on one’s tracks.

preJuu *\[4\] tof Juu [\[4\] tof follow someone (after they have left)

Khwe *\[4\] àmá tof to love, like (SNK N G| Kh)

Khwe [\[4\] tof to love

Khwe *\[4\] àmá to love

*LL

cSWFri *\[4\] tof to shake, churn (SNK N G| Kh)

Khwe [\[4\] tof to shake (milk), make (butter)

!Xóó [\[4\] tof to shake (of liquids), shake liquid in a container to clean it out

As good as pKhoe, but no information from EKal has been brought to bear.

cSWFri

Found in SNK, and either Naro or G\ui or both.
13 Comparative Series for consideration

13.1  WKhoe [hê]  to speak ill of
preSNK  gê SNK hê to talk about (s.o.) in h.
absence; backbite, gossip about
Naro loï (lm) to make fun of, make a fool of, humiliate, mock, ridicule)
Khwe ñê vbi [c&c<nondep*HL] 1 vt cheat, deceive 2 vt speak ill of 3 ...

13.2  WKhoe [fê]  to choke, sputter
preSNK  ëü SNK ëü vi to cough (after swallow-
lowing wrong way); cough (cattle)
Naro ëü to have problems in swallowing, have something in throat
Gui ëü vi to cough one’s throat
Khwe xø vi [c&c<dep*LH] to choke down, swallow (piece of wood, resin)

13.3  WKhoe [òê] intestines
SNK ëü nf intestines, bowel ..., gut
Naro ëü n intestines
Gui ëü n fat of the small intestine.
Khwe ëü n bowels, intestines

13.4  Khoe [/toû] to peel, skim, shave
(i.e. to remove a surface layer)
1  pKhoe *soô to whittle, peel
2  preNaro dep*zô Naro zô n stick/flat piece of
wood, used to remove ashes
preGui(?) *dô ëü Gui dô vi to skim off the
oil/scum on the surface
preKhw dep*drû Khwe drû (~â-L, drû-â-H
[cit<dep*HH or dep*HL; cj not standard] to skim off (fat) ñ spoon
3  pNWKal *dou to shave

13.5  WKhoe [bê] or [ò]  to gut, clean
Nama ë to cut open abdomen of (animal) to
remove entrails; ....
Naro ëi remove intestines, cut belly(animal)
Gui ëi vi to gut an animal
||Ani ëi (-a) [tc4] <dep*LH & q-dep*LL]
to gut [RV04:4.15]
Khwe ëi vi [c&c<nondep*HL] to press out
(faeces from caterpillar intestines)

13.6  WKal [bô] go through/immerse in, water
Naro bô v to go through
Gui bô vi to soak (to walk) in water
Khwe bô [c&c<dep*HL] to swim

13.7  WKal [í]  to move far away
Naro ëi to move away quickly, pass,
disappear far away... be far away
Gui ëi v to become far, (long, deep, high)
Khwe ëi [c&c<nondep*LL] 1 to disappear,
get lost 2 lose 3 away (last v of svc)

13.8  WKhoe [ña]  to put on clothes {HH08}
SNK ña vi 1 to cover (someone) with/wrap
(someone) in (blanket) 2 clothe ....
Naro ñ to put on (clothes), hang over
shoulder (bag), cover with
Gui ñ vi to wear
Khwe ña vi [c&c<nondep*LL] to put on (loin
cloth)(obsolete), put on (dress)

13.9  RV97 pKhoe*ũ Zahn p509.2.0
Khoe [toû] tooth
pCape *û tooth; tusk
[Naro û 1 tooth 2 ...]
pWKal *û Gui û n a tooth
Khwe û(ûn) tooth

13.10  WKal [cê]  to shine, get light
Naro ë to shine; n light;
Khwe ëa [c&c<nondep*HL] 1 to get light,
shine II n light 2 electricity

13.12  WKal [tôa]  to carve, bite out
pKal *tôa (mit der Axt) schnitzen RV97 487.2.0
Naro tê to gnaw at (a bone)
[preNaro*tôrê < Kal [tôa] + .rê]
Gui tê v to make a beautiful thing (e.g. a
spoon) (rare)
[||Ani tê(-a) (tc2) <nondep*HH] to carve
Khwe tê vi [c&c<nondep*HH] to carve with an
axe (hard wood)
14 Three recent articles

Ehret C 2008 ‘The early livestock raisers of southern Africa’ SAH XX pp7-35
Heine B and C König 2008 ‘What can linguistics tell us about early Khoekhoe history?’ SAH XX pp235-248
Voßen R 2007 ‘Languages of the Desert ... and what they can tell us about the economic history of southern Africa’ SuGiA XVIII pp175-185

14.1 20 forms, for historical purposes acceptable, (including to miss, see below).

(13.11)
RV97 pKhoe*sa (ein Jagdziel) verfehlen p500.4.0
RV97 pKhoe*sa ablehnen / verweigern p413.2.1
pKhoe *sóá to miss
Khoe ht-[tsóá] to miss
preSNK *sáá SNK sáá vt to miss, fail to hit 2 affect (s.o.) adversely... 3 (suffix) (do) wrongly /
erroneously, mis-
Naro tsáá to miss (a target), be mistaken; make a mistake, be wrong, sin
Glui sáá v 1 to take off (arrow) 2 to fail to do..
Khwe cáá (~-á-,~-cá-á-M) [<dep*HH] 1 to miss (target) 2 private mis- mal-

14.2 7 forms which I reconstruct with Narrowing or the 2nd Depressor (kraal, to track, shoe, to churn, (v.s.)

RV07 pKal *te bow (for hunting) pWKal *tòè
RV07 pKal *n|nue digging-stick pSWKal *t|òè
CE08 pKhoe *go male domestic animal (ram/bull or both)
cSWFringe *|òò bull
!Xóõ |òò male G-string of skin, modern pants

14.3 21 remaining forms benefit from discussion.

14.3.1
CE08 pKhoe *!oxa zebra (cf KB74pEKal *kuaxa)

14.3.2
H&K08 pKhoe *thobo beeswax

14.3.3
CE08 pKhoe *t`adi leather garment worn around shoulders (also PSAK skin for carrying child)
SNK tsàrî nm robe, gown
|Gui tsérä n piece of cloth;(?<Ts\ana)

14.3.5
RV07 pKal *dubi to castrate
SWFringe ht-[täbi]
|SNK tä|i vt to castrate, geld|
|Naro tibi (m.l/l.l) v castrate|
pWKal *töbi
Glui cúbi v to castrate
Khwe tü|i [c&c<nondep*LL] v to smack, slap

14.3.4
CE08 pKhoe *tsadu to be sour
RV97pKhoe*tsadú sauer p482.2.0
preSNK *|àrû SNK |àrû vi to curdle (of milk)
SNK |ûrû adj sour, acid
preKhwe *tàrû Khwe té|èrû vi [c&c<nondep*LL] to be sour, be brackish
cWKhoe *tsàrû
Naro kàrû v to lick salt n place that is salty..
Glui qà|û pit-trap (RV92)
Gl|ana qà|û salt lick (RV92)
RV92pSWKal*quru salt lick
SWKal ht-[k]az|û salty, tasty
Glui qà adj salty, sour; … with a taste/flavor
Naro t|û adj sour, salty, tasty
SWKal ht-[k]arî salty, tasty
pKhoe *k`ãû bitter
!Xóõ qà adj sour, brackish, salty tasting
Glui qà|û n salt
!Xóõ qàadj salt, salty
WKhoe ht-[t]oz|û
Khoe ht-[t]oû
14.3.6 CE08 pEKal *be(e) cow/cattle
RV07 pEKal *bee cow/cattle
KB74 pKal *bize zebra
Naro bií n horse
Khwe bèjë n 1 zebra 2 horse
G|ui (Molapo) guibe cow

14.3.7 RV07 pKal *gude to herd
SNK kűüré vt to look after/tend/herd (domestic animals)
Naro kòrè v to care, watch (cattle etc.), look after, be watchful, alert
pKhoe *gouë sheep

14.3.8 RV07 pKal *kóm(a) bellows
RV97 pEKal*gom rauchen (tr) p477.1.3
pSWKal *góm to inhale
[SNK ?órn nm (fine) sediment/setttings (of filtered coffee/beer during brewing]
Naro góm v to eat (powder, sugar) out of bag or hand {WH08}
G|ui (Molapo) gûm v to take snuff
pKhoe *góm to blow
Khwe góm (~-à-L, góm-à-H) [c&c<dep*HL]
II to blow into the fire (also of wind) I short piece of firewood

14.3.9 RV07 pKal *lánú metal, iron (= RV97 p467.3.2)
cWKhoe *lanú bracelet, bangle, metal
SNK lánú vt 1 to put on (bracelet/bangle) 2 handcuff nf bracelet, bangle (arm)
Naro lánó 1 iron, metal 2 machine clock, bell
|Gui lánú n 1 iron, metal 2 ...
[Khwe gánú bracelet, ring for one’s knee (of copper, brass, and iron)]
Khwe kánú idem [OK66 p160]

14.3.10 RV07 pKal*qa to smelt
G|ui qà v to melt (e.g. fat/hail)

14.3.11 RV07 pKhoe *l[a]o hoe
RV97pKhoe *l[a]o (Hacke) / wachsen (Plantzen) p446.2.0
hoe, plough
preSNK *l‘àò SNK l‘àò vi to turn green
Khwe l‘àò 1 hoe 2 plough

14.3.12 CE08 pKal *l’ada garden/field?
RV07 pKal *l’ada field, garden
pSWKal *l‘àrà to scratch on ground, sow
!Xóö l‘hàllà field for cultivation, vegetable garden.

14.3.13 RV07 pKhoe *l’au fish
cSWFringe ht.<.“l‘û]u]
SNK l‘û n fish
Naro l‘û n fish, English
G|ui l‘û n fish
preKhwe *l‘au or *l‘û Khwe l‘û n fish (gen)

14.3.14 H&K08pKhoe *laba hat, cap
RV97 pKal*laba maturieren p466.2.0
RV97 pKhoe*laba pWKal*lábä Kopfbedeckung
pSWKal *lóbä hat, to wear a hat
SNK lágà to put on (headgear): f headgear, headdress; hat; cap...
Naro lábä to wear hat; hat, cap
G|ui lágà v to wear on the head; wear a hat/cap; carry on the head n hat/cap.
[Khwe lágà (~-à-L, ~nà-M) to have the first menstruation II n 1st menstruation]
[Khwe lágà(géú) [c&c<dep*HH or dep*HL] hat (in former times made from membrane of giraffe’s heart)]
14.3.15
H&K08 pKhoe *geu wooden bowl
  cWKhoe *lú dish, bowl
  Khwe *lú (var qéú, qéú) (oq [<LH]) n plate

14.3.16
H&K08 pKhoe *khíína fat container made of horn
  Nama *ćënä nf fat-container (for ointment, made of horn with lid of hide)
  Damara *nínä nf id.
  Khwe *nà n 1 horn box … 2 small bottle 3 tin box for … arrowheads 4 snuff box

14.3.17
CE08 pKhoe *badV to run (away)
  pKhoe *bèè to run away (?Intrans *LL of *bèè)

14.3.18
RV07 pKal *sàå to cut open (animal)
  cSWFringe *áfèè to cut lengthwise
    SNK *ábèè vt to split (wood), saw/cut/chop (lengthwise); give change...
    SNK *ábèè vi to split/burst/crack (of wood)
    Naro *ábè vt to cut straight with a knife, into two pieces
    [Glui *árè 1 vt to cut out; to rip 2 for a flower to fall (having produced seeds/fruit]
    [Khwe *á [c&c<dep/nondep*HH] to split (sedge) lengthwise]

14.3.19
H&K08 pKhoe *u? Commiphora africana and/or other Commiphora spp
  SNK *úí nf botanical common commiphora/corkwood, Commiphora pyracanthoides (soft wood, used for utensils)
  Naro *ùù n tree
  Naro (AB85) *uri n Commiphora sp (RS roots chewed as a source of water)
  Glui *rò n a kind of tree, Commiphora mollis (Its leaves are considered to sharpen teeth) (Chewing its leaves and blowing a sick child with the breath is considered a treatment) (Used for making small arrowheads for birds)

Inadmissible as pKhoe

14.3.20
H&K08 pKhoe *ada Acacia erioloba camel thorn
  (not beyond NW of central Zimbabwe)
    SNK *ánä m/nf camel thorn, Acacia erioloba
    [SNK *ărä nf quiver tree, Aloe dichotoma]
    Naro *ánä n 1 gun 2 camel tree (Acacia erioloba) [RV97 quotes ǁd]
    Glui *ărà n a kind of tree (whose leaves are favoured/eaten by the giraffes)
    Khwe *ánä camel thorn, Acacia erioloba
    Khwe *ărà n camel thorn, Acacia erioloba

Inadmissible as pKhoe

14.3.21
H&K08 pKhoe *u? Ficus spp
  Hai’om *uí nf botanical wild fig, Ficus thoningii
    Damara *uí nf botanical any wild fig with small inedible fruit esp 1 laurel fig, Ficus ilicina 2 botanical Namaqua fig, Ficus cordata
    Khwe *uí 1 common wild fig, stranger fig, Ficus thoningii 2 poker (made of its wood) 3 bird lime

Acceptable as pKhoe, SWKal languages are outside distribution area.
15 Naro nasalised click, no pharyngeal, LH

- Naro ḣarí v thresh, move tree with stick so that berry or something can fall
- Naro ḣarú vt thread, string; skewer/spit (meat) nm (narrow) passage, channel; tunnel; gorge
- Naro ḣáu n arrow
- Naro ḣáu vt shave (hair) off head; shave (someone, i.e. his/her head)
- Naro ḣáu v shave n blades
- Juu ḣáu vt shave

Dictionaries quoted:
- Khoe
  - SNK Haacke&Eiseb 2002
  - Naro Visser 2001
  - Głuui Nakagawa et al. 2004
  - Khwe Kilian-Hatz 2003
- nonKhoe:
  - !Xóõ Traill 1994
  - Juu Snyman 1975
  - Juu Dickens 1994
- protoKhoe
  - Voßen 1997
(iii) Systematised summary of presentation

The abbreviation ‘Ho’ refers to the handout, (ii) above

**Juu**

From internal reconstruction, using distribution displays as Ho1, Juu can be interpreted as having underlyingly two tones, *H* and *L*, one of which is chosen at each syllable in a morph.

Three phonation types may be reconstructed, as prosodies.

It seems as if there is complementary distribution of a glottalised click in a morph with initial *H* and glottalisation during the vocalic part of a morph with *L*. There is also complementary distribution of velarisation of an initial consonant in a morph with initial *H* and pharyngealisation in a morph with initial *L*. For these two features, prosodies of glottalisation and pharyngealisation are abstracted from the data.

Snyman gives no information about the distribution of breathiness in the vocalic part of the morph. However, it is expedient to abstract also a prosody of breathiness which is realised as aspiration in a morph with initial *H* and as breathiness in a morph with initial *L*, (where it has possibly been neutralised with its absence).

As $C_1$, the consonants in Ho2 appear. x, h, and ? are probably to be related in some way to the prosodies of pharyngealisation, breathiness and glottality respectively, and therefore realisations of the prosodies rather than members of the system at $C_1$; breathiness and glottality do not cooccur, as the table at Ho3 shows.

Therefore the structure of a morph in Juu can be symbolised as follows.

<table>
<thead>
<tr>
<th>Tone</th>
<th>underlying</th>
<th>surface</th>
<th>Phonation Type</th>
<th>Pharyngeality</th>
<th>Glottality</th>
<th>Breathiness</th>
<th>Glottality and breathiness</th>
<th>do not cooccur</th>
<th>Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*H/*L</td>
<td>four</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*H/*L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**!Xóõ**

Naumann has established a two tone system for !Xóõ. Traill uses three phonation types in his transcription of !Xóõ. Ho4 shows that they do not occur freely with all types of initial consonant. By correlating data such as this with tone it seems that !Xóõ also has a patterning similar to that given for Juu above. Ho5 gives one such subpattern, using the complementarity of a velarised click with glottalisation and a glottalised velar click; Ho6 shows how the three nasalised accompaniments can be reduced to one by correlating tone and prosody. The structure of a morph in !Xóõ can therefore probably be given as

<table>
<thead>
<tr>
<th>Tone</th>
<th>underlying</th>
<th>surface</th>
<th>Phonation Type</th>
<th>Pharyngeality</th>
<th>Glottality</th>
<th>Breathiness</th>
<th>Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*H/*L</td>
<td>two</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Proto Khoe**

pKhoe has a two tone system although the present day languages have been described as having four tones (SNK) or three (Naro, G|ui and Khwe). Two possible phonation types have been reconstructed for pKhoe, these have been referred to as narrowing and the second depressor. The point to make about these is that they seem to be late entries into the pKhoe system; Ho12a shows fairly clear sources for
narrowing and the two possible realisations in Khwe for the second depressor shown in Ho12b make it seem more of an unstructured loan into pKhoe.

The examples in Ho13 are a part demonstration that pharyngealisation cannot be systematised into any reconstruction; uvularity in C₁ should be seen as an attempt to reproduce pharyngeality. Particularly to be noted as early borrowings are pKhoe *sóó ‘to whittle’ and pKhoe *sôú ‘tooth’ in which an original pharyngeality was completely lost in borrowing, only to be reintroduced by speakers of Naro who were presumably in contact with a language descendant of the source language; see also Ho13.11 (under Ho14.1) pKhoe *sáá ‘to miss’.

<table>
<thead>
<tr>
<th>Tone underlying</th>
<th>*H/#L</th>
<th>*H/#L</th>
</tr>
</thead>
<tbody>
<tr>
<td>surface</td>
<td>four (SNK) three (Naro, Glui, Khwe)</td>
<td></td>
</tr>
<tr>
<td>Phonation Type</td>
<td>Narrowing</td>
<td>Late borrowings</td>
</tr>
<tr>
<td>Segmentals</td>
<td>C₁ V₁ C₂ V₂</td>
<td></td>
</tr>
</tbody>
</table>

It should be noted that in the pKhoe inventory, there are two underrepresented series: starred forms with an initial voiced click account for only 5% and with an initial voiced click for only 8% of the total of non velarised clicks.

In the realisation of the underlying tones, once it is understood that 4 and 3 are historically allotones, the default system of SNK shows the greatest phonetic resemblance to the proto system:

*HH = 33  *HL = 32  *LH = 23  *LL = 22

SNK shows depression in reflexes with Voiced C₁ only with *HL and *LL; unlike the Kalahari languages, nasalised clicks also show this voiced depression in SNK. The first tone in the default realisations of Kalahari languages (all three of those used here are described with three tones) is never L. Most noteworthy is the Glui realisation of *LH as HM and the Khwe realisation of *LL as HM. In Khwe, *LH is realised as HH; no Kalahari language of the three used here shows a rising realisation of *LH. All Khwe realisations of the depressed (voiced C₁) tones show a rising pitch pattern, (except for the alternative HH for MH with *HH and *HL – HH and MH are best considered in free variation); all Naro realisations of these tones show an initial L. Glui resists having distinct forms when the C₁ is voiced, only *LL show a different realisation to that of the default series.

**East Africa**

All East African languages with clicks have been described as having a two tone system; it should be noted that the tone system of Hadza has not yet been adequately worked out. At the surface level, no phonation type other than the normal has been noted.

<table>
<thead>
<tr>
<th>Tone underlying</th>
<th>*H/#L</th>
<th>*H/#L</th>
</tr>
</thead>
<tbody>
<tr>
<td>surface</td>
<td>two</td>
<td></td>
</tr>
<tr>
<td>Phonation Type</td>
<td>Normal</td>
<td></td>
</tr>
<tr>
<td>Segmentals</td>
<td>morph type unit of marginal validity</td>
<td></td>
</tr>
</tbody>
</table>

The click system seems to have three basic members, glottalised, voiceless and nasalised. Dahalo (Ho10) has, in its borrowings, simplified this by omitting the voiceless click. Sandawe (Ho8) does also have aspirated and voiced clicks; voiced clicks are extremely rare (2% of the total recorded), but aspirated and voiceless clicks may be historically in complementary distribution, there is synchronically an operative rule of interdependence between C₁ and C₂ in which the nature of the C₂ determines the C₁. The realisations of the voiceless series in Hadza (Ho9) vary between voiceless and aspirated, (Sands p.c.), there is no agreement between linguists who have had exposure to Hadza about how to describe this and whether, in fact, it is not free variation.
Conclusion
In its absence of distinctive phonation types, pre pKhoe patterns more with East African click languages. Its preference for glottalised, voiceless and nasalised clicks also places it with the East African pattern.

In tone, East Africa and !Xóõ have, both underlyingly and on the surface, a straightforward opposition between H and L. Juu and pKhoe have an underlying two tone system, but more complex realisations in the present day languages. If the complexity of the realisations of the tones of pKhoe in the daughter languages is taken as a result of the attempts of a language without distinctive phonation types coming to grips with the distinctions that these phonation types give, might this also be true of the situation in Juu? This would place Juu at a greater typological distance from !Xóõ than might casually be thought.

In all events, in Juu as well as in !Xóõ, a synchronic description should include an account of the relationship between click accompaniments and phonation types; this is mandatory in a diachronic description.

Caveats
The Juu suggestion are based on Elderkin 1988; in the light of later, more accurate description of aspiration types, the ideas on the connection between click accompaniment and phonation types requires further modification. The suggestion about the connection between click accompaniment and phonation type in !Xóõ is based on surmise and incomplete observation; a thorough elaboration of this will have to be based on Naumann’s presentation of the greater complexity in the Western variety of the language augmented by greater lexical data from that variety. The relationship between aspiration and voiceless clicks in Sandawe needs further work; at the present moment, as already mentioned, the nature of the C₁ is known to be susceptible of dependency on the nature of the C₂. Finally, despite the number of linguists who have dabbled in Hadza, the status of the aspirated consonants there still needs to be systematically established.
Note

Handout

Section 14 Three recent articles
This section is a basis for evaluating the validity of pKhoe reconstructions used in recent historically oriented articles.

Section 15 Naro nasalised click, no pharyngeal, LH
This section investigates the validity of the correspondence Naro LH G|ui HH with a nasalised click at C₁ by recording all instances Naro LH (without pharyngealisation) with nasalised click C₁ in Visser 2001; (prompted by Nakagawa 2011)

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