

[Text version of database, created 17/01/2011].

Annotated Swadesh wordlists for the North Khoisan group (Peripheral Khoisan family).

Languages included: Ju|'hoan [nkh-juh], ||Kxau||en [nkh-aue], !Kung [nkh-kng], Grootfontein !Kung [nkh-dkk], !O!Kung [nkh-okn], Ekoka !Xung (= !Xun) [nkh-ekk].

Reconstruction: Preliminary version available.

Data sources.

General:

Bleek 1929 = Bleek, Dorothea F. Comparative Vocabularies of Bushman Languages. Cambridge University Press. // *(A collection of mid-size vocabularies from 12 "Bushman" dialects (several North, South, and Central Khoisan idioms are represented), with most of the data collected by D. Bleek herself. Not as thorough as Bleek 1956, and even less reliable in regards to data transcription, but the English-Bushman data organization principle makes it a useful source to consult in the preparation of Swadesh wordlists.)*

Bleek 1956 = Bleek, Dorothea F. A Bushman Dictionary. American Oriental Society: New Haven, Connecticut. // *(A huge (almost 700 pages) collection of comparative data on Khoisan that includes both Dorothea F. Bleek's own collection and data from numerous other researchers published up until the 1930s (W. Bleek, L. Lloyd, etc.). Transcription quality varies in between all the different sources, but is generally unreliable, quite typical of all Khoisan data published before the second half of the XXth century. Nevertheless, the edition still contains a wealth of priceless data, particularly on extinct North and South Khoisan languages.)*

Ju|'hoan: Dickens 1994 = Dickens, Patrick. English-Ju|'hoan - / Ju|'hoan-English Dictionary. Köln: Rüdiger Köppe Verlag. // *(Large, posthumously edited dictionary, based on careful reexamination of J. Snyman's earlier [1975] dictionary with new data added. "Based on the dialect of Ju|'hoan spoken in the Nyae Nyae area of Namibia". Relies on the author's highly idiosyncratic orthography system, transliterated in the database.)*

Grootfontein !Kung: Doke 1925 = Doke, Clement M. An outline of the phonetics of the language of the Chû: Bushmen of north-west Kalahari. In: Bantu studies and general South African anthropology, 2 (3), pp. 129-165. // *(Brief article that contains a detailed*

description of the phonetical system of a North Khoisan dialect in the Grootfontein district. Also contains a small vocabulary, sufficient for about 75% of the Swadesh wordlist. Very high quality of data transcription for its time, although not entirely free of mistakes.)

!O!Kung: Snyman 1980 = Snyman, Jan W. The relationship between Angolan !Xu and Žu|'ōasi. In: Bushman and Hottentot linguistic studies 1979. Ed. by Jan W. Snyman. Pretoria: University of South Africa, pp. 1-58. // *(A sketch of the phonetical and grammatical peculiarities of a Northern dialect of the Ju (North Khoisan) family, with a small vocabulary in the appendix. The dialect is highly similar to, although not exactly identical, with the "N3" dialect described by D. F. Bleek in [Bleek 1929] and [Bleek 1956].)*

Ekoka !Xung: König & Heine 2008 = König, Christa; Heine, Bernd. A Concise Dictionary of Northwestern !Xun. Köln: Rüdiger Köppe Verlag. // *(Representative English-Ekoka and Ekoka-English dictionary based on field data collected by the authors.)*

Heikkinen 1986 = Heikkinen, Terttu. Phonology of the !Xū, dialect spoken in Ovamboland and western Kavango. In: South African Journal of African Languages (Pretoria), 6 (1), pp. 18-28. // *(Brief description of phonology, accompanied by an impressive vocabulary. Describes more or less the same dialect as [König & Heine 2008], with minor transcriptional and lexical differences.)*

Database compiled and annotated by: G. Starostin.

Reconstruction sources: G. Starostin, personal notes (partially published in: Starostin, George. From Modern Khoisan Languages to Proto-Khoisan: the Value of Intermediate Reconstructions. In: Aspects of Comparative Linguistics III [Aspekty komparativistiki III]. Orientalia et Classica, vol. XIX. Moscow, RSUH Publishers, pp. 337-470).

1. ALL

Ju|'hoan *wèšè* (1), ||Kxau||en *áisi* (1), Grootfontein !Kung *weše-sì* (1), !O!Kung *wεšɛ-šɛ* (1), Ekoka !Xung *wòhšē(-šē)* (1), Proto North Khoisan **wòe-še* (1).

References and notes:

Ju|'hoan: Dickens 1994: 281.

||Kxau||en: Bleek 1956: 153. Quoted as *ási* in [Bleek 1929: 15]. Secondary synonym: *||kaia* [Bleek 1929: 15] ~ *||kai* [Bleek 1956: 551] = Ju|'hoan *||kxáé* 'together'.

!Kung: Not attested. [Bleek 1929: 15] gives the form *ɔá* in this meaning; it is then later quoted as *ɔá* in [Bleek 1956: 30]. However, not only does this morpheme have no external parallels whatsoever in the meaning 'all', but it also looks very much like a variant of the numeral 'two' q.v., and the sole text example quoting it (*i ɔá |u |xoa* 'we are all alive') most likely means just 'both of us are alive', cf. Ju|'hoan *è-cí* 'us two' etc.

Grootfontein !Kung: Doke 1925: 153.

!O!Kung: Bleek 1956: 253; Bleek 1929: 15. Quoted as *wìsè* ~ *wèšè* in [Snyman 1980: 32], without reduplication.

Ekoka !Xung: König & Heine 2008: 71. Quoted as *wèšè* in [Heikkinen 1986: 26].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. No alternate stems. Reconstruction shape: The reconstruction follows the Ekoka variant as phonetically more archaic in its vocalism; the variant **wè-še* is also possible. Extra low tone in Ekoka is not, however, confirmed by the rest of the data. Structure and semantics: The form is morphologically complex: the derivation is transparently seen in Ekoka, cf. *wòhà* 'forever', *wòhè* 'some time ago, already, just' [König & Heine 2008: 71]. The meaning of the suffix **-še* however, remains unknown.

2. ASHES

Ju|'hoan *tǔ* (1), ||Kxau||en *tɔ*: (1), !Kung *tɔ*: ~ *tó* (1), !O!Kung *ɬwà* (-1), Ekoka !Xung *||ðhà* (2), Proto North Khoisan **tǔ* (1).

References and notes:

Ju|'hoan: Dickens 1994: 273.

||Kxau||en: Bleek 1956: 208. Quoted in a reduplicated variant as *tótó*: in [Bleek 1929: 17].

!Kung: Bleek 1956: 206. Quoted as *tɔ*: in [Bleek 1929: 17]. Secondary synonym: *ɬwá* [Bleek 1956: 649] ~ *ɬwa* [Bleek 1929: 17]. The latter root is less common in North Khoisan and may easily represent a recent borrowing from Central Khoisan.

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 649. Quoted as *ɬwà*: in [Bleek 1929: 17]; *ɬwá* in [Snyman 1980: 33]. The latter source adds a secondary synonym: *tǔo-tǔo* [ibid.]. This may be a more archaic (and "genuine" root) than *ɬwa*, a highly probable borrowing from Central Khoisan, but it is completely absent in Bleek's primary sources for the wordlist.

Ekoka !Xung: König & Heine 2008: 34. Translated as 'ash'. The dictionary also lists two more compound forms glossed as 'ashes' (sic): *dàɬà šjɨj* and *dàɬà !!ðhà*, where *dàɬà* = 'fire'. The first form literally means 'fire-excrement'; the main morpheme in the second, *!!ðhà*, is suspiciously similar to *||ðhà*, which indicates either a case of mistranscription or areal transmission (the latter is quite possible, since *!!ðhà* is a direct parallel to Ju|'hoan *ɬdǎh* 'soap', a cultural word most likely transmitted from Central Khoisan **ɬdǎ* 'ashes').

Proto North Khoisan: Distribution: The original root is well preserved in the Southern and Central clusters. The Northern cluster seems to have displaced it with a borrowing of Central Khoisan origin (^{*}!óà 'ashes'; the initial lateral click in Ekoka indicates a different root, but is possibly mistranscribed). Reconstruction shape: The reconstruction follows the Ju|'hoan variant, although it is not in perfect agreement with Angolan !O!Kung ^ǀǀo-^ǀǀo in terms of vocalism. (A secondary development ^{*}ǀ > ^ǀǀo is not out of the question).

3. BARK

Ju|'hoan ^ǀǀǀǀǀǀǀǀ (1), ||Kxau||en ^ǀǀo-si (2), !Kung ^ǀǀǀ ~ ^ǀǀǀ ~ ^ǀǀǀwa (2), !O!Kung ^ǀǀǀǀǀ (1), Ekoka !Xung ^ǀǀǀǀǀ (1), Proto North Khoisan ^{*}ǀǀǀǀǀǀ (1).

References and notes:

Ju|'hoan: Dickens 1994: 258.

||Kxau||en: Bleek 1956: 348. Quoted as ^ǀǀǀo-si in [Bleek 1929: 19]. Formally = plural form of ^ǀǀo 'skin' q.v.

!Kung: Bleek 1956: 348. Quoted as ^ǀǀǀ in [Bleek 1929: 19]. Same word as 'skin' q. v. More specifically, may be expressed by the compound !au-^ǀǀ, lit. 'tree-skin' [Bleek 1956: 348].

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 622. Quoted as ^ǀǀǀǀǀ in [Bleek 1929: 19]. The same source also lists a secondary synonym: ^ǀǀǀǀǀ, confirmed in [Bleek 1956: 344]. Semantic difference is unclear, but the second word has no external parallels.

Ekoka !Xung: König & Heine 2008: 61. Quoted as ^ǀǀǀǀǀ 'peel or bark' in [Heikkinen 1986: 26].

Proto North Khoisan: Distribution: The original root is fully preserved in the Northern cluster and partially in the Southern one. Known alternates are limited to a metaphoric semantic transfer {'skin' > 'bark'} in the Central cluster. Reconstruction shape: The reconstruction is problematic in the vocalism department; however, the development ^{*}o > u is attested for Ekoka several times, particularly before the front vocalism of the second syllable. We tentatively follow the more complex shape of the Ju|'hoan variant.

4. BELLY

Ju|'hoan ^ǀǀǀǀ (1), ||Kxau||en ^ǀǀǀǀ (1), !Kung ^ǀǀǀ ~ ^ǀǀǀ (1), Grootfontein !Kung ^ǀǀǀ (1), !O!Kung ^ǀǀǀ (1), Ekoka !Xung ^ǀǀǀǀ (1), Proto North Khoisan ^{*}ǀǀǀǀ (1).

References and notes:

Ju|'hoan: Dickens 1994: 213.

||Kxau||en: Bleek 1956: 387. Quoted as ^ǀǀǀǀ in [Bleek 1929: 21].

!Kung: Bleek 1956: 388. Polysemy: 'stomach / belly'.

Grootfontein !Kung: Doke 1925: 159. Polysemy: 'stomach / belly'. The word ^ǀǀǀ: [ibid.] is also translated as 'inside; belly', but the latter meaning may be fictitious.

!O!Kung: Bleek 1956: 388. Quoted as ^ǀǀǀ in [Bleek 1929: 21].

Ekoka !Xung: König & Heine 2008: 30; Heikkinen 1986: 24. The former source lists the meaning 'stomach', the latter source gives 'belly'; most likely, a case of polysemy as in all the other dialects in this family.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are

generally regular and trivial. Structure and semantics: Polysemy {'belly' & 'stomach'} was present on the proto-level.

5. BIG

Ju|'hoan $\tilde{a}a\tilde{a}$ (1), ||Kxau||en $\tilde{a}a$ (1), !Kung $\tilde{a}a$ (1), Grootfontein !Kung $\tilde{a}a$ (1), !O!Kung $\tilde{a}a$ ~ $\tilde{a}a$ ~ $\tilde{a}a$ (1), Ekoka !Xung $\tilde{a}a$ ~ $\tilde{a}a$ (1), Proto North Khoisan $*\tilde{a}a$ ~ $*\tilde{a}a$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 250. Singular subject action verb/adjective; the plural subject form is $\tilde{a}a$ [Dickens 1994: 309].

||Kxau||en: Bleek 1956: 471; Bleek 1929: 22. Secondary synonym: $\tilde{a}a$ [Bleek 1956: 488; Bleek 1929: 22]. It is unclear if this form, with no parallels in other NK dialects, is related to $\tilde{a}a$ or represents an entirely different root.

!Kung: Bleek 1956: 612. The transcription $\tilde{a}a$ in [Bleek 1929: 22] is most likely a misprint for $\tilde{a}a$; the latter form, along with several variants, is quoted in [Bleek 1956: 618] with the meaning '(to be) large, increase' (a compound of 'big' with another stem).

Grootfontein !Kung: Doke 1925: 160.

!O!Kung: Bleek 1956: 612, 613. Quoted as $\tilde{a}a$ in [Bleek 1929: 22]. Singular subject action verb/adjective; the plural subject form is $\tilde{a}a$ [Bleek 1929: 22]. Secondary synonym: $\tilde{a}a$ [Bleek 1956: 565]; [Snyman 1980: 33]. The latter is clearly a different root (with reduplication and without the nasal click efflux), but the semantic difference is unclear, and external parallels for $\tilde{a}a$ are lacking.

Ekoka !Xung: König & Heine 2008: 57. Quoted as $\tilde{a}a$ in [Heikkinen 1986: 26]. Singular subject action verb/adjective; the plural subject form is $\tilde{a}a$ *ibid*.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are generally regular, indicating an original retroflex nasalized click and a glottal stop between the vowels. Tonal reconstruction is highly approximate. Various forms show fluctuations between nasalized and plain vowels; this may be due to the influence of the nasalized click.

6. BIRD

Ju|'hoan $c\tilde{a}m\tilde{a}$ (1), ||Kxau||en *cama* (1), !Kung *caba* (1), Grootfontein !Kung $c\tilde{a}u\tilde{a}$ (1), !O!Kung *cama* (1), Ekoka !Xung $\check{c}\tilde{a}m\tilde{a}$ (1), Proto North Khoisan $*c\tilde{a}(m)-m\tilde{a}$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 278.

||Kxau||en: Bleek 1956: 211. Quoted as *cana* (misprint?), *camama* 'little bird' in [Bleek 1929: 22].

!Kung: Bleek 1956: 210; Bleek 1929: 22. The latter source also quotes *kxani* in the meaning 'little bird' (the word is of Khoekhoe origin).

Grootfontein !Kung: Doke 1925: 153.

!O!Kung: Bleek 1956: 211; Bleek 1929: 22.

Ekoka !Xung: König & Heine 2008: 67. Quoted as $\check{c}\tilde{a}m\tilde{a}$ in [Heikkinen 1986: 22]. Plural form is $\check{c}\tilde{a}-\tilde{a}h\tilde{e}$, indicating that $-m\tilde{a}$, pl. $-\tilde{a}h\tilde{e}$ is detachable as the standard diminutive suffix. The original form is still found as $\check{c}\tilde{a}m$ 'poultry, bird (life form), aeroplane', i. e. $\check{c}\tilde{a}m\tilde{a} < *c\tilde{a}m-m\tilde{a}$.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are more or less straightforward. The alveolar affricate regularly develops into postalveolar in Ekoka. Tonal reconstruction is approximate. Structure and semantics: the word is morphologically complex, the second component clearly identifiable as Proto-North Khoisan **-ma* 'small; diminutive suffix'. The root morpheme is therefore **c̣ā* or, perhaps, **c̣am* (cf. the notes to Ekoka !Xung).

7. BITE

Ju|'hoan *ĩái* (1), ||Kxau||en *ĩâ ~ ĩe(ɛ)* (1), !Kung *ĩɛ ~ ĩê*: (1), !O!Kung *ĩâ* (2), Ekoka !Xung *ʔĩāē-ń* (1), Proto North Khoisan **ʔĩāē* (1).

References and notes:

Ju|'hoan: Dickens 1994: 248. Polysemy: 'to bite / to chew'.

||Kxau||en: Bleek 1956: 477, 510. Quoted as *ĩɛ* in [Bleek 1929: 22].

!Kung: Bleek 1956: 477. Quoted as *ĩé*: in [Bleek 1929: 22]. The latter source also quotes *ta* in the same meaning, but the word is Central Khoisan in origin (in [Bleek 1956] it is only attested for Naro, a close contact of !Kung).

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 341; Bleek 1929: 22. [Snyman 1980: 34] quotes the forms *ĩai-||dā* (sg.), *ĩai-!xóm* (pl.) in the meaning 'to bite off'. The first root in these compounds is clearly of Proto-North Khoisan descent, unlike the isolated form *ĩâ* in D. Bleek's transcription. Bleek, however, does not mention the existence of a separate *ĩai* 'bite' in !O!Kung, and it is not highly likely that *ĩâ* could be a mistranscription of the former.

Ekoka !Xung: König & Heine 2008: 50. Compound form (second component is *ń* 'to eat' q.v.). A synonymous form [König & Heine 2008: 50] is *ńāē*; this may be simply a phonetic variant of the original form with the complex preglottalized nasalized click. Quoted as *ʔĩāē* (Western dialect) ~ *ĩé* (Eastern dialect) in [Heikkinen 1986: 25].

Proto North Khoisan: Distribution: Preserved in most daughter dialects, with the possible exception of Bleek's !O!Kung, with a recent replacement of unknown status. Reconstruction shape: Correspondences are generally regular. The special preglottalized nasalized click is preserved in Ekoka, but merges with the simple nasal click in the other dialects. The vocalic correspondence "Ju|'hoan *ai*: Ekoka *ae*" indicates an older **ae*.

8. BLACK

Ju|'hoan *žó* (1), ||Kxau||en *žó*: (1), !Kung *žó ~ žò ~ žò* (1), !O!Kung *žo ~ žu* (1), Ekoka !Xung *žò* (1), Proto North Khoisan **žò* (1).

References and notes:

Ju|'hoan: Dickens 1994: 221. Polysemy: 'black / dark'.

||Kxau||en: Bleek 1956: 265; Bleek 1929: 22.

!Kung: Bleek 1956: 33. Quoted as *žó*: in [Bleek 1929: 22].

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 33, 34. Quoted as *žò*: in [Bleek 1929: 22]; *žó* in [Snyman 1980: 34].

Ekoka !Xung: König & Heine 2008: 22. Polysemy: 'black / dark / dirty'. Quoted as *žó* in [Heikkinen 1986: 26].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial.

9. BLOOD

Ju!'hoan /ʔáŋ (1), ||Kxau||en /ʔi (1), !Kung /ʔi ~ /ʔiŋ (1) / ʔóru ~ ʔoru (2), !O!Kung *yalo* ~ *yalu* (-1), Ekoka !Xung ʔú ~ ʔú (2), Proto North Khoisan */ʔaŋ (245).

References and notes:

Ju!'hoan: Dickens 1994: 295. Polysemy: 'blood / money'. Secondary synonym: *zǎǎ*, of unclear origin but most likely tabooistic in nature [Dickens 1994: 221].

||Kxau||en: Bleek 1956: 292; Bleek 1929: 22.

!Kung: Bleek 1956: 292, 621; Bleek 1929: 22. L. Lloyd's texts contain examples of both words used in the meaning 'blood', with no obvious differentiation between the two. External data indicate that this may be a gradual replacement of the old root /ʔi with the innovation ʔoru.

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 72. Quoted as *yalu* ~ *yula* in [Bleek 1929: 22]; *yàlò* ~ *yúlà* in [Snyman 1980: 34]. The word contains a near-unique case of initial *y-* (not only in !O!Kung, but in North Khoisan as a whole), shows no external parallels and is consequently, in all likelihood, a borrowing from an unknown source. J. Snyman adds a secondary synonym, *lànú*, whose external connections are much stronger, but D. Bleek does not mention this word in her recordings of "N3".

Ekoka !Xung: König & Heine 2008: 60. Quoted as ʔóru in [Heikkinen 1986: 26].

Proto North Khoisan: Distribution: The original root is well preserved everywhere except for the Northern dialect cluster, but is encountered even there, seemingly as an archaism. Replacements: (a) !O!Kung *yalo* of unknown origin, probably non-native because of initial *y-*; (b) Northern */ʔoru, probably an authentic root but without a good etymology; (c) Northern */am, quoted here for Angolan !Xung and also reflected in several other dialects of this cluster; the similarity with */ʔaŋ is notable, but the origin is probably different (click influxes as well as finals are incompatible). Reconstruction shape: Reconstruction of the vocalic part of the syllable is highly questionable and problematic (the correspondence series is unique). Only the presence of a velar nasal is certain; neither the quality of the first vocalic element nor the original tonal scheme can be fully ascertained.

10. BONE

Ju!'hoan ʔú (1), ||Kxau||en ʔú: [~ !u ~ !ú] (1), !Kung !ù ~ !ú (1), Grootfontein !Kung ʔú: (1), !O!Kung ʔu ~ ʔo (1), Ekoka !Xung ʔú (1), Proto North Khoisan */ʔú (1).

References and notes:

Ju!'hoan: Dickens 1994: 325.

||Kxau||en: Bleek 1956: 447, 492; Bleek 1929: 23. D. Bleek seems to occasionally confuse ʔu 'bone' with ʔu 'horn' (her recorded polysemy 'bone / horn' is most likely fictitious), which explains the unexpected appearance of variants with simple velar efflux (instead of the expected glottal stop).

!Kung: Bleek 1956: 447. Quoted as *!ú:* in [Bleek 1929: 23]. The lack of glottal stop efflux is strange and may imply that L. Lloyd, just like D. Bleek after her, was confusing the word 'bone' with the word 'horn'.

Grootfontein !Kung: Doke 1925: 159.

!O!Kung: Bleek 1956: 492; Snyman 1980: 34. Quoted as *!ú:* in [Bleek 1929: 23].

Ekoka !Xung: König & Heine 2008: 88; Heikkinen 1986: 24.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are generally regular and trivial. The word is normally assigned the regular high tone, but P. Dickens indicates an extra high tone for Ju|'hoan. This is reflected in the reconstruction, but there is no certainty about the presence of a separate extra high tone in Proto-North Khoisan.

11. BREAST

Ju|'hoan *ǀòʔá* (1), ||Kxau||en *ǀwá* (1), !Kung *ǀé* (2), !O!Kung *toa* *ǀō* (3), Ekoka !Xung *ǀōǀǀ* (4), Proto North Khoisan **ǀòʔá* # (1).

References and notes:

Ju|'hoan: Dickens 1994: 213. Different from *kù* 'female breast' [Dickens 1994: 230].

||Kxau||en: Bleek 1956: 390; Bleek 1929: 28. Different from *ǀʔa* 'female breast' [Bleek 1929: 24] (curiously, the form is absent in [Bleek 1956]).

!Kung: Bleek 1956: 659; Bleek 1929: 28.

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 355. Quoted as *ǀoa* *ǀō* in [Bleek 1929: 28]. Obviously a compound; neither of the two parts are, however, attested individually, or have transparent equivalents in closely related dialects. Obscure.

Ekoka !Xung: König & Heine 2008: 66. Quoted as *ǀōǀǀ* in [Heikkinen 1986: 22]. Different from *kūú* 'female breast' [König & Heine 2008: 42] and *ǀám* 'female breast, nipple' [König & Heine 2008: 17].

Proto North Khoisan: Distribution: Found in the Southern and Central clusters, but conspicuously absent in the Northern dialects. Replacements: (a) !O!Kung *toa* *ǀō*, of unknown origin; (b) Ekoka *ǀōǀǀ*, possibly = various dialectal forms, recorded by J. Snyman, with the meaning 'lung', e. g. Tsintsabis *soǀǀ*, Cuando *ǀōǀǀ*, etc., eventually = Ju|'hoan *ǀōǀǀ*; if so, clearly an innovative development {'lungs' > 'chest'}. On the other hand, the word *ǀǀǀnà* 'lung' is attested in Ekoka all by itself [König & Heine 2008: 65], so this may be some sort of semantic contamination. Reconstruction shape: the only reliably transcribed form is in Ju|'hoan; reconstruction variants may include **ǀòʔá*, with a retroflex click.

12. BURN TR.

Ju|'hoan *kǀǀú* (1), ||Kxau||en *kou* ~ *kau* (1), !Kung *kúú* ~ *kou* ~ *kòú* (1), Ekoka !Xung *kǀǀú* (1), Proto North Khoisan **kǀǀú* (1).

References and notes:

Ju|'hoan: Dickens 1994: 231. Polysemy: 'to burn / to light, set alight'.

||Kxau||en: Bleek 1956: 83, 102. Both forms are phonetic variants, to which it is perhaps possible to add a third one, *gu*

[Bleek 1956: 49], although in this form the quoted example for the word reflects intransitive use. [Bleek 1929: 25] quotes two more roots, *du* and *če*, in the meaning 'burn (tr.)', but neither is verified through [Bleek 1956], where the form *du* is translated as 'to heat slowly', and the form *če* is not found at all.

!Kung: Bleek 1956: 102, 108. Quoted as *kuú*: in [Bleek 1929: 25].

Grootfontein !Kung: Not attested.

!O!Kung: Not attested. In [Bleek 1929: 25] the possible equivalent is listed as $\| \hat{a}lasə$, but the more accurate entry in [Bleek 1956: 525] explains this as $\| \hat{a}la-se$ 'to burn in (smth.)' = $\| \hat{a}la$ 'to mark, tattoo, write'. [Snyman 1980: 35] has $\hat{f}e$ 'to burn down'.

Ekoka !Xung: König & Heine 2008: 42; Heikkinen 1986: 21. Polysemy: 'to burn / to roast / to shine' (used as both transitive and intransitive stems). Secondary synonym: $!P^{h\tilde{u}}\tilde{b}$ [König & Heine 2008: 95; Heikkinen 1986: 24] (exact difference in meaning stays unclear, but this form has no external parallels).

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial, except for the tonal reconstruction, which is approximate (the pattern is probably mid-rising, as in Ekoka).

13. CLAW(NAIL)

Ju!'hoan *!ú?úrí* (1), ||Kxau||en $\|uru$ (1), !Kung $\|uru$ (1), Grootfontein !Kung $\|urù$ (1), !O!Kung $\|ulu \sim \|nu$ (1), Ekoka !Xung *!ūhú* (1), Proto North Khoisan **!ū?rú* (1).

References and notes:

Ju!'hoan: Dickens 1994: 318. Polysemy: 'fingernail / toenail'; more precise denotation of the former is *!áú-!ú?úrí*, lit. 'hand-nail'.

||Kxau||en: Bleek 1956: 593; Bleek 1929: 60. Textually attested in the compound form *!au-||uru*, lit. 'hand-nail'.

!Kung: Bleek 1956: 593; Bleek 1929: 60.

Grootfontein !Kung: Doke 1925: 160.

!O!Kung: Bleek 1956: 586, 592; Bleek 1929: 61.

Ekoka !Xung: König & Heine 2008: 84. Quoted as *!ú?úrí* in [Heikkinen 1986: 24]. Also encountered as a compound: $\| \hat{a}o \hat{h}ú$, lit. 'hand-nail' [König & Heine 2008: 34].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: The rare retroflex click **!* is clearly indicated by the variation between alveolar and lateral articulation in particular dialect clusters, and is explicitly attested in the Grootfontein dialect. Ekoka !Xung, however, irregularly yields alveolar reflexation instead of lateral, possibly due to semantic contamination with **!uru* 'quiver' ('nail' as 'hand sheath?'). The correspondence "Ju!'hoan -V?V- : Ekoka -V-" is currently interpreted as reflecting an original sequence **-V?-[C]-*.

14. CLOUD

Ju!'hoan $\| \hat{a} = !kxúí$ (1), ||Kxau||en $\| \hat{a} = kxwí-sí$ (1), !Kung $\|a \sim \|a$ (2), !O!Kung *!om* # (3), Ekoka !Xung $\| \hat{o}b\bar{o}-xà$ (4), Proto North Khoisan **! \hat{a} = !kxúí* # (1).

References and notes:

Ju|'hoan: Dickens 1994: 211. Literally 'rain-hair'.

||Kxau||en: Bleek 1956: 374; Bleek 1929: 29. Literally 'rain-hairs'.

!Kung: Bleek 1956: 505, 522; Bleek 1929: 29. Same word as 'rain'. Judging by available data, the !Kung dialect described by L. Lloyd is the only one where the meaning 'cloud' itself can be expressed by the same word as 'rain', without an additional second component ('hair', etc.): cf. examples such as $\llbracket a \text{ ti } \#^h auwa \bar{e}i \rrbracket$ 'clouds travel in the sky'. It cannot be verified whether they may be interpreted as a metonymical 'rain travels in the sky'; the dialect may have had a special word for 'white cloud', but it is not attested in L. Lloyd's data.

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1929: 29. Dubious entry, since it is not confirmed in [Bleek 1956], nor anywhere else. Also, D. Bleek indicates that the plural form is *!li*, possibly implying that the form is morphologically segmentable, but no such mechanism of segmentation exists in living North Khoisan dialects.

Ekoka !Xung: König & Heine 2008: 100. Glossed as 'white cloud', distinguished from $!^h \bar{o} w \bar{a}$ 'cloud' (= 'raincloud') [König & Heine 2008: 82].

Proto North Khoisan: Distribution: The compound form, lit. 'sky-hair', is encountered in the Southern and Central clusters, but not in the Northern one, where several different roots are present, none of them with a solid common North Khoisan etymology (none, however, can be seen as obvious borrowings). Since even different dialects of the Northern cluster disagree in between themselves, we present no alternate etyma. Reconstruction shape: See under 'rain' and 'hair', resp.

15. COLD

Ju|'hoan $\# \hat{a} \bar{r} \acute{u}$ (1), ||Kxau||en $\# x \acute{i}$ (2), !Kung $\# \acute{a} o \sim \# \acute{a} \acute{o}$ (1), Grootfontein !Kung $\# x \eta$: (2), !O!Kung $\# k x \acute{a} \acute{u}$ (3), Ekoka !Xung $!! \hat{a} \bar{o} \sim !! \hat{a} \bar{o} \bar{o}$ (1), Proto North Khoisan $* \# \hat{a} \bar{r} \acute{u}$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 300.

||Kxau||en: Bleek 1929: 29; Bleek 1956: 680. Alternately transcribed as $\# x \bar{e}$ in [Bleek 1956: 679]. A possible synonym is */au* 'to be cold, bare' [Bleek 1956: 303]; however, in the English-||Kxau||en vocabulary of [Bleek 1929] only the first root is adduced.

!Kung: Bleek 1956: 656. [Bleek 1929: 29] gives the form $\# a r a u$ instead, but it is unconfirmed in [Bleek 1956] and unsupported by external data; possibly erroneous.

Grootfontein !Kung: Doke 1925: 158. Secondary synonym: $!^h \bar{a}$: [Doke 1925: 159].

!O!Kung: Bleek 1956: 335. Quoted as $\# k \bar{e} a u \sim \# k x a u$ in [Bleek 1929: 29].

Ekoka !Xung: König & Heine 2008: 89. Quoted as $\# \hat{a} \bar{o} \bar{o}$ in [Heikkinen 1986: 23]. Polysemy: 'cold / cool / good, well'.

Proto North Khoisan: Distribution: Preserved (mostly) in the Northern and Central clusters. Replacements: (a) Southern cluster: $* \# x \bar{a} \bar{i}$, possibly reflecting a rare semantic development {'to tremble' > 'to be cold'}; (b) !O!Kung $\# k x \acute{a} \acute{u}$ of unknown origin (not likely to be a mistranscription of $* \# \hat{a} \bar{r} \acute{u}$). Reconstruction shape: Correspondences are regular and trivial.

16. COME

Ju|'hoan $\# \acute{e}$ (1), ||Kxau||en $\# \acute{e} \sim \# \acute{e} \acute{i}$ (1), !Kung $\# \acute{e} \sim \# \acute{e} \acute{e}$: (2), Grootfontein !Kung $\# w \bar{e}$: # (3), !O!Kung $\# \acute{e} \sim \# \acute{e} \acute{i}$ (1), Ekoka !Xung $\# \acute{e}$ (2), Proto North Khoisan $* \# \acute{e} \acute{i}$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 275. Secondary synonym: *ǀàè* [Dickens 1994: 202], glossed as 'come, arrive (by day)'. The two words are also encountered as a compound: *ǀá-ǀàè* 'come'. Contexts, idiomatic use, and statistical frequency all suggest that *ǀàè* means a more temporally marked 'arrive' rather than simply 'come'.

ǀǀKxauǀen: Bleek 1956: 216, 228; Bleek 1929: 30. The variant *ǀá*, with different vocalism, is only attested in [Bleek 1929] and may be mistaken.

ǀKung: Bleek 1956: 277. Quoted as *ǀe* in [Bleek 1929: 30]. The latter source also adds a secondary synonym *ǀe ~ ǀá* analysis of contexts in [Bleek 1956: 178] as well as external data, however, suggests that the basic meaning of this word is 'to return, come back', whereas *ǀe* is simply 'come' (cf. the following example: *sa tí u, sa tí ǀe* 'they two go out, they two come in', where it forms an antonymous pair with *u* 'to go').

Grootfontein ǀKung: Doke 1925: 153. Somewhat dubious; corresponding forms in related dialects (e. g. Ju|'hoan *ǀòè*) usually have an imperative meaning ('come!'). Since Doke gives no syntactic contexts, it is possible that in the Grootfontein dialect it is also used primarily as an imperative. Alternately, the word *ǀè*: [Doke 1925: 157] is also translated as 'to travel, to come', which is, however, unlikely to represent the Swadesh meaning either.

ǀO!Kung: Bleek 1956: 216, 228. Quoted as *ǀá ~ ǀí ~ ǀǐ* in [Bleek 1929: 30]. The latter source adds *ǀe* as a potential synonym, only scantily confirmed through examples in [Bleek 1956] (statistically, *ǀí* is much more frequent).

Ekoka ǀXung: König & Heine 2008: 28; Heikkinen 1986: 23. Quasi-synonyms include *ǀxǀì* [König & Heine 2008: 101] (glossed as 'come, cross'; meaning given as 'to come (Western dialect), to come out (Eastern dialect)' in [Heikkinen 1986: 25]) and *ǀí* 'come!' (imperative) [König & Heine 2008: 65].

Proto North Khoisan: Distribution: The original root is strongly preserved in the Central and Southern clusters, but in the Northern cluster it seems to have been relegated to the imperative function ('come!'), replaced in the original meaning by **ǀàè*. The latter root is also of Proto-Northern Khoisan origin, and co-exists in most dialects with **ǀá* with subtle differences in semantics (judging by certain examples and translations, **ǀá* = 'to come (proceed in the listener's direction)', **ǀàè* = 'to arrive (reach the final destination)'). Replacements: Northern cluster: **ǀàè* {'to come' > 'to arrive'}. Reconstruction shape: Correspondences are regular and trivial, including reconstruction of a high tonal pattern.

17. DIE

Ju|'hoan *ǀáí* (1), ǀǀKxauǀen *ǀé: ~ ǀéí ~ ǀí* (1), ǀKung *ǀé ~ ǀè* (1), Grootfontein ǀKung *ǀáí* (1), ǀO!Kung *ǀé ~ ǀe* (1), Ekoka ǀXung *ǀāē ~ ǀē* (1), Proto North Khoisan **ǀe* (1).

References and notes:

Ju|'hoan: Dickens 1994: 309. Singular subject action verb; the plural subject form is *ǀàò* [Dickens 1994: 311].

ǀǀKxauǀen: Bleek 1956: 658, 662; Bleek 1929: 33. Also transcribed as *ǀe, ǀé* in [Bleek 1956: 419] ("unusual form"). Singular subject action verb; the plural subject form is *ǀau* [Bleek 1929: 33].

ǀKung: Bleek 1956: 566. Singular subject action verb; the plural subject form is *ǀau* [Bleek 1956: 561].

Grootfontein ǀKung: Doke 1925: 159.

ǀO!Kung: Bleek 1956: 566. Quoted as *ǀáí* in [Snyman 1980: 36]; *ǀé:* in [Bleek 1929: 33]. The latter source additionally lists *ǀò:* as a synonym; this is a transparent borrowing from Central Khoisan. It is not confirmed in [Bleek 1956]. Singular subject action verb; the plural subject form is *ǀau* [Bleek 1956: 561].

Ekoka ǀXung: König & Heine 2008: 96. Singular subject action verb; the plural subject form is *ǀāō* [ibid.]. Quoted as *ǀāē*

(Eastern dialect), $\|\bar{e}$ (Western dialect) in [Heikkinen 1986: 25] (plural subject form is $\|\bar{a}\bar{o}$).

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: The click is to be reconstructed as retroflex, based on perfect correspondences all around (except for the strange transcription with palatal \ddot{z} in //Kxau//en). The vowel was most likely *e, with regular diphthongization in Ju|'hoan and certain Ekoka lects. Tonal information is contradictory and so far inconclusive. The word had a lexical variant *!ao for the plural action verb; the two may have been morphologically related on a Pre-Proto-North Khoisan level, but the model is not seen in any other examples.

18. DOG

Ju|'hoan $\ddot{z}^h\ddot{u}\ddot{i}$ (1), //Kxau//en !ɔ (1), !Kung $\ddot{z}^hwé \sim \ddot{z}wé$ (297), Grootfontein !Kung $\ddot{z}^hwɪ: \sim \eta\ddot{z}^hwɪ:$ (1), !O!Kung $\ddot{z}wé$ (1), Ekoka !Xung $\|\bar{h}\bar{o}\bar{e}$ (1), Proto North Khoisan * $\ddot{z}^ho\bar{i} \sim * $\ddot{z}^ho\bar{e}$ (1).$

References and notes:

Ju|'hoan: Dickens 1994: 207. Secondary synonyms: (a) $\ddot{z}^h\bar{o}\bar{a}$ (with the exact same rare click as the initial consonant, this must be a dialectal variant of the same root) [Dickens 1994: 207]; (b) !kxúí (= 'hair, fur'; probably a tabooistic equivalent) [Dickens 1994: 315].

//Kxau//en: Bleek 1956: 436; Bleek 1929: 34. Spelling with the alveolar click ! in these sources may in reality reflect palatal click \ddot{z} .

!Kung: Bleek 1956: 662, 666; Bleek 1929: 34.

Grootfontein !Kung: Doke 1925: 156, 158.

!O!Kung: Bleek 1956: 666; Bleek 1929: 34. Entirely different stem quoted in [Snyman 1980: 37]: ! $\bar{h}\bar{o}\bar{e}$ (slightly similar phonetically, but ultimately probably unrelated).

Ekoka !Xung: König & Heine 2008: 32. Quoted as $\ddot{z}^h\bar{o}\bar{e}$ in [Heikkinen 1986: 23].

Proto North Khoisan: Distribution: Preserved in all daughter dialects, although in different morphological shapes. Reconstruction shape: All reliably transcribed sources agree upon * \ddot{z}^h - as the original click articulation, and labial articulation of the following vowels. Ju|'hoan, however, shows at least two different morphological variants: $\ddot{z}^ho\bar{a}$ and * $\ddot{z}^ho\bar{i} > \ddot{z}^h\bar{u}\bar{i}$, and Ekoka adds a possible third ($\ddot{z}^ho\bar{e}$). This can be interpreted as reflecting three original nominal suffixes (archaic class markers?) and is analogous to similar variations in many other cases. The bare root would then be reconstructible as * \ddot{z}^ho .

19. DRINK

Ju|'hoan \check{c}^hi (1), //Kxau//en $\check{c}i$ (1), !Kung $\check{s}i\eta \sim \check{c}i\eta$ (1), Grootfontein !Kung $\check{s}\eta:$ (1), !O!Kung $\check{c}i$ (1), Ekoka !Xung $\check{s}\eta$ (1), Proto North Khoisan * $\check{c}^hi\eta$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 268.

//Kxau//en: Bleek 1956: 228. Quoted as $\check{c}i$ in [Bleek 1929: 34].

!Kung: Bleek 1956: 180, 230; Bleek 1929: 34. Secondary synonym: !kx [Bleek 1956: 117; Bleek 1929: 34]. The latter, however, is unquestionably a Central Khoisan word, not met in actual texts.

Grootfontein !Kung: Doke 1925: 155.

!O!Kung: Bleek 1956: 228. Quoted as \tilde{c} in [Bleek 1929: 34]; $\xi\tilde{a}\eta \sim \tilde{c}^h\tilde{a}\eta \sim \tilde{c}^h\tilde{r}\eta$ in [Snyman 1980: 37].

Ekoka !Xung: König & Heine 2008: 18. Quoted as $\tilde{c}^h\tilde{a}\eta$ (Eastern dialect), $\xi\tilde{a}\eta \sim \xi^h\tilde{a}\eta$ (Western dialect) in [Heikkinen 1986: 22].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Initial \tilde{c}^h - clearly indicated by Ju|'hoan data. Reconstruction of the vocalic part is problematic, mainly because of the lack of any traces of a nasal consonant or nasalization in Ju|'hoan. Nevertheless, loss of the nasal in this particular context may still have been conditioned phonologically. Aspiration in Ju|'hoan is confirmed in several other dialects; it may be connected with the ultra-low tone attested for Ekoka.

20. DRY

Ju|'hoan **!kxáú** (1), !Kung **!!áó** ~ **|| áó** ~ **||àó** ~ **||kxáó** (1), Grootfontein !Kung **!ʔau** (1), Ekoka !Xung **||xʔāō** (1), Proto North Khoisan ***!!kxau** (1).

References and notes:

Ju|'hoan: Dickens 1994: 314. The synonym $\beta\tilde{o}$ is, most likely, of Khoekhoe origin (Nama $\beta\tilde{o}$) and not the basic equivalent for this notion [Dickens 1994: 296].

||Kxau||en: Not attested.

!Kung: Bleek 1956: 470, 558. [Bleek 1929: 35] does not contain these items (only **||áo** in the verbal meaning 'to dry (intr.)'), but gives a strange, unparalleled entry $\tilde{c}a$ in the adjectival meaning. It is, perhaps = $\tilde{c}a$ 'to pour, spill' (i. e. 'spilt' mistaken for 'dry').

Grootfontein !Kung: Doke 1925: 160. Tone not ascertained. Meaning given as 'dry; arid'.

!O!Kung: Not attested.

Ekoka !Xung: König & Heine 2008: 103. Adjectival form; the verbal stem is formed through tonal change (**||kxāō** 'be dry, hard'). Quoted as **||kxāō** 'become dry or hard' in [Heikkinen 1986: 26].

Proto North Khoisan: Distribution: Preserved in all daughter dialects (at least, where the form is attested). Reconstruction shape: Correspondences are mostly regular and trivial. The correspondence between Ekoka **||-** and Ju|'hoan **!-** indicates an original retroflex click. The tonal pattern, however, is unclear (level tone in Ekoka vs. rare "ultra-high" tone in Ju|'hoan); the original pattern was probably composite.

21. EAR

Ju|'hoan **!ʔhúí** (1), ||Kxau||en **/wí** (1), !Kung **/úí** (1), Grootfontein !Kung **!ʔwí** (1), !O!Kung **/wí** (1), Ekoka !Xung **!ʔhúí** (1), Proto North Khoisan ***!ʔhúí** (1).

References and notes:

Ju|'hoan: Dickens 1994: 296. The synonym $\beta\tilde{o}\tilde{a}\tilde{e}$ is, like many other synonyms for bodyparts, most likely an "educated" word of Khoekhoe provenance (Nama $\beta\tilde{a}\tilde{e}$ 'ear'), although the first component remains unclear.

||Kxau||en: Bleek 1956: 334; Bleek 1929: 35.

!Kung: Bleek 1956: 324. Quoted as $\beta\tilde{y}\tilde{i} \sim \beta\tilde{y}h\tilde{i}$ in [Bleek 1929: 35].

Grootfontein !Kung: Bleek 1956: 334. Doke 1925: 157.

!O!Kung: Quoted as /wì in [Bleek 1929: 35]; /ʔʰúí in [Snyman 1980: 37].

Ekoka !Xung: König & Heine 2008: 78; Heikkinen 1986: 23.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Ju!'hoan and Ekoka forms (the most reliable ones) completely coincide and justify the current reconstruction.

22. EARTH

Ju!'hoan *kxà* (1), ||Kxau||en *kxa* (1), !Kung *kxá* (1), Grootfontein !Kung *kxá*: (1), !O!Kung *kxa* (1), Ekoka !Xung *kxà* (1), Proto North Khoisan **kxà* (1).

References and notes:

Ju!'hoan: Dickens 1994: 231.

||Kxau||en: Bleek 1956: 118; Bleek 1929: 35. The latter source also quotes *čà* as a synonym, but the form has not reappeared in [Bleek 1956] and has not been confirmed by any other data, so it must have been erroneous.

!Kung: Bleek 1956: 118. Quoted as *kxa* in [Bleek 1929: 35]. The latter source also quotes //wì as a synonym; the word is seemingly confirmed in the meaning 'earth' in [Bleek 1956: 538], but lacks any sort of external parallels. It is, however, nearly homophonous with Kavango (Ekoka) !Kung //úʔi 'termite hill'; comparing this fact with the lone textual example supporting it (šú *tanki ti lum* //wì 'other people fill in the earth' /over a dead man's body/) would suggest that the real meaning is a more specific '(earth) mound'.

Grootfontein !Kung: Doke 1925: 155. Secondary synonym: *ũʔi* [Doke 1925: 160] (tone not ascertained).

!O!Kung: Bleek 1956: 117; Bleek 1929: 35.

Ekoka !Xung: König & Heine 2008: 43; Heikkinen 1986: 21.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Ju!'hoan and Ekoka forms (the most reliable ones) completely coincide and justify the current reconstruction. Structure and semantics: The polysemy 'earth / sand' must have been inherited from the proto-level (no perceived semantic difference between the two substances due to areal conditions).

23. EAT

Ju!'hoan *ʔm* (1), ||Kxau||en *m*: ~ *m* (1), !Kung *m*: ~ *m*: (1), Grootfontein !Kung *ʔm*: (1), !O!Kung *m* ~ *m* (1), Ekoka !Xung *m* (1), Proto North Khoisan **ʔm* (1).

References and notes:

Ju!'hoan: Dickens 1994: 340.

||Kxau||en: Bleek 1956: 131; Bleek 1929: 35. Both sources quote *kxɔ*: ~ *kxɔ* as a synonym in the meaning 'to eat meat (hard food)'; this is undoubtedly a recent borrowing from a Khoekhoe source (not to mention ineligible for exclusion due to semantic reasons).

!Kung: Bleek 1956: 131. Quoted as *m* in [Bleek 1929: 35].

Grootfontein !Kung: Doke 1955: 156.

!O!Kung: Bleek 1956: 131; Bleek 1929: 35. Quoted as *ʔm* in [Snyman 1980: 37].

Ekoka !Xung: König & Heine 2008: 44. Quoted as *ʔm* in [Heikkinen 1986: 27].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: The root, just as it is attested in most dialects, should be reconstructed with a high-toned syllabic **m* preceded by a glottal stop.

24. EGG

Ju!'hoan *ʔû* (1), ||Kxau||en *ʔu* (1), !Kung *ʔú* (1), !O!Kung *ʔu ~ ʔú* (1), Ekoka !Xung *ʔûû ~ ʔôú* (1), Proto North Khoisan **ʔu* (1).

References and notes:

Ju!'hoan: Dickens 1994: 254. Used independently only in the meaning 'glans of the penis'; otherwise, in compounds like *ʔàmə-ʔû* 'bird's egg', *khúkhú-ʔû* 'chicken egg' etc.

||Kxau||en: Bleek 1956: 483; Bleek 1929: 35.

!Kung: Bleek 1956: 483. Quoted as *ʔu* in [Bleek 1929: 35].

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 483. Quoted as *ʔú* in [Bleek 1929: 35].

Ekoka !Xung: König & Heine 2008: 54. Quoted as *ʔúú* in [Heikkinen 1986: 25].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are mostly regular and trivial with the exception of the tonal pattern where even Ekoka has several close variants.

25. EYE

Ju!'hoan *ʔàʔá* (1), ||Kxau||en *ʔa* (1), !Kung *ʔá ~ ʔáá ~ ʔáá* (1), Grootfontein !Kung *ʔəʔa ~ ʔa ~ ʔaʔa* (1), !O!Kung *ʔa* (1), Ekoka !Xung *ʔàʔā* (1), Proto North Khoisan **ʔaʔā* (1).

References and notes:

Ju!'hoan: Dickens 1994: 203. Polysemy: 'eye / tip, point'. Secondary synonym: *kxóá-si* 'eye, face'.

||Kxau||en: Bleek 1956: 274. Quoted as *ʔa* in [Bleek 1929: 36].

!Kung: Bleek 1956: 274. Quoted as *ʔa* in [Bleek 1929: 36].

Grootfontein !Kung: Doke 1925: 157.

!O!Kung: Bleek 1956: 274. Quoted as *ʔa* in [Bleek 1929: 36]; *ʔàʔá* in [Snyman 1980: 37].

Ekoka !Xung: König & Heine 2008: 27; Heikkinen 1986: 23.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial, including a clearly indicated glottal stop "break"; the only possible minor problem is with the tonal pattern (probably low-mid, but low-high is not excluded either).

26. FAT N.

Ju!'hoan *ʔáí* (1), ||Kxau||en *ʔí* (1), !Kung *ʔí ~ ʔai ~ ʔáie* (1), Grootfontein !Kung *ʔáí* (1), !O!Kung *ʔí* (1), Ekoka !Xung *ʔéí ~ ʔí* (1), Proto North Khoisan **ʔí* (1).

References and notes:

Ju|'hoan: Dickens 1994: 238.

||Kxau||en: Bleek 1956: 347. Quoted as \tilde{f} in [Bleek 1929: 37].

!Kung: Bleek 1956: 347. [Bleek 1929: 37] quotes \tilde{f} *wi* instead, but the latter is obviously a Central Khoisan root by descent, and its existence in !Kung (even as a borrowing) is not further confirmed in [Bleek 1956].

Grootfontein !Kung: Doke 1925: 157.

!O!Kung: Bleek 1956: 347. Quoted as \tilde{f} *ni* in [Bleek 1929: 37] (the clickless variant is not confirmed in [Bleek 1956] and generally looks strange).

Ekoka !Xung: König & Heine 2008: 48. Quoted as \tilde{f} 'oil' in [Heikkinen 1986: 23].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular; original vowel **i* undergoes diphthongization in Ju|'hoan and a few other dialects.

27. FEATHER

Ju|'hoan $c\dot{a}m\dot{a}=!kx\acute{u}i$ (1), ||Kxau||en *!kxwe* ~ *!kxwi* ~ *!kwi* (1), !Kung *!kxwé* ~ *!kxwi* (1), !O!Kung *!wi* ~ *kxwi* (1), Proto North Khoisan **!kx\acute{u}i* (1).

References and notes:

Ju|'hoan: Dickens 1994: 77. Literally 'bird-hair'.

||Kxau||en: Bleek 1956: 466, 510; Bleek 1929: 38. Same as 'hair'.

!Kung: Bleek 1956: 510; Bleek 1929: 38. Same as 'hair'. The latter source also quotes *tana* 'young feather', but the word is absent in [Bleek 1956].

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 128, 466. Same as 'hair' (the meaning 'feather' is illustrated by the example $\check{c}\alpha$ *!wi* 'feather on arrow'). Quoted as *!kxwi* in [Bleek 1929: 38].

Ekoka !Xung: Not attested.

Proto North Khoisan: Distribution: Although precise data on many dialects are missing, it is fair to assume that the basic words for 'hair' and 'feather' were not distinguished in Proto-North Khoisan (at best, as in Ju|'hoan, the meaning 'feather' could be specified as 'bird-hair'). For more details, see under 'hair'.

28. FIRE

Ju|'hoan $d\dot{a}\dot{a}$ (1), ||Kxau||en $d\dot{a}$ (1), !Kung da ~ $d\dot{?}a$ ~ $da\acute{i}$ (1), Grootfontein !Kung $d\dot{a}\dot{?}a$ ~ $da\dot{?}a$ (1), !O!Kung $d\dot{a}$ ~ $d\dot{a}a$ (1), Ekoka !Xung $d\dot{a}\dot{?}a$ (1), Proto North Khoisan **d\dot{a}\dot{a}* (1).

References and notes:

Ju|'hoan: Dickens 1994: 194. Polysemy: 'fire / firewood'. Secondary synonym: $\|x\dot{o}\dot{e}$ (< vb. 'to make fire').

||Kxau||en: Bleek 1956: 20. Quoted as $d\dot{a}a$ in [Bleek 1929: 39].

!Kung: Bleek 1956: 20. Quoted as $da\acute{i}$ in [Bleek 1929: 39].

Grootfontein !Kung: Doke 1925: 154.

!O!Kung: Bleek 1956: 20. Quoted as *dà:a* in [Bleek 1929: 39]; *dà:á* in [Snyman 1980: 38].

Ekoka !Xung: König & Heine 2008: 20. Quoted as *dà:á* in [Heikkinen 1986: 21].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial, except for the questionable tonal pattern (probably low-high, but Ekoka indicates low-low or low-mid).

29. FISH

Ju|'hoan //ʔàù (-1), !Kung //ʔau (-1), !O!Kung //ʔau (-1), Ekoka !Xung ʔòḽ # (1).

References and notes:

Ju|'hoan: Dickens 1994: 338.

||Kxau||en: Not attested (the word may not exist at all in the language).

!Kung: Bleek 1956: 518.

Grootfontein !Kung: Not attested (the word may not exist at all in the language).

!O!Kung: Bleek 1956: 518.

Ekoka !Xung: König & Heine 2008: 30. Quoted as ʔòḽ in [Heikkinen 1986: 24]. Very dubious. König & Heine actually list three synonyms, with no attempts at differentiation; the other two are //ʔáú (p. 104) and !àmmù (p. 82). The primary choice on this list is motivated only by the fact that ʔòḽ is the only word out of the three that finds confirmation in [Heikkinen 1986]. External connections would rather speak in favor of //ʔáú, but since this word is suspicious as a recent loan from Khoekhoe, such connections should not qualify as a serious argument in this particular case.

Proto North Khoisan: Distribution: Technically, the form *//ʔau is reconstructible for Proto-North Khoisan, being found in at least two out of three main dialect clusters. Nevertheless, the following reasons prevent us from adopting such a reconstruction: (1) the overall distribution of the root is quite poor; it is very marginally attested or not attested at all in old sources; (2) the form closely matches Proto-Central Khoisan *//ʔau, from descendants of which the several attested variants could be borrowed individually; (3) the existence of an authentic word for 'fish' in North Khoisan is questionable considering their desert homeland; for comparison, there is not a single South Khoisan language for which the word 'fish' has even been attested, let alone considered "authentic". Ekoka ʔòḽ, without any clear etymology or transparent source of borrowing, is in this respect a better candidate for Proto-North Khoisan than *//ʔau; still, in the light of its even more limited distribution as well as factor (3), we prefer to leave the slot empty.

30. FLY V.

Ju|'hoan ʔòḽ (1), ||Kxau||en tē # (2), !Kung //amma # (3), !O!Kung tē: # (2), Proto North Khoisan *ʔom # (1).

References and notes:

Ju|'hoan: Dickens 1994: 252.

||Kxau||en: Bleek 1956: 196. Dubious (translated as "to fly up" in the one available context). [Bleek 1929: 40] gives /ʔwí: in the meaning 'fly', but [Bleek 1956: 362] gives the meanings 'to fly up' and 'to come out' (e. g. of ants). Still another form, ʔaa [Bleek 1956: 479], may be etymologically related to Ju|'hoan ʔòḽ, etc., but is translated as 'to fly about' (of birds).

!Kung: Bleek 1956: 525 (only in the meaning 'to fly up'). Quoted as *ama* in [Bleek 1929: 40] (in the meaning 'to fly' as such). Dubious entry, but no better one can be suggested.

Grootfontein !Kung: Not attested. Cf., however, *kā-í*: 'to fly up' [Doke 1925: 155], where the second part = *í*: 'to come out, to rise'.

!O!Kung: Bleek 1956: 196. The confirming textual example is given as *soŋgu tē*: "the arrow flies". Quoted as *tē* in [Bleek 1929: 40]. The same source also adds *!aú* as a secondary synonym, but this is not confirmed in [Bleek 1956] (according to that source, such forms in the meaning 'to fly' only exist in South Khoisan languages). Of additional note is *!āa* [Bleek 1956: 479], translated as 'to mount up' (in the sky) and compared with //Kxau//en *!āa* 'to fly about'. Everything is highly dubious due to ambiguity of the contexts.

Ekoka !Xung: Not attested. Cf., perhaps, *čāō* 'to fly up' [König & Heine 2008: 64], but the meaning is fully glossed as 'wake up, rise, stand up, fly up, jump up', indicating the idea of ascension rather than flight.

Proto North Khoisan: Distribution: The etymon is highly unstable and, furthermore, few of the sources are trustworthy (see notes on particular items). Ju|'hoan *!d̥m̄* is the only form from a reliable source glossed directly as 'fly', and can be very tentatively projected onto a higher level, especially if it is in some way related to //Kxau//en *!āa* 'to fly about' (maybe < **!om-a?*, cf. the Ju|'hoan derived form *!d̥m̄-ā* 'to fly over (a village)').

31. FOOT

Ju|'hoan *!kxáí* (1), //Kxau//en */e ~ !xe* (1), !Kung *!kxe ~ !kxi ~ !xí ~ !e ~ !í* (1), Grootfontein !Kung *!ǀáí ~ !xáí* (1), !O!Kung *!kxe ~ !kxε* (118), Ekoka !Xung *!kxáí* (1), Proto North Khoisan **!kxáí* (1).

References and notes:

Ju|'hoan: Dickens 1994: 290.

//Kxau//en: Bleek 1956: 307, 364. Quoted as */e* in [Bleek 1929: 40].

!Kung: Bleek 1956: 307, 316, 338, 339, 365; Bleek 1929: 40.

Grootfontein !Kung: Doke 1925: 156.

!O!Kung: Bleek 1956: 122, 339. Quoted as *!kε* in [Bleek 1929: 40].

Ekoka !Xung: König & Heine 2008: 76; Heikkinen 1986: 23. The same sources also list *!ǀō* in the meaning 'foot', but this is dubious: the complete meaning is given as 'foot, base, back' [König & Heine 2008: 88; Heikkinen 1986: 24], and all external parallels point to 'back' as the default semantics.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial, including the tonal pattern (high-high).

32. FULL

Ju|'hoan *!ǀǎǎí* (1), //Kxau//en *!ǀē ~ !ǀēí* (1), Ekoka !Xung *!ǀǎǎí* (1), Proto North Khoisan **!ǀǎǎí* (1).

References and notes:

Ju|'hoan: Dickens 1994: 211.

//Kxau//en: Bleek 1956: 381; Bleek 1929: 41. Erroneously contaminated in [Bleek 1956] with *ǀē* 'long' q. v. Secondary

synonym: *!au* [Bleek 1956: 411; Bleek 1929: 41].

!Kung: Not attested. Cf., however, the word for 'to fill': $\text{!}ʔ\grave{\text{a}}\eta \sim \text{!}ʔ\acute{\text{a}}\eta$ [Bleek 1956: 376], etymologically the same as the adjectival form 'full' in other languages.

Grootfontein !Kung: Not attested.

!O!Kung: Not attested. Cf., however, $\text{!}ʔ\grave{\text{a}}\grave{\text{e}}\text{-!}ʔ\grave{\text{a}}\eta\text{?}\eta$ 'to fill' in [Snyman 1980: 38].

Ekoka !Xung: König & Heine 2008: 30. Quoted as $\text{!}ʔ\acute{\text{a}}\eta$ in [Heikkinen 1986: 24]. Secondary synonym: *bá!i* [König & Heine 2008: 15] ~ *bá!ri* [Heikkinen 1986: 20] 'to be full'. The latter form is probably not of Khoisan origin, judging by the initial *b*, and has no parallels outside Ekoka. It is unclear from the existing data what is the exact difference in semantics between the two items.

Proto North Khoisan: Distribution: Preserved in all daughter dialects in which it is attested. Reconstruction shape: correspondences are mostly trivial, with the exception of the last mora after the glottal stop; $\text{!}ʔ\acute{\text{a}}\eta$, following the Ekoka structure, seems to be the least controversial variant for the protoform.

33. GIVE

Ju!hoan $\text{!}ʔ\grave{\text{a}}$ (1), **||Kxau||en** $\text{!}ʔ\grave{\text{a}} \sim \text{!}ʔ\text{a}$ (1) / **au** (2), **!Kung** $\text{!}ʔ\acute{\text{a}} \sim \text{!}ʔ\grave{\text{a}} \sim \text{!}ʔ\grave{\text{a}} \sim \text{!}ʔ\acute{\text{a}}$ (1), **Grootfontein !Kung** **au** (2), **!O!Kung** $\text{!}ʔ\text{a} \sim \text{!}ʔ\text{a}$ (1), **Ekoka !Xung** $\text{!}ʔ\grave{\text{a}}\eta \sim \text{!}ʔ\grave{\text{a}}$ (1), **Proto North Khoisan** $\text{!}ʔ\acute{\text{a}}\eta$ (1).

References and notes:

Ju!hoan: Dickens 1994: 294. Secondary synonyms: (a) $\text{!}ʔ\grave{\text{a}}\text{n}\grave{\text{a}}$; (b) *xá!ró* ("present"). Different from imperative *nà* "give (me)!"

||Kxau||en: Bleek 1929: 42; Bleek 1956: 2, 267. The forms are given as synonymous in [Bleek 1929] (a third synonym included there is *na*, disqualified because its use is restricted to the imperative 'give!'), and analysis of the contexts in [Bleek 1956] does not allow to establish any serious semantic difference. Considering external data, it is likely that **au** is a recent replacement for $\text{!}ʔ\text{a}$, still competing with the old form.

!Kung: Bleek 1956: 267, 293. Quoted as $\text{!}ʔ\acute{\text{a}} \sim \text{!}ʔ\grave{\text{a}}$ in [Bleek 1929: 42]. The latter source also quotes *a* as a synonym; however, the form is not confirmed in [Bleek 1956] (it is typical rather of Southern Khoisan languages and could have penetrated the North Khoisan material accidentally).

Grootfontein !Kung: Doke 1925: 152. Secondary synonyms: $\text{!}ʔ\acute{\text{a}}$ 'to give, gift' [Doke 1925: 156] (the way the meaning is quoted and the lack of contexts, in comparison to the far better represented **au**, implies that, in this dialect, this verb may have a more specialized function); *na* 'to give, to bring' [Doke 1925: 154] (judging by external data, most likely an imperative form).

!O!Kung: Bleek 1956: 293; Bleek 1929: 42. Quoted as $\text{!}ʔ\text{a}$ in [Snyman 1980: 39]. [Bleek 1929] also quotes *na* as a synonym, confirmed in [Bleek 1956: 141], which includes both imperative ('give!') and indicative textual examples. It is possible that in some subdialects the older imperative verb has indeed replaced the old indicative form.

Ekoka !Xung: König & Heine 2008: 74; Heikkinen 1986: 22. Secondary synonym: *nè!è* [König & Heine 2008: 46]. This is probably the imperative form, as in other languages of the subgroup (textual confirmation needed).

Proto North Khoisan: Distribution: The original root $\text{!}ʔ\text{a}$ is present in all three major dialect clusters and clearly reconstructible. It should be distinguished from $\text{!}ʔ\text{a} \sim \text{!}ʔ\text{e}$, whose functions in at least several distinct dialects and, most likely, in Proto-North Khoisan as well are restricted to the imperative function. Replacements: $\text{!}ʔ\text{a}$, of unknown origin, in the Grootfontein and ||Kxau||en dialects. Reconstruction shape: Attested forms fluctuate between nasalized and non-nasalized variants, without much evidence for the primacy of either one. Also, the Northern cluster shows glottalized articulation of the vowels ($\text{!}ʔ\text{a}$), whose archaicity is possible, but uncertain (the development $\text{!}ʔ\text{a} > \text{!}ʔ\text{a}$ in

Ju|'hoan is quite irregular). The proposed reconstruction is somewhat speculative (it includes both glottalization and nasalization, presupposing that different dialects simplified the original structure in different ways).

34. GOOD

Ju|'hoan $\check{z}\tilde{a}$ (1), ||Kxau||en $!a\tilde{a}$ (-1), !Kung $\check{z}\tilde{a} \sim \check{z}a$ (1), Grootfontein !Kung $\check{z}a \sim \check{z}a$ (1), Ekoka !Xung $k\tilde{a}h\acute{i}$ (-1), Proto North Khoisan $*\check{z}\tilde{a}$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 221.

||Kxau||en: Bleek 1956: 405; Bleek 1929: 43. Secondary synonym: $!h\acute{i}$ [Bleek 1929: 43], translated, however, as 'nice; pretty' in [Bleek 1956]. The form $!a\tilde{a}$ must be the principal word, since it functions in texts as the antonym of $\check{c}u$ 'bad'.

!Kung: Bleek 1956: 32. Within actual text examples translated as 'nice', 'sweet', 'glad'. [Bleek 1929: 43] quotes an entirely different root: $!kai\tilde{a}$, but it is not confirmed in [Bleek 1956].

Grootfontein !Kung: Doke 1925: 155. Secondary synonym: $g\tilde{a}\tilde{a}$ 'good, nice' [Doke 1925: 156]; $!h\acute{u}m$ 'nice, good, beautiful' [Doke 1925: 157].

!O!Kung: Not attested.

Ekoka !Xung: König & Heine 2008: 38. Quoted as $k\tilde{a}\tilde{h}$ in [Heikkinen 1986: 21]. In the English-Ekoka section of their dictionary, König & Heine list several other synonyms, but all of them are probably secondary according to the main section: (a) $\tilde{n}!h\acute{u}m$ is glossed as 'to be beautiful' (p. 48); (b) $t\acute{u}$ 'good' is a word said to be 'known but not used' (p. 70); (c) $!h\acute{a}nn\tilde{u}$ is glossed as 'be good, harmless' (p. 90).

Proto North Khoisan: Distribution: The widest distribution (South and Central clusters) by a clearly non-borrowed (at least, not recently) root is shown by $*\check{z}\tilde{a}$. Its replacements in various dialects, for the most part, seem to represent recent borrowings of various variants of the Proto-Central Khoisan root $*!a\tilde{a}$ 'good' (some of them still preserve the original click articulation and some, as seen in the Ekoka variant, have already dropped the click influx).

Reconstruction shape: The form of the original root is established based on the Ju|'hoan form.

35. GREEN

Ju|'hoan $!a\tilde{u}^h$ (1), ||Kxau||en $!a\tilde{u}$ (1), !Kung $!a\eta \sim !a\eta \sim !a\eta \sim !u\eta$ (1), Grootfontein !Kung $!a\tilde{u}^h$ (2), !O!Kung $!a\eta$ (1), Ekoka !Xung $!h\acute{a}\eta$ (1), Proto North Khoisan $*!a\eta u$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 289. Polysemy: 'green / blue'.

||Kxau||en: Bleek 1956: 303; Bleek 1929: 44. Quoted as 'blue, light green' in [Bleek 1956]. [Bleek 1929: 44] also gives the form $!oussi$ in the meaning 'dark green'; in [Bleek 1956: 345] it is then quoted as $!ausi$ 'green'. Considering the lack of any special parallels in other languages, it is highly likely that this is really the same word as $!a\tilde{u}$ ($-si$ is typically the plural suffix), misheard or dialectal. See also notes to 'yellow'.

!Kung: Bleek 1956: 300, 325. Quoted as $!a\eta$ in [Bleek 1929: 44]. Secondary synonym: $!e$ [Bleek 1956: 659; Bleek 1929: 44], with no external parallels.

Grootfontein !Kung: Doke 1925: 161.

!O!Kung: Bleek 1956: 300; Bleek 1929: 44. Polysemy: 'green / yellow'. Quoted as *l̥ā̃* in [Snyman 1980: 39].

Ekoka !Xung: König & Heine 2008: 74. Polysemy: 'green / blue / yellow' (basic meaning glossed as 'coloured' in the source).

Proto North Khoisan: **Distribution:** The original root is preserved almost everywhere, except for a possible replacement of unclear origin in the Grootfontein dialect (provided Doke's glossing is correct). **Reconstruction shape:** Correspondences indicate the presence of a final sequence **-aŋu*, with the subsequent development $> -āū$ in Ju!hoan (see 'neck' for more details on intervocal **-ŋ-* in Proto-North Khoisan). Tonal characteristics are not entirely clear, but at least one of the two morae must have been characterized by an ultra-low tone, connected with the aspiration/breathiness elements in Ju!hoan and Ekoka. **Semantics and structure:** The root must have been the main denotation for the entire 'blue / green / yellow' spectrum in Proto-North Khoisan.

36. HAIR

Ju!hoan *!kxúí* (1), ||Kxau||en *!kxwe ~ !kxwi ~ !kwi* (1), !Kung *!kxwé ~ !kxwí* (1), Grootfontein !Kung *!kxwi* (1), !O!Kung *kxwi ~ !wi* (1), Ekoka !Xung *!kxúí* (1), Proto North Khoisan **!kxúí* (1).

References and notes:

Ju!hoan: Dickens 1994: 315.

||Kxau||en: Bleek 1956: 466, 510. Quoted as *!kxwí-si* in [Bleek 1929: 38] (*-si* is the plural suffix). See also 'feather'.

!Kung: Bleek 1956: 510. Quoted as *!kxwí* in [Bleek 1929: 45].

Grootfontein !Kung: Doke 1925: 158.

!O!Kung: Bleek 1956: 128, 466. Quoted as *!k̥wí ~ k̥wí* in [Bleek 1929: 45].

Ekoka !Xung: König & Heine 2008: 86; Heikkinen 1986: 25. The meaning 'head hair' may be more specifically expressed by the compound form *ʔl̥é !kxúí*, where *ʔl̥é* = 'head' q.v.

Proto North Khoisan: **Distribution:** Preserved in all daughter dialects. **Reconstruction shape:** Correspondences are regular and trivial.

37. HAND

Ju!hoan *!áú* (1), ||Kxau||en *!ou ~ !au* (1), !Kung *!au* (1), Grootfontein !Kung *!āù* (1), !O!Kung *!au* (1), Ekoka !Xung *!àò ~ !āō* (1), Proto North Khoisan **!au* (1).

References and notes:

Ju!hoan: Dickens 1994: 210.

||Kxau||en: Bleek 1956: 378, 387; Bleek 1929: 45.

!Kung: Bleek 1956: 528. Quoted as *!áú* in [Bleek 1929: 45].

Grootfontein !Kung: Doke 1925: 160. Meaning given as 'hand, finger' (the latter, however, only in compounds, such as *!āù-de* 'thumb', etc.).

!O!Kung: Bleek 1956: 528. Quoted as *!āù* in [Bleek 1929: 45]; *!àò* in [Snyman 1980: 40].

Ekoka !Xung: König & Heine 2008: 136; Heikkinen 1986: 25.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular, indicating an original voiced retroflex click (still preserved in Grootfontein). The only problem is with the tonal pattern (ultrahigh-high in Ju|'hoan vs. low-low or mid-mid in Ekoka, probably indicating a rare and unstable combination in the protolanguage).

38. HEAD

Ju|'hoan $\tilde{á}\acute{í}$ (1), ||Kxau||en $\tilde{e} \sim \tilde{é} \sim \tilde{i} \sim \tilde{í}$ (1), !Kung $\tilde{é}$ (1), Grootfontein !Kung $\tilde{é}$: (1), !O!Kung $\tilde{é}$ (1), Ekoka !Xung $\tilde{é}$ (1), Proto North Khoisan $*\tilde{e}$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 238. Secondary synonym: $\#?á\text{-}!òè$ ($\#?á$ = 'to lead, be first'; the second component is unclear).
 ||Kxau||en: Bleek 1956: 346, 347; Bleek 1929: 46. All variants quoted in [Bleek 1956] with the second meaning 'berry', but this is likely to be the result of confusion with a different root = Ju|'hoan $\tilde{á}\eta$ 'wild currant', !Kung (Doke) η 'berry' rather than true polysemy.
 !Kung: Bleek 1956: 346. Quoted as \tilde{e} in [Bleek 1929: 46].
 Grootfontein !Kung: Doke 1925: 157.
 !O!Kung: Bleek 1956: 346; Bleek 1929: 46.
 Ekoka !Xung: König & Heine 2008: 47. Polysemy: 'head / top / peak'; also, same word as $\tilde{é}$ 'reflexive marker' [König & Heine 2008: 48].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are generally regular. The preglottalized nasal click is reconstructed based on Ekoka data. Ju|'hoan regularly undergoes diphthongization of $*e > -ai$. Tonal pattern is mid-level.

39. HEAR

Ju|'hoan $cà\tilde{á}$ (1), ||Kxau||en $cá \sim \tilde{c}á$ (1), !Kung $sá \sim ssá \sim ssaí \sim saí$ (1), Grootfontein !Kung $sá\tilde{á}$ (1), !O!Kung $sáa \sim saa$ (1), Ekoka !Xung $\tilde{c}à \sim \tilde{c}à\tilde{á}$ (1), Proto North Khoisan $*sà\tilde{a}$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 275. Polysemy: 'hear / feel / understand'.
 ||Kxau||en: Bleek 1956: 210, 223. Quoted as $cá \sim \tilde{c}á$ in [Bleek 1929: 46].
 !Kung: Bleek 1956: 162. Quoted as $sá$ in [Bleek 1929: 46].
 Grootfontein !Kung: Doke 1925: 154. Secondary synonym: $tóm$ [Doke 1925: 153].
 !O!Kung: Bleek 1956: 162. Quoted as $sá \sim \tilde{s}á$ in [Bleek 1929: 46].
 Ekoka !Xung: König & Heine 2008: 64. Polysemy: 'hear / feel understand'. Quoted as $cà\tilde{á}$ in [Heikkinen 1986: 22].
 Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: The fluctuation between affricate (c -) and fricative (s -) articulation is resolved in favour of the fricative articulation as original; affricativization probably occurs under the influence of the glottal stop, especially considering that the first half of the complex vowel sequence is frequently reduced or even completely deleted in the actual articulation. Everything else is fairly regular, including the tonal correspondences between Ju|'hoan and Ekoka.

40. HEART

Ju|'hoan **!kxá** (1), ||Kxau||en **!a** (1), !Kung **!kxá ~ !xá** (1), Grootfontein !Kung **!a** (1), !O!Kung **kxa** (1), Ekoka !Xung **!kxā** (1), Proto North Khoisan ***!kxā** (1).

References and notes:

Ju|'hoan: Dickens 1994: 314. Secondary synonym: *ǀáó* (< Nama *ǀao-b* id.).

||Kxau||en: Bleek 1956: 402. Quoted as *!a* in [Bleek 1929: 46].

!Kung: Bleek 1956: 496, 507; Bleek 1929: 46.

Grootfontein !Kung: Doke 1925: 159. Tone is not ascertained.

!O!Kung: Bleek 1956: 118. Quoted as *kʰa* in [Bleek 1929: 47]; *!kxá* in [Snyman 1980: 40].

Ekoka !Xung: König & Heine 2008: 86; Heikkinen 1986: 24. Polysemy: 'heart / inside'.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are mostly regular. The development of the velar affricate efflux into a glottal stop in Grootfontein !Kung is not 100% regular, but very frequent (see 'dry', 'foot', etc.). In !O!Kung, Bleek records dialectal articulation that drops the click influx, possibly under local Khoe influence. Semantics and structure: The polysemy {'heart' & 'inside'} is reflected in at least several dialects and may easily go back to Proto-North Khoisan stage.

41. HORN

Ju|'hoan **!hú** (1), ||Kxau||en **!u ~ !ú** (1), !Kung **!ú ~ !hú ~ !xú** (1), Grootfontein !Kung **!ú** (1), !O!Kung **!hú** (1), Ekoka !Xung **!hú** (1), Proto North Khoisan ***!hú** (1).

References and notes:

Ju|'hoan: Dickens 1994: 313.

||Kxau||en: Bleek 1956: 447. Quoted as *!ú* in [Bleek 1929: 47]. For confusion with 'bone' q.v.

!Kung: Bleek 1956: 429, 448, 502. Quoted as *!u* in [Bleek 1929: 47].

Grootfontein !Kung: Doke 1925: 160.

!O!Kung: Bleek 1956: 429; Bleek 1929: 47.

Ekoka !Xung: König & Heine 2008: 82; Heikkinen 1986: 24. Polysemy: 'horn / thorn'.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are mostly regular and trivial. The retroflex click articulation in Grootfontein must represent erroneous transcription on the part of C. Doke (correspondences do not confirm original retroflex articulation).

42. I

Ju|'hoan **mí** (1), ||Kxau||en **m ~ me ~ mi** (1), !Kung **m ~ mé ~ mi ~ mĩ** (1), Grootfontein !Kung **mí** (1), !O!Kung **m ~ me ~ mi** (1), Ekoka !Xung **mí ~ mā** (1), Proto North Khoisan ***mí** (1).

References and notes:

Ju|'hoan: Dickens 1994: 235.

||Kxau||en: Bleek 1956: 132, 136; Bleek 1929: 49. The variant *mi-hi*, quoted in both sources, is most likely emphatic.

!Kung: Bleek 1956: 132, 136, 137; Bleek 1929: 49. The latter source adds *ŋ* and *na* as additional variants; the forms are confirmed in [Bleek 1956: 141, 142], but do not seem to be primary choices (they function more frequently as possessive forms rather than independent pronouns, and may be positional phonetic variants in at least some contexts).

Grootfontein !Kung: Doke 1925: 153. Form said to be used "in conjunction". The same source also quotes the "isolated" (most likely, emphatic) form *mi-lu*. Of note is also the morpheme *nà* [Doke 1925: 154] that Doke interprets as "1st pers. singular tense formative" (e. g. *na=təm* 'I don't know').

!O!Kung: Bleek 1956: 132, 136, 137; Bleek 1929: 49. The variant *mi-hi*, quoted in both sources, is most likely emphatic. Quoted as *ma*, *mi* in [Snyman 1980: 41]; the latter source also adds another stem, *na*, as synonymous, without explaining the difference.

Ekoka !Xung: König & Heine 2008: 44, 45.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: One of the very few solid cases of initial **m*- in Proto-North Khoisan. The stem is often found in multiple variants, of which **mi* is the most frequent; the others may perhaps be explained as lenited, assimilated, or, in a few cases, suffixal variants. The emphatic stem **mi-hi* is also of Proto-North Khoisan origin (cf. the corresponding form **hi* for the 2nd p. pronoun).

43. KILL

Ju|'hoan *ʰũ* (1), ||Kxau||en *!ũ* (1), !Kung *!úŋ ~ ʰũ ~ ʰúŋ ~ !xũ* (1), Grootfontein !Kung *ʰũ*: (1), !O!Kung *!ũ ~ !xũ* (1), Ekoka !Xung *ʰúŋ ~ ʰũ* (1), Proto North Khoisan **ʰũ* (1).

References and notes:

Ju|'hoan: Dickens 1994: 314. Singular object action verb; the plural object form is *ʀóǎ*.

||Kxau||en: Bleek 1956: 447; Bleek 1929: 50.

!Kung: Bleek 1956: 429, 453, 502. Quoted as *!ũ ~ !uŋ* in [Bleek 1929: 50]. The same source also lists *||óǎ* as a synonym; this must be the plural object action equivalent = Ju|'hoan *ʀóǎ*.

Grootfontein !Kung: Doke 1925: 159.

!O!Kung: Bleek 1956: 447, 502. Quoted as *!ũ* in [Bleek 1929: 50].

Ekoka !Xung: König & Heine 2008: 82; Heikkinen 1986: 24. Singular object action verb; the plural object form is *||ŋ* [ibid.].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. The plural object form is more difficult to reconstruct, since several different stems are attested in that function (Ju|'hoan *ʀóǎ* is not equal to Ekoka *||ŋ*).

Reconstruction shape: Correspondences are generally trivial, except for the final position where a velar nasal consonant may or may not have been present in Proto-Northern Khoisan (variation in Ekoka seems to favour this reconstruction, but it is unclear if the variant *ʰúŋ* is truly archaic; at the very least, correspondences indicate a coda that is different from the one in 'nose' q.v.).

44. KNEE

Ju|'hoan *!xòǎ* (1), ||Kxau||en *!wa-ĩ* (1), !Kung *!óǎ ~ !xóǎ* (1), Grootfontein !Kung *!xwa* (1),

!O!Kung $g\grave{o}m \sim \grave{j}m$ (2), Ekoka !Xung $\grave{x}\grave{o}\grave{a}$ (1), Proto North Khoisan $*\grave{x}\grave{o}\grave{a}$ (1).

References and notes:

Ju!'hoan: Dickens 1994: 215.

||Kxau||en: Bleek 1956: 458; Bleek 1929: 50. Translated as 'knee' in [Bleek 1929], but as 'knee-joint' in [Bleek 1956] and transparently equivalent to Ekoka $\grave{x}\grave{o}\grave{a} \grave{?}\grave{e}$ 'knee-cap', where the first component is 'knee' proper and the second = 'head' q.v.

!Kung: Bleek 1956: 427, 437; Bleek 1929: 50.

Grootfontein !Kung: Doke 1925: 159. Tone is not ascertained.

!O!Kung: Bleek 1956: 48, 281. Quoted as $\grave{j}om \sim g\grave{o}m$ in [Bleek 1929: 50]; $\grave{j}om\grave{?}m$ in [Snyman 1980: 42]. Transcription with the lateral click in [Bleek 1929] is probably in error (a misprint), although it is also reproduced in the cross-reference in [Bleek 1956: 48]; Snyman's data clearly corroborate the variant with the dental click.

Ekoka !Xung: König & Heine 2008: 31; Heikkinen 1986: 24.

Proto North Khoisan: Distribution: Preserved in most dialects, with the possible exception of some Northern lects (provided the meanings have been attested correctly). Replacements: !O!Kung $\grave{j}om$, probably representing a metonymic meaning shift {'knee-cap' > 'knee'}, cf. the distinction in Ekoka between $\grave{x}\grave{o}\grave{a}$ 'knee' and $\grave{j}om$ 'knee-cap' [König & Heine 2008: 28]. Reconstruction shape: Correspondences are regular and trivial, except for the tonal pattern (the correspondence between low-low in Ju!'hoan and ultralow-ultralow in Ekoka is not well understood). Semantics and structure: The stem is frequently found as a compound with $\grave{?}\grave{e}$ 'head', either explicitly or, perhaps, implicitly in the meaning 'knee-cap', lit. 'knee-head'.

45. KNOW

Ju!'hoan $!ʔ^{h}\grave{a}$ (1), ||Kxau||en $\grave{?}\grave{a}$: (2), !Kung $!ʔ^{h}\grave{a} \sim !^{h}\grave{a}$ (1), Grootfontein !Kung $!!ʔ^{h}\grave{a}$ (1), !O!Kung $\grave{?}\grave{i}$ (3), Ekoka !Xung $\grave{?}\grave{i}\grave{e}\grave{h}\grave{i} \sim \grave{?}\grave{i}\grave{h}\grave{e}\grave{i} \sim \grave{?}\grave{i}\grave{h}\grave{i}$ (3), Proto North Khoisan $*!ʔ^{h}\grave{a}$ (1).

References and notes:

Ju!'hoan: Dickens 1994: 323.

||Kxau||en: Bleek 1956: 640. Quoted as $\grave{?}\grave{a}$: $\sim \grave{?}\grave{a}$ in [Bleek 1929: 51]. It should be noted that in [Bleek 1956: 393] we also find $!ʔ^{h}\grave{a}$: 'to know'; the semantic difference between the two words in the language is hard to establish.

!Kung: Bleek 1956: 393, 423. Of note also should be $\grave{?}\grave{i}$, glossed in [Bleek 1956: 672] as 'to know, understand'.

Grootfontein !Kung: Doke 1925: 160.

!O!Kung: Bleek 1956: 672; Bleek 1929: 51. Quoted as $\grave{?}\grave{a}\grave{i}$ in [Snyman 1980: 42] (provided that this is really the same root; the click correspondences are irregular, although this may simply represent a transcription mistake on Snyman's part). Snyman also adds a secondary synonym: $\grave{?}\grave{a}\grave{i}$ (similar to Grootfontein !Kung $!!ʔ^{h}\grave{a}$, but phonologically incompatible).

Ekoka !Xung: König & Heine 2008: 55. Quoted as $\grave{?}\grave{i}$ (Western dialect) $\sim \grave{?}\grave{i}$ (Eastern dialect) in [Heikkinen 1986: 24].

Proto North Khoisan: Distribution: The original root $*!ʔ^{h}\grave{a}$ is well preserved in the Southern dialect cluster, but tends to be displaced elsewhere. Replacements: (a) ||Kxau||en $\grave{?}\grave{a}$: < Proto-Northern Khoisan $*\grave{?}\grave{a}\grave{i}$ {'to think' > 'to know'}; (b) !O!Kung $\grave{?}\grave{i}$, etc. < Proto-Northern Khoisan $*\grave{?}\grave{a}\grave{i}$, reconstructible with the semantics 'to be able to; to understand' {'to be able' > 'to know'}, cf. the meaning 'to be able' in several sources listing the same root [Bleek 1956: 672]. An alternate

scenario is that *ʔʔai could be the original root and all of the forms listed under *ʔʔā merely borrowings from a Central Khoisan source (cf. Proto-Central Khoisan *ʔʔā 'to know'). However, the distribution of reflexes of *ʔʔā is so wide that, even if such a borrowing did occur, it should be postulated at the proto-stage, which renders the scenario irrelevant to the current issue. **Reconstruction shape:** Correspondences are mostly regular (in Grootfontein !Kung, Doke incorrectly records a retroflex click, just like he does with 'horn', q.v.); the tonal pattern is, however, hard to establish without Ekoka data.

46. LEAF

Ju|'hoan *d̥arà* (1), ||Kxau||en *d̥ra* (1), !Kung *!wá* (2), Grootfontein !Kung *ʔúbu* (3), !O!Kung *ʔba ~ ʔva ~ gòx* (3), Ekoka !Xung *ʔà* (2), Proto North Khoisan *!oa # (2).

References and notes:

Ju|'hoan: Dickens 1994: 196. Secondary synonym: *ʔúbu* (< vb. 'to come into leaf').

||Kxau||en: Bleek 1956: 27. Quoted as *d̥ra* in [Bleek 1929: 52], with a second synonym: *ʔbu*. The latter is, however, not found in [Bleek 1956] and may be an erroneous entry in the earlier vocabulary.

!Kung: Bleek 1956: 390. Quoted as *!wá* in [Bleek 1929: 52]; likely to be the most neutral word in this dialect, as illustrated by textual examples (e. g. *ʔā tí ma !āū !wa-sij* 'the wind blows the tree's leaves'). The latter source also adds *ʔbu* as a synonym; existence of the word is confirmed in [Bleek 1956: 480], where it is quoted as *ʔbbu*, but no text examples are given.

Grootfontein !Kung: Doke 1925: 159.

!O!Kung: Bleek 1956: 47, 532. Quoted as *ʔba ~ ʔva ~ gòx* in [Bleek 1929: 52]. Different root quoted in [Snyman 1980: 43]: *!oa*. Theoretically, Bleek's *gòx* may fit in better with Snyman's variant, reflecting a secondary dialectal post-click-drop variant of *!oa*.

Ekoka !Xung: König & Heine 2008: 30. Quoted as *ʔà* in [Heikkinen 1986: 24]. Secondary synonym: *gè-!kxáé* [König & Heine 2008: 25] (internal structure is not quite clear; *gè* probably = 'be, stay, have', second component has not been identified).

Proto North Khoisan: **Distribution:** A complex case; the etymon is highly unstable, usually with several quasi-synonyms for each dialect, frequently with dubious semantics. The best isogloss so far is *!oa, with the meaning 'leaf' (as such) attested for L. Lloyd's !Kung and Ekoka, but in Ju|'hoan yielding *ʔà* 'wet leaf' [Dickens 1994: 212]. Better data from future descriptions may, however, change the situation. **Replacements:** (a) Ju|'hoan *d̥arà*, etc., of unclear origin (an areal isogloss with Naro *t̥arà*, although the latter also lacks a reliable Central Khoisan etymology; both forms may be possibly inherited from an unknown substrate); (b) Grootfontein *ʔúbu*, etc. = Ju|'hoan *ʔúbu* 'to come into leaf (vb.); leaf, cabbage (n.)' [Dickens 1994: 254] {'to come into leaf' > 'leaf'}. **Reconstruction shape:** Correspondences among the few surviving reflexations are mostly regular, except for some difficulties with the tonal pattern.

47. LIE

Ju|'hoan *šú* (1), ||Kxau||en *šu ~ šú* (1), !Kung *šú ~ šù* (1), Grootfontein !Kung *šu* (1), !O!Kung *šú ~ ču* (1), Ekoka !Xung *šú* (1), Proto North Khoisan *šú (1).

References and notes:

Ju|'hoan: Dickens 1994: 192. Singular subject action verb; the plural subject form is $\text{ʃ}̃\text{à}$.

||Kxau||en: Bleek 1956: 182; Bleek 1929: 53.

!Kung: Bleek 1956: 182; Bleek 1929: 53. The latter source also quotes *tam* in the same meaning, but this is erroneous; in [Bleek 1956: 190] the correct meaning is stated as 'to fall down, to throw', confirmed by external data.

Grootfontein !Kung: Doke 1925: 155. Meaning given as 'to sleep, to lie down'.

!O!Kung: Bleek 1956: 182, 236; Bleek 1929: 53. The latter source adds $\text{w}̃\text{a}$ as a synonym, but textual examples in [Bleek 1956], compared with external data, show that the more correct meaning is 'to stand'.

Ekoka !Xung: König & Heine 2008: 19. Quoted as *sú* in [Heikkinen 1986: 26]. Polysemy: 'lie / lie down / lay down / fall'. Singular subject action verb; the plural subject form is $\text{!}̃\text{à}$.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial. Semantics and structure: The meanings 'lie' (state) and 'lie down' (action) seem to be generally expressed by the same stem or lexeme, as opposed to 'sleep' q.v.

48. LIVER

Ju|'hoan $\text{č}̃\text{h}̃$ (1), ||Kxau||en $\text{č}̃$ (1), !Kung $\text{č}̃\text{h}̃$ (1), Grootfontein !Kung $\text{š}̃\text{h}̃$ (1), !O!Kung $\text{č}̃$ (1), Ekoka !Xung $\text{š}̃\text{h}̃$ (1), Proto North Khoisan $\text{*č}̃\text{h}̃$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 268.

||Kxau||en: Bleek 1956: 229. Quoted as $\text{č}̃$: in [Bleek 1929: 54].

!Kung: Bleek 1956: 230; Bleek 1929: 54.

Grootfontein !Kung: Doke 1925: 155.

!O!Kung: Bleek 1929: 54. For some reason, absent in [Bleek 1956].

Ekoka !Xung: König & Heine 2008: 18. Quoted as *sáh* ~ *čáh* in [Heikkinen 1986: 26].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: The correspondence between Ju|'hoan $\text{č}̃$ (ʰ)- and Ekoka $\text{š}̃$ - is irregular, possibly reflecting a specific development $\text{*č}̃\text{-} > \text{š}̃\text{-}$ before a syllabic nasal. The coda is provisionally reconstructed as $\text{*h}̃$, although alternate variants are possible.

49. LONG

Ju|'hoan $\text{ʃ}̃\text{à}\text{?}\text{h}̃$ (1), ||Kxau||en $\text{ʃ}̃$ ~ $\text{ʃ}̃$ (1), !Kung $\text{ʃ}̃\text{à}\text{?}\text{h}̃$ ~ $\text{ʃ}̃\text{à}\text{?}\text{h}̃$ ~ $\text{ʃ}̃\text{à}\text{?}\text{h}̃$ (1), Grootfontein !Kung $\text{ʃ}̃\text{à}\text{?}\text{h}̃$ ~ $\text{ʃ}̃\text{à}\text{?}\text{h}̃$ (1), !O!Kung $\text{ʃ}̃\text{xana}$ (2), Ekoka !Xung $\text{!}̃\text{à}\text{?}\text{h}̃$ (1), Proto North Khoisan $\text{*ʃ}̃\text{à}\text{?}\text{h}̃$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 206. Singular subject action verb; the plural subject form is $\text{ʃ}̃\text{à}\text{?}\text{h}̃$ (a morphological variant of the same stem).

||Kxau||en: Bleek 1956: 277 (translated as 'long; tall; big'). Quoted as $\text{ʃ}̃$ in [Bleek 1929: 55], i. e. with a different click influx; considering that old Khoisan sources consistently misidentify the palatal click $\text{ʃ}̃$, the variation between the

earlier and the later source is an indirect argument in favor of a palatal click in this word, i. e. the same as in related languages.

!Kung: Bleek 1956: 275, 644. Translated as '(to be) long, tall, deep, powerful' (most text examples are in the meaning 'tall', but the two meanings normally merge in North Khoisan).

Grootfontein !Kung: Doke 1925: 158. Translated as 'long, tall'.

!O!Kung: Bleek 1956: 678; Bleek 1929: 55.

Ekoka !Xung: König & Heine 2008: 31. Adjectival variant; the verbal stem ('to be long, tall, big') is attested with tonal variation as $\ll\bar{a}á\eta$. Plural form for both stems is $\ll\bar{a}á\eta$.

Proto North Khoisan: Distribution: Preserved in most daughter dialects, with the possible exception of !O!Kung.

Replacements: !O!Kung $\dagger xana$ is probably related to Ju|'hoan $\dagger xá$ 'far' [Dickens 1994: 303], !O!Kung $\dagger xa$ id. with additional suffixation {'far' > 'long'}. Reconstruction shape: Correspondences are generally regular, although the coda is relatively rare and not entirely certain; however, the presence of a segmental nasal $*-ŋ$ is almost certain.

50. LOUSE

Ju|'hoan $cʔí$ (1), Ekoka !Xung $ʒʔí$ (1), Proto North Khoisan $*cʔí$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 279. Secondary synonyms: (a) $\tilde{f}á$; (b) $kxúri$ (probably < Khoekhoe, cf. Nama *uri*, !Ora *kxúri-b* id.).

||Kxau||en: Not attested.

!Kung: Not attested.

Grootfontein !Kung: Not attested.

!O!Kung: Not attested.

Ekoka !Xung: König & Heine 2008: 21. Quoted as $ʒʔá\eta$ in [Heikkinen 1986: 22].

Proto North Khoisan: Distribution: Preserved in most of the daughter dialects in which it is attested. Reconstruction shape: Ju|'hoan and Ekoka forms clearly belong together; the correspondence "-i : -ŋ" is recurrent (cf. 'liver', etc.). The voicing in Ekoka is, however, irregular (all of the dialectal forms collected by J. Snyman show that voiceless $*cʔ-$ is primary).

51. MAN

Ju|'hoan $ʔʰ\bar{a}á$ (1), ||Kxau||en $!wá$ (1), !Kung $!ù \sim !ù \sim !ù\eta \sim !ʰú$ (1), Grootfontein !Kung $\ll\bar{a}$ (2), !O!Kung $!ũ$ (1), Ekoka !Xung $\ll\bar{a}$ (2), Proto North Khoisan $*!ʔʰ\bar{a}á$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 323. Suppletive plural: $\ll\bar{a}è$.

||Kxau||en: Bleek 1956: 458. Quoted as $!wá$ in [Bleek 1929: 56]. Alternately quoted as $!wá$ in [Bleek 1956: 458]; attested contexts suggest this may be actually a plural form, although in [Bleek 1929] the singular and plural forms of this word are put down as homonymous. On the other hand, formation of the plural number through pharyngealization of the vowel is never attested in any reliable source on North Khoisan languages, so there may be some mistake involved.

!Kung: Bleek 1956: 430, 447. Quoted as *!ũ* in [Bleek 1929: 56].

Grootfontein !Kung: Doke 1925: 160. Polysemy: 'man / husband' (from which it can be ascertained that this is indeed the basic form for 'man (male)' rather than 'human being'). Cf. also *!õ-mà* 'small (of males); son' [ibid.]. Suppletive plural: *!ã* [Doke 1925: 161].

!O!Kung: Bleek 1956: 447; Bleek 1929: 56. Of note is also *!õ* 'man, male' [Bleek 1956: 531]. The word is only listed in the meaning 'male' in [Bleek 1929], but such textual examples as *!õ wi !ei dââ* 'a man does not bring firewood' may indicate that the word is at least partially synonymous with *!ũ* in its usage in the meaning 'human being of male sex'. [Snyman 1980: 44] lists the form *!xú-!õ*, pl. *!xú-!ãé*, lit. 'Xung-male', as well as an entirely different root, *!áú*, = Ju|'hoan *!ãú* 'old man' (most probably, this is the exact meaning in Angolan !Xung as well).

Ekoka !Xung: König & Heine 2008: 35; Heikkinen 1986: 25. Suppletive plural: *!ãé*.

Proto North Khoisan: **Distribution:** The main stem denoting a 'male human being', as opposed to both 'female human being' and 'human being, person (in general)', seems to have been generally preserved in all three dialectal clusters, despite occasional instability as well as strange phonetic changes. **Replacements:** Grootfontein *!ã*, etc., reflecting Proto-North Khoisan **!õ* 'male' (of any species; cf. the use of *-!õ* as a suffix denoting male sex in Ju|'hoan [Dickens 1994: 213]) {'male' > 'man'}. **Reconstruction shape:** The root is highly problematic; attested variants presuppose at least four irreconcilable variants (Ju|'hoan *!õã*, ||Kxau||en **!õã*, !Kung **!ũ*, !O!Kung /Snyman/ *!xũ* = Ekoka *!xũũ* 'person' [König & Heine 2008: 86]). Mechanistically suggesting four different entries is out of the question. It is more likely that the Ju|'hoan variant is the most archaic, whereas the old sources fail to properly transcribe aspiration; as for the velar fricative efflux *-x-* in the Northern cluster, it may have appeared secondarily through contamination with **!xuni* 'to live, reside' (cf. Ekoka *!xúni* [König & Heine 2008: 86], etc.). **Semantics and structure:** In Proto-North Khoisan, the root must have denoted a 'male person' without specific ethnic connotations (as it is attested in Ju|'hoan and ||Kxau||en); in many dialects, however, there is a clear tendency to restrict its usage to the denotation of native speakers (hence the appearance of the ethnonym *!Kung*, *!Xung*).

52. MANY

Ju|'hoan *!hái* (1), ||Kxau||en *!hí* (1), !Kung *!hí ~ !xí ~ !xì* (1), Grootfontein !Kung *!hí* (1), !O!Kung *!hí ~ !hí ~ !hí!hí* (1), Ekoka !Xung *!hí* (1), Proto North Khoisan **!hí* (1).

References and notes:

Ju|'hoan: Dickens 1994: 300.

||Kxau||en: Bleek 1956: 661; Bleek 1929: 57. [Bleek 1956: 313] also quotes *!hí* as a rare alternative variant (dialectal or misheard).

!Kung: Bleek 1956: 661, 680. Quoted as *!hí*: in [Bleek 1929: 57].

Grootfontein !Kung: Doke 1925: 158. The word *!au ~ !ãu* is also translated as 'three, many' in [Doke 1925: 158, 159], but the numeric meaning is likely to be the principal one.

!O!Kung: Bleek 1956: 313, 661. Quoted as *!hí*: in [Bleek 1929: 57]; *!hái* in [Snyman 1980: 44]. The latter source adds a secondary synonym, *!hò* (no etymology).

Ekoka !Xung: König & Heine 2008: 94.

Proto North Khoisan: **Distribution:** Preserved in all daughter dialects. **Reconstruction shape:** Correspondences are regular. The click efflux is reconstructed as "regular aspirated", despite the (probably erroneous) transcription with a glottal stop in C. Doke's Grootfontein materials. The original vowel is **-i*, undergoing regular diphthongization in Ju|'hoan.

53. MEAT

Ju|'hoan $!^h\acute{a}$ (1), ||Kxau||en $!^h\mathbf{a} \sim !\acute{a} \sim \|\acute{a} \sim \mathfrak{f}\mathbf{a}$ (1), !Kung $\|!^h\acute{a} \sim \|!^h\grave{a} \sim \|\mathbf{a}$ (1), Grootfontein !Kung $!!^h\acute{a} \sim \|\mathbf{a}$ (1), !O!Kung $\|!^h\mathbf{a}$ (1), Ekoka !Xung $\|!^h\bar{a}$ (1), Proto North Khoisan $*!!^h\bar{a}$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 312.

||Kxau||en: Bleek 1956: 402, 423, 546, 654. Quoted as $!^h\acute{a}$ in [Bleek 1929: 57]. Fluctuating articulation of the click influx reflects former retroflex (!) articulation.

!Kung: Bleek 1956: 546, 572; Bleek 1929: 57.

Grootfontein !Kung: Doke 1925: 160.

!O!Kung: Bleek 1956: 572; Bleek 1929: 57. Quoted as $\|!^h\acute{a}$ in [Snyman 1980: 44].

Ekoka !Xung: König & Heine 2008: 98; Heikkinen 1986: 25.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and indicate an original retroflex click, still preserved in the Grootfontein dialect. Tonal pattern is most probably level even, based on Ekoka data.

54. MOON

Ju|'hoan $\tilde{!}úí$ (1), ||Kxau||en $\tilde{!}wi$ (1), !Kung $\tilde{\|}wi \sim \tilde{\|}wái \sim \tilde{\|}wáí \sim \mathfrak{f}wi$ (1), Grootfontein !Kung $\tilde{\|}wi$ (1), !O!Kung $\tilde{\|}wi \sim \tilde{\|}we$ (1), Ekoka !Xung $\tilde{\|}úí$ (1), Proto North Khoisan $*\tilde{\|}úí$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 254.

||Kxau||en: Bleek 1956: 488; Bleek 1929: 59.

!Kung: Bleek 1956: 623, 624, 675. Quoted as $\tilde{\|}wái$ in [Bleek 1929: 59].

Grootfontein !Kung: Doke 1925: 160.

!O!Kung: Bleek 1956: 624; Bleek 1929: 59.

Ekoka !Xung: König & Heine 2008: 60; Heikkinen 1986: 26.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial, indicating retroflex click articulation in Proto-North Khoisan.

55. MOUNTAIN

Ju|'hoan $\tilde{!}òm$ (1), ||Kxau||en $\tilde{!}um$ (1), !Kung $\tilde{!}um$ (1), Grootfontein !Kung $\tilde{\|}ù:m$ (1), !O!Kung $\tilde{!}um$ (1), Ekoka !Xung $\mathfrak{?}\tilde{!}òrí$ (1), Proto North Khoisan $*\mathfrak{?}\tilde{!}òm$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 252. Polysemy: 'stone / mountain'. Secondary synonym: $|xúni$.

||Kxau||en: Bleek 1956: 485; Bleek 1929: 59. Polysemy: 'stone / mountain'. The latter source also lists \tilde{b} : as a synonym, but the form is unconfirmed in [Bleek 1956].

!Kung: Bleek 1956: 485; Bleek 1929: 59. Polysemy: 'stone / mountain'.

Grootfontein !Kung: Doke 1925: 159. Polysemy: 'stone / mountain', although Doke postulates tonal differences between the two: $\tilde{u}:m$ 'mountain' vs. $\tilde{u}:m$ 'stone'. No other dialect confirms any such differentiation.

!O!Kung: Bleek 1956: 485. Not quite certain, since the word is not found under 'mountain' in [Bleek 1929]; no better candidates, however, are recorded in [Bleek 1956].

Ekoka !Xung: König & Heine 2008: 53. Quoted as $\tilde{d}óm$ (Western dialect), \tilde{om} (Eastern dialect) in [Heikkinen 1986: 25]. Both sources gloss the word as 'hill' and explicitly distinguish this root from the very similar-sounding 'stone' q.v.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Both major sources on Ekoka agree that the word is pronounced with a glottalized nasal click rather than simple nasal in the case of 'stone' q.v. Considering the usual polysemy 'stone / mountain' in African languages, this phenomenon looks very strange. On the other hand, if the two roots were indeed different in the protolanguage, it would have been natural for them to contaminate. Provisionally, following the data, we reconstruct 'mountain' with a preglottalized nasal click and 'stone' q.v. with a simple nasal one. C. Doke does not mark any differences in click articulation, but mentions that the two words have different tonal characteristics ; this is not confirmed by Ekoka or Ju|'hoan data at all. The basic tonal pattern is low-low or low-high (as in Ekoka).

56. MOUTH

Ju|'hoan $cʔí$ (1), ||Kxau||en $ci \sim c\acute{i}$ (1), !Kung $ci \sim c\grave{i}$ (1), Grootfontein !Kung $cʔ\acute{i}$: (1), !O!Kung $c\acute{i} \sim c\grave{i}$: (1), Ekoka !Xung $\check{c}ʔ\acute{i}$ (1), Proto North Khoisan $*cʔ\acute{i}$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 279. Secondary synonym: *kxám* (< Khoekhoe, cf. Nama *am-s* id.).

||Kxau||en: Bleek 1956: 216. Quoted as *c\acute{i}*: in [Bleek 1929: 59].

!Kung: Bleek 1956: 216. Quoted as *c\acute{i}*: in [Bleek 1929: 59]. The latter source adds *||kwe* as an alternative synonym, but the word is not confirmed either in [Bleek 1956] or by external data.

Grootfontein !Kung: Doke 1925: 153.

!O!Kung: Bleek 1956: 216; Bleek 1929: 59.

Ekoka !Xung: König & Heine 2008: 68. Quoted as $cʔ\acute{i}$ in [Heikkinen 1986: 22]. Polysemy: 'mouth / door / opening'.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial.

57. NAME

Ju|'hoan $!ú$ (1), ||Kxau||en $!ú \sim !^hú$ (1), !Kung $!ù \sim !ú \sim !ú$ (1), Grootfontein !Kung $!ú$ (1), !O!Kung $!ú$ (1), Ekoka !Xung $!ú$ (1), Proto North Khoisan $*!ú$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 317.

||Kxau||en: Bleek 1956: 448. Quoted as *!ú*: in [Bleek 1929: 60].

!Kung: Bleek 1956: 388, 448; Bleek 1929: 60.

Grootfontein !Kung: Doke 1925: 157.

!O!Kung: Bleek 1956: 448; Bleek 1929: 60.

Ekoka !Xung: König & Heine 2008: 84; Heikkinen 1986: 24.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial, except for an unexpected dental (rather than the expected alveolar) click transcription by C. Doke in the Grootfontein dialect; possibly just a misprint.

58. NECK

Ju|'hoan *!ãĩ* (1), ||Kxau||en *!ẽĩ* (1), !Kung *||ãŋ ~ ||ãũŋ* (1), Grootfontein !Kung *!!ãŋ* (1), !O!Kung *||ãŋ* (1), Ekoka !Xung *||ãŋ* (1), Proto North Khoisan **!!ãŋi* (1).

References and notes:

Ju|'hoan: Dickens 1994: 310.

||Kxau||en: Bleek 1956: 420; Bleek 1929: 60.

!Kung: Bleek 1956: 556. Quoted as *||ãũ* in [Bleek 1929: 60]; in [Bleek 1956], the given meaning is 'back of the neck', but no separate root for 'front of the neck' is indicated.

Grootfontein !Kung: Doke 1925: 160.

!O!Kung: Bleek 1956: 556; Bleek 1929: 60. Quoted as *||ãŋ* in [Snyman 1980: 45].

Ekoka !Xung: König & Heine 2008: 97; Heikkinen 1986: 25.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are generally regular, indicating an old retroflex click in the initial position. Coda correspondences fall under the recurrent pattern "Ju|'hoan *-ãĩ ~ -ãũ* : Ekoka *-aŋ*" that we provisionally mark as reflecting Proto-North Khoisan **-aŋi* and **-aŋu* respectively (alternately, one could reconstruct **-aĩŋ* and **-aũŋ*, but, with three vocalic morae in a row, that would contradict the general laws of Bushman phonotactics); see 'green' and 'tree' for more examples.

59. NEW

Ju|'hoan *z'é ~ zǎí* (1), ||Kxau||en *z'é* (1), !Kung *zɛ-ma* (1), Grootfontein !Kung *zɛ* (1), !O!Kung *zɛ* (1), Ekoka !Xung *zǎhè* (1), Proto North Khoisan **zɛ* (1).

References and notes:

Ju|'hoan: Dickens 1994: 285, 286.

||Kxau||en: Bleek 1956: 264. Quoted as *zɛ*: in [Bleek 1929: 61]. The same source adduces one more synonym: *gǎù*, later quoted as *gǎù* in [Bleek 1956: 45]. This word is cognate to Ju|'hoan *gǎǎú* 'to be clean', and it is not clear whether a semantic shift has actually taken place or if the whole thing is merely a matter of inadequate translation.

!Kung: Bleek 1929: 61. Not found in [Bleek 1956].

Grootfontein !Kung: Doke 1925: 154.

!O!Kung: Bleek 1956: 31. Quoted as *zɛ ~ zɛ* in [Bleek 1929: 61]; *zǎé* in [Snyman 1980: 45].

Ekoka !Xung: König & Heine 2008: 22.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are mostly regular and trivial, with the exception of the tonal pattern that ranges from simple rising in Ju|'hoan to ultra-low in Ekoka (with additional aspiration, frequently accompanying low tones). It is also unclear whether the Ju|'hoan form *zú*, with a diphthong and pharyngealization, is merely a dialectal variant or a different root. The reconstruction of the coda as simple **e* is therefore provisional.

60. NIGHT

Ju|'hoan *ú* (1), ||Kxau||en *u* ~ *u* ~ *ú* (1), !Kung *ú* ~ *u* (1), Grootfontein !Kung *ú*: (1), !O!Kung *ú* (1), Ekoka !Xung *ú* (1), Proto North Khoisan **ú* (1).

References and notes:

Ju|'hoan: Dickens 1994: 205.

||Kxau||en: Bleek 1956: 282; Bleek 1929: 61.

!Kung: Bleek 1956: 282; Bleek 1929: 61.

Grootfontein !Kung: Doke 1925: 157.

!O!Kung: Bleek 1956: 282. Quoted as *ú* ~ *gú* in [Bleek 1929: 61]; *ú* in [Snyman 1980: 45].

Ekoka !Xung: König & Heine 2008: 28; Heikkinen 1986: 23.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial.

61. NOSE

Ju|'hoan *cú* (1), ||Kxau||en *čú* (1), !Kung *sú* ~ *cú* ~ *càŋ* ~ *cáú* (1), Grootfontein !Kung *cú* (1), !O!Kung *cuŋ* ~ *cáŋ* ~ *čn* (1), Ekoka !Xung *čxáŋ* ~ *čŋ* (1), Proto North Khoisan **čxú* (1).

References and notes:

Ju|'hoan: Dickens 1994: 279. Secondary synonym: *ú* (< Khoekhoe, cf. Nama *ú*-*s* id.).

||Kxau||en: Bleek 1956: 236. Quoted as *cú* in [Bleek 1929: 62] (in the light of external evidence, this may actually be the more correct form).

!Kung: Bleek 1956: 173, 211, 213, 220. quoted as *cú* ~ *sú* in [Bleek 1929: 62].

Grootfontein !Kung: Doke 1925: 153. The author is uncertain about the tone.

!O!Kung: Bleek 1956: 211, 221, 232. Quoted as *cn* ~ *čn* in [Bleek 1929: 62].

Ekoka !Xung: König & Heine 2008: 67, 68. Quoted as *čxáŋ* 'nostrils' in [Heikkinen 1986: 22].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are complex and relatively rare. In the initial position, Ekoka as well as some other dialectal data indicate an old affricate cluster **čkx*- (phonologically opposed to the simple post-alveolar glottalized affricate **čʔ*-). The coda contains a velar nasal, presumably with a preceding labial vowel (reflecting the correspondence "Ju|'hoan *-ú* : Ekoka *-(a)ŋ*"), although this particular part of the reconstruction is provisional.

62. NOT

Ju|'hoan /óá (1), ||Kxau||en /wa ~ /ua ~ /á (1), !Kung /úä ~ /úí (1), !O!Kung /wa ~ /we ~ /wí ~ kwé ~ kwí (1), Ekoka !Xung /ōā (1), Proto North Khoisan */ōā (1).

References and notes:

Ju|'hoan: Dickens 1994: 291.

||Kxau||en: Bleek 1956: 295, 323, 328. Quoted as /á ~ /wá ~ /kú: in [Bleek 1929: 62]; the clickless variant does not, however, reappear in [Bleek 1956].

!Kung: Bleek 1956: 323, 324; Bleek 1929: 62.

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 111, 114, 328, 332, 334. Quoted as /wa ~ /wí ~ /kwí in [Bleek 1929: 62].

Ekoka !Xung: König & Heine 2008: 75; Heikkinen 1986: 22.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are generally regular, although there are occasional fluctuations of vocalism in this negative marker, possibly due to sandhi-type change. !O!Kung dialects as recorded by D. Bleek also tend to drop click articulation.

63. ONE

Ju|'hoan /èʔé (1), ||Kxau||en /ē ~ /é (1), !Kung /é (1), Grootfontein !Kung /ɣé (1), !O!Kung /é (1), Ekoka !Xung /èʔè ~ /è (1), Proto North Khoisan */èʔe (1).

References and notes:

Ju|'hoan: Dickens 1994: 239.

||Kxau||en: Bleek 1956: 346; Bleek 1929: 63.

!Kung: Bleek 1956: 346; Bleek 1929: 63.

Grootfontein !Kung: Doke 1925: 158.

!O!Kung: Bleek 1956: 346. Quoted as /é in [Bleek 1929: 63]; /éʔé in [Snyman 1980: 45].

Ekoka !Xung: König & Heine 2008: 48. Quoted as /éʔé in [Heikkinen 1986: 23] (no tone marks).

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial except for the tonal pattern, where the best-transcribed dialects contradict each other.

64. PERSON

Ju|'hoan /žù (1), ||Kxau||en /žu (1), !Kung /žú ~ /žú (1), Grootfontein !Kung /atù (-1), !O!Kung /žu ~ /žu (1), Ekoka !Xung /xũũ (2), Proto North Khoisan */žù (1).

References and notes:

Ju|'hoan: Dickens 1994: 221. Plural form: /žú.

||Kxau||en: Bleek 1956: 266. Quoted as *z̥u* in [Bleek 1929: 56], with the plural form *z̥u-si*.

!Kung: Bleek 1956: 34, 266. Quoted as *z̥u* ~ *z̥u* in [Bleek 1929: 56], with the plural form *z̥u-siŋ*.

Grootfontein !Kung: Doke 1925: 152. Although the immediate source of borrowing is unknown, the word cannot possibly be of native origin. The plural form, however, is the same as in other North Khoisan dialects: *z̥u*: ~ *z̥u*: 'people' [Doke 1925: 155].

!O!Kung: Bleek 1956: 34, 266. Quoted as *z̥u* ~ *z̥u* in [Bleek 1929: 56]; *z̥u* in [Snyman 1980: 46].

Ekoka !Xung: König & Heine 2008: 86; Heikkinen 1986: 24. Secondary synonym: *z̥u-xòà* [König & Heine 2008: 23]. The latter term is not as well confirmed by textual examples and may be more stylistically marked (it should be noted that the simple root *z̥u* 'person' has shifted in Ekoka to the meaning 'we excl.', although the form *z̥u* 'man, person' is still quoted in [Heikkinen 1986: 26] next to the pronominal meaning).

Proto North Khoisan: Distribution: The original root **z̥u* is found in all the major dialect clusters. Replacements: (a) *atā* in C. Doke's Grootfontein records, of unclear origin (if the word is transcribed correctly, it cannot be a native item); (b) Ekoka *!x̥iú* < '!Xung, (Bushman) male human being'. Reconstruction shape: Correspondences are generally regular and trivial. It is remarkable that in Ju!'hoan, the word forms its plural through tonal change, the only recorded (and so far unexplained) instance of this phenomenon in North Khoisan. Semantics and structure: Of note is the compound form **z̥u-!hōā*, lit. 'true person', denoting North Khoisan-speaking people; given its presence in both Ju!'hoan and Ekoka, it has to be projected onto the proto-level as a very archaic ethnic self-designation.

65. RAIN

Ju!'hoan *!à* (1), ||Kxau||en *!à* (1), !Kung *!a* ~ *!a* (1), Grootfontein !Kung *!a* (1), !O!Kung *!a* ~ *!a* (1), Ekoka !Xung *!à* (1), Proto North Khoisan **!à* (1).

References and notes:

Ju!'hoan: Dickens 1994: 209. Secondary synonym (praise form): *!òí* (lit. 'to drown').

||Kxau||en: Bleek 1956: 374; Bleek 1929: 68.

!Kung: Bleek 1956: 505, 522. Quoted as *!a* in [Bleek 1929: 68]; the latter source also lists *!ú*: 'water' as a synonym.

Grootfontein !Kung: Doke 1925: 156.

!O!Kung: Bleek 1956: 41, 522. Quoted as *!á* in [Bleek 1929: 68]; the latter source also lists *!u*: 'water' as a synonym.

Ekoka !Xung: König & Heine 2008: 33; Heikkinen 1986: 25. Polysemy: 'rain / year'.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial, indicating an original voiced retroflex click and a low tonal pattern.

66. RED

Ju!'hoan *!ā*: (1), ||Kxau||en *!ā*: (1), !Kung *!ā* ~ *!a* (1), Grootfontein !Kung *!ā?ā* (1), !O!Kung *!à* (1), Ekoka !Xung *!āē* (1), Proto North Khoisan **!ā* ~ **!ae* (1).

References and notes:

Ju!'hoan: Dickens 1994: 209. Polysemy: 'red / brown'.

||Kxau||en: Bleek 1956: 374. Quoted as *!ā* in [Bleek 1929: 69].

!Kung: Bleek 1956: 374. Quoted as $\text{!}a \sim \text{!}ā$ in [Bleek 1929: 69].

Grootfontein !Kung: Doke 1925: 159. Secondary synonym: $\eta\tilde{f}$: [Doke 1925: 158].

!O!Kung: Bleek 1956: 375. Quoted as $\text{!}ai$ in [Bleek 1929: 69]; $\text{!}āe$ in [Snyman 1980: 47].

Ekoka !Xung: König & Heine 2008: 29. Adjectival form; the corresponding verbal stem 'to be red' is glossed as $\text{!}āè$ (with tonal variation). Quoted as $\text{!}āè$ (Western dialect), $\text{!}ēè$ (Eastern dialect) in [Heikkinen 1986: 24].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: The Northern dialect cluster generally agrees on the reconstruction $\text{*!}ae$, whereas the rest of the dialects agree on $\text{*!}ā$. This may either reflect some rare, non-trivial combination of features (a nasalized diphthong?), or, more likely, two different morphological variants, making it likely that the original root was simply $\text{*!}a$.

67. ROAD

Ju|'hoan $\tilde{\text{!}}ā\text{m}ā$ (1), ||Kxau||en $\text{/}a$ (2), !Kung $\text{!}^h a$ (2), !O!Kung $\text{/}ā$: (2), Ekoka !Xung $kū\text{h}ū$ (3), Proto North Khoisan $\text{*!}^h ā$ (2).

References and notes:

Ju|'hoan: Dickens 1994: 248. Synonym: $\text{!}^h ā$ 'path, road'; external comparison shows this to be the older root, but it is unclear which of the two words is currently used as the default word for 'road'.

||Kxau||en: Bleek 1956: 295; Bleek 1929: 64. The latter source quotes $dā\text{ū-sa}$ a transparent borrowing from Central Khoisan, as a synonym, confirmed also in [Bleek 1956: 22]. It is not quite clear which root is the default one in the transcribed dialect.

!Kung: Bleek 1956: 660; Bleek 1929: 64. The latter source quotes $kū$ as a synonym. In [Bleek 1956: 103] this word is translated as 'footprints, road', with text examples illustrating both meanings. Since external data are clearly in favor of $\text{!}^h a$ as the more archaic designation of 'path, road', it may be assumed that the older root $kū$ 'footprints' has not yet firmly replaced the old 'road' in the dialect(s) described by L. Lloyd, as it has, for instance, in Ekoka !Kung.

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 295; Bleek 1929: 64.

Ekoka !Xung: König & Heine 2008: 42. Quoted as $kū\text{ū}$ in [Heikkinen 1986: 21]. Meaning given as 'path, road, way'. Derived form: $kū\text{h}ū\text{-m}ā$ 'path' (with the regular diminutive suffix). Secondary synonym: $\text{!}hū$ 'path' [König & Heine 2008: 90] (arguably not eligible, since the meaning 'road' is not glossed; the word is likely to be restricted for designating explicitly small paths, rather than the "default" type of walkway).

Proto North Khoisan: Distribution: The original root $\text{*!}^h ā$ 'path, road' is relatively stable according to old data sources, but its usage seems to have diminished in recently transcribed dialects, possibly due to its being replaced by lexemes denoting different kinds of 'roads'. However, this may be a dictionary-based illusion. Replacements: (a) Ju|'hoan $\tilde{\text{!}}ā\text{m}ā$, with no known parallels or sources; (b) Ekoka $kū\text{h}ū$ {'footprint' > 'footpath' > 'road'} (see notes on !Kung). Reconstruction shape: Correspondences are regular and trivial. D. Bleek seems to have mistranscribed a dental click for both ||Kxau||en and !O!Kung instead of palatal articulation (a rather common error in her records).

68. ROOT

Ju|'hoan $\tilde{\text{!}}ā\text{n}i$ (1), ||Kxau||en $\text{!}ā\text{ĩ}$ (1), !Kung $\text{!}ubbe$ (2), !O!Kung $\text{!}ale \sim \text{!}are$ # (3), Ekoka !Xung $\text{!}ā\text{k}i$ (3), Proto North Khoisan $\text{*!}ani$ # (1).

References and notes:

Ju|'hoan: Dickens 1994: 209. Secondary synonym: *||àrì* [Dickens 1994: 329]. The form is slightly less reliable, since (a) it is only quoted by P. Dickens after J. Snyman's earlier dictionary (not attested by himself); (b) related forms in other dialects of the Central and Southern clusters usually have it in the meaning 'root fibre'.

||Kxau|en: Bleek 1956: 375. Erroneously quoted as *||āī* in [Bleek 1929: 71]; later, confused by D. Bleek with the phonetically similar, but ultimately different forms for 'tree' (the difference is clearly seen in Ju|'hoan: *!āni* 'root' vs. *!āīh* 'tree'). There are also several forms with the meaning 'root fibre' ([Bleek 1929: 71]: *||ari*, *†abe*) that are ineligible.

!Kung: Bleek 1956: 448. Translated as 'main root of plant'; quoted as *!ube* 'root' in [Bleek 1929: 71]. The latter source also lists, in the meaning 'root fibre', the forms *||eri* and *darj*; external data show that *||eri* may indeed mean 'fibre', whereas *darj* is more likely to be a metaphor for 'root' proper, since its usual meaning is 'bottom'.

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 554. Dubious; the meaning is given as 'branch; root fibre'. In the exact meaning 'root' the word is quoted as *||ari* in [Bleek 1929: 71]. Only a complete lack of synonyms and the fact that the same word functions as 'root' in the closely related Ekoka !Xung keeps us from leaving the slot unfilled.

Ekoka !Xung: König & Heine 2008: 97. Quoted as *||āri* in [Heikkinen 1986: 25]. Polysemy: 'root / handle'. Secondary synonym: *||āi* 'root, carrot' [König & Heine 2008: 58].

Proto North Khoisan: Distribution: Proto-North Khoisan **!ani* is well attested in Ju|'hoan and ||Kxau|en, restricting its total absence only to the Northern dialect cluster, and has no known semantics other than simply 'root'. Still, it is frequently competing with **!ari*, also quoted with the meaning 'root' for Ju|'hoan as well as Ekoka !Xung (Northern cluster). On the other hand, the latter in some old sources is glossed as 'root fibre' rather than 'root' (D. Bleek very explicitly states the difference and lists minimal pairs in [Bleek 1929]); the semantic transition {'root fibre' > 'root'} is easily understandable and could have occurred in the common ancestor of all Northern cluster dialects.

Replacements: (a) !Kung *tubbe*, of unclear origin, perhaps = Ju|'hoan *!úhè* 'species of shrub' [Dickens 1994: 317]; (b) !O!Kung *||ale*, etc., see above. Reconstruction shape: The protoform **!ani* is tentatively modeled after the Ju|'hoan form, but, since there are no correlates in the Northern dialect cluster, could have easily been **!ari* as well.

69. ROUND

References and notes:

Ju|'hoan: Not attested.

||Kxau|en: Not attested.

!Kung: Not attested.

Grootfontein !Kung: Not attested.

!O!Kung: Not attested.

Ekoka !Xung: Not attested.

Proto North Khoisan: Not reconstructible due to lack of attestation.

70. SAND

Ju|'hoan *kxà* (1), ||Kxau||en *kxa* (1), !Kung *kxa* (1), !O!Kung *kxa* (1), Ekoka !Xung *kxà* (1), Proto North Khoisan **kxà* (1).

References and notes:

Ju|'hoan: Dickens 1994: 231. Same word as 'earth' q.v.

||Kxau||en: Bleek 1929: 71. Same word as 'earth' q.v.; in [Bleek 1956: 118] quoted only in this latter meaning, but no alternative lexeme for 'sand' is attested.

!Kung: Bleek 1929: 71. Same word as 'earth' q.v.; in [Bleek 1956: 118] quoted only in this latter meaning, but no alternative lexeme for 'sand' is attested.

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1929: 71. Same word as 'earth' q.v.; in [Bleek 1956: 118] quoted only in this latter meaning, but no alternative lexeme for 'sand' is attested.

Ekoka !Xung: König & Heine 2008: 43. Same word as 'earth' q.v.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: see 'earth'. Semantics and structure: The meanings 'earth' and 'sand' were not differentiated in Proto-North Khoisan any more than they are differentiated in modern day descendants.

71. SAY

Ju|'hoan *kò* (1), ||Kxau||en *o=kxwí* (2), !Kung *o=kxwi* ~ *o=kxwì* (2), Grootfontein !Kung *o=kxwí*: (2), !O!Kung *ka* ~ *ke* (1), Ekoka !Xung *kòè* ~ *kwèé* ~ *kūyā* (1), Proto North Khoisan **kò* (1).

References and notes:

Ju|'hoan: Dickens 1994: 228. Synonyms: *ǀá*, *ǀàè* (possibly of Khoekhoe origin).

||Kxau||en: Bleek 1956: 154. The form is a composite one, consisting of *o* 'to make, do' ([Bleek 1956: 152]) + *kxwi* 'to speak' ([Bleek 1956: 128]) = Ju|'hoan ò:-*kxúí* 'speak, talk'. Although existing textual examples do not show the meaning 'say' for *kxwi* as such, this may be accidental; [Bleek 1929: 72] quotes both *kxwí* and *o=kxwí* in the meaning 'to say', but only *o=kxwí* in the meaning 'to speak'. Another synonym is *ǀá* [Bleek 1956: 653] ~ *ǀá*: [Bleek 1929: 72] 'to say, talk', with no external parallels.

!Kung: Bleek 1956: 154. Quoted as *kxwí* ~ *o=kxwí* in [Bleek 1929: 72]. See notes on the ||Kxau||en entry (most of them apply to the !Kung item as well). The latter source also quotes *kue* as a synonym; the form is not confirmed in [Bleek 1956].

Grootfontein !Kung: Doke 1925: 152. The meaning quoted as 'to say, to speak, word'.

!O!Kung: Bleek 1929: 72. Neither of the forms is confirmed in [Bleek 1956]. Additionally, [Bleek 1929: 72] lists *kwi* = *kxwí* in [Bleek 1956: 128], but with textual examples confirming the semantics of 'speak, sound' rather than 'say' proper. A third synonym is *ǀaǀj*, also unconfirmed in [Bleek 1956]. Quoted as *ka* in [Snyman 1980: 48].

Ekoka !Xung: König & Heine 2008: 41, 42. Quoted as *kòè* (Western dialect), *kè* (Eastern dialect) in [Heikkinen 1986: 21]. All the variants look like idiolectal variants of the same word, although the fluctuations between *-œ* and *-uya* cannot be easily explained.

Proto North Khoisan: Distribution: The original root **kò* still functions as the main term for 'say' in Ju|'hoan and

Ekoka, the two best recorded North Khoisan dialects that represent two distant clusters; this is clearly the best candidate for proto-status. Replacements: (a) ||Kxau||en *o-kxwi*, etc.; a compound from Proto-North Khoisan *o 'to do, make' + Proto-North Khoisan *kxúí. Both in Ju|'hoan and Ekoka this compound is translated as 'speak, talk (about smth.)' rather than 'say (smth. specific)'. Furthermore, P. Dickens even assigns the morpheme *kxúí* a pronominal rather than verbal meaning: 'be thus, be so (e. g. of the sound, sight or way of doing something)' [Dickens 1994: 232], although a more detailed analysis of contexts is needed to clarify the situation. Still, some of the examples given by D. Bleek in [Bleek 1956] suggest that this compound form may have actually replaced the original *h̃ in at least some of the described dialects, i. e. the original *'speak' and *'say' have merged in one word. Reconstruction shape: The basic form of the root is *h̃, as seen in Ju|'hoan; Ekoka *h̃è* (and the contracted variant *h̃e*) is likely to represent a suffixal extension (possibly old).

72. SEE

Ju|'hoan *h̃* (1), ||Kxau||en *sɛ ~ sɛ:* (2), !Kung *sínj* (2), Grootfontein !Kung *sɪ* (2), !O!Kung *sínj ~ sínj ~ sünj ~ hɪj* (2), Ekoka !Xung *hɪj ~ hní ~ šj* (2), Proto North Khoisan **séj* ~ **héj* (2).

References and notes:

Ju|'hoan: Dickens 1994: 219. The form *sé* is listed as a synonym in the English-Ju|'hoan section of the dictionary (p. 144), but is only translated as 'look (at), look after, investigate' in the main section.

||Kxau||en: Bleek 1956: 165; Bleek 1929: 72. The latter source also quotes *!ʔhā* as a synonym, but the word really means 'to know' q.v.

!Kung: Bleek 1956: 169; Bleek 1929: 72.

Grootfontein !Kung: Doke 1925: 154.

!O!Kung: Bleek 1956: 62, 169, 176; Bleek 1929: 72. Quoted as *sínj* in [Snyman 1980: 48]. The latter source also quotes *ǀe* as a synonym, but the root is not explicitly confirmed in this meaning in [Bleek 1956: 345], with 'perceive, understand, know' more likely to be its general semantics.

Ekoka !Xung: König & Heine 2008: 36. Quoted as *háj* (Western dialect), *sáj* (Eastern dialect) [Heikkinen 1986: 22].

Proto North Khoisan: Distribution: Preserved in all daughter dialects except Ju|'hoan. Replacements: Ju|'hoan *h̃* < Proto-North Khoisan **h̃(ó)* 'to find' (cf. Ekoka *h̃h̃* id. [König & Heine 2008: 37], etc.; a basic semantic shift {'to find' > 'to see'}). Reconstruction shape: Ju|'hoan and ||Kxau||en drop the nasal part of the coda in this root just as they do for 'drink' q.v., for not quite clear reasons; nevertheless, most of the dialects, including those from J. Snyman's survey, confirm *-ɪj*. The vowel is tentatively reconstructed as *-e* based on Ju|'hoan data (in most dialects the two codas, *-ɪj* and *-eɪ*, seem to have merged). Initial **s-* is occasionally lenited to *h-*; this is either a unique positional development before a syllabic nasal, or reflects an original aspirated **sʰ-* (not enough data to reach a definite conclusion).

73. SEED

Ju|'hoan *ǀǎǎá* (1), ||Kxau||en *ʔa* (2), !O!Kung *!ó* (3), Ekoka !Xung *!ó* (3), Proto North Khoisan **!ó* (3).

References and notes:

Ju|'hoan: Dickens 1994: 329. Polysemy: 'seed / kernel / marrow'; more precise denotation of the former is $\|\text{xàxà}\|$ - $\|\text{àzà}\|$, lit. 'plant-seed'.

$\|\text{Kxau}\|$ en: Bleek 1956: 642 (quoted in the plural form: ʔa-si 'seeds'). [Bleek 1929: 72] has an entirely different entry: $\tilde{\alpha}$ - si (also a plural form), but this is almost certainly a mistake, since $\tilde{\alpha}$ actually means 'skin, bark, shell' q.v.; in the generally more reliable source [Bleek 1956] the meaning 'seed' for this root is unattested.

!Kung: Not attested (seemingly). [Bleek 1929: 72] quotes the plural form $\tilde{e-si}$ in the meaning 'seeds'; the basic meaning of the root is 'head' (q.v.) and, although it is commonly used in the metaphorical meaning 'bulb' or 'berry' (see text examples in [Bleek 1956: 346]), the meaning 'seed' (of fruit or berry) is not really confirmed by any other source, be it this particular dialect or any other North Khoisan language.

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1929: 72. Not confirmed in [Bleek 1956], but the presence of the same root in Ekoka !Xung makes the entry reliable.

Ekoka !Xung: König & Heine 2008: 82. Polysemy: 'grain / seed'. Glossed as !ó 'pip, grain' in [Heikkinen 1986: 24]. Secondary synonym: !óhí [König & Heine 2008: 41] (also, as a verb, = 'to plant'; not confirmed in [Heikkinen 1986]).

Proto North Khoisan: Distribution: Proto-North Khoisan $*\text{!ó}$ is well preserved in the Northern dialect cluster; in Ju|'hoan, !ó is still attested with the meaning 'pip' [Dickens 1994: 315]. Replacements: (a) Ju|'hoan $\|\text{àzà}\|$ = Ekoka $\|\text{àzà}\|$ 'bone marrow', implying a shift like {'pith' > 'seed'}; (b) $\|\text{Kxau}\|$ en ʔa of unclear origin (the form itself is somewhat dubious). Reconstruction shape: Correspondences are regular and trivial.

74. SIT

Ju|'hoan $\tilde{\text{!á}}\eta$ (1), $\|\text{Kxau}\|$ en $\tilde{\text{!i}} \sim \tilde{\text{!í}}$ (1), !Kung $\tilde{\text{!i}} \sim \tilde{\text{!í}} \sim \tilde{\text{!í}}\eta$ -a (1), Grootfontein !Kung $\tilde{\text{!í}}\eta$: (1), !O!Kung $\text{!í} \sim \text{!í}\eta$ (1), Ekoka !Xung $\text{!í}\eta \sim \tilde{\text{!á}}$ (1), Proto North Khoisan $*\text{!á}\eta$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 238. Singular subject action verb; the plural subject form is $\text{!}^{\text{h}}\text{ó}$ [Dickens 1994: 211].

$\|\text{Kxau}\|$ en: Bleek 1956: 347; Bleek 1929: 76. Singular subject action verb; the plural subject form is $\text{!}^{\text{h}}\text{ó}$: [Bleek 1929: 76; Bleek 1956: 382].

!Kung: Bleek 1956: 347. Quoted as $\tilde{\text{!i}}$ in [Bleek 1929: 76]. Singular subject action verb; the plural subject form is !a [Bleek 1929: 76] ~ !o [Bleek 1956: 435].

Grootfontein !Kung: Doke 1925: 157. Meaning given as 'to sit, to sit down'.

!O!Kung: Bleek 1956: 341; Bleek 1929: 76. Singular subject action verb; the plural subject form is $\text{!o} \sim \text{!a}$ [Bleek 1929: 76; Bleek 1956: 435]. Quoted as $\tilde{\text{!á}}\eta$ (sg.), $\text{!}^{\text{h}}\text{ó}$: (pl.) in [Snyman 1980: 49].

Ekoka !Xung: König & Heine 2008: 48. Quoted as $\text{ʔ!í}\eta$ (Western dialect), $\tilde{\text{!í}}\eta$ (Eastern dialect) in [Heikkinen 1986: 23]. Singular subject action verb; the plural subject form is $\text{!}^{\text{h}}\text{ó}$ [ibid.].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial. Preglottalized nasal click is reconstructed based on T. Heikkinen's transcription of the Ekoka entry. The coda is probably the same as in 'blood' q.v. and, alternately, may be reconstructed as syllabic $*\text{-}\eta$.

Semantics and structure: Like many basic verbal stems, this one is also suppletive: the plural subject form is also preserved everywhere and is safely reconstructible as $*\text{!}^{\text{h}}\text{ó}$.

75. SKIN

Ju|'hoan $\tilde{\jmath}ó$ (1), ||Kxau||en $\tilde{\jmath}o$ (1), !Kung $\tilde{\jmath} \sim \tilde{\jmath}ò \sim \tilde{\jmath}wa \sim \tilde{\jmath}óä$ (1), Grootfontein !Kung $\tilde{\jmath}o \sim \tilde{\jmath}owà$ (1), !O!Kung $\tilde{\jmath}o \sim \tilde{\jmath}ó$ (1), Ekoka !Xung $\tilde{\jmath}ò$ (1), Proto North Khoisan $*\tilde{\jmath}ò$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 240.

||Kxau||en: Bleek 1956: 348. Quoted as $\tilde{\jmath}ó$: in [Bleek 1929: 76].

!Kung: Bleek 1956: 348, 349. Quoted as $\tilde{\jmath}$ in [Bleek 1929: 76].

Grootfontein !Kung: Doke 1925: 157.

!O!Kung: Bleek 1956: 348; Snyman 1980: 49. Quoted as $\tilde{\jmath}$ in [Bleek 1929: 76]. The latter source adds *da* as a synonym, but the word rather means 'cloth, kaross', as can be seen from both the examples in [Bleek 1956: 19] and external parallels.

Ekoka !Xung: König & Heine 2008: 49; Heikkinen 1986: 23.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and generally trivial. Some old sources seem to reflect an additional suffixal variant $*\tilde{\jmath}o-a$ (or $\tilde{\jmath}o-ba$?) that is not, however, encountered in recently transcribed material.

76. SLEEP

Ju|'hoan $cʔá$ (1), ||Kxau||en $cá \sim cʔa$ (1), !Kung $cà \sim cá$ (1), Grootfontein !Kung $cʔa$ (1), !O!Kung $cʔa \sim ca$ (1), Ekoka !Xung $čʔā$ (1), Proto North Khoisan $*cʔā$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 278.

||Kxau||en: Bleek 1956: 210; Bleek 1929: 76.

!Kung: Bleek 1956: 210. Quoted as *cá*: in [Bleek 1929: 76]. The stem *ʔa*, quoted in the latter source as a synonym, is actually the plural subject form of the verb 'to lie (down)'.
Grootfontein !Kung: Doke 1925: 153.

!O!Kung: Bleek 1956: 210. Quoted as *cá* ~ *ča* in [Bleek 1929: 76]; *cà* in [Snyman 1980: 50].

Ekoka !Xung: König & Heine 2008: 67. Quoted as *cā* in [Heikkinen 1986: 22].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial (including the development $*č- > č̣-$ in Ekoka).

77. SMALL

Ju|'hoan $cʔè(-mà)$ (1), ||Kxau||en $ce-ma \sim ce-ma$ (1), !Kung $cé-ma \sim cé:e-ma$ (1), Grootfontein !Kung $cʔe-ma$ (1), !O!Kung $ce-ma$ (1), Ekoka !Xung $čʔē-mà$ (1), Proto North Khoisan $*cʔe \sim *cʔe-mà$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 279. The simple form *cʔè* is used after nouns with diminutive suffixes (*cʔu-ma cʔè* 'small house'); the compound form *cʔè-mà* (where *-mà* itself is a diminutive suffix) is used more frequently.

||Kxau||en: Bleek 1956: 215; Bleek 1929: 76. The latter source also quotes such ineligible forms as *-ma* (actually a diminutive suffix) and *ʔb* (actually 'short', as clarified by examples in [Bleek 1956]).

!Kung: Bleek 1956: 215. Quoted as *ce-ma* in [Bleek 1929: 76]. The latter source also quotes *-ma* separately in the same meaning (the morpheme is actually a diminutive suffix).

Grootfontein !Kung: Doke 1925: 153. The same source also quotes *ma* per se [ibid.] in the meaning 'small', interchangeable with *cʔe-ma* (e. g. *dà: ma* and *dà: cʔema* both mean 'small blanket'). It is perhaps reasonable, as in several other North Khoisan dialects, to think of *-ma* as a diminutive suffix and *cʔe-ma* as the proper adjective 'small'.

!O!Kung: Bleek 1956: 215. Quoted as *ce-ma* in [Bleek 1929: 76]; *cʔèmə ~ cʔèmə* in [Snyman 1980: 50]. [Bleek 1929] also quotes the compound form *-ma !a* as a synonym, where *-ma* is the standard diminutive suffix and *!a* = Ju|'hoan *!ò-* in *!ò-mà* 'short'. Textual examples in [Bleek 1956: 436] confirm the usage of both *-ma !a* and simply *!o* in the meaning 'small' (e. g. *!ú !ó* 'a small star'), but the semantic difference between these cases and *ce-ma* remains unclear. We mark the latter form as primary, since its general distribution in the meaning 'small' indicates its archaic nature.

Ekoka !Xung: König & Heine 2008: 68. Quoted as *cʔema* in [Heikkinen 1986: 22] (without tonal marking).

Proto North Khoisan: Distribution: Preserved in all daughter dialects, although, for the most part, only in the form of the derived stem **cʔe-mà*. Reconstruction shape: Correspondences are regular and trivial, with the exception of the tonal pattern (the Ekoka mid-level pattern may be more archaic, with assimilation to the low tonal level of the suffix **-mà* in Ju|'hoan). Semantics and structure: The root **cʔe*, already on Proto-North Khoisan level, must have been most frequently used with the diminutive suffix **-mà*, usually (but not always) adjacent to nominal roots. There is, however, no solid evidence for **mà* having ever functioned as an independent adjective 'small' on the same chronological level.

78. SMOKE

Ju|'hoan *šórnà* (1), ||Kxau||en *šore ~ šori* (1), !Kung *šórre ~ šure* (1), Grootfontein !Kung *šorǎ* (1), !O!Kung *ʔonu* (2), Ekoka !Xung *šúle* (1), Proto North Khoisan **šóre ~ *šorà* (1).

References and notes:

Ju|'hoan: Dickens 1994: 192. Secondary synonyms: (a) *ʔðh* 'dust, smoke'; (b) *ʔhðm̃* 'smoke, steam; to get into one's eyes (of smoke)'

||Kxau||en: Bleek 1956: 181.

!Kung: Bleek 1956: 182. Quoted as *šore* in [Bleek 1929: 77].

Grootfontein !Kung: Doke 1925: 155.

!O!Kung: Bleek 1956: 319; Bleek 1929: 77.

Ekoka !Xung: König & Heine 2008: 19. Polysemy: 'smoke / tobacco'. Quoted as *šurē* in [Heikkinen 1986: 26]. Secondary synonyms: (a) *!! ðhà* [König & Heine 2008: 91]; (b) *ʔðð* [König & Heine 2008: 60]. Semantic differences between all these stems are unclear; the only transparent external connections with the meaning 'smoke' are displayed by *šúle*.

Proto North Khoisan: Distribution: Preserved in most daughter dialects. Replacements: !O!Kung *ʔonu*, of unknown origin (although the original root is still preserved as *šule ~ šuli* 'tobacco, snuff' [Bleek 1956: 237]; the semantic shift {'smoke' > 'tobacco'} is trivial). There is some phonetic similarity between *ʔonu* and Nama *ʔanni* 'smoke', but not

enough to postulate borrowing with any degree of certainty. Reconstruction shape: Correspondences are regular and trivial except for the unclear vocalic variation in the second syllable. Semantics and structure: Polysemy {'smoke' & 'tobacco'} is widespread for this root both between and within dialects, but there is no clear evidence for 'tobacco' having been the original semantics.

79. STAND

Ju|'hoan $\tilde{t}ú$ (1), ||Kxau||en $\tilde{t}ú$ (1), !Kung $\tilde{t}ú \sim \tilde{t}ũ \sim \tilde{t}ú\eta$ -a (1), !O!Kung $\tilde{t}wa \sim \tilde{t}a$ (1), Ekoka !Xung $\tilde{t}ú \sim \tilde{t}ũ$ (1), Proto North Khoisan $*\tilde{t}ú$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 254. Singular subject action verb; the plural subject form is $\ll\hat{a}$ [Dickens 1994: 215].

||Kxau||en: Bleek 1956: 482; Bleek 1929: 79. Singular subject action verb; the plural subject form is $\ll\alpha \sim \ll\acute{a} \sim \ll\grave{a}$ [Bleek 1956: 522].

!Kung: Bleek 1956: 482, 485. Quoted as $\tilde{t}ú$ in [Bleek 1929: 79]. Singular subject action verb; the plural subject form is $\ll\alpha$ [Bleek 1956: 522].

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 471, 486. Quoted as $\tilde{t}ú$ in [Bleek 1929: 79] (both variants found in [Bleek 1956] represent suffixal extensions); $\tilde{t}ú$ in [Snyman 1980: 50]. Singular subject action verb; the plural subject form is $\ll\alpha \sim \ll\hat{a}$ [Bleek 1956: 522].

Ekoka !Xung: König & Heine 2008: 84. Quoted as $\tilde{t}ú$ (Western dialect), $\tilde{t}ú$ (Eastern dialect) in [Heikkinen 1986: 25]. Singular subject action verb; the plural subject form is $\ll\hat{a}$ [ibid.].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are generally trivial, although T. Heikkinen's data on Ekoka conflict with König & Heine as to the exact articulation of the click efflux. Perhaps the rare case of variation between $!$ - and $\tilde{!}$ - in König & Heine's data actually reflects an unrecognized case of preglottalized nasalisation. Semantics and structure: The etymon was almost certainly suppletive in Proto-North Khoisan: sg. action $*\tilde{t}ú$ vs. pl. action $*\ll\hat{a}$. There was also a derived verbal stem $*\tilde{t}ú$ -a, whose protolanguage meaning is hard to establish (P. Dickens gives a causative meaning for Ju|'hoan, but for Ekoka, König & Heine adduce a continuative meaning instead).

80. STAR

Ju|'hoan $\#ú^h$ (1), ||Kxau||en $\#ôê$ (1), !Kung $\#ô \sim \#ũ$ (1), Grootfontein !Kung $\#ù\eta$ (1), !O!Kung $\#ù \sim \#õ \sim \#ũ$ (1), Ekoka !Xung $!!\grave{u}$ (1), Proto North Khoisan $*\#ú$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 302.

||Kxau||en: Bleek 1956: 648; Bleek 1929: 79.

!Kung: Bleek 1956: 663; Bleek 1929: 79.

Grootfontein !Kung: Doke 1925: 158.

!O!Kung: Bleek 1956: 469, 663, 664. Quoted as $!!\tilde{u}$ in [Bleek 1929: 79].

Ekoka !Xung: König & Heine 2008: 92. Quoted as $\#ù$ in [Heikkinen 1986: 23].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are generally regular and trivial. The tonal pattern is ultra-low, frequently accompanied with breathy articulation in Ju|'hoan.

81. STONE

Ju|'hoan $\tilde{\delta}m$ (1), ||Kxau||en $\tilde{l}um$ (1), !Kung $\tilde{l}um \sim \tilde{l}om$ (1), Grootfontein !Kung $\tilde{l}um$ (1), !O!Kung $\tilde{l}um$ (1), Ekoka !Xung $\tilde{l}m \sim \tilde{l}um \sim \tilde{l}om$ (1), Proto North Khoisan $*\tilde{\delta}m \sim *\tilde{l}um$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 252. Polysemy: 'stone / mountain'.

||Kxau||en: Bleek 1956: 485; Bleek 1929: 80. Polysemy: 'stone / mountain'.

!Kung: Bleek 1956: 481, 485; Bleek 1929: 80. Polysemy: 'stone / mountain'.

Grootfontein !Kung: Doke 1925: 159. On the polysemy 'stone / mountain' in this dialect see under 'mountain'.

!O!Kung: Bleek 1956: 485; Bleek 1929: 80. Polysemy: 'stone / mountain'.

Ekoka !Xung: König & Heine 2008: 52. Quoted as $\tilde{\delta}m$ in [Heikkinen 1986: 25]. Probably the same word as 'mountain' q.v., but both sources on the Ekoka dialect mark different types of nasalized clicks for the two words. Secondary synonyms: (a) $\tilde{l}um$ 'stone; money' [König & Heine 2008: 75]; (b) $\tilde{l}um$ 'stone; flint' [König & Heine 2008: 76].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular. There seems to have been a neutralization of the *u* / *o* opposition before syllable-final **m* in Proto-North Khoisan, hence all the vocalic fluctuations. Semantics and structure: Further discussion on the polysemy {'stone' & 'mountain'} see under 'mountain'.

82. SUN

Ju|'hoan $\acute{a}m$ (1), ||Kxau||en $\acute{a}m$ (1), !Kung $\acute{a}m$ (1), Grootfontein !Kung $\acute{a}:m$ (1), !O!Kung $\acute{a}m$ (1), Ekoka !Xung $g\grave{a}\delta \sim g\grave{a}\delta\bar{o}$ (2), Proto North Khoisan $*\acute{a}m$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 288. Polysemy: 'sun / day / thirst'. Secondary synonym (praise form): $kh\grave{a}||\acute{a}$ ($||\acute{a}$ = 'light'; first component is unclear).

||Kxau||en: Bleek 1956: 327; Bleek 1929: 81. Polysemy: 'sun / thirst'.

!Kung: Bleek 1956: 327; Bleek 1929: 81.

Grootfontein !Kung: Doke 1925: 156. Also encountered in the same source as $\acute{a}m$ 'sun, day' [Doke 1925: 157]; this may be an idiolectal variant or a most recent re-borrowing from a Central Khoisan source.

!O!Kung: Bleek 1956: 327; Bleek 1929: 81. Polysemy: 'sun / thirst'.

Ekoka !Xung: König & Heine 2008: 24; Heikkinen 1986: 22. Polysemy: 'sun / day / time / thirst'.

Proto North Khoisan: Distribution: Preserved in all daughter dialects with the sole exception of Ekoka. Replacements: Ekoka $g\grave{a}\delta$ is attested in this dialect alongside $\acute{a}m$, which is, however, only assigned the secondary meanings 'day, hour' [König & Heine 2008: 73]. In theory this raises the question of whether this could not have been the original North Khoisan word for 'sun', whereas all the instances of $*\acute{a}m$ could then count as more recent

borrowings from Central Khoisan (cf. Proto-Central Khoisan **ǀám* id.). However, given our current information, the answer must be negative, since: (a) in Khoekhoe, the subgroup that includes Nama and serves as the most common source for recent Central Khoisanisms, the word for 'sun' is **sore*; (b) the general distribution very clearly speaks for the Proto-North Khoisan status of **ǀám*, regardless of whether its further connections with Central Khoisan are horizontal or vertical; (c) Ekoka *ǵàò* is clearly related to Ju|'hoan *ǵà?áró*, glossed by Dickens as 'to drink too little to quench one's thirst' [Dickens 1994: 200], i. e. basically '(still) be thirsty'. This implies that 'thirst' may, after all, be the original meaning for this root. The semantic shift {'thirst' > 'sun'} is certainly unusual, but, considering that the polysemy {'sun' & 'thirst'} is quite typical of all Bushman languages, not at all impossible. Reconstruction shape: Correspondences are regular and trivial throughout.

83. SWIM

Ju|'hoan *ǰxà* (1), !Kung *duím* (2), !O!Kung *ǀva ~ ǀba* (3), Ekoka !Xung *dhòm* (2), Proto North Khoisan **dòm ~ *dùm* (2).

References and notes:

Ju|'hoan: Dickens 1994: 196.

||Kxau||en: Not attested.

!Kung: Bleek 1956: 29. Quoted as *dum* in [Bleek 1929: 82]. The latter source also adds *#au* as a synonym; this word is, however, translated as 'to walk, travel, crawl, stalk game, swim' in [Bleek 1956: 651] and is the regular equivalent of the item 'to walk, move' in other North Khoisan dialects.

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 480, 482; Bleek 1929: 82. Somewhat dubious; the translation equivalent in [Bleek 1956] is given as 'to row across, swim across' for *ǀva* and simply 'row' for *ǀba*. No better suitable equivalents have been found. [Snyman 1980: 52] lists this stem, transcribed as *ǀa*, as synonymous with *dòm*; the latter is clearly cognate with Ekoka *dhòm*, but cannot be listed here as the main item since [Snyman 1980] is not the main source.

Ekoka !Xung: König & Heine 2008: 21.

Proto North Khoisan: Distribution: The root **dòm* in the meaning 'to swim' has the widest distribution, being attested in the Northern cluster (Ekoka) as well as L. Lloyd's !Kung data. Replacements: (a) Ju|'hoan *ǰxà*, of unknown origin; (b) !O!Kung *ǀva*, with a dubious meaning (see notes on !O!Kung). Reconstruction shape: The protoform is essentially based on the Ekoka form (the only more or less reliably transcribed item). Semantics and structure: Apart from the meaning 'swim', the root is also found in some sources in the meanings 'wash', 'bathe', and even 'shelter from rain' (Heikkinen). This is consistent with the general (and understandable) scarceness of water basin-related terminology in native North Khoisan lexicon.

84. TAIL

Ju|'hoan *!xúí* (1), ||Kxau||en *!#wí ~ #wí* (1), !Kung *!#wé ~ !hwé ~ !kxwè ~ !kxwé* (1), !O!Kung *//wé* (1), Ekoka !Xung *//xōē* (1), Proto North Khoisan **!xōē* (1).

References and notes:

Ju|'hoan: Dickens 1994: 320.

||Kxau||en: Bleek 1956: 433, 667; Bleek 1929: 82. Variation in click articulation (*!* ~ *ʃ*) may have something to do with the original retroflex articulation of the click (*!*), but not necessarily.

!Kung: Bleek 1956: 470, 579, 610. Quoted as *!we* in [Bleek 1929: 82].

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 599; Bleek 1929: 82.

Ekoka !Xung: König & Heine 2008: 102; Heikkinen 1986: 25.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular; click correspondences clearly indicate original retroflex articulation, and the diphthong is to be reconstructed as **œ* based on Ekoka (and !Kung) data.

85. THAT

Ju|'hoan *tòʔà* (1), ||Kxau||en *či* ~ *če* (2), !Kung *doá* (1), !O!Kung *doa* (1), Ekoka !Xung *ndùʔà* ~ *ndòʔà* ~ *tùʔà* ~ *tòʔà* (1), Proto North Khoisan **toʔà* ~ **ndoʔà* (1).

References and notes:

Ju|'hoan: Dickens 1994: 274.

||Kxau||en: Bleek 1956: 227, 229; Bleek 1929: 83. An uncertain entry; the word is ascribed both the meanings 'this' and 'that', indicating a general rather than proximity-specific deictic stem. [Bleek 1929: 83] also lists *úhe* as a potential synonym, but the word is not confirmed in [Bleek 1956].

!Kung: Bleek 1956: 27. Uncertain (there is a semantic difference indicated for two near-homonymous forms *dóá* 'this' and *doá* 'that', with not enough textual evidence to fully justify this). In [Bleek 1929: 83] the item 'that' is rendered by two different morphemes, *ši* and *ka*, neither of which finds confirmation in [Bleek 1956]; the former most likely refers to some specific auxiliary use of the noun *ši* 'thing', and the latter may be a particle mistaken for a deictic pronominal stem (or, perhaps, the third person pronoun *ka* 'it').

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 27. Attested textual examples do not provide the required contexts, but external comparison with Ekoka material indirectly confirms this as the basic stem for far deixis. Quoted as *n doa* in [Bleek 1929: 83].

Ekoka !Xung: König & Heine 2008: 46, 70. The derived nominal stem ('that thing') is *čá-à-ndòʔà* [König & Heine 2008: 64]. All forms seem to be in free variation.

Proto North Khoisan: Distribution: Preserved in most daughter dialects, with the possible exception of ||Kxau||en. Replacements: (?) ||Kxau||en *či*, of unclear provenance (perhaps = Proto-North Khoisan **či* 'thing?'). Reconstruction shape: No single certain variant; the dialectal fluctuation as reflected in four distinct Ekoka variants, including structurally rare forms with initial nasal clusters, may go as far back as Proto-North Khoisan. Semantics and structure: The form is analyzable as a composite stem, from **to* ~ **ndo*, indicating far deixis, and **a* 'general relative morpheme' (= Ju|'hoan *-à* [Dickens 1994: 188]). Initial **nd-*, a cluster normally prohibited in North Khoisan, may only reflect traces of further compounding, perhaps from some earlier unclear structure like **Vn-to*.

86. THIS

Ju|'hoan *=è* (1), ||Kxau||en *či* ~ *če* (2), !Kung *e* ~ *é:ya* (1), !O!Kung *η* (3), Ekoka !Xung *ŋjŋ* (3), Proto North Khoisan **ŋ* (3).

References and notes:

Ju|'hoan: The morpheme occurs in Class I deictic pronoun *h=è* [Dickens 1994: 218] and Class II deictic pronoun *k=è* [Dickens 1994: 225].

||Kxau||en: Bleek 1956: 227, 229; Bleek 1929: 84. An uncertain entry; the word is ascribed both the meanings 'this' and 'that', indicating a general rather than proximity-specific deictic stem. [Bleek 1929: 84] also lists *ĩ* and *e* as potential synonyms, but the latter is assigned only the meaning 'here' in [Bleek 1956], and textual examples for the former are rather confusing.

!Kung: Bleek 1956: 36, 38. Quoted as *e ~ ea ~ eya* in [Bleek 1929: 84]. In [Bleek 1956: 27] the stem *dóá* is also given in the meaning 'this', with no clear differentiation between the two. Considering, however, that the latter is translated both as 'this' and 'that', and comparing this situation to the distinction in Ju|'hoan, it is likely that *e* is still the most neutral morpheme in this dialect to designate near deixis.

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 141; Bleek 1929: 84. The latter source adds *čĩ* as a synonymous form. Its existence is corroborated in [Bleek 1956: 229], however, examples for *ŋ* are more numerous. [Snyman 1980: 52] under 'this' lists the form *àŋ*, which is clearly the same item.

Ekoka !Xung: König & Heine 2008: 61. According to König & Heine's grammar sketch, this stem is the "neutral" version of the close-deixis pronoun. The word *ē* [König & Heine 2008: 24], on the other hand, has a contrastive function: 'this (particular), rather than any other one'. It is also said to be used less frequently than *ŋŋ*, and is therefore ineligible for the wordlist.

Proto North Khoisan: Distribution: Two main morphemes glossed in English as 'this' are attested in North Khoisan: **e* and **ŋ*. The presence of both at the same time is noted only for Ekoka. However, since there is no evidence, nor any general reason, to imply an external provenance for **ŋ* in the Northern dialect cluster, the simplest solution is to project the opposition onto the proto-level, stating that Ekoka (and, possibly, other dialects of the Northern cluster) preserves the original distinction between **ŋ* 'this (one)' and **e* 'this (one) in particular', whereas the other clusters have generalized **e* as the only morpheme for both cases. This hypothesis will remain the likelier one until an external etymology has been found for **ŋ* that would explain its apparition in the Northern cluster.

87. THOU

Ju|'hoan *à* (1), ||Kxau||en *a-hi* (1), !Kung *a ~ á* (1), Grootfontein !Kung *à:* (1), !O!Kung *a ~ a-hi* (1), Ekoka !Xung *à* (1), Proto North Khoisan **à* (1).

References and notes:

Ju|'hoan: Dickens 1994: 188.

||Kxau||en: Bleek 1956: 6; Bleek 1929: 85. The suffixless form *a* is also quoted in the meaning 'thou' in [Bleek 1929], but mentioned only as the possessive form 'thine' corresponding to the independent form *a-hi* 'thou' in [Bleek 1956].

!Kung: Bleek 1956: 3. Cf. also the "isolated" form *á-hn* [Bleek 1956: 6]. [Bleek 1929: 85] does not mention the existence of these forms, but quotes instead a different form: *ma*. [Bleek 1956: 132] shows that the more correct transcription is *mʔa*, and that the form is regularly used in subject position, whereas *a* is more common as the object and the possessive form. This is similar to the difference between *à* and *hi* in Ekoka q. v. The form *mʔ-a* can thus be analyzed as *-a* (root morpheme) with a "subject" particle prefixed.

Grootfontein !Kung: Doke 1925: 152. The "isolated" (emphatic) form \grave{a} -*h* is quoted *ibid.*

!O!Kung: Bleek 1956: 4, 6; Bleek 1929: 85; Snyman 1980: 56. Both the simple and complex form are attested in textual examples in subject position as well as in the possessive function.

Ekoka !Xung: König & Heine 2008: 15. According to König & Heine's grammar sketch, \grave{a} is the pronominal stem used in all syntactic contexts. In the subject position, however, especially sentence-internally, it tends to be replaced with *b* [ibid.]. The latter is probably best viewed as the result of merger between \grave{a} and some other morpheme (emphatic particle, etc.).

Proto North Khoisan: Distribution: Preserved in all daughter languages. Reconstruction shape: Correspondences for this monovocalic morpheme are perfectly regular and obvious. The special emphatic variant fluctuates between $\ast\grave{a}$ -*hi* and $\ast\grave{a}$ -*h*; it is possible that $\ast\grave{a}$ -*h* is the primary variant, restructured in some dialects by analogy with the 1st p. emphatic form $\ast mi$ -*hi* q.v. Odd forms with initial labial consonants should probably be treated as compounds, although the meaning and function of these initial labial elements are not yet understood.

88. TONGUE

Ju!'hoan *dhàrì* (1), ||Kxau||en *tarí* (1), !Kung *térrí* (1), Grootfontein !Kung *ntháhl* (1), !O!Kung *tali* (1), Ekoka !Xung *dhàlí* (1), Proto North Khoisan $\ast nthari$ (1).

References and notes:

Ju!'hoan: Dickens 1994: 195.

||Kxau||en: Bleek 1956: 193; Bleek 1929: 86.

!Kung: Bleek 1956: 198. Quoted as *térrí* ~ *téni* in [Bleek 1929: 86].

Grootfontein !Kung: Doke 1925: 154.

!O!Kung: Bleek 1956: 189; Bleek 1929: 86. Quoted as *thàrì* in [Snyman 1980: 53].

Ekoka !Xung: König & Heine 2008: 24. Quoted as *dhàrì* in [Heikkinen 1986: 24].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are generally trivial, with the exception of the initial consonant, with irregular fluctuation of laryngeal features and even completely unexpected prenasalization in Grootfontein !Kung. This is consistent with the typologically aberrant (both for Africa and other world areas) phonetic behavior of the word 'tongue' and indicates some sort of hard-to-reconstruct phonosemantic phenomenon. The situation is provisionally denoted in the guise of a unique initial cluster $\ast nth$ - (= the variant attested in [Doke 1925]), although, obviously, this is far from the only way to interpret the data. Tonal correspondences are also complex, although P. Dickens and J. Snyman in [Snyman 1980] agree on the tonal pattern "extra low-low" for two dialects from different clusters.

89. TOOTH

Ju!'hoan *cʔàù* (1), ||Kxau||en *cʔou* ~ *cou* ~ *cau* (1), !Kung *cau* ~ *caù* (1), Grootfontein !Kung *cʔáú*: (1), !O!Kung *cau* (1), Ekoka !Xung *čʔāō* (1), Proto North Khoisan $\ast cʔau$ (1).

References and notes:

Ju!'hoan: Dickens 1994: 278. Secondary synonym: \grave{a} [Dickens 1994: 255].

||Kxau||en: Bleek 1956: 213; Bleek 1929: 220. More frequently found in the plural form (*c?ou-si, cau-si*).

!Kung: Bleek 1956: 213. Quoted as *cíú* in [Bleek 1929: 86].

Grootfontein !Kung: Doke 1925: 153.

!O!Kung: Bleek 1956: 213; Bleek 1929: 86. Quoted as *cáo* in [Snyman 1980: 53].

Ekoka !Xung: König & Heine 2008: 68. Quoted as *cāō* in [Heikkinen 1986: 22].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial except for the tonal pattern (low in Ju|'hoan vs. mid-level in Ekoka, not allowing for an adequate reconstruction).

90. TREE

Ju|'hoan *!āṽ^h* (1), ||Kxau||en *!āĩ* (1), !Kung *!áŋ ~ !áŋ-a ~ !āũ ~ !aŋ* (1), Grootfontein !Kung *!āŋ* (1), !O!Kung *!āũ ~ !ā ~ gāũ* (1), Ekoka !Xung *!ā^hŋ ~ !^hāŋ* (1), Proto North Khoisan **!^hāŋi* (1).

References and notes:

Ju|'hoan: Dickens 1994: 310. Polysemy: 'tree / wood / stick'.

||Kxau||en: Bleek 1956: 375; Quoted as *!āĩ* in [Bleek 1929: 87].

!Kung: Bleek 1956: 376, 407, 412. Quoted as *!áŋ ~ !āũ* in [Bleek 1929: 87].

Grootfontein !Kung: Doke 1925: 159. Polysemy: 'tree / stick'.

!O!Kung: Bleek 1956: 44, 374, 378. Quoted as *!āũ ~ gāũ* in [Bleek 1929: 87]; *!āŋ ~ !āũ* in [Snyman 1980: 53]. Polysemy: 'tree / stick'.

Ekoka !Xung: König & Heine 2008: 80.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are complex and, in some aspects, unique. The basic structure of the word is more or less the same as in 'neck' q.v., which is reflected in the reconstruction of the coda **-aŋi* for both items. Seemingly random fluctuations are, however, observed in secondary click articulation (ranging from simple velar release to prevoicing to aspiration), additional vowel properties (breathy articulation in Ju|'hoan) and the tonal scheme (usually low tones, but cf. also the ultra-high notation in Snyman's !O!Kung data). The provisional reconstruction with **!^h-* and ultra-low tone on the first mora merely reflects the fact that some particularly complex bag of features must have been present on the proto-level in order to yield such a large variety of reflexions.

91. TWO

Ju|'hoan *cá ~ cǎ* (1), ||Kxau||en *ca ~ ča* (1), !Kung *sā ~ sǎ ~ sa ~ ca ~ cā ~ ca: ~ zǎ* (1), Grootfontein !Kung *sā*: (1), !O!Kung *cá ~ ca ~ ča* (1), Ekoka !Xung *čā* (1), Proto North Khoisan **cā ~ *cǎ ~ *cǎ̄* (1).

References and notes:

Ju|'hoan: Dickens 1994: 274.

||Kxau||en: Bleek 1956: 210, 224. Quoted as *cá* in [Bleek 1929: 88].

!Kung: Bleek 1956: 161, 210, 263. Quoted as *sá ~ cá* in [Bleek 1929: 88].

Grootfontein !Kung: Doke 1925: 154.

!O!Kung: Bleek 1956: 210, 224. Quoted as $\check{c}\acute{a} \sim \check{c}a$ in [Bleek 1929: 88]; $\check{c}\grave{a} \sim c\grave{a}$ in [Snyman 1980: 53].

Ekoka !Xung: König & Heine 2008: 64. Quoted as $c\bar{a}$ in [Heikkinen 1986: 22].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: The initial consonant is unambiguously reconstructed as *c-, but the coda demonstrates so far unexplainable variations of secondary features (nasalization and pharyngealization that seem to "come and go"). This is perhaps a reflection of former morphological variability, but there is no evidence to prove it.

92. WALK (GO)

Ju!'hoan \acute{u} (1), ||Kxau||en \acute{u} (1), !Kung $\grave{u} \sim \grave{u}:$ (1), Grootfontein !Kung $\acute{u} \sim \check{u}:$ (1), !O!Kung \acute{u} (1), Ekoka !Xung \acute{u} (1), Proto North Khoisan * \acute{u} (1).

References and notes:

Ju!'hoan: Dickens 1994: 280.

||Kxau||en: Bleek 1956: 246; Bleek 1929: 42. The latter source also quotes such dubious synonyms as $!u$ and $/u$, but their existence is not confirmed in [Bleek 1956].

!Kung: Bleek 1956: 246. Quoted as \acute{u} in [Bleek 1929: 42]. The latter source adds $!u$ as a synonym, but it is only confirmed in the meaning 'to run' in [Bleek 1956: 446].

Grootfontein !Kung: Doke 1925: 152.

!O!Kung: Bleek 1956: 246; Bleek 1929: 42. The latter source adds two other stems: \acute{o} , which may be an error or just a phonetic variant of \acute{u} , and $!oa$, not confirmed in [Bleek 1956].

Ekoka !Xung: König & Heine 2008: 71. Also met in a compound with an etymologically unclear first part: $\check{u}\acute{u} \acute{u}$ [König & Heine 2008: 50].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: This monovocalic stem is relatively trivial (Doke's transcription of it as a diphthong is not confirmed by any other source) and should be reconstructed with a high or, possibly, ultra-high tone. Semantics and structure: All sources agree on this item as representing the basic meaning of moving from one place to another, rather than anything more specific.

93. WARM (HOT)

Ju!'hoan $kh\acute{u}i$ (1), ||Kxau||en $kw\acute{i} \sim khw\acute{i}$ (1), !Kung $kw\acute{i} \sim kw\grave{i} \sim kw\grave{i}ya$ (1), !O!Kung $khw\acute{i}$ (1), Ekoka !Xung $kh\acute{u}i$ (1), Proto North Khoisan * $kh\acute{u}i$ (1).

References and notes:

Ju!'hoan: Dickens 1994: 227. Polysemy: 'hot / painful'.

||Kxau||en: Bleek 1956: 113; Bleek 1929: 48.

!Kung: Bleek 1956: 113; Bleek 1929: 48.

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 90; Bleek 1929: 48. Quoted as $kh\acute{u}i$ in [Snyman 1980: 54].

Ekoka !Xung: König & Heine 2008: 40; Heikkinen 1986: 22. Polysemy: 'hot / painful'.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial. Semantics and structure: The word is antonymous to *ʔúʔú 'cold' q.v., and is strictly distinguished from *ʔúú 'warm' (Ju|'hoan, Ekoka ʔúú, etc.).

94. WATER

Ju|'hoan ʔúú (1), ||Kxau||en ʔúú ~ ʔu ~ ʔúú (1), !Kung ʔúú ~ ʔúú (1), Grootfontein !Kung ʔúú (1), !O!Kung ʔúú ~ ʔó (1), Ekoka !Xung ʔúú (1), Proto North Khoisan *ʔúú (1).

References and notes:

Ju|'hoan: Dickens 1994: 213. Secondary synonym (praise form): *d̥hms̥d̥ã*, lit. 'throat-soft(ener)'.
 ||Kxau||en: Bleek 1956: 387, 535. Quoted as ʔúú: in [Bleek 1929: 90]. Dialectal variation between alveolar and lateral articulation of the click indicates original retroflex (ʔ) articulation.
 !Kung: Bleek 1956: 535. Quoted as ʔúú: in [Bleek 1929: 90].
 Grootfontein !Kung: Doke 1925: 160.
 !O!Kung: Bleek 1956: 531, 535. Quoted as ʔúú: in [Bleek 1929: 90].
 Ekoka !Xung: König & Heine 2008: 35; Heikkinen 1986: 25. Polysemy: 'water / semen'.
 Proto North Khoisan: Distribution: Preserved in all daughter languages. Reconstruction shape: Correspondences are regular, reflecting an original retroflex click and a high tonal pattern.

95. WE₁

Ju|'hoan è (1), ||Kxau||en e (1), !Kung e (1), !O!Kung e ~ e-hŋ (1), Ekoka !Xung ʒù (2), Proto North Khoisan *è (1).

References and notes:

Ju|'hoan: Dickens 1994: 199. Exclusive form. Also met in expanded form: è-lá. Dual variant: è-áí 'we two'.
 ||Kxau||en: Bleek 1956: 36. D. Bleek notes a special variant for the masculine form (e-!ka) and one for the feminine (e-he) (ibid.; also [Bleek 1929: 90]). According to her notes, there is no difference between inclusive and exclusive.
 !Kung: Bleek 1956: 36; Bleek 1929: 90. Exclusive form. Both sources also list the synonymous form šší; this must probably be an occasional Khoekhoeism, cf. Nama sí-ke 'we (excl. m.)', sí-se 'we (excl. f.)'; its statistical frequency is unclear.
 Grootfontein !Kung: Not attested.
 !O!Kung: Bleek 1956: 36, 37; Bleek 1929: 90. [Bleek 1929] also quotes i, not confirmed in [Bleek 1956] (probably a phonetic variant of e). D. Bleek does not record an inclusive/exclusive opposition for this dialect; J. Snyman, however, does, and quotes e as only the exclusive meaning [Snyman 1980: 54].
 Ekoka !Xung: König & Heine 2008: 23. Exclusive form. Quoted as zù (Western dialect) in [Heikkinen 1986: 26]. The more archaic synonymous form è [König & Heine 2008: 24] is said by the authors to be much less used, meaning that it is in the final stages of being displaced by ʒù.
 Proto North Khoisan: Distribution: Preserved in all daughter languages except for Ekoka. Replacements: Ekoka ʒù, reflecting an interesting semantic shift {'people' > 'we'}; see 'person' for more details. Reconstruction shape:

Correspondences for this monovocalic stem are regular and trivial. Semantics and structure: Proto-North Khoisan *è is unambiguously reconstructed as the exclusive version of the 1st pronoun pl.

95. WE₂

Ju|'hoan ì (3), !Kung *hm* (3), Ekoka !Xung ì-*hì* (3), Proto North Khoisan *ì (3).

References and notes:

Ju|'hoan: Dickens 1994: 234. Inclusive form. Also met in expanded form: ì-*lá*. Dual variant: ì-*cá* 'we two'.

!Kung: Bleek 1956: 62; Bleek 1929: 90. Inclusive form. Said to be rarely used. Also attested in the dual variant: *m-sa* ~ *m-sa* 'we two' [Bleek 1956: 138]. An alternate synonym is *i* [Bleek 1956: 67], "rarely used before numbers"; unclear form, lacking external parallels in other North Khoisan dialects.

!O!Kung: D. Bleek does not record any special inclusive forms for this dialect. J. Snyman [Snyman 1980: 54], along with *e*, records the synonymous forms *m* and *m-la*. Judging by the external parallels, the distinction must be between the exclusive *e* and the inclusive *m*, although Snyman does not mention any differences in meaning.

Ekoka !Xung: König & Heine 2008: 45. Inclusive form. The morpheme *-hì* is probably assimilated from *-hìj*, the standard emphasis marker [König & Heine 2008: 36].

Proto North Khoisan: Distribution: The original form is not attested in some of the dialects, which could indicate occasional loss of the clusivity opposition. On the other hand, most of these non-attestations are evident in old sources, whereas most modern descriptions clearly state the presence of this opposition. Reconstruction shape: Correspondences are generally regular and trivial. The ultra-low tone in Ekoka may be connected with the aspiration of the emphatic particle. Semantics and structure: Proto-North Khoisan *ì is unambiguously reconstructed as the inclusive pronoun. The compound form *ì-*la* id. must also be of Proto-North Khoisan origin, although the meaning and function of the second morpheme are obscure. Of note is the phonetic similarity with the 1st p. sg. **mí*, possibly, although not necessarily, indicating a common origin for the two.

96. WHAT

Ju|'hoan *hì-čé* (1), ||Kxau||en *če-ba* (2), !O!Kung *m-pai* (3), Ekoka !Xung *m̄-čá* ~ *m̄-čē* ~ *m̄-čí* (3), Proto North Khoisan **hà-čí* (1).

References and notes:

Ju|'hoan: Dickens 1994: 218. Literally 'what thing?'. Plural form: *hì-čì*.

||Kxau||en: [Bleek 1929: 91]. Simple *-ba* is also quoted in the same meaning, but [Bleek 1956: 13] gives *ba* as a general interrogative particle = Ju|'hoan *hì-č* id. The first component *če* probably = *čí* ~ *čì* 'thing' [Bleek 1956: 229]. The bimorphemic stem, however, is not attested in [Bleek 1956]; instead, one finds *čo* (p. 232), perhaps, a dialectal contraction from **čì-ba*.

!Kung: Unclear. [Bleek 1929: 91] lists the compound form *ca-de*, but its existence is not confirmed in [Bleek 1956] except for the second part *dé*, indicated as a general interrogative word on p. 23. Rather than trust the dubious evidence of [Bleek 1929], we prefer to leave the slot unfilled.

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 138; Bleek 1929: 91. J. Snyman lists a different compound form: *m-čí* [Snyman 1980: 55], easily

analyzable as the general interrogative morpheme *m* plus *či* 'thing'. Bleek's *-pai* component is less easy to understand, but it is clear that the main interrogative meaning is placed on the *m*-element as well.

Ekoka !Xung: König & Heine 2008: 45. The form *m-či* literally means 'what thing?'; *-čá* is a pronominal stem. The main interrogative meaning is expressed by the morpheme *m*.

Proto North Khoisan: Distribution: Each dialect cluster has its own preferable interrogative marker, which makes reconstruction problematic. Nevertheless, analysis of comparative data in J. Snyman's dialect survey shows that occasional forms of interrogative pronouns with initial *a*- (< **ha*-) can be found even in the most distinct Northern cluster. We choose **hà* as the most representative equivalent, and reconstruct the compound form 'what?' as **hà-či*.

Replacements: (a) ||Kxau||en *če-ba*; the transformation mechanism is not quite clear, but it looks like the noun 'thing' has dropped the preceding interrogative marker in this language and then linked itself to a more general interrogative particle, transposing the interrogative meaning on itself; (b) Ekoka *m-čá*, etc. The provenance of the interrogative morpheme **m* is unclear. It is not excluded that it appeared under the influence of similar morphemes in Central Khoisan languages, but direct borrowing is out of the question; there must have been some internally driven reason for replacement as well. Reconstruction shape: The reconstruction is essentially based on the Ju|'hoan form. The second component must have been the equivalent of Proto-Northern Khoisan **či* 'thing' = Ju|'hoan *či*, etc., although some dialects show an irregular development to *če*; this is the result of further contraction with the deictic stem **e*, i. e. **ha-či-e* > **hače* (cf. the same situation with 'who' q.v.).

97. WHITE

Ju|'hoan *!àʔú* (1), ||Kxau||en *!áú* (1), !Kung *!áo ~ !káo ~ !kxáo* (1), Grootfontein !Kung *!əʔàù* (1), !O!Kung *!áú* (1), Ekoka !Xung *!àʔò* (1), Proto North Khoisan **!àʔū* (1).

References and notes:

Ju|'hoan: Dickens 1994: 312.

||Kxau||en: Bleek 1956: 413; Bleek 1929: 91.

!Kung: Bleek 1956: 409, 507. Quoted as *!káo* in [Bleek 1929: 91].

Grootfontein !Kung: Doke 1925: 159.

!O!Kung: Bleek 1956: 413; Bleek 1929: 91. Quoted as *!àʔò* in [Snyman 1980: 55].

Ekoka !Xung: König & Heine 2008: 81. Adjectival stem; the corresponding verbal stem is *!àʔò* [ibid.], with tonal gradation.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial, except for the tonal pattern (Ekoka data shows traces of tonally marked morphological gradation, which could account for the irregularities).

98. WHO

Ju|'hoan *!hà-žòè* (1), ||Kxau||en *žu-ba* (2), !Kung *a-žu* (1), !O!Kung *m-žu* (2), Ekoka !Xung *m-žē ~ m-žōē* (2), Proto North Khoisan **hà-žù* (1).

References and notes:

Ju|'hoan: Dickens 1994: 218. Lit. 'what person?'. Plural form: *hã-žùì*.

||Kxau||en: Bleek 1929: 91. Consists of *žu* 'person' with the interrogative particle *-ba*. Not attested in [Bleek 1956].

!Kung: Bleek 1956: 4. Lit. 'what person?' = Ju|'hoan *hã-žòè*. [Bleek 1929: 91] lists an entirely different form: *!ũ-de* where *!ũ* = 'man' q.v., and *-de* is a general interrogative morpheme. However, that form is not confirmed in any way in [Bleek 1956], whereas textual confirmation for *a-žu* 'who?' is quite plentiful.

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1929: 91; Snyman 1980: 55. Consists of *žu* 'person' suffixed to the interrogative stem *m-*. Not attested in [Bleek 1956].

Ekoka !Xung: König & Heine 2008: 45. Lit. 'what person?', with the same interrogative morpheme as in *m-čá* 'what?' q.v.

Proto North Khoisan: Distribution: The situation here is exactly the same as with 'what' q.v. Replacements: See under 'what'. Reconstruction shape: Based on the Ju|'hoan form. The exact lexeme is a compound with **žù* 'person', and in some dialects is further expanded with the deictic stem **-e* **hã-žù-e* > Ju|'hoan *hã-žoe*, etc.

99. WOMAN

Ju|'hoan *žʰàù* (1), ||Kxau||en *žau* ~ *žou* ~ *žóú* (1), !Kung *žau* ~ *záú* ~ *sáú* (1), Grootfontein !Kung *zsháú*: (1), !O!Kung *cau* ~ *cáú* (1), Ekoka !Xung *žhāō* (1), Proto North Khoisan **žhau* (1).

References and notes:

Ju|'hoan: Dickens 1994: 197.

||Kxau||en: Bleek 1956: 31; Bleek 1929: 93.

!Kung: Bleek 1956: 31, 164, 263. Quoted as *zau* ~ *žau* in [Bleek 1929: 93]. The latter source also adds *de* as a synonym, but most of the textual examples as well as external comparison rather suggest the meaning 'female' for this word.

Grootfontein !Kung: Doke 1925: 154. The transcriptional notation *zs-* indicates, according to Doke, that the fricative *z* "becomes unvoiced before completion".

!O!Kung: Bleek 1956: 213; Bleek 1929: 93. Secondary synonym: *dama* [Bleek 1956: 21; Bleek 1929: 93]. Textual examples in [Bleek 1956] show that *dama* and *cau* are either completely synonymous (indicating that *dama* is in the process of replacing the older word *cau*), or that *cau* may already be restricted to indicating the more specialized 'wife'. Additional research on existing texts is needed to resolve the issue. However, J. Snyman, for the meaning 'woman', only quotes *čhàò* ~ *čhàò* ~ *šàò* ~ *sao* [Snyman 1980: 55], not mentioning the existence of *dama* at all. A third synonym is *!ũ-de* [Bleek 1929: 93] = *!xú-dè* [Snyman 1980: 55], but this form is easily understood as lit. '!Xung female', i. e. specifically 'a !Xung woman'.

Ekoka !Xung: König & Heine 2008: 20. Quoted as *žhāō* (Western dialect) ~ *shāō* (Eastern dialect) in [Heikkinen 1986: 22]. Attested also as *žhāō-mà* id., with a standard diminutive suffix. Secondary synonym: *dāh-mà* 'woman, wife' [ibid.]. The semantic distinction between the two words is not quite clear, but text examples suggest that the latter is more closely associated with the specified meaning of 'wife' or 'married woman', whereas the former is still the more broad term.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are generally regular and trivial; Proto-North Khoisan **žh-* automatically becomes preglottalized in Ju|'hoan, so there is no need to carry it over as a phonological feature onto the proto-level. Tonal correspondences are not clear enough to allow the reconstruction of a distinct pattern. Semantics and structure: This is unambiguously the main North

Khoisan word denoting a female human being, and should be distinguished as such from **de* ~ **di* 'female (in general)'. The occasionally encountered synonym *da(h)ma* is much more localized (could this be simply a "naturalized" reanalysis of German/Afrikaans *Dame*?).

100. YELLOW

Ju|'hoan $\llbracket\tilde{\text{d}}\text{n}\tilde{\text{i}}\text{-}\text{ú}\rrbracket$ (1), $\llbracket\text{Kxau}\rrbracket\text{en}$ $\llbracket\tilde{\text{a}}\tilde{\text{u}}\rrbracket$ (2), !Kung $\llbracket\acute{\text{a}}\eta\rrbracket$ ~ $\llbracket\grave{\text{a}}\eta\rrbracket$ (2), Grootfontein !Kung $\llbracket\text{a}\eta\rrbracket$ ~ $\llbracket\tilde{\text{a}}\eta\rrbracket$ (2), !O!Kung $\llbracket\tilde{\text{a}}\eta\rrbracket$ (2), Ekoka !Xung $\llbracket\tilde{\text{u}}\tilde{\text{u}}\rrbracket$ (3), Proto North Khoisan * $\llbracket\tilde{\text{a}}\eta\text{u}\rrbracket$ (2).

References and notes:

Ju|'hoan: Dickens 1994: 217. Lit. '(the color of) the jewel beetle's ($\llbracket\tilde{\text{d}}\text{n}\tilde{\text{i}}\rrbracket$) belly ($\llbracket\text{ú}\rrbracket$).

$\llbracket\text{Kxau}\rrbracket\text{en}$: Bleek 1956: 276; Bleek 1929: 94. Translated as 'yellow, pale blue, green' in [Bleek 1956] and most likely the same word as 'green' q.v., unless there is some confusion of similar-sounding roots involved (not highly likely given lack of confirming external evidence).

!Kung: Bleek 1956: 300. Quoted as $\llbracket\text{a}\eta\rrbracket$ in [Bleek 1929: 94]. Same word as 'green' q.v.

Grootfontein !Kung: Doke 1925: 156, 157.

!O!Kung: Bleek 1956: 300. Quoted as $\llbracket\text{a}\eta\rrbracket$ in [Bleek 1929: 94]. Same word as 'green' q.v.

Ekoka !Xung: König & Heine 2008: 54. Same word as 'egg' q.v.

Proto North Khoisan: Distribution: Two different terms denoting the color of 'yellow' in Ju|'hoan and Ekoka are transparent recent innovations, which, in the light of the rest of the data, means that in Proto-North Khoisan 'yellow' was not likely to have been different from 'green' q.v. Replacements: (a) Ju|'hoan $\llbracket\tilde{\text{d}}\text{n}\tilde{\text{i}}\text{-}\text{ú}\rrbracket$ {'jewel beetle belly' > 'yellow'}; (b) Ekoka $\llbracket\tilde{\text{u}}\tilde{\text{u}}\rrbracket$ {'egg' > 'yellow'}.

101. FAR

Ju|'hoan $\llbracket\text{xá}\rrbracket$ (1), $\llbracket\text{Kxau}\rrbracket\text{en}$ $\llbracket\text{xá}\rrbracket$: ~ $\llbracket\text{fa}\rrbracket$ ~ $\llbracket\text{fa}\rrbracket$ ~ $\llbracket\tilde{\text{a}}\rrbracket$: ~ $\llbracket^h\tilde{\text{a}}\rrbracket$: ~ $\llbracket\text{xá}\rrbracket$: ~ $\llbracket\tilde{\text{a}}\rrbracket$ (1), !Kung $\llbracket\text{xá}\rrbracket$ ~ $\llbracket\text{xá}\rrbracket$ ~ $\llbracket\text{fa}\rrbracket$ (1), !O!Kung $\llbracket\text{fa}\rrbracket$ ~ $\llbracket\text{xa}\rrbracket$ (1), Ekoka !Xung $\llbracket\text{xá}\rrbracket$ (1), Proto North Khoisan * $\llbracket\text{xá}\rrbracket$ (1).

References and notes:

Ju|'hoan: Dickens 1994: 303. Secondary synonym: $\llbracket\tilde{\text{a}}\text{mm}\rrbracket$.

$\llbracket\text{Kxau}\rrbracket\text{en}$: Bleek 1956: 295, 362, 401, 423, 653, 678. Quoted as $\llbracket\text{xá}\rrbracket$: ~ $\llbracket\tilde{\text{a}}\rrbracket$ in [Bleek 1929: 37]. The multiple variants are, in all likelihood, dialectal or misheard forms of the same root (the palatal click $\llbracket\text{x}\rrbracket$ is very unstable in D. Bleek's transcription).

!Kung: Bleek 1956: 653, 678. Quoted as $\llbracket\text{xá}\rrbracket$ in [Bleek 1929: 37].

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 362, 678; Bleek 1929: 37. Quoted as $\llbracket\text{xá}\rrbracket$ in [Snyman 1980: 38].

Ekoka !Xung: König & Heine 2008: 92. Quoted as $\llbracket\text{xá}\rrbracket$ in [Heikkinen 1986: 23]. Used in verbal ('to be far') and adverbial ('far away') functions. Cf. also $\llbracket\tilde{\text{a}}\rrbracket$ 'far' [König & Heine 2008: 86], only as a directive adverb.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial. Fluctuation between various click types in old records is fairly typical of the palatal click, usually the hardest one to properly identify (at least for researchers in the first half of the XXth century).

102. HEAVY

Ju|'hoan *t̪ʰ* (1), ||Kxau||en *tí* (1), !Kung *tí* ~ *tí* (1), Ekoka !Xung *t̪h̪* (1), Proto North Khoisan **t̪ʰ* (1).

References and notes:

Ju|'hoan: Dickens 1994: 272.

||Kxau||en: Bleek 1956: 201. Quoted as *t̪* in [Bleek 1929: 46].

!Kung: Bleek 1956: 201. Quoted as *tí* in [Bleek 1929: 46].

Grootfontein !Kung: Not attested.

!O!Kung: Not attested.

Ekoka !Xung: König & Heine 2008: 69. Quoted as *t̪* in [Heikkinen 1986: 21].

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular. Both in Ju|'hoan and Ekoka the word displays an ultra-low tonal pattern that frequently accompanies breathy vowel articulation; in this case, it seems that breathy articulation has to be reconstructed on protolanguage level as a distinctive phonological feature.

103. NEAR

Ju|'hoan *t̪ʔm(-á)* (1), ||Kxau||en *t̪m* ~ *toma* ~ *tum* ~ *dom* (1), !Kung *t̪ʔumm* ~ *tumma* ~ *tamma* (1), !O!Kung *tum* (1), Ekoka !Xung *t̪ʔm̪* (1), Proto North Khoisan **t̪ʔm* (1).

References and notes:

Ju|'hoan: Dickens 1994: 274.

||Kxau||en: Bleek 1956: 27, 207, 241. Quoted as *t̪mm* in [Bleek 1929: 60]. The latter source also quotes /u/ in the meaning 'to be near', confirmed in [Bleek 1956: 322], but this is a recent borrowing from Central Khoisan that evidently has not succeeded in replacing the original word.

!Kung: Bleek 1956: 191, 241. Quoted as *t̪um* 'near', *t̪am-a* 'to be near' in [Bleek 1929: 60].

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 241. Quoted as *t̪m̪m̪* in [Snyman 1980: 45].

Ekoka !Xung: König & Heine 2008: 70; Heikkinen 1986: 21. Verbal form ('be near'), also quoted as *g̪è t̪ʔm-ā* id.

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial, except for the tonal pattern which requires further exploration. Frequently attested in the "junctive" form **t̪ʔm-a* (with following object).

104. SALT

Ju|'hoan *g̪úí* (1), ||Kxau||en *dabe* (-1), !Kung *g̪wì* (1), !O!Kung *g̪wí* (1), Ekoka !Xung *g̪úí* (1), Proto North Khoisan **g̪úí* (1).

References and notes:

Ju|'hoan: Dickens 1994: 202. Secondary synonym: *díbí* (< Central Khoisan, cf. Naro *dābǝ* id., etc.).

||Kxau||en: Bleek 1929: 71. For some reason, not attested in [Bleek 1956]. In any case, clearly a borrowing from the same Central Khoisan source as the Ju|'hoan item.

!Kung: Bleek 1956: 53. Quoted as *gwí* in [Bleek 1929: 71].

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 53; Bleek 1929: 71. J. Snyman [Snyman 1980: 48] incorrectly translates 'salt' as *ʔʰiì*, even though the latter is a verb/adjective meaning '(to be) salty'; this is made clear in a textual example on the same page: *gui ʔʰiì* 'the salt is salty'.

Ekoka !Xung: König & Heine 2008: 27; Heikkinen 1986: 22.

Proto North Khoisan: Distribution: Preserved in most daughter dialects. Replacements: (possibly) ||Kxau||en *dabe*, borrowed from Central Khoisan. J. Snyman records the variants *dabi* and *dibi* for a few more North Khoisan dialects, but the distribution is still scarce enough to be explainable as the result of recent areal diffusion. Reconstruction shape: Correspondences are regular and trivial.

105. SHORT

Ju|'hoan *!ò-mà* (1), ||Kxau||en *!ò:* (1), !Kung *!o-ma ~ !α-ma* (1), !O!Kung *!o-!o* (1), Ekoka !Xung *!ò* (1), Proto North Khoisan **!ò ~ *!ò-mà* (1).

References and notes:

Ju|'hoan: Dickens 1994: 316. Singular subject action verb; the plural subject form is *!òà-mhí* (second part of the compound stem in both cases is *=mà / =mhí* 'small').

||Kxau||en: Bleek 1956: 383. Quoted as *!ò:* in [Bleek 1929: 74].

!Kung: Bleek 1956: 441; Bleek 1929: 74.

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 446. In the meaning 'short' only the reduplicated stem is attested in [Bleek 1956], but in [Bleek 1929: 74] both *!o!o* and *!α* are quoted with the meaning 'short'.

Ekoka !Xung: König & Heine 2008: 83. Functions both as adjectival and verbal stem; another derived verbal stem is *!ò-mà* 'be short' [ibid.] (quoted as *!ò-mā* in [Heikkinen 1986: 24]).

Proto North Khoisan: Distribution: Preserved in all daughter dialects. Reconstruction shape: Correspondences are regular and trivial. The proper monosyllabic root is **!ò*, but the word must have existed in the expanded form **!ò-mà*, with a further diminutive suffix, already on the protolevel.

106. SNAKE

Ju|'hoan *ʔʰàgà-mà ~ ʔʰà:-mà* (1), ||Kxau||en *!e ~ !i* (2), Grootfontein !Kung *ʔʰàwà* (1), !O!Kung *!áú ~ !wē* (3), Ekoka !Xung *!ʔʰàwà* (1), Proto North Khoisan **ʔʰàgà ~ *ʔʰàwà* (1).

References and notes:

Ju|'hoan: Dickens 1994: 304, 305. The second morpheme is the diminutive suffix *=mà* (cf. the plural form *ʔàgà-mhí*). Of the two variants of the root morpheme, *ʔà:* is likely secondary (a dialectal contraction from *ʔàgà-*).

||Kxau||en: Bleek 1956: 380; Bleek 1929: 77. The latter source also quotes *ʔi:* as a synonym; in [Bleek 1956: 672] the word is, however, attested with the more specialized meaning 'great watersnake'.

!Kung: Unclear. [Bleek 1929: 77] lists two items: (a) *ʔé:*, confirmed in [Bleek 1956: 530] in the specific meaning 'a short thick snake' (corresponds regularly to Ju|'hoan *ʔáí* 'puff-adder'); (b) *ʔaŋ||ani-sé*, confirmed in [Bleek 1956: 527] as the plural form 'snakes', but no corresponding singular form is listed.

Grootfontein !Kung: Doke 1925: 158. Subtitled "collective term".

!O!Kung: Bleek 1956: 303, 332. Quoted as *ʔáũ ~ wē* in [Bleek 1929: 77].

Ekoka !Xung: König & Heine 2008: 93.

Proto North Khoisan: Distribution: Ekoka and Ju|'hoan agree on the same item, which is therefore the best candidate for 'snake' in Proto-North Khoisan. Replacements: (a) ||Kxau||en *ʔe*, etc. = Ju|'hoan *ʔáí* 'puff-adder' [Dickens 1994: 209], etc., implying a generalization {'puff-adder' > 'snake'}; (b) !O!Kung *ʔáũ* probably is the same word as Ju|'hoan *ʔxáũ* 'blind snake (Typhlops sp.)' [Dickens 1994: 291], although the lack of velar affricate efflux is suspicious. It should also be noted that the exact semantics for these forms could have been indicated erroneously (i. e., 'snake' instead of 'a certain kind of snake'). Reconstruction shape: Correspondences for the first two segments are regular and trivial, but the stem on the whole is somewhat unique; its violation of the general phonotactic laws of North Khoisan (*-g-* or *-w-* in word-medial position) can be explained either as a result of compounding (i. e. **ʔá- + *-ga*, although neither of the two morphemes is encountered separately) or borrowing (although the source is unknown). The Ju|'hoan variant with *-g-*, even worse from a general phonotactic view than Ekoka's variant with *-w-*, must have been primary. Also, in Ju|'hoan, the word is further expanded with the standard derivative suffix **-mà*.

107. THIN

Ju|'hoan *ʔám* (1), ||Kxau||en *ʔam* (1), !Kung *ʔám* (1), Grootfontein !Kung *ʔam* (1), Ekoka !Xung *ʔxáí* (2), Proto North Khoisan **ʔám* (1).

References and notes:

Ju|'hoan: Dickens 1994: 221.

||Kxau||en: Bleek 1956: 265. Quoted as *ʔám* in [Bleek 1929: 84].

!Kung: Bleek 1956: 265. Secondary synonym: *wí* [Bleek 1929: 85], confirmed as *wí* in [Bleek 1956: 334] = Ju|'hoan *ʔúʔí* 'to be thin (of paper)', i. e. the semantics is probably somewhat more specialized than that of *ʔám*.

Grootfontein !Kung: Doke 1925: 155. Secondary synonym: *ʔáũ* [Doke 1925: 161].

!O!Kung: Not attested in D. Bleek's primary sources. Cf., however, *ʔám* 'lean' in [Snyman 1980: 43].

Ekoka !Xung: König & Heine 2008: 103; Heikkinen 1986: 26. Meaning given as 'to be thin, lean'.

Proto North Khoisan: Distribution: The original form is attested in all major dialect clusters, replaced completely only in Ekoka. Replacements: Ekoka *ʔxáí* = Ju|'hoan *ʔxáí* 'wrinkled' [Dickens 1994: 331], implying a metonymic shift {'wrinkled; contracted' > 'thin'}. Reconstruction shape: The reconstruction essentially just follows the form of the word in Ju|'hoan.

108. WIND

Ju|'hoan *mà* (1), ||Kxau||en *ʔá ~ ʔa* (2), !Kung *ʔa ~ ʔá* (2), !O!Kung *ʔuli* (3), Ekoka !Xung

//ǀhli ~ //ǀhli-gō (3), Proto North Khoisan *ʔa (2).

References and notes:

Ju|'hoan: Dickens 1994: 234.

||Kxau||en: Bleek 1956: 640. Quoted as ʔā in [Bleek 1929: 92].

!Kung: Bleek 1956: 640. Quoted as ʔā in [Bleek 1929: 92].

Grootfontein !Kung: Not attested.

!O!Kung: Bleek 1956: 592. Quoted as //i li in [Bleek 1929: 92].

Ekoka !Xung: König & Heine 2008: 100.

Proto North Khoisan: Distribution: Proto-North Khoisan *ʔa has the widest dialectal distribution in this case, the other two roots being somewhat more localized. Replacements: (a) Ju|'hoan mǀ, etc. probably reflects verb-to-noun conversion: {'to blow (of wind)' > 'wind'}, since in most other dialects this root, clearly reflecting Proto-North Khoisan *mǀ, is only attested in this verbal meaning (cf. in ||Kxau||en: ʔa mǀ 'the wind blows' [Bleek 1956: 132]); (b) !O!Kung //uli, etc., is comparable with Ju|'hoan //ǀrǀ 'whirlwind' [Dickens 1994: 333], hence probably a semantic specialization: {'whirlwind' > 'wind'}. Reconstruction shape: Apart from old sources, the word is also attested in many dialects in J. Snyman's survey, always in the form ʔa, Bleek's transcription with a nasalized vowel in ||Kxau||en must, therefore, be either an error or an occasional irregularity. Semantics and structure: The phonetic similarity with Proto-Central Khoisan *ʔā 'wind' is hardly coincidental, implying either cognation or borrowing. If this was a borrowing, however, it must have occurred already on the Proto-North Khoisan level.

109. WORM

Ju|'hoan ʔǀǀǀǀ (1).

References and notes:

Ju|'hoan: Dickens 1994: 247.

||Kxau||en: Not attested.

!Kung: Not attested.

Grootfontein !Kung: Not attested.

!O!Kung: Not attested.

Ekoka !Xung: Not attested.

Proto North Khoisan: Not reconstructible due to almost complete lack of attestation.

110. YEAR

Ju|'hoan kǀrǀ (1), ||Kxau||en kuri (1), Grootfontein !Kung ǀǀǀǀ (2), !O!Kung kuri (1), Ekoka !Xung ǀǀ (3), Proto North Khoisan *kuri # (1).

References and notes:

Ju|'hoan: Dickens 1994: 231.

||Kxau||en: Bleek 1956: 107. Quoted as *kiri* in [Bleek 1929: 94].

!Kung: Not attested.

Grootfontein !Kung: Doke 1925: 160.

!O!Kung: Bleek 1956: 107; Bleek 1929: 94. The latter source also lists *maka*, confirmed in [Bleek 1956: 133], as a synonym; this must be a very recent Bantu borrowing. J. Snyman lists an entirely different form: *ʔhúú* [Snyman 1980: 56].

Ekoka !Xung: König & Heine 2008: 33. Same word as 'rain' q.v. Secondary synonym: *ʔhúú* [Heikkinen 1986: 23].

Proto North Khoisan: Distribution: Although the form *kuri* is far more widespread in the meaning 'year' than any other one, it is also most likely of Central Khoisan origin (Proto-Central Khoisan **kuri* id.); the only question is whether it had already penetrated into Proto-North Khoisan, or was borrowed independently into different dialects. There are, however, no serious alternate candidates for 'year' on the protolanguage level anyway. Replacements: (a) Grootfontein *ʔhúú*, of unknown origin; (b) Ekoka *ʔhúú* = 'rain' q.v. Reconstruction shape: The reconstruction is based directly on Ju'hoan.