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Lexica Dene-Caucasica

by

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The recent revival of the Dene-Caucasic (= Sino-Caucasian) hypothesis is owed to the pioneering work of S. A. Starostin (1982, 1984), which was prefigured by the earlier work of Bleichsteiner, Bouda, Shafer, Tailleur, Toporov, Trombetti (among others: see list of references).<sup>1</sup> Starostin was the first to frame the hypothesis in the standard comparative method, with phonetic correspondences, but compared only three phyla (Caucasic, Sino-Tibetan, Yeniseian).<sup>2</sup>

Studies by Čirikba (1985) and Nikolaev (1989, 1991), enlarged the scope of the hypothesis to include Basque and Na-Dene, respectively, again reviving lines of inquiry begun by earlier scholars. The present authors, in turn, find the inclusion of Burushaski compelling (Bengtson 1990a, Blažek 1989). The cases of Sumerian (Bouda 1938; Bengtson 1990b) and Kusunda (= Ban Raja: Gurov 1989) are more difficult, but these may represent additional

1 The "Basque-Dennean" or "Vasco-Dene" of Swadesh was far more inclusive than our Dene-Caucasic, containing also what are now considered Nostratic or Eurasiatic languages (Swadesh 1972; cf. Fleming 1990). Swadesh's mentor, Edward Sapir, believed in a genetic tie between Sino-Tibetan and Na-Dene, but only fragments of his evidence have been published (e.g., Golla 1984: letter 332). Apparently independent of Sapir, Robert Shafer (1952, 1957) came to the same conclusion, which was supported by Swadesh (1952).

2 The Term "Caucasic" here replaces the earlier "North Caucasic" or "North Caucasian". Since "South Caucasic" no longer exists, having been replaced by the term "Kartvelian", the "North" has become superfluous. "Caucasic" is preferred to "Caucasian", since the latter has regional and racial connotations. We concur in the genetic separation of Caucasic from Kartvelian, supported also by Diakonoff, Starostin, and Nikolaev. (See Catford 1991 for discussion.)

branches of the Dene-Caucasic tree, and citations from these languages figure frequently in the comparisons presented here.

Another isolate, Nahali (Nihali), shows some affinities with DC lexicon (Ruhlen 1990, Fleming 1991), but the genetic core may be yet older and distinct. Nikolaev and Shevoroshkin have also suggested that some other American language families, viz. Salish and Algic, may also be included in Dene-Caucasic (Nikolaev 1991: 61; Shevoroshkin 1991: 6-9). We prefer Greenberg's (1987) Amerind affiliation for these latter languages.

The present authors accept the validity of the Dene-Caucasic hypothesis in its broad outlines. While we find the cumulative evidence of the above-referenced works convincing, we do not necessarily concur in all of the individual comparisons adduced, including some of our own earlier proposals. One of the most serious deficiencies of works in this field has been the restricted scope of binary or trinary comparisons. We intend to remedy that problem by expanding the comparison to the full range of potential Dene-Caucasic families. We believe the light shed by multilateral comparison will clarify many of the questions raised by the Dene-Caucasic hypothesis.

Dene-Caucasic historical phonology is still in its infancy. The basis was codified by Starostin (1984 = 1991; revised and simplified in Starostin 1989b). Nikolaev (1989, 1991) extended the correspondences to Na-Dene, and one of the present authors (Bengtson 1991c) has begun the correlation of Basque and Burushaski phonologies with Caucasian. Some of the results to emerge from these cumulative efforts are the following tentative correspondences:<sup>3</sup>

3 Notes on transcriptions: Basque *p*, *t*, *k* in Spanish dialects (V, G, AN, R) = *ph*, *th*, *kh* in French dialects (L, BN, S); similarly, Fr. *h* = Sp. *θ*; *š*, *č* (dorso-alveolar) = orthographic *z*, *tz*; *ṣ̌*, *č̣* (apico-alveolar) = orth. *s*, *ts*; *ṣ̣̌*, *č̣̣* (prepalatal) = orth. *x*, *tx*.

Caucasic and Na-Dene - *l* = unvoiced lateral fricative; *h* = voiced lateral affricate (*dʰ*); *ḥ* = unvoiced lateral affricate (*tʰ*); *ḥ'* = (the preceding, glottalized); *X* = unvoiced uvular fricative; *q* = unvoiced uvular stop; *R* (*ɣ*) = voiced uvular fricative; *G* = voiced uvular stop; *ʔ* = glottal stop; *ʔ̣* = epiglottal (pharyngeal) stop; *ḥ* = unvoiced pharyngeal fricative; *ʕ* = voiced pharyngeal fricative; *a*, *e*, etc. = pharyngealized vowel; *V* = undetermined vowel (in reconstructions); *a*, *e*, etc. = reconstructed prosodic feature (tense voice?) in Proto-Caucasic (Starostin 1989b).

In general: *c*, *ɟ* = *tʰ*, *dʰ*; *č*, *ǰ* = *tʰ̣*, *dʰ̣*; other characters have the usual values.

Proto-DC:	Basque:	Caucasic:	Burushaski:	Sino-Tibetan:	Yeniseian:	Na-Dene:
* <i>p</i>	<i>p(h)</i>	<i>p</i>	<i>ph (pf)</i>	<i>ph/bh, -p</i>	<i>p</i>	<i>w</i>
* <i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>p(h), -p</i>	<i>p/b</i>	<i>w</i>
* <i>w</i>	<i>b</i>	<i>w</i>	<i>w</i>	<i>w</i>	<i>w</i>	<i>w</i>
* <i>t</i>	<i>t(h)</i>	<i>t</i>	<i>th</i>	<i>th/dh, -t</i>	<i>d</i>	<i>t</i>
* <i>d</i>	<i>d</i>	<i>d</i>	<i>d</i>	<i>t(h), -t</i>	<i>t</i>	<i>d</i>
* <i>t'</i>	<i>t(h)</i>	<i>t'</i>	<i>t</i>	<i>t/d, -t</i>	<i>d</i>	<i>t'</i>
* <i>k</i>	<i>h-/k</i>	<i>k</i>	<i>kh</i>	<i>k/gh, -k</i>	<i>g</i>	<i>k</i>
* <i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>k(h), -k</i>	<i>k</i>	<i>g</i>
* <i>k'</i>	<i>k(h)</i>	<i>k'</i>	<i>k</i>	<i>k(h)/g, -k</i>	<i>g, -k</i>	<i>k'</i>
* <i>s</i>	<i>š</i>	<i>s</i>	<i>s</i>	<i>s, -θ</i>	<i>s</i>	<i>s</i>
* <i>c</i>	<i>š</i>	<i>c</i>	<i>c/č</i>	<i>c(h), -t</i>	<i>č/s</i>	<i>c</i>
* <i>c'</i>	<i>š</i>	<i>c'</i>	<i>š/ṣ̌</i>	<i>s/ch, -t</i>	<i>c/s</i>	<i>c'</i>
* <i>š</i>	<i>š</i>	<i>š</i>	<i>š/ṣ̌</i>	<i>š-, -θ</i>	<i>s</i>	<i>š</i>
* <i>č</i>	<i>š</i>	<i>č</i>	<i>š/ṣ̌</i>	<i>č/ṣ̌, -t</i>	<i>č-/ṣ̌, s</i>	<i>č</i>
* <i>č'</i>	<i>č-/č̣</i>	<i>č'</i>	<i>š/ṣ̌</i>	<i>č/ṣ̌h-, -t</i>	<i>č-/ṣ̌, s/ṣ̌</i>	<i>č'</i>
* <i>l</i>	<i>l-, -lh-</i>	<i>l</i>	<i>ɣ</i>	<i>l</i>	<i>θ-, l/l'</i>	<i>l</i>
* <i>h</i>	<i>l-, -l/rd-</i>	<i>h</i>	<i>d-, -ld-</i>	<i>l/h, -k</i>	<i>k-, r</i>	<i>h</i>
* <i>ḥ</i>	<i>l-, -l/rd-/rg-</i>	<i>ḥ</i>	<i>t-, -lt-</i>	<i>l/h, -k</i>	<i>ʔ-, r</i>	<i>ḥ</i>
* <i>ḥ'</i>	<i>l-, -l/rd-/rg-</i>	<i>ḥ'</i>	<i>t-, -lt-</i>	<i>l/h, -k</i>	<i>j-/k-, l</i>	<i>ḥ'</i>
* <i>X</i>	<i>h</i>	<i>X</i>	<i>x</i>	<i>k(h)/qh, -k</i>	<i>X/q</i>	<i>X</i>
* <i>q</i>	<i>k(h)</i>	<i>q</i>	<i>q</i>	<i>q/G, -k</i>	<i>X-, q/G</i>	<i>q</i>
* <i>G</i>	<i>g</i>	<i>G</i>	<i>g/ɣ</i>	<i>q(h)/G, -k</i>	<i>X-, q/G</i>	<i>G</i>
* <i>q'</i>	<i>k(h)</i>	<i>q'</i>	<i>q</i>	<i>Q/K, -k</i>	<i>X/q</i>	<i>q'</i>

We emphasize that this table is only a working model, based mainly on Starostin's formulations. While details are still subject to change, certain trends are already clear. Proto-Caucasic and Proto-Na-Dene are phonologically archaic, and many of the correspondences are trivial, but radical shifts have taken place in some of the other proto-languages, notably Proto-Sino-Tibetan and Proto-Yeniseian. Burushaski is relatively archaic in its consonantal system (retaining the triple contrast *th - d - t*), while the Basque system has undergone transformation (*t(h) - d*), possibly due to areal influence.

Preliminary to the etymological section, we should remark on some salient grammatical features reconstructed for Proto-Dene-Caucasic. There was a system of class prefixes marking nouns and verbs, frequently in the form of infixes. This system is more or less living in Burushaski, Yeniseian (Ket), and some Caucasian languages till the present time (Toporov 1971). Remnants of these markers, often merely 'fossilized', can be found in most of the other DC branches, e. g., the prefixes of Basque and Sino-Tibetan:

Basque *a-ho* 'mouth', *a-gin* 'molar tooth', *be-lhaun* 'knee', *be-hatz* 'thumb, toe, hoof' (the unprefixated *hatz* ~ *atz* survives as 'finger, claw, paw'; the meanings of both words vary dialectally), *bi-hotz* 'heart', *bi-zkar* 'back' (cf. *u-zki* 'anus', with a different prefix and suffix), etc.; Tibetan *m-dan* 'cheek', *m-čhu* 'lip, beak', *m-čhin* 'liver'; Burmese *ā-mi* 'mother', *ā-sa* 'flesh', etc. The presence or absence of a prefix could affect the voicing or unvoicing of the initial root consonant. (Further discussion in Bengtson 1991a, 1991d.)

The present work is intended to build upon the body of Dene-Caucasic lexical comparisons already published. While some of the etymologies presented here are entirely new, others are expanded from comparisons previously published. Insofar as they are known to the authors, the predecessors are acknowledged in the notes following each entry.

Unless indicated otherwise, linguistic forms in the etymological section are cited as follows: Basque (Bsq) from standard dictionaries, cited only when the word is unusual; Proto-Caucasic (Cauc) as given by Nikolaev & Starostin (1991); Burushaski (Bur) and Werchikwar (W) as found in Lorimer (1935–1938, 1962), with some modifications of the transcription; Sumerian (Sum) from standard sources (see list of abbreviations); Kusunda (Kus) from works of Grierson (G), Hodgson (H), and Reinhard & Toba (RT); Sino-Tibetan (ST) reconstructions are mainly by Benedict (Bn), also by Pejros & Starostin (PS), as indicated; Yeniseian (Yen) reconstructions by Starostin (1982, 1984); Eyak-Athapaskan (EA) reconstructions by Nikolaev (1991), with Haida forms taken from Lawrence & Leer (1976), Tlingit from Davis (1977), and Eyak from Krauss (1970).

Wherever possible we have tried to supply some attested forms underlying the Proto-Caucasic reconstructions. However, the *North Caucasian Etymological Dictionary*, by Nikolaev and Starostin, is not yet available to us (save for excerpts cited in Diakonoff & Starostin 1986; Nikolaev 1985; Starostin 1982, 1985, 1987), and in some cases we could only infer examples from other Caucasian sources.

Etymologies are arranged by semantic groups, viz: Body parts, secretions, functions (1–44); fauna (45–63); flora (64–91); natural phenomena (92–121); verbal roots (122–143); artifacts and

food preparations (144–162); divisions of time and space (163–169); social terms (170–179); descriptives (180–203); grammatical forms (204–219).

1. Bsq *txorru* [čorru] (V) 'stubble' (of hair or beard)// Cauc \*č'aHVrV 'hair' (Arch. č'ari, Lzg č'ar, And č'ur X 47, Tal 264)// Bur -čhōqur-aŋ 'hair cut in a fringe on the forehead, forelock', (W) -čoyúy-an 'infant's first hair' (apparently contaminated with the following etymon)// Sum *suhur* 'Haarschopf, Wipfel, hair of the head, crown, top of a tree, a plant' [Boisson 1989 a § 74 Bur + Sum + Nost \*čäyUrV 'hair'].

2. Bur *γoy-aŋ* ~ *γuy-aŋ* 'hair' (-aŋ pl.)// Kus *gyai-i* 'hair' (H)// ND: TI *Xaw* 'hair', Ath \*xa? (Mat -γα?, -ga?, Hupa -wa?, Nav -yaa? P § 115; Go 110) [Bengtson NSC § 15 Bur + ND].

3. Bsq *bel-ar* 'forehead', be-*pel-ar* (AN) 'eyelash' (from \*bet-bel- from bet- 'eye')// Cauc: Lezgian 'bel- 'forehead' (Lzg *p̄el*, Bud *bel-i*, Rut *bql* Tal 274)// ST: Tib d-*pral* 'forehead' (from \*r-pal ?) [Trombetti 1926: 116 Bsq + Cauc; Bouda 1950a: 142 Cauc + ST].

4. Bur *pūi* 'mustache' ~ (N) *phūjī* (SV 154)// ST \**pui* 'body hair' (Tib *s-pu*, gLo-skad *pu* IST 60; Nagano 1985: 455).

5. Bsq \*a-h<sup>w</sup>o 'mouth' > *aho* (BN, L, S) ~ *ao* (AN, G, V, R) ~ *ago* (AN, V, G, R) ~ *abo* (V)// ST \**ku(w)* (Bn) = \**Khō(w)* H (PS) 'mouth' (Dim *khu*, OCh \**k<sup>h</sup>u*, Hruso *khu-mo* 'face' STC 184; Shafer 1947: 192)// Yen \**Xowe* 'mouth' (Ket *qō*, Kott *hōpi* Yen 147) [Starostin Hyp 20 ST + Yen + Cauc \**k'wēl*?V 'mouth'; the Cauc form does not fit phonologically; Bouda 1957: 89 Bsq + ST + Yen].

6. Cauc \**dānHV* (Rut, Tskh *dan* 'cheek', Av *da* 'gum' X 32, 46)// ? Sum *da* 'side'// ST: Tib m-*dan* 'cheek' // ND: EA \**daa*? (Hupa -*da*? 'mouth, lips', Chip -*dà-*, -*dá* 'lip, beak', Nav -*dàà*? 'lip, bill' / Go 111) [Bouda 1938: 1938: 19 Sum + ST; Nikolaev 1991: § 1.6 Cauc + ND].

7. Sum *sù* 'lip'// ST: Tib m-*čhu* 'lip, beak', Midzu *čuw* 'mouth', OCh \**čoj* 'beak' (IST 52, 93; DK 265) [Bouda 1938: 19 Sum + Tib].

8. ST: OCh \**zwin* 'lips' (< *l*: DK 668; cf. 224–225)// Yen \**ʕn* 'lip' (Yug *lon*, Arin e-*tan* Yen 159).

9. Bsq \*(h)a-*gin*: *hagin* (BN, L, S) ~ *agin* (AN, G) 'molar tooth' ~ *agin* (V) 'incisor tooth'; cf. *ganga* 'palate'// ST \**gəm* (Lpch *fo-gom* 'molar tooth', Garo *wa-gam* 'tooth', OCh \**g<sup>h</sup>əm* 'jaw' (STC 25) [Bsq does not permit final -*m*].

10. Bur *-me* 'tooth'// ST: Karen *má* 'tooth' (Pejros 1989: 247).
11. ? Bsq *lat-agin* (V, AN) 'canine tooth' ('tongue tooth?')// ST: Mag *let* 'tongue', Kach *šin-lèt*. OCh *\*lat* (IST 14; DK 225)// ND: TI *l'ut* 'tongue', Eyak *-laʔt'*, Yak *kha-leth* (P § 68).
12. Bur (W) *-yūng-us* 'tongue' (cf. *-ūm-us* in the Hunza dialect; nasal labialized by the rounded vowels)// Kus *i-jiŋ* [iʒiŋ] 'tongue' (R)// ND: Haida *taaq-al* ~ *t'aaŋ-al* 'tongue' [Bengtson NSC § 2 Bur + ND; initials are apparently irregular, like Slav *językū* and Gmc *\*tungōn* 'tongue'].
13. Bsq *kokotz* (BN, L) ~ *okotz* (V) ~ *kokots* (AN, BN, L, S) '(point of) chin; snout'// Cauc: East Cauc *\*q'ac'o* (Rut *q'ac'* 'chin', Lak *q'ac'* 'mouth' X 41-42)// ND: TI *X'ás'* 'jaw', Eyak *q'aʔc'* [Nikolaev 1991: § 1.36 Cauc + ND].
14. Bsq *bekho* (BN, L) 'face, forehead' (mainly in the phrase *bekhoz bekho* 'face to face, head to head')// Cauc *\*bēk'wV* (Rut *buk'* 'face', Tskh *bok'* 'snout' X 37)// Bur *būk* 'throat, front of neck, neck' ~ (W) *būk* ~ *bōk* 'throat, gullet'// Yen: Arin *b'úq-on*, *byk-ólong* 'face, cheek, mouth' (Toporov 1968: 287) [Eng *beak*, Fr *bec*, etc. have been attributed to Gaulish since Suetonius (Ernout & Meillet 1939: 106), but may be traced, ultimately, to DC substratum in Europe].
15. Cauc. *\*XwimXV* (AV *XweneX* 'muzzle, snout' ~ (dial.) *Xu-maX* 'face', And *XunXu* 'face', HU 61)// Kus *hángná* 'face' (H)// Yen *\*xaŋ* 'nose' (Kott *aŋ*, Pump *haŋ* Yen 162)// ND: Haida *Xáŋ-ee* 'the eye', *Xaŋ* 'with the face' (Kaigani) *hoŋ-ai* 'eye' (P § 230 a).
16. Cauc *\*mVfwVIV* 'nose' (Av *meŋer*, And *mahar*, Tsez *mqli* Gi 71)// ST *\*mūr* (Tib *mur* 'gills', Nung *mr* 'face, mouthful', Thado *mu* 'beak' STC 78) [Cf. Pre-Romance *\*murro-* 'snout' TP 2: 142].
17. Bsq *\*hač*: *hats* (BN, L, S) 'breath' ~ *ats* (V, G, BN, L, R) 'stench'// Cauc: Bats *haič'* 'odor', Ing *haž*, Chech *hožu* (Sommerfelt 1938: 130)// Bur *hiš* ~ (W) *hīs* 'breathing, breath, sigh'.
18. Bsq *khino* (L) ~ *kino* (BN) '(bad) odor' ~ *khíño* (S) 'mauvais goût'// Yen: Kott *kiŋ* 'Geruch' (Castrén)// ND: Hupa *-koonʔ* 'odor' ('Etymology unknown' Go 115) [Bouda 1957: 88 Bsq + Yen].
19. Bsq *lirdi* (G) ~ *lerde* (AN, BN, G) 'drivel, saliva' ~ *elder* (V, BN, L, R, S) ~ *helder* (BN) 'drop of saliva / baba' (apparently metathesis of the same etymon, per Michelena 1961: 340)// Cauc *\*twirdi* (Arch *twit* 'dung', Ag *furd* id., Av *xwerd* 'pus' X 50, 70; Tal 323)// ND: Kut *tíd* 'scar', Mat *-lood-eʔ* id., Hupa *toh*, *-lood-eʔ*

'scab', Chip *tür* id., Nav *lood*, *-lood* 'sore' (Go 117) [Bouda 1949: 25 Bsq + Cauc; the unifying semantic theme is 'bodily secretion'].

20. Bsq *\*huN* 'marrow, brain' > *hun* (BN) ~ *hün* (S) 'brain' ~ *fuiñ* (L) 'moelle, sève' ~ *un* (V, BN, R) 'marrow; pith (of plants)', (BN, R) 'brain'// Cauc *\*hwēnH* 'blood' (And *hin*, Hnz *hāj*, Darg *hi*, Av *bi*, Tab *ifi* Gi 138; Bok 22)// Kus *uyu* (R), *uyú* (H), *uyū* (G) 'blood'// ST *\*s-hywəy* (Bn) = *\*(s)γ<sup>w</sup>ɿj* (PS) 'blood' (Mag *hyu*, Dungmali *hi*, Vayu. Mikir *vi*, OCh *\*hwiʔ* STC 51, 181; Bodman 1980: 126; Matisoff 1978: 184 prefers comparison with OCh *\*swia* 'marrow', Kach *lə-səwi* id., *sài* 'blood') [For connection of 'marrow : blood' see Matisoff 1978: 183-184, 202-203; cf. also Drav: Tamil *nīnam* 'fat, flesh, serum', Malayalam *nīnam* 'coagulated blood', Kannada *neṇa* 'fat, marrow' Burrow & Emeneau 1984: § 2927; DC substratal influence may be present in Iran *\*vahuni* 'blood': Av *vohuna-*, Khotan Saka *hūnā*, Pers *xūn*, etc. Bailey 1979: 490-491].

21. Bsq *mami* (S) 'marrow' (V, G, AN, BN, L, R) 'flesh (of fruit, fish, etc.)'// Cauc *\*maŋū* 'marrow, brain' /Tsez *ama*, Lak *naŋ*, Udi *maŋ*, Darg *mahe* X 38)// Sum *múh* 'top, skull' (Boisson 1989 a)// ST *\*nuk* (Bn) = *\*nūH* 'brain' (Karen *\*nuʔ*, Burm *ú-hnauk*, OCh *\*nūʔ* STC 144; DK 189)// Yen *\*doʔ-ŋ* (*\*d- < \*n-*: Ket *doʔŋ* 'human brain, testicles') [Starostin Hyp 24 Cauc + ST + Yen; alternation of *n* ~ *m*, where there is another labial in the root, is not uncommon in DC: note Lak *n-* ~ Udi *m-*, above; also cf. Tab *niq<sup>w</sup>* 'tear, pus' ~ Lak *maq'* ~ Bur *nagei* ~ *magei* 'boil (sore)' NSC § 6].

22. Bsq *\*hauspo* 'lungs > bellows': *hauspo* ~ *haspo* (S) ~ *auspo* ~ *aspo* (AN, V, G) ~ *hausko* (BN, L) ~ *ausko* (AN, BN, R) (meaning 'lungs' only in Vizcaíno (Markina, Orozko) according to Azkue)// Cauc *quǎǎVrV* ~ *\*XwǎǎVrV* 'lung(s)' (Lak *hutru*, Darg *Xurhala* ~ *Xurhari* ~ *Xurhru*, Rut *Xudul*, Arch *Xurǎrti* X 37; Tal 317)// Bur *-xurpat* ~ (W) *-xórpēt* 'lung'// ND: Haida *tkux'íí* ~ *tkuxwíí* 'lung', Eyak *quh* [Berger 1956: 16 Bsq + Bur; Nikolaev 1991: § 1.39 Cauc + ND. Like the IE words for 'tongue' and 'spleen' (cf. § 12, above) "un air de ressemblance, mais différent trop pour qu'on puisse poser un original commun." Meillet 1937: 407.]

23. Bsq *\*kholko* (< *\*khoklo* ? cf. Hnz, below): *kholko* (S) ~ *kolko* (V, G, AN, BN) ~ *golkho* (BN) ~ *golko* (BN, L) 'chest, breast'//

Cauc \**kik[u]* (Tsez *kiki* ~ *keke* 'woman's breast', Hnz *kigla*, Abkh *-k'ək'a*, Lak *kūku* 'nipple' Gud 71)// ND: Haida *k'uuk* 'heart', Tl *kegŭ* 'lungs' (NDE) [Čirikba 1985: 99 Bsq + Cauc].

24. Sum *agan* (D), *agán* (J) 'breast (of woman)// ST (? \**qhaŋ*) Burmic \**yaŋ* 'chest': Burm *yín*, Atsi *vāŋ-kāŋ* (Burling 1967: 76)// Yen (? \**qan*): Kott *xan-ti* 'breast, chest' (Xelinskij 1986: 189)// ND: Haida *qán* '(human) chest'.

25. ST: Tib *thug-s* 'heart', Thami *thug*, Kan *s-tug* 'chest', Mag *tuk* 'belly' (IST 112, 144)// Yen \**təga* 'breast' (Ket *təga*, Pump *tike* Yen 161)// ND: Haida *tek'-ogo* 'heart', Tl *téX'* id., Hare *t'oy* 'breast (of female)', Kut *t'agu* id. (NDE; Hoijer 1956).

26. Bur *-san* 'milt, spleen// ST \**m-sin* (Bn) = \**sĭn* (PS) 'liver' (Tib *m-čhin*, Kan *sin*, Burm *ā-sāñ* STC 55) Yen \**seŋ* (Ket *sēŋ* 'liver', Arin *sin-trun* 'entrails' Yen 210)// ND (\**sVt?* < \**sVn-t*): Eyak *-sa<sup>h</sup>t* 'liver', Gal *-saʔt*, Nav *-zid* (K 126; Go 112) [The ND correspondences are the same as in the word for 'knee', where \**-nt-* was underlying (Nikolaev 1991: § 1.14; K 126); Shafer 1957: 117 ST + ND; Starostin Yen 210 & Hyp 20 ST + Yen + Cauc \**zwām ħi* 'bile'; we think the latter is better compared with Bsq *-zun* and Bur *čhemi-* (Etm 131)].

27. Cauc \**k'əwV* (Darg *k'ac'* 'spleen', Ad *k'wac'ə* 'innards, inside, interior' X 43; Kp 60)// ND: Haida *k'üic* 'abdomen, belly, stomach'.

28. Cauc \**čecV* ~ \**é'ecV* 'kidney' (Abkh *a-č'ac'a*, Darg *ur-čec*// Yen \**sisal-* 'lungs' (Kott *šičātn*, Arin *šišali*)// ND: Haida *ča* 'salmon eggs', *čaay* 'kidney', Chip *-c'əzè* 'kidney', Sar *c'üzá* (NDE) [Starostin Yen 224 Cauc + Yen].

29. Cauc \**k'embV* ~ \**gembv* 'kidney' (And *k'unu*, Bzht, Hnz *koma* X 41)// Kus *kaammu* (RT), *qāmu* (R) 'liver// ND: Haida *k'ao* 'salmon egg', EA \**k'uum?* (Hupa *q'oŋ?* 'salmon eggs', Ingalik *k'úw-k'úna* 'fish eggs', Chip *-k'ùn-* id. NDE; Go 116) [Nikolaev 1991: § 1.12 Cauc + ND].

30. Cauc \**naqwV* (Arch *naqa* 'nape', Av *naq* 'back(wards)' X 33; Bok 50)// ST \**s-nuŋ* (Bn) = \**nuk* ~ \**nuŋ* (PS): Burm *nok* 'space behind', *ʔə-nok* 'the west', *hnoŋ* 'come after', Mikir *ə-nuŋ* 'back' (STC 76; Matisoff 1978: 25)// ND (\**naq* ~ \**noq*): Eyak *ñi-naq-t* 'behind', Kato *-ne?* 'back, backbone', *-noo?* 'behind', Nav *-ne?*, *-neħ* 'behind, back of, back' (P § 72; Go 112) [Shafer 1952: 16 ST + ND; Starostin N & SC 60 Cauc + ST].

31. ? Bsq \**tak-* in \**tak-hoin* 'heel (of footwear)' (*hoin* 'foot'): *takoin* (L) ~ *takoi* (V, G) (> Span *tacon*)// Cauc \**daqwV* (Rut *daqw*, *daq* 'nape', Ad *ta-dāqa* 'heel' X 33; Kp 17)// Bur *dōq* 'on the shoulder// ST \**tuk* ~ \**twak* (Garo *gi-tok* 'neck', Lpch *tük-tok*, Kach *du* STC 82; IST 398)// Yen: Pump *tuk* 'back(wards)' (Dul'zon 1961: 173)// ND: Tl *deX'* 'back', *dAX'* 'place behind one', *-dAX'* 'from', Nav *dah* 'off, down off' (P § 72).

32. Bsq \**balda* in *sor-balda* (common Bsq) 'shoulder', (AN) 'midsection of hog' (*sor-* is apparently a variant of *soin* 'body, shoulder')// Cauc \**wəhV* 'neck' (Bzht *boto*, Hnz *bolo* Bokarev 1959: 250)// Bur *-wald-as* 'back'.

33. Bsq *kokot* (V) ~ *kokote* (G, AN) 'nape, neck' (> Span *co-gote*)// Bur *yuqú* (pl. *yuqōnc*) ~ (W) *qoqó* 'goitre// ST \*(s)ke(k): Tib *s-ke* 'neck, throat', Kach *ke?* 'to be or make neck-shaped' (STC 59)// Yen \**kəqənt-* (Ket *kəqti* 'neck', Kott *agant-an* 'collar, neck' Yen 171) [Ruhlen 1989a Bsq + Yen].

34. Bsq \**halbo* > *albo* (V, G, AN) 'side, flank// Yen \**Xəlab* (Ket *qəlap* 'side, half', Kott *halap* 'half'; cf. Pump *kolp-ar* 'back' Yen 150) [Trombetti 1923: 483 sees a connection between Yen + Gmc \**xalba* 'half, side'; DC substratal influence?].

35. Bsq *hūmē* (S) ~ *ume* (common) ~ *ime* (V) 'infant, young of animal'; *hūmoi* (S) ~ *umoi* (AN) 'womb// Cauc: ? Kryz *fin* 'intestine', Bud *fni-b*, Udi *unu-R* (X 33-34)// Bur *-yuma-r* ~ *yumu-r* 'belly, bowels, womb' ~ (W) *-yuma-r* ~ *-yoma-r* 'belly, stomach' [Cf. § 21, above, for *n* ~ *m* alternation].

36. Cauc: Circ \**č'əš<sup>w</sup>a* (Ad *č'əš<sup>w</sup>a*, Kab *š'əfa* 'human skin, body' Kp 36)// Yen \**sās* '(animal) skin' (Ket *sāsi*, Kott *šet* Yen 155)// ND: Tl *zàs* 'skin', *zās* 'thong', Eyak *k'u-sic* 'fish skin', Gal *-saas* 'skin (of animals)', Hupa *sIc'* 'skin, bark' (P § 173; Go 112).

37. Cauc: Darg *kabe* ~ *kabu* ~ *kabc* 'hide (skin)' (X 34)// Bur *gap* 'hide// ST \**q(r)uap* (PS) (< \**r-quap?* OCh \**krāp* 'shell, armor', Tib *khraβ* 'shield, scale', Kach *kòp* 'bark, rind, shell' DK 311; N & SC 58) [Bouda 1950b: 49 Cauc + Bur].

38. Cauc \**mič'V* ~ \**mič'V* 'hoof' (Arch *č'i-mič'*, Lak *xi-mič'*, Kryz *mič'-ek* 'hoof, claw' X 35)// Bur *-amiš* ~ (W) *á-meš* (Z) 'finger, toe'.

39. ST: OCh \**kū* 'elbow', Lush *kiu*, Tib *khyu* (IST 46)// ND: Tl *kiy* 'knee'.

40. Bsq *\*be-lawn* ~ *\*be-laur* 'knee' > *be.lhaun* (BN, L) ~ *be.lhain* (BN) ~ *bé-lhañ* (S) ~ *be-lawn* (AN, V, G) (*\*be-laur*- survives in forms such as *belaurikatu* (BN, R) 'to kneel')// Cauc *\*twilV* 'elbow' (Akhw *e-telu*, Khw *hol*, Tsez *horu*, Hnz *hāru*, Bzht *hajo*, Chech *gola* 'knee' X 37; Bokarev 1959: 251; Sommerfelt 1938: 115) [We prefer this to Čirikba's (1985: 100) comparison with Cauc *\*l̥l̥hV* 'foot, trace' (see next entry); Bsq *be-* is the well-known fossilized class prefix (Bengtson 1991 d)].

41. Bsq *\*loř-* in *lorr-atz* (V, G) 'track, trail, trace, scent'// Cauc *\*l̥l̥hV* (Ub *la* 'foot', Chech *lar* 'trace', Rut *xql* id., Av *lar-k* 'sole' Tal 321; Čirikba 1985: 100)// ST *\*g-la* (Bn) = *\*lāH* (PS) (Chep *la* 'foot', Garo *ža* 'leg, foot', Dim *ya* STC 34) [Original *\*VrHN* reshaped by assimilation in Cauc? Starostin Hyp 19 Cauc + ST].

42. Bsq *hoin* ~ *oin* ~ *oiñ* ~ *oñ* (V) ~ *huñ* (S) 'foot'// Cauc *\*řn(i)GwV* (Lak *niqa* 'heel', Akh *inā'u* 'foot' X 41; Trub 266)// Bur *-γān* 'heel'// Kus *yien* / *iwaan* 'foot' (R) [Bengtson 1991 c: 146 Bsq + Cauc + Bur].

43. Cauc *\*q'amq'ə* 'knee' (Tab *q'amq'*, Rut *q'waq'*, Ag *q'aq'* X 34; Alekseev 1985: 20)// ST *\*(m)-kuk* 'knee' (Ao Naga *te-mo-kok*, Thado *kug-bu*, Lush *khūp* STC 120)// Yen: Ket *qok*, *qoaqpi*, *qoaqpo* 'Wade / calf of the leg' (Castrén).

44. Bsq *buzt-an* 'tail'// Cauc: ? Tskh *bīt* 'tail' (if from *\*bič'V*, cf. Alekseev 1985: 19)// Yen (*\*pis*): Kott *pis* 'tail', Ket *fis* '(bird's) tail' (Castrén; Xelimskij 1986: 203) [Trombetti 1926: 118, 154 notes also Alb *bisht*, Kurd *bōč*, Arm *poč* 'tail', from DC; or IE origin may be indicated (cf. Skt *puccha-* 'tail')].

45. Bsq *bargo* (V, G, BN, L, R) ~ *bargo-sta* (L) 'young pig of three to seven months' ~ *bargo-xta* (G, BN, L) 'suckling pig'// Cauc *\*wqrñ'wə* 'pig, swine' (Bzht *buño*, Lzg *wak*, Arch *boñ'*, Lak *burk'*, etc. KL 78)// ST *\*wak* or *\*pwak* 'pig' (Tib *phag*, Chep *pyāk*, Burm, Garo *wak*, Empeo *gəbak* STC 23–24) [ST from Austro-Thai, according to Benedict (STC 23–24, n. 78), but Pejros (1988: 326) derives Austronesian *\*beRek* from ST].

46. ST *\*b-sey* (BN) = *\*b-slej* (PS) (OCh *\*slhāj* (PS) = *\*siər* (Karlgrén) 'rhinoceros', Tib *b-se* STC 193; DK 569)// Yen *\*čel[ʔ]l'* (ket *tēl'*, Yug *čel*, Sym *síl* 'mammoth' Bouda 1968: 168) [Bouda 1957: 86 Chin + Ket; if this comparison is valid, it may reflect the fauna of the last glacial period].

47. Kus *qoyo* 'red deer' (RT)// ST *\*d-kiy* 'barking deer' (Burm *khye* ~ *gyi*, Lush *sa-ki* STC 26)// Yen *\*Gāja* 'elk' (Kott *kōja*, Pump *xaju* Yen 166).

48. Bur *kil* 'ibex'// ST *\*k(y)ēl*, *\*kyi[:]l* (Lush *kēl* 'goat', Tib *s-kyin* 'capra ibex' STC 73) [Bouda 1950 b: 42 Bur + ST].

49. Cauc: Hatti *takeha* 'lion'// Bur *ta(h)* 'leopard'// ST: Tib *s-tag* 'tiger', gLo-skad *taʔ*// Yen: Ket, Imb *tōyg*, Kott, Assan *tuga* 'leopard' (Klaproth 1823: 171) [Bouda 1950 b: 39 Bur + ST].

50. Cauc *\*ʔamʔV* ~ *\*ʔamʔV* 'wolf' (Arch *jam*, Tskh *eb*, Rut *ubul* X 10)// Sum *uḡ* [uḡ] 'lion' (J) ST: Kuki *\*hum* 'tiger' (IST 299–300).

51. ST *\*-kā:n* (OCh *\*ʔkân* 'wild dog', Kach *čyā-khyon* 'fox, wolf, or wild dog' Benedict 1976: 186)// Yen *\*kəqVn* (Ket *kān* 'fox', Yug *kāxin*, Kott *agan* Yen 165).

52. Sum *ugubi* 'monkey' (Klein 1979)// Kus *ugu* 'monkey (male)' (H)// ST *\*woy* (*\*gwoy* ?) 'monkey' (Kach *woi* ~ *we*, Kadu *kwe*, OCh *\*gjawñ* STC 68).

53. Cauc *\*cwänʔV* ~ *\*cwämʔV* 'bear' (And *sěj*, Lzg *sev*, Ub *məs'wə*)// Bur *yā* (pl. *yam-uc*) ~ (W) *nya* (pl. *nyamo*) 'bear'// ST *\*s-wam* ~ *\*d-wam* 'bear' (Khoirao *čəwom*, OCh *\*wəm* STC 116)// Yen *\*čə/j/aŋ* 'bear' (Kott *šajan*, Pump *xanki*) [Starostin Yen 210–211 Cauc + ST + Yen].

54. pre-Bsq *\*e-rVg'wi* > Bsq *erbi* 'hare', *erbi-unide* (AN) ~ *erbi-ñude* (V, G) ~ *erbi-ñure* (G) 'weasel'// Cauc *\*riḡwV* (Akh *reñ'u* 'weasel, squirrel', Tnd *reñ'u* 'marten', Chech *daXka* 'mouse', Ub *dəɣ'wə* id. Yen 214)// ST *\*rwak* (Bn) = *\*ruak* (PS) 'rat' (Burm *krwak*, Maru *ruk*, Lahu *fāʔ* STC 107) [Starostin Yen 214 & Hyp 27 Cauc + ST; he offers two different Yen comparisons, neither of which we find convincing. As to Bsq *-b-*, cg. Bsq *sabu* (AN, BN) 'mouse', beside common Bsq *sagu* = Cauc *\*cwərgwV* (NSC § 92); also Bsq *aho* ~ *ago* ~ *abo* above (§ 5)].

55. Cauc: Av *gergel* 'bat (letučaja myš')' (X 12; assim. < *\*kerḡel* ?)// Bur *kargaló* 'smaller flying squirrel'// ND: Haida *kagan* 'mouse, rat', TI *kaGáák* 'mouse' (NDE).

56. BSQ *huntz* (BN, L) ~ *hüntz* (S) ~ *untz* (AN, BN) ~ *ontza* (G, V, AN) 'owl / hibou'// Cauc *\*finsa[* ~ *\*fänsä* 'owl' (Lak, Arch *řisu* X 17) [Possibly of descriptive origin].

57. Bsq *kaheka* (BN) ~ *kahāka* (S) '(female) owl / chouette'// Bur *kiki* 'small hawk, sparrow hawk' ~ (N) *kiŋkiki* 'red hawk'//

Yen \**kag-* (Kott *hikei-še* 'owl', Arin *kak* 'hawk' Yen 161)// ND: Haida *k'akw* 'small owl', Tl *k'ákw* 'owl (without ear tufts)' [Descriptive].

58. Bsq *txori* [čori] (V, G, AN, R) ~ *xori* [šori] (AN, BN, L, S) 'bird' (general); cf. *txoarre* (G) 'sparrow'// Cauc *č'wllV* (Av *č'orolo* ~ *č'orolli* 'quail', Cham *č'or* 'sparrow', Bud *č'ili-t'* id. X 15, 17; Tal 302)// Bur *čili* (babūk) 'a very small bird' (Lorimer 1938: 60, 541)// ST: Tib *m-čhil-pa* 'sparrow', gLo-skad *čhik* (wa) id. (Nagano 1985: 456).

59. Bur *tol* ~ (W) *tul* 'snake'// ST \**til* 'worm' (Kukish \**tl*, Thado *til* IST 48)// Yen: Ket *tul'*-n 'lizard' [Bouda 1950b: 39 Bur + Yen].

60. Sum *ku<sub>6</sub>*, *kua* 'fish' (J)// ST: \**d-ka-y* ~ \**d-ga-y* (Tangkhal *khai* 'fish', *khai-reu* 'crab', Chin \**yai* id. STC 25, 192–193).

61. Bsq *kokoso* (AN) ~ *kukuso* (G, AN, BN, L) ~ *kükúso* (S) 'flea'// Bur *khīšo* 'mosquito'.

62. Bsq \**e-Huli* 'fly' > *euli* (V, G) ~ *eulli* (BN) ~ *uli* /AN, BN, L) ~ *elbi* (G) ~ *éllu* (R) ~ *üli* ~ *ülü* (S)// Cauc: Arch *hili-ku* *hül-ku* 'fly', (nisin)-*hili-ku* 'bug' (X 20)// Bur *hōlal-as* (Lorimer), *hólən-as* (SV) ~ (W) *hāulal* (Lorimer), *a-hūlal* (Z) 'butterfly, moth' [Berger 1956: 16 Bsq + Bur].

63. Bsq *lózer* (S) ~ *leizor* (BN) ~ *liztor* (G, BN, L) ~ *listor* (G, BN, L) 'hornet'; *elzar* (BN) ~ *loze-biā* (S) ~ *leiza-fin* (BN) ~ *listame* (AN, G), etc. 'wasp'// Cauc \**hqmC*'V 'stinging insect' (Av *h'ož* 'wasp')// Yen: Arin *lamši* 'grasshopper' (Xelimskij 1986: 199)// ND: Chip *h'izè* 'bulldog fly', *h'izè-tōuwé* 'wasps', Nav *h'éžii* 'horsefly, gadfly' (Li 1933; Hoijer 1974) [Bouda 1948: 195 Bsq + Cauc; Furnée 1982: 28 Bsq + pre-Greek *elsós* 'fly' (Hesych.)].

64. ? Bsq *zungo* (R) 'tronco en que se apoya el yunque' (LM), 'tronco sobre el cual se apoya el yunque' (Azkue)// ST \**siŋ* ~ \**sik* 'tree, wood' (Tib, Kan *siŋ*, Vayu *siŋ*, Lush *thiŋ*, OCh \**syiŋ* 'firewood' STC 55; Bodman 1980: 157; Matisoff 1978: 174)// Yen \**sVŋg-VI*- 'stump (of a tree)' (Ket *śuŋ-ul't*, Kott *šag-ali* Yen 171).

65. Bsq *a-tze* (R) 'tree', *-tze* (BN, S: suffix, as in *sagar-tze* 'apple tree')// Yen: Ket *žiŋe* ~ *diŋe*, Kott *či* 'Baumstamm' (Castrén).

66. Bsq *gartxu* [garču] (V) 'un arbusto que parece que es el enebro; palo que se pone sobre las cargas colmadas del carro' (Azkue)// Cauc \**Gwerč*'V ~ \**qwerč*'V (Bats *γoč'* 'bâton', Chech, Ing *γaž*, Av *ŋarč'* 'beam', And *q'erč'u* 'girder' X 77; Sommerfelt 1938: 128)// Bur *gačhe* ~ *gačhi* ~ (W) *gačé* (Z) 'twig, wither'// Sum *giš* ~ *geš* 'tree' (B),

'bois, sceptre' (J)// ND: EA \**giž* ~ \**gěž* (Nav *giš* 'cane, staff', Chip *gyès* 'poker (of wood)' Hoijer 1974; Li 1933) [Bengtson NSC § 103 Bur + Sum; Nikolaev 1991: § 4.7 Cauc + ND].

67. Kus *gilong* 'forest' (cf. *gilongdei mihaq* 'people of the forest' = Kusunda people)// ST \**b-liŋ* 'forest' (Kach *māliŋ*, Garo *buruŋ* ~ *brigi* STC 80).

68. Cauc: Lzg *tam*, Rut *dam* 'forest, grove', Lak *īama* 'wood' (X 54)// Bur *tōm* 'tree'// ST: Kukish \**tum* 'log' (IST 361) [Bouda 1950b: 45 Cauc + Bur].

69. Bsq *haga* (BN, L, S) ~ *aga* (V, G, AN) 'long pole'// Cauc \**XwirK*V (Arch *Xwak* 'forest', Rut *Xuk* 'tree' X 53)// ? Bur *hukar* 'tamarisk' or (W) *xaxar* 'a kind of tree or shrub which provides withes'// Yen \**xaŋq* (Ket *aŋq* 'wood', Pump *hox-on* 'wood, forest' Yen 165).

70. Bsq *e-gur* 'firewood'// Cauc \**gōrV* ~ \**gōrV* 'stick, pole, piece of a log'// ST: ? Tib *m-khar* 'pole, stick'// Yen (\**koŋr*): Yug *koŋl* 'stump' [Starostin Hyp 29 Cauc + ST + Yen].

71. Cauc: Circ \**k<sup>h</sup>æwə* 'dry twigs' (Kab *kæw* Kp 49)// ND: Haida *kuk* 'firewood', Tl *qŋlk<sup>w</sup>* 'very rotten wood', Eyak *kūk-t* 'dry wood', Ath \**k<sup>w</sup>ǰ<sup>w</sup>* 'dry wood, firewood': Minto *tredr*, Mat *čiš*, Hupa *č<sup>w</sup>iž*, Nav *čiž* (P § 132; K 125; Go 114; NDE).

72. Bsq \**i-tinti* > *ilhinti* (S) ~ *ilinti* (V, R) ~ *illindi* (R) ~ *illeti* (V, G, AN, L)// Cauc \**hwindV* 'firewood' (And *tudi*, Hnz *hūdu*, Cham *tunni*, Khw *lido* Bok 48; X 69)// ND: Eyak *tid* 'deadwood, firewood' [Nikolaev 1991: § 4.3 Cauc + ND].

73. Kus *hák* (H), *hāq* (R), *haaq* (RT) 'leaf'// Yen \*/*ŋəq* 'branch' (Yug *ǣx*, Kott *ōge* Yen 164–165).

74. Bsq \**k<sup>h</sup>ark<sup>h</sup>ano* > *kankano* (V) 'large fruitstone, kernel, almond'// Cauc \**k'erk'énV* (Av *k'ork'onu* 'grape, berry', Hur *kiri-kiri*-(j)annə 'seed of pinecone', And *k'ork'on* 'egg', Circ \**k'ank'a* 'egg' Komm 459; HU 57; Kp 52)// Bur (N) *kakāyo* 'walnut' (unbroken), *khəkai* 'walnut kernel' (SV 152)// ST: Tib *khra* 'a kind of seed or grain', OCh \**kra-s* 'grain, seed, to sow' (Pejros & Starostin 1977: 218)// ND: Haida *k'áánk'aay* ~ *k'áánk'aan* 'unripe berries', Nav *-k'óó?* 'seed, pit'.

75. Bsq \**a-menč* 'a kind of oak': *ámētz* (S) 'chêne tauzin', *ametz* (common Bsq) 'carballo, rebollo' (Azkue), 'melojo (árbol), quejigo (botánica)' (IKAS), 'carballo, melojo' (Plantas 12), 'quejigo / Steineiche' (Plantas 79)// Cauc \**mēnčV* ~ \**mīnčV* 'oak tree'

(And *noži*, *noži*, Lak *maža*, Chech *naž* X 54)// Bur *měš* ~ (W) *nōš* 'bush, shrub, sapling'// ? Sum <sup>ēis</sup>*mez* 'un arbre' (J) [Span *mesto* 'Zerreiche' from Vasconian substratum (Meyer-Lübke 1935: n. 420)].

76. Bsq *muk-ur* (V) 'trunk, base of a tree', *mūkh-ür* (S) 'très grosse bûche'// Cauc *\*moqwe* 'oak tree' (Udi *maq̄*, Rut *mq̄Xw*, Tab *maq̄w*; Khw *muq-urk'a* 'acorn' Gi 98; Starostin 1988: 124)// ST: OCh *\*muk* 'tree, wood' (DK 77); cf. Kan *morgōŋ* 'oak (Quercus dilatata)' (Bailey) [Cf. Georg *muXa* 'oak', prob. from Cauc. In Paleo-European, cf. Friul. *mughe*, Besc. *moegh* 'Pinus picea/mugus', etc. TP 2: 52, 102–103; Trombetti 1923: 126].

77. Bsq *zuzun* (V) 'poplar, aspen' ('álamo, tiemblo / Zitterpappel, Espe' Plantas 91)// Cauc *\*swinē* (Rut *sin* 'barberry', Lak *sunuw* 'pomegranate', Hur *\*šann-orə* ~ *\*šall-orə* 'plum(-tree), medlar' HU 34)// Sum *šenn-ur* 'plum, medlar' (prob. from Cauc)// Yen: Kott *sānef* 'mountain ash' (Castrén).

78. Cauc *\*č'weli* (Lzg *c'welin-tar* 'willow tree', Tab *č'wal*, Rut *č'ul* Tal 268)// Yen *\*dāl'e* 'willow': Ket *dāl'*-, Kott *tīli*, *tīle* 'Weiden-gebusch' (Castrén; Yen 160)// ND: Tl *č'áál* 'willow' [Yen *\*d-* is irregular, may be a loanword (cf. Turkic *dal* 'willow, branch'). Arm *čluř* 'a kind of willow' from Cauc, per Nikolaev 1984; 71].

79. Cauc *\*bīnk'wV* (Chech *baga* 'fir', Av *nač'* id., Lak *mīk'ik'ij* 'fir cone' Starostin 1988: 123)// Bur *baŋ* ~ (W) *baŋgi* 'gum, resin'// ST: Kukish *\*boŋ* 'fig' (IST 280) [Semantic connections as in Eng *tree*: *tar*, etc.].

80. Bur *čiki* 'musk of person or plant'), *čiki* mužūr 'musk weeping willow'// Yen (*\*žik*): Ket *dik* 'resin', Kott *čik* (Castrén)// ND: Ath *\*žex?* (Minto *zax* 'spruce gum', Hupa *žeh* 'pitch, gum', Nav *žèh* K 125; Go 113).

81. Bsq *izai* (AN, L, R) ~ *izei* (BN, R, S) 'fir (tree)'// Cauc *\*ʔažwV* (Hur *ažu-γə* 'fir tree', And *eže-la* 'pine tree'; ? Circ *\*P-sayə* 'spruce, fir; black maple' HU 41; Kp 25)// ND: Tl *aas* '(evergreen) tree' [Bouda 1949: 17 Bsq + Circ].

82. Bsq *ler* (BN, R) ~ *leher* (S) 'pine tree', *ler-do* BN) 'resin'// Cauc *\*tawlu* ~ *\*tewlu* (And *tor* 'elm', Av *tor* 'lime tree' X 53)// ND: Tl *l'él* 'jackpine, swamp spruce' [Bouda & Baumgartl 1955: 71 Bsq + Av].

83. ST: Bunan *sag* 'birch', Kan *šyag<sup>b</sup>* 'Betula utilis' (IST 131; Bailey 1910)// Yen: Ket *soiga*, Imb *šujuŋ*, Kurej *s'ujgoks*, *sojŋak*

'alder' (Dul'zon 1961: 176)// ND: Tl *šex'w* 'red alder' [Bouda 1957: 78 derives Yen from Turkic *\*su-ayačy* 'water-tree'].

84. Bsq *\*šumhar* ~ *\*šumhal-* > *zūnhar* (S) ~ *zuhar* (BN, L) ~ *zumar* (AN, G, V) ~ *zuar* (AN) 'elm' (Plantas 14); *zumal-di* (G) 'grove, park'// Cauc *\*žu(H)malV* ~ *\*žu(H)lamV* (Bud *žumal* 'cornel', Chech *žfolam* 'shrub, bush', Hur *zilumba* 'date (of Phoenix dactylifera)', etc. HU 40)// Sum *zú-lum*, *zú-lum-ma* 'date' (from Cauc, per HU 41; Boisson 1989a).

85. Bsq *a-stigar* (common) ~ *a-ztigar* (G) ~ *a-xtigar* (S) 'maple' (Plantas 12)// Cauc: Bats *stagar* 'maple (Acer platanoides)', Chech *stajr* id., Hur *taškar-* 'boxwood' (HU 25)// ST: Tib *stag-pa* 'birch tree' (IST 80)// Yen: Pump *teksul-či* 'stem' (Dul'zon 1961: 176)// ND: Eyak *t'aXks* 'cottonwood', Minto *t'eyeθ*, Gal *t'aas*, Nav *t'ùis* (K 127) [Various metatheses of the same elements: *STVK* ~ *TVSK* ~ *TVKS*].

86. Cauc *\*pHūV* (N & SC 61) or *\*pwūV* (Nikolaev & Starostin 1991: 214): Darg *palpalay* 'aspen', Tsez *bēli* 'poplar, aspen' (X 54; Bokarev 1959: 178)// Bur *pfelc* 'a small tree, in appearance resembling the "gindauwar", which bears small berries that are sweet and edible', (W) *pfālc* 'a kind of poplar'// Yen *\*(h)pwV* 'aspen' (Ket *ýfel*, *ýl*, Kott *īpal* Castrén) [Starostin N & SC 61 Cauc + Yen; Starostin 1988: 123 derives IE *\*pel(w)-* 'poplar' from Cauc].

87. Bur *thōn* ~ *thauŋ* 'coriander'// ST *\*taŋ* 'pine' (Vayu *thon*, Burm *thāŋ-rù* STC 69)// Yen *\*dme* 'spruce, fir' (Ket *dñ*, Arin, Assan *tin* Yen 148) [The unifying semantic theme is 'strong-smelling (resinous) plant'; cf. § 80 above].

88. Bsq *a-betxo* ~ *a-betxu* (V) 'shrub' (if not a loan from Romance *arbustu-*)// Cauc *\*wīcV* 'grass' (Ad *wācə*, Kab *wəz*, Chech *buc*, God *besi* Trub 276; Komm 457; Kp 85)// Kus *waci* 'bush' (RT)// ND: Tl *wás'* 'bush'.

89. Bsq *halga* (BN) 'heather' (Plantas 23)// Cauc *\*ʔwēh'V* (Lzg *waq'* 'grass', Lak *huk'uw* 'wormwood', Chech *jol* 'hay' Gi 104; SZ 65)// ND: Tl *h'eX* 'brown fungus', Exak *h'IX* 'grass, green', Chip *h'òy* 'grass', Nav *h'òh*, Hupa *h'oh*, *-h'ow?* 'grass, plant, bush, foliage' P § 192; Go 117) [Nikolaev 1991: § 4.11 Cauc + ND; Nikolaev 1985: 65 derives Hitt *welku-*(n) 'grass' from Cauc].

90. Bsq *alha* (BN, L, S) ~ *ala* (G, AN, BN, R) 'pasture, grazing'// Cauc *\*XālV* ~ *\*XāV* (Chech *Xal* 'stalk', Lak *Xara*, *Xala* 'stalk, grass', *Xulu* 'hay' X 63, 65)// ? Sum *ul* 'blühendes Gras' (B)//



ST: Kukish \*hlo 'grass' (IST 239)// ND: ? TI *Xaañ* 'freshwater grass'.

91. Bsq *arhan* (BN) ~ *āhān* (S) ~ *aran* (AN, G, L) ~ *adan* (BN) 'plum, sloe' (Plantas 16)// Cauc \**γānʔV* 'pear' (Av *geni*, And *hiki*, Hnz *hī*, Botl *hīhū* Trub 276; Komm 457)// Bur *γaiŋ* ~ *γēiŋ* 'grapes' [Bouda 1949: 15 derives Bsq from Celtic, cf. Welsh *eirinen* 'plum', Irish *áirne* 'sloe'].

92. Bsq \**khe* 'smoke': *khe* (BN, L, S) ~ *ke* (AN, V, G) ~ *e-ke* (AN, BN, R); \**kheldar* 'soot': *khedarre* (S, BN) ~ *kedar* (AN, BN, V, G) ~ *kelar* (G) ~ *kelder* (BN, L)// Cauc \**qītʔV* ~ \**q'ītV* (Lak *q'it* 'smoke', Arch *q'īī*; Av *q'int'uri* 'soot' X 101–102)// ND: Haida *Gayt* 'ashes' (*Gayt'aa* 'the ashes'), TI *kél't* 'wood ashes'.

93. Cauc \**gwīnʔV* 'smoke' (Lzg *gum*, Ag *kum*, Tskh *kuma*, Udi *kuin*, Darg *gaw* X 101; Gud 192; Aleks 21)// Bur (W) *gū* (< \**gū* < \**guN*) 'caked soot, black from smoke, accumulated soot and dirt, soot in dust form' (Lorimer 1962: 101)// ST \**kuw* 'smoke' (Tsangla *mu-gu*, Burm *mī-khuī* ~ *ā-khuī*, Lush *mei-khu* STC 61)// Yen: Ket *kuṛu*, *kū*, *kuṛo* 'soot' (Castrén)// ND: Sar *-gūh* 'to be foggy, smoky' (Li 1930) [Shafer 1952: 15 ST + ND].

94. Bsq *lanhū* (S) ~ *laino* (L) ~ *lanb(r)o* (L, BN) ~ *laño* (AN, G) ~ *laino* (V, G, BN) 'mist, fog'// Cauc \**rVnñʔwV* 'cloud' (? God *hanlo*, Tnd *hinatu*, Cham *hana* X 75)// ? Sum *dungu* 'cloud' (B)// ? Kus *duling* 'cloud' (RT) [cf. Alb *ren* > *rē* 'cloud', Illyr *rhinós* 'Nebel', possibly from DC substratum: Krahe 1955: 38].

95. Cauc \**gwimhV* ~ \**m(h)igwV* (Tsez *qema* 'rain', Bzht *qimaro* 'clouds', Abkh *a-naqʔwa* 'fog')// ST \**mūk* 'fog' (Tib *r-mug-s-pa*, Lpch *muk* 'foggy', OCh \**mōk* 'drizzle' STC 77)// Kus *gaanigiling* 'fog' (RT; cf. preceding for element *-ling*)// Yen: Yug *xoaŋ* 'fog' [Starostin Yen 210 Cauc + ST + Yen].

96. Bsq *malgo-r* (BN, S) 'numbed by the cold' ('engourdi par le froid' Larrasquet 1939: 176)// Cauc \**mēlh'e* 'cold' (n) (Lzg *meq'*, Ag *mek'* id., Av *mart'* 'frost' SZ 70) [Nikolaev SZ 70 derives Gk *malché* 'numbed by the cold' from Cauc; note similar phonetic and semantic development in Bsq].

97. Cauc \**mārñʔwī* 'ice' (ad *māḷə*, Arch *muñ'añ'*, Lzg *murk*, Tskh *mək* Trub 241, 276; Komm 456)// Sum *a-magi* 'ice' (B).

98. Kus *khaangu* 'cold' (adj.) (RT)// ST: Tib *khyag-s* 'gefrieren, erfrieren', OCh \**Xjwanŋ* 'Eiswasser'// Yen: Ket *qūŋ-el*, *qū*, *qou* 'ice' [Bouda 1957: 90 ST + Yen].

99. Bsq *i-zotz* 'frost, hoarfrost, ice'// ND: Chip *-t'θəđi* 'glacier', *-t'θəθ* *-t'θəđ* 'a glacier is formed, moving', Nav *-c'òs* 'frost' (Li 1933, Hoijer 1974).

100. Bsq *luia* 'adverse wind'// Cauc \**twiŋʔV* 'wind' (Tab *xar*, Rut *xbil* X 100)// Sum *lū* 'wind, to blow' (B)// ST \**g-liy* (Bn) = \**lij* (PS) 'wind' (Burm *le*, Lahu *hò*, Samong *kə-li* STC 91, 114)// Yen \**ʔul'* 'whirlwind' (Imb *ul-it* Dul'zon 1961: 160) [Bouda 1938: 21 Sum + ST; Starostin Hyp 30 Cauc \* ST + Yen].

101. Bsq \**e-tur* 'snow' > *élhūr* (S) ~ *elur* (AN, G) ~ *erur* (V) ~ *edur* (V)// Cauc \**twiūV* ~ \**[j]iwtwV* 'snow' (Check *lo*, Ing *loa*, Bats *law*, Ag *iwá*, Tab *jif* Trub 240; Komm 443; Sommerfelt 1938: 132)// ST: Tib *li-s* 'snow', Waya *li-ri* (IST 145)// Yen: Arin *lot* 'winter' (Xelimskij 1986: 191)// ND: EAth \**tū(w)* (Chip *-lū* 'hard, frozen, solid', Kato *loo* 'frost', Hupa *k'i-loo*, *-loy* 'hail', Nav *ń-ló* id., Jic *ʔi-loh* 'ice' (Go 117) [Trombetti 1926: 124 Bsq + Cauc; Nikolaev 1991: § 5.10 Cauc + ND].

102. Cauc (Lzg) \**q'orī(a)* 'winter' (Tab, Ag *q'urd*, Rut *q'id* Yen 208)/ Bur *kati* (? *qati*) 'hoarfrost'// Yen \**gəte* 'winter' (Ket *kəte*, Kott *kəti*)// ? ND: Nav *k'èèd* 'autumn' [Starostin Yen 208 Cauc + Yen].

103. Cauc \**GinʔV* ~ \**GinʔV* 'summer' (Lak *γ<sup>w</sup>i*, *γ<sup>w</sup>int-*, Darg *hani-ši* Komm 456)// ND: Haida *q'in-at* 'summer', *q'in-ñ'el* 'spring' [Apparently with metathesis of the glottal element].

104. Cauc \**mVtwV* 'sun' (Ad *mafə*, Tnd *miti*, Chech *malX* Trub 275)// Sum *mul*, *mūl*, *mul<sub>4</sub>* 'star' (B), *mul* 'to shine, to radiate' (T).

105. Bur *a-si* (pl. *a-sim-uc*) 'star', (W) *a-sum-un* id.// Kus *saaʔna-an* 'star' (RT)// ST: OCh \**sēŋ* 'star', Hruso *li-coŋ*, Yatshumi *cīŋ<sup>h</sup>i*, Tengsa *lū-tiŋ tiŋ* (Hyp 22; IST 177; Shafer 1947: 194)// ND: Haida *sIŋ* 'sky, day'; Ath \**sUnʔ* ~ \**cUnʔ* 'star': Minto *senʔ*, Chip *tθən*, Nav *səʔ* (K 57) [Bengtson NSC § 74 Bur + ST + ND].

106. ST: Burm \**khyap* 'month' (Burling 1967: 87)// Yen: Ket *xīp*, *kīp* 'moon, month' (Castrén), Imb *chāip*, *chip* 'moon', Pump *chep* (Klaproth 1923: 176).

107. Cauc \**ñēña* 'night' (Akh *reña*, Botl *reha*; Av *rele-da* 'evening'; Lak *laḷu* 'yesterday' Bok 47; Gi 94)// ST: OCh \**lia-s* 'night', Burm *ña*, Lush *zā-n* DK 228; STC 100)// ND: Gal *ñ'eʔ*, Nav *ñ'éeʔ*, Lipan *ñ'iʔ* 'night' (Go 117).

108. Bsq *bez* 'afternoon' (LM)// Cauc \**bVsV* 'night, evening' (Ing *bijsa* 'night', Ub *z<sup>w</sup>a-psə* 'evening')// Bur *basa* 'halting for the

night; night or day (as a measure of time)// Yen *\*bis* 'evening' (Ket *bīš*, Arin *pis*) [Bouda 1950a: 155 & Starostin Yen 201 Cauc + Yen].

109. Cauc *\*Hw̄inV* ~ *\*HničwV* 'dream, night' (Lak *šanū* 'dream', Bzht *niše* 'night', Lzg *jif*)// ST *\*chen* ~ *\*sen* 'night' (Tib *m-chan-mo*, Sbalti *chan*, Dandzong *chen* IST 81, 91)// Yen *\*si(n)-G* 'night' (Kott *šig*, Arin *saj*)// ND: Tlingit *čun* ~ *žun* 'dream', Eyak *čj̄j̄z* (NDE) [Starostin Yen 203 Cauc + Yen; later (1989b: 64) he adds ST].

110. Kus *duwu* / *du* 'earth' (R)// Yen *\*tuʔw-* 'clay' (Ket *tuʔ*, Pump *tu-* Yen 147).

111. Bsq *e-rroitz* 'slope, cliff, mountain range'// ST: Tib, Dwags *ri* 'mountain' (IST 114)// Yen *\*riʔʒ* 'mountain' (Ket *l'ɪʔt*, Kott *d'ɪ* Yen 159).

112. Bsq *hegi* 'summit, peak; corner, edge, border'// Cauc *\*ferqwē* (Darg *ʔurqi* 'mountains', Av *forq̄i* 'border', Ing *ʔarya* 'low mountain ridge' HU 30; SZ 60)// Bur *hūrgo* ~ (W) *hurgó* ~ *horgó* 'uphill, up, slope up, ascent'// Yen: Ket *aya*, Sym *agēj* 'ans Ufer, auf den Berg, vom Feuer herunter' (Bouda 1968: 159) [Nikolaev SZ 60 derives Hitt *arha/irha-* 'border, line, row' from Cauc].

113. Bsq *mulho* ~ *mulo* 'small hill, montecito'// Cauc *\*musalV* 'mountain' (Arch *mul*, Av *meser*, And *mahar* Gi 71)// ST: Kuki-Chin *\*mual* 'mountain, hill' [Starostin 1989: 59 Cauc + ST; in some Cauc languages this etymon has merged with Cauc *\*mVʔwVIV* 'nose' (above, no. 17)].

114. Bur *čiš* 'mountain, hill' ~ (W) *čhiš* 'mountain, peak'// Yen *\*čiʔs* 'stone' (Ket *tīʔš*, Kott *šīš* Yen 157)// ND: Eyak *čiiš* 'beach, sand bank, gravel bank, sand, gravel'.

115. Bsq *arroka* (BN, G) 'rock'// Cauc *\*rVq'(w)V* (God *req̄'a* 'hill, mound', Chech *duq'* 'mountain ridge' SZ 71)/ Bur (W) *duq* 'hill, mound' (Z)// ST: Kan *ragʰ* 'stone' (Bailey), Thebor *rak'*, Tib, Bunan *b-rag*, Tib *rag* 'fruit stone, bead', Mikir *rak* 'fruit stone' (IST 137; Bodman 1985: 86)// ND: Eyak *-duk'* 'hump, hump-backed' [Nikolaev 1991: § 5.3 Cauc + ND; Span *roca*, Eng *rock*, etc. from pre-Romance *\*rokka* TP 2: 47; Nikolaev SZ 71 derives Gk *rákhis* 'back(-bone), ridge' from Cauc].

116. Bur *dan* 'stone, mountain'// ST: OCh *\*troŋʔ* 'hill, rock', Tib *r-duŋ* 'hill', Kach *ú-dùŋ* 'peak' (DK 184).

117. Bsq *hara-n* (BN, L) ~ *ara-n* (S, AN, V, G) 'valley, field'// Cauc *\*ʔwVrV* (Lak *ʔar* 'plain', Chech *ʔārē* 'field, plain, steppe' SZ

61)// Bur *har* 'nullah, ravine' [Furnee 1982: 27 Bsq + Bur; Nikolaev SZ 61 derives Hitt *hari-* 'valley' from Cauc].

118. Bsq *erreka* 'ravine, rivulet, arroyo' ~ *erreka* (S) 'ruisseau, ravin'// Cauc *\*ʔVrVqV* 'ravine, gorge, rock' (Ag *ruX* 'uščel'e' X 73)// Yen: Kott *uruk* 'Bergthal' (Castrén) [Polák 1967: 124, 140 sees DC substratal influence in Alb *rëkë* 'torrent', *rik* 'rivière' and Slav *\*rëka* id.].

119. Bsq *ehe* 'wash water'// Cauc *\*fimX(w)V* ~ *\*jimX(w)V* 'river, stream' (Hnz *ēXu*, Lak *neX*, Akh *ĩXe* X 75; Gi 72)// ? Sum *iku* 'canal' (J)// ST: OCh *\*ghaj* 'river' (DK 307)// Yen: Arin *ikai* 'river' (Xelinskij 1986: 199).

120. Kus *taang* 'water' (R)// ND: Haida *taŋ* 'sea water', Eyak *taŋ* 'waves', Gal *ta-* 'water' (in comp.), Chip *tà-*, Nav *tá-* (Saphir 1915: 553; NDE).

121. Bsq *baratz* 'garden, orchard'// Cauc *\*ʔwöröc'V* 'meadow' (Tskh *gruš*, Lzg *uruš* X 72) [For phonology, cf. Bsq *beltz* ~ *baltz* 'black' = Cauc *\*ʔwɔlɔč'V* 'black' Etm § 60].

122. Bsq *kheñu* (S) 'signe, geste, oeillade', *kiña-tu* (G) 'to wink'// Bur *yan-* 'to seem', (W) *yan-* 'to see, look', *yen* 'seen, visible', *a-qen* 'unseen, invisible'// Sum *kin*, *kiġ* 'to seek' (T)// ST *\*qēn* (Tib *m-khyen-pa* 'to know', OCh *\*kēn-s* 'to see' STC 51; N & SC 55; DK 311)// ND: Haida *qiŋ* ~ *qen* 'to look', *qín-daa* 'to show (something)', Tl *Gen* ~ *Gin* 'to look', Nav *gen* 'wait and see!' (NDE; P § 295).

123. Bsq *e-zag-un* 'to know (connaître)'// Cauc: Circ *\*c'axʷə* 'to know, be acquainted with' (Ad *c'əʔə*, Kab *c'axʷ* Kp 21)// ST: Tib *k-čag-s* 'to know, understand', OCh *\*tök-s* (Pejros & Starostin 1977: 217).

124. Bsq *lo* 'sleep', *lo* (egin) 'to sloop'// Sum *lu* 'liegen, schlafen, stehen' (B).

125. Kus *čim-nan* ~ *cib-nan* 'I sleep' (RT)// ST: Tib *g-zim* 'to fall asleep, sleep', Hruso *žūm* 'to sleep', OCh *\*šimʔ* 'to lie down to sleep' (DK 264; Shafer 1947: 194)// Yen: Kott *šame* 'dream' (Castrén).

126. Sum *luh*, *läh* 'to wash' (B), 'to be clean, to cleanse, to wash' (T)// ST *\*lu(w)* (Bn) (Angami Naga *rə-lu* 'to bathe', Garo *ru* 'to pour', OCh *\*lu* 'to swim' STC 110, 147; DK 228)// ND: Hupa *-luu*, *-le* 'to dive, swim under water', Hare *-lè*, *-là* 'to float', Chip *lé*, *-lè*, *lâl* 'to dive, swim under water' (Goddard 1911: 128; Hoijer 1966: 503; Li 1933).

127. Bsq *edan* ~ *eran* (V) 'to drink'// Cauc \**HVhwVnV* 'to drink' (Tsez *ħaħwa*, Bzht *Xuħal*, Hnz *Xuħa*, Khw *Xiħa* Bokarev 1959: 233)// ST \**luj* (Kach *lɔwi* ~ *lwi* 'to flow', Lush *lui* 'stream, river' STC 48)// ND \**haNH* 'to drink' (Eyak *la*, Yak *-lia*, Nav *-hą* P § 35) [Nikolaev 1991: § 10.6 Cauc + ND; Starostin N & SC 63 Cauc + ST].

128. Bsq *jan* 'to eat'// ND \**yan* 'to eat' (Tl *-yan*, Mat *-yan*, *-yaaʔn*, Nav *-yá*, *-yááʔ*, etc. P § 85).

129. Bsq *u-suki* (S) ~ *u-siki* (G) 'to bite'// Cauc: Circ \**čāqā* 'to bite' (Ad *ya-čāqā*, Kab *ya-zāq'a* Kp 20); cf. Lzg \**žaq'*-un 'to chew' (Tal 299)// Bur *čaq* (etas) 'to chew'// ST: Tib *čag čag* (byas) 'to chew'// ND \**cax*: Sar *-cāh*, *-cāq̄i* (*-cāg-*), *-čaqč* 'to do with one's mouth or teeth'; Chip *-tθāih*, *-tθāy* 'to bite', *-tθāy* 'to hold with one's teeth, in one's mouth' (Li 1930; Li 1933).

130. Bsq *hil* 'to die, kill'// Cauc \**ʔiwħV* 'to die, kill' (Circ \**ħ'ə-n*, Hnz *iħ'a*, Arch *ħ'a-s*, *-uħ'a-s*, Rut *-urgw-* Trub 241; Komm 445)// Sum *ug<sub>5</sub>*, *ug<sub>6</sub>*, *ug<sub>7</sub>* 'to die, kill' (B)// ST: OCh \**ħij* 'corpse'// ND: Haida *ħ'a-daa* 'to kill' (with pl. obj.) [Čirikba 1985: 98 Bsq + Cauc; starostin N & SC 63 Cauc + ST].

131. Sum *tin*, *tìl*, *tì*, *tì-la* 'to live' (B), *ti-l* 'to be alive, to live, to dwell, to let live' (T)// ST: Tib *s-ti* 'to rest' Yen \**ʔ/e/ʔ-te* 'alive' (Ket *eā-te*, Arin *a-tie* Yen 147)// ND \**tin*: Eyak *-tj* 'to live', Tl *-ti* 'to be', Nav *-tj* 'it lies, an animate being is there' (P § 142).

132. Bsq *lan* 'work'// Cauc: Circ \**la-ž(a)* 'to work, to wear out; work, misery, fault': Ad *lāža*, Kab *lāža* (Kp 47)// ST: Tib *la* -s 'action, deed, work'// Yen: Ket *leŋ* 'arbeit' (Castrén)// ND: Tl *-nA*, *-nAn* 'to do', Chip *là* 'work', *-lè*, *-la* 'to make, cause', Jic *-léh*, *-láš* 'to do', Mesc *lá*, *làà*, *líú* (P § 238) [Shafer 1957: 117 ST + ND; Tailleux 1958: 425 Bsq + Cauc + Yen].

133. Bsq *joan* 'to go' (< \**i-oha-n*)// Cauc \**HVʔwVn-* (Krt *-oʔan-la* 'to go', Tsez *-əʔa* 'to come', Hur *un-* HU 32)// ? Sum *ġen* /*ŋen*/ 'to go, come' (B)// Kus *un* (R) = *won* (H) 'road'// ST \**ʔwāŋ* 'to go, walk' (OCh \**w(h)āŋ*, Tib *s-oŋ*, Burm *s-wah* STC 167, DK 158)// Yen \**hVjVŋ* 'to walk, go' (Ket *ējeŋ*, Kott *hejaŋ* Yen 159) [Starostin Hyp 23 Cauc + ST + Yen].

134. Bsq *e-thorri* 'to come, attend, proceed'// Cauc \**ʔV-t' Vr-* (Av *t'ur-ize* 'to run', Ad *t'ara-n* 'to sport, gambol' (of horse) X 119; Kp 18)// Sum *tur<sub>5</sub>* 'to enter, bring in'// ST \**tur* (PS) (Lush *tur* 'to hurry', OChin \**d(h)or* id., Tib *dur* 'to run' DK 185).

135. Bur *dal* 'up', *dal* 'up, above, uphill', *dal* (etas) 'to take up, raise, remove', *-a-dil-* 'to jump, leap'// Sum *dal*, *dal-dal* 'to fly' (B, J)// ND: Sar *-dāl*, *-dāál*, *-dìl*, *dìl-č* 'to fly', Chip *-dét*, *-dèl*, *-díl* 'several objects fly' (Li 1930: 18; Li 1933: 129).

136. Bsq *erori* 'to fall'// Cauc \**ʔVrVl(w)Vw-* (Darg *-ixe-s* 'to fall', Bud *arax-* id., Akh *lob-* 'to be poured' Trub 240; Komm 443)// Sum *ri* 'to fall, collapse' (B).

137. Bsq *e-duki* ~ *e-dugi* ~ *i-duki* (G) ~ *e-uki* (V) 'to have, hold'// Sum *tuku* 'to have, marry' (T).

138. Bsq *egi-n* 'to do, make'// Cauc \**ʔaGV* 'to hold, take' (Tskh *-aqqa-s*, Lzg *q'u-n* Trub 278; Komm 460–461)// Bur *ga* 'take!', *gan-as* 'to take'// Sum *ak* 'to make, do'// Yen \**-aq-* 'to take, hold' (Kott *ba'-āk-ŋ* 'halten' Castrén) [Starostin N & SC 53 Cauc + Yen; cf. also Etr *ac-* 'to have, do' Orel & Starostin 1990: 63].

139. Bsq *e-ma-n* 'to give'// Cauc: ? Arch *ma f* 'to give'// Sum *mu* id.// Kus *ma* 'to take' (H) [cf. Nahali *ma-* 'to give'; Uhlenbeck 1924: 586 Bsq + Cauc].

140. Bsq *gal-* 'to lose, disappear, waste, spoil, perish', etc.// Cauc \**ʔi-gwVl-* 'to lose, steal' (Kryz *gul-ăž* X 136)// Bur *gal-* 'to break, become broken'// Sum *gul* 'to destroy' (B, T)// ? ST \**kway* (Bn) = \**kol* (~ *q-*, *-j*) (PS) 'to hide' (Kachin *me-koi*, Burm *kwai* STC 67) [Starostin N & SC 57 Cauc + ST].

141. Bsq *eri* 'sick, sickness'// Bur *her-* 'to weep, cry, lament'// Sum *ér*, *ir<sub>6</sub>* 'to weep' (B), *ír* ~ (ES) *er* 'se lamenter' (J) [Boisson 1989a Bur + Sum].

142. Bsq *i-suri* ~ *i-xuri* 'to flow, spill'// Cauc \**šorV* (Darg *šurai*, *šara* 'lake, pond' X 75)// Sum *šur* 'to flow' (B), 'jaillir' (J)// ST \**sywar* (Bn) = \**šur* (PS) 'to flow, pour' (Garo *sol-*, Dim *di-sor* STC 56)// ND: Haida *súú* 'pond, lake', Eyak *šii* ~ *šj̄j̄* 'creek, stream' [Starostin N & SC 62 Cauc + ST; Nikolaev 1991: § 5.17 Cauc + ND].

143. Bur *čūš-* 'to suck, suckle'// ST: Burm *čut* 'to suck'// ND: Eyak *c'uʔc'* 'to suck, smoke', Mat *-c'oos*, *-c'oʔc* 'to suck, sip', Chip *-tθyθ* 'to suck', Nav *-c'òòs*, *-c'óóž*, *-c'òs* id. [Shafer 1952: 16 ST + ND].

144. Bsq *a-dor* 'wheel' (archaic?)// Cauc \**ħuħrV* (Ag *fur* 'wheel', Tab *fur* 'Wagen' X 85, Bouda 1939)// ST \**rual* (PS) (Lush *hrual* 'to twist, roll', Tib *ril*, *rel* 'round', *ril-ma* 'ball, globule', OCh \**run* 'wheel', \**rol* ~ *ryol* 'to turn around' DK 198, Bodman 1980: 88).

145. Bsq *lema* 'rudder'// Cauc \**h'amHV* 'roof, cover, lid' (Bzht *h'amo*, Bagw *k'ama*, Av, And *t'om* Gud 61)// Yen: Ket *lam* 'board', Kur *l'em*, Yug *l'aʔm* (Dul'zon 1961: 166) [Bouda 1957: 72 Cauc + Yen].

146. Bsq *marx-ite* ~ *matx-ite* [*marč-* ~ *mač-*] (AN, G) 'sickle, machete'// Cauc \**mirčV* ~ \**mürčV* 'sickle' (Darg *mirš*, Chech *mars*, Ad -*bžǎ*) [Bouda 1949: 18 Bsq + Cauc; Militarev & Starostin 1984: 39 compare Cauc with Berber \**a-mrəz* (Tuareg Ahaggar *amrəh* 'faucille (à dents)'); if so, we have an exclusive mediterranean neolithic isogloss].

147. Bsq *a-ska* 'trough, manger'// Cauc \**c'äq'wV* (Arch *č'aq'w* 'spoon', Ub *čaq'w* 'basin, tureen', etc. KL 87)// Bur *čūq* 'sieve, measure of grain', (W) *čhiq* 'sifting tray'// ST \**ček'w* ~ \**šek'w* 'to draw, ladle' (Hyp 32)// Yen \**siʔX* (~ -*k*, -*g*): Ket *syək* (pl. *sīk-ŋ*) 'grosses längliches Gefäß aus Birke, in dem Fleisch aufbewahrt wird' (Donner 1955: 82)// ND: Tl *s'ix* 'dish, plate', Eyak *c'aag-l* 'dipper, bailer', Chip *t'ái* 'cup, dish', Nav *c'ää* 'shallow basket', Gal *kaa-c'aʔ* 'bucket' (K 126; P § 224; Go 113) [Starostin Hyp 32 Cauc + ST + Yen; Nikolaev 1991: § 6.8 Cauc + ND].

148. Bsq *kaiku* (V, G, AN, L) 'wooden vessel or cup for collecting milk'// Cauc \**qwäqwV* (*Lzg XwaX* 'trough' X 85)// ST \**Kuk* ~ \**Kuak* (Tib *khug-ma* 'pouch, little bag', Garo *khok* 'basket' STC 82)// Yen \**qək-* (Ket *xək-te*, *xək-t*, *kīk-ti* 'spoon' Castrén)// ND: Haida *qikw* 'basket', Tl *qákw* [Starostin Hyp 32 Cauc + ST + Yen].

149. Bur *thali.o* 'wicker basket', (N) *thäle.o* 'open-mouth basket', *thaljò* 'basket for bread' (SV 153)// ND: Tl *táál* 'flat, open basket', Chip *tə̀li* 'kettle, pot' (Li 1933) [Furnée 1982: 31 Bur + Gk *thallis* 'basket' + Georg *talia* 'Beutel oder Sack aus Fell', etc.].

150. Bsq *untzi* ~ *ontzi* 'vessel, container, bucket; boat, ship'// Yen: Ket *untí* ~ *untei* 'basket' (Castrén).

151. Bsq *lapi-ko* 'pot, kettle, cauldron, stew'// Cauc \**h'ap'V* 'plate, slab' (*Kryts k'äp-su* 'bread trough' X 85)// ST \**lyap* (Bn) = \**lēp* (PS) 'flat, plate, slab' (Tib *leb-mo* 'flat', Burm *lyap* 'very thin' (STC 48) [Starostin N & SC 58 Cauc + ST].

152. Bsq *ogi* 'bread, grain'// East Cauc \**HVlgV* (Akhw *ʔog* 'rye'. Bzht *ʔög* 'barley', Chech *fow* 'millet') [Nikolaev SZ 61 derives Hitt *halki-* 'grain, bread' from Cauc].

153. Cauc \**raʔwV* (Av *rax* 'milk', Tsez *ril* 'butter', Darg *daki* 'fat', \**hə* > Ad *ša* 'milk' KL 79)// Bur *diltar* 'buttermilk' [Nikolaev SZ 65 derives Hitt *talka-* 'fat' from Cauc].

154. Cauc \**gəʔnʔV* (Darg *ganzi* ~ *ganz-ūq* 'ladder, staircase' X 80)// Bur *ganc'* ~ *ganž* 'spindle, shaft'// ND: Haida *gáác'* 'house post', Tl *gáás'* id., Eyak *gaʔc'* 'ladder' [Nikolaev 1991: 6.15 Cauc + ND].

155. Sum *zig* 'wall, partition', *i-zig* 'partition' (J)// ST: Tib *r-cig* 'to build, build up, wall, masonry', OCh \**cik* 'masonry' (Bodman 1980: 158)// ND: Sar -*cik'* 'to build a fence' [Shafer 1952: 16 ST + ND].

156. Cauc \**ʔǎ[n]q'i* 'house' (And *haq'u*, Cham *hāq'w*, Khw *āq* Gud 170)// Bur \**hak(i)-*: *ha*, pl. *haku-čaŋ* 'house, home, room, household'// ND: Ath \**yaxʔ* 'house': Ingalik *yax*, Kut *zyéh*, Chip *yè*, Han *žo*, Sar -*γáh* (Hojjer 1963) [Bleichsteiner 1930: 322 Cauc + Bur].

157. Bsq *gune* (AN, BN, L, R) ~ *güne* (S, BN) 'place, site' ~ *une* 'space, distance, moment' (AN, V, G)// Cauc \**GWinhV* (Ad *wəna* 'house', Tsez *qun* 'cabin, farmhouse', Chech *bun* 'house' Trub 278; Komm 460)// ST \**kyim* ~ \**kyum* (BN) = \**qim* (PS) 'house' (Tib *khylim*, Miri *ə-kum*, *Mikir hem*, Lush *in*, OCh \**kun* 'palace', etc. STC 26, 182)// ND: Chip *ku-é* ~ *kj-é* 'house', Hare *khj-é*, Nav *kín* [Trombetti 1926: 126 Bsq + Cauc; Shafer 1952: 17 ST + ND; Pejros 1988: 327 derives Austronesian \**ɣumah* = \**Rumaq* 'house' from ST].

158. Cauc \**bulh'V* 'house, shed' (Av *boh'*, Hnz *buhi*, Hur *purli* HU 17)// Bur *balti* ~ *baldi* ~ (W) *balti* 'verandah, outside room'// Kus *bāhi* 'house' (G, H)// ST \**pu/k* 'house' [Starostin N & SC 60 Cauc + ST + Nost \**palyV* 'fortified dwelling'].

159. ? Bsq \**lubi* ~ \**lobi* in \**zur-lubi* (*zur* 'wood') > *zulubi* (L, AN) ~ *zurubi* (BN, L, S) 'ladder, stairs' (distinct from *zubi* 'bridge', from *zur* 'wood' + *ubi* 'ford') and/or *lobio* ~ *lobi-ro* (BN) 'fence, corral'// Cauc \**həmp'V* ~ \**hāmp'V* (Lak *lamu* 'bridge', Darg *ɣubi*, Ad *laməʔəʔə*; Chech *lāmi* 'ladder', Ing *loami*, Bats *lap'* Komm 446; Kp 44; Sommerfelt 1938: 132)// ST \**lamH* 'road' (Tib, Kan *lam*, Burm *lām*, Garo *ram-a* STC 32; Pejros 1988: 326) [Bouda 1950: 143 Cauc + ST; for the semantic analogy of 'bridge : road', cf. Lat *pont-* 'bridge': Skt *panthā* 'way, path, course'; for 'bridge : ladder : fence' cf. Indo-Iranian \**saitu-* 'bridge' : Slav \**sěti* 'net'; Nikolaev 1984: 71 derives Arm *kamurž* 'bridge' from Cauc].

160. Cauc \**h'wile* 'saddle' (Av, Arch *h'ili*, Lak *k'ili*, Darg *guli* Gi 110)// Bur *tili-eg* 'saddle', *-ltul-* ~ (W) *tul-*, *-ltul-* 'to saddle (a horse)' [The domestication of horses is too late for the common DC period; however, this may be part of the cultural lexicon indicating the later dispersal of "Macro-Caucasic" (Bengtson 1991 b, 1991 e, 1991 f)].

161. Bsq \**hari*, \**hal-* 'thread': *hari*, *hal-* (BN, L, S) ~ *ari*, *al-* (V, G, AN) (*hal-* ~ *al-* is the combinatory form)// Cauc \**XqIV* 'thread': Lak *Xal*, Lzg *yal* (*Ral*), Rut *u-Xur*, Tskh *u-Xara*, Bud *Xiri*, Kryz *Xi*, Ag *Xaj-at* (X 87; Tal 317)// Yen: ? Kott *iri* 'Faden' (Castrén)// ND: Eyak *Xehl* 'rope' [Nikolaev 1991: § 6.1 Cauc + ND].

162. Bsq *lerro* 'file, string, row'// Cauc: AV *h'ur-*, Khw *jul-* ~ *lul-* 'to twist' (Gud 189); cf. Cauc \**h'VIV* 'trap'// Bur *-ltali-* 'to wind (thread), swaddle (cloth)'// ND: TI *-l'un* 'to hunt on sea' (i.e., with harpoon and rope), Chip *-h'ù* 'to set a snare, to lace a net, to tie (with a rope)', *da-h'ùt* 'fishing line', *h'ùt* 'string', *h'ùlé* 'rope', Sar *h'ut* id., Gal *h'uuli* id., Hupa *h'ohl*, *-h'ool?* 'strap', Nav *h'óól*, *-h'óól* 'string, cord, rope' (P § 228; Go 117) [The meanings 'string, cord' and 'trap, snare' are reconciled in ND].

163. Bsq *a-din* 'age', *a-din-tsu* 'aged, old'// Cauc: Nakh \**dē(n)* 'day'// Bur *den* ~ (W) *dēn* (Z) 'year', *den-kuš* 'age'// ST ? Hruso *-dren* ~ *a-diat* ~ *o-ddia* 'year' (< \**r-den* ? Shafer 1947: 195) [Berger 1956: 16 Bsq + Bur; Orel & Starostin 1990: 62 Cauc + Etr *tin* 'day'; for semantic analogy, cf. Eng *year*, Slav *jara* 'spring', Gk *hōrā* 'hour, season, year', etc.].

164. Bsq *thini* 'summit, top'// Bur *than-es* 'top, peak', *than-um* 'high, tall'// ST \**teŋ* 'top' (Chin \**teŋ*, Tib *s-teŋ* 'top', m-ton 'high' IST 48) [Bouda 1950b: 39 Bur + ST].

165. Cauc \**Hi-mic'V* ~ \**Hi-mi3V* 'end, edge' (Av *mic'-ir*, Kab *b3ə* X 71)// Bur *muš* 'end, edge, side, frontier'// ND: Ath \**wes* ~ \**wes* 'riverbank' (Hupa *mis*, Mat *bis*, Chip *-bèḏ-*, Nav *bis* Go 111).

166. Bsq *erdi* 'half, middle'// Cauc \**e-h'i* 'half, middle' (And *b-a-h'u*, Tnd *b-a-h'i*, Tsez *r-o-ho*, Lzg *j-uq'*, etc. Gud 183, Tal 307)// Bur *alto* 'two', *w-alto* 'four', etc.// ST \**lāy* (Bn) = \**haj* (PS) 'middle, center, navel' (Burm *ā-lai*, Lush *lai* STC 65)// Yen \**ʔal*, \**d-al* 'half' (Ket *a(ʔ)l'*, Kott *al-* Yen 222) [Berger 1959: 24 Bsq + Bur; Starostin Yen 222 & Hyp 35 Cauc + ST + Yen; cf. similar IE forms: Skt *ārdha-* 'part, side, half', Osset *ārdäg* 'half', etc. from DC?].

167. Bsq *ber-hezi* 'to separate, distinguish; district, region'// Sum *bar* 'scheiden, entscheiden, öffnen, Hälfte'// ST \**bra* (Bn) = \**phraj* (PS): Kan *bra* 'forked', *pra* 'spread, stretch', Kach *bra* 'scattered, dispersed' (STC 40); Tib *bar* 'Zwischenraum'// Yen: Ket *bar*, *in-bar*, (d-)in-bal' '(sein) Zwischenraum' [Bouda 1938: 18 Sum + ST; Bouda 1957: 80 ST + Yen].

168. Bsq *toki* 'place / parage, lieu, endroit'// Cauc: Circ \**t'ak'wə* 'place' (Ad Šapsug *t'ak'w* Kp 18).

169. Cauc \**ʔo-h'onu* 'bottom' /Bzht *o-h'o*, Av *t'inu*, Arch, Lzg *k'an*, etc. Yen 204)// Bur *tano* 'lower end of an animal's gut'; cf. *tano* 'bastard' ('base born')// Yen \**kan-* ~ \**kam-* (Kott *hana* 'down', Arin *xam-artu* 'low' Yen 204)// ND (\**h'aah*): Chip *-h'á* 'buttocks, tail, hind part', *-h'à*, *-h'àyà* 'bottom', Hupa *-h'a?* 'buttocks, bottom', Nav *-h'ááh* 'bottom', *-h'àà?* 'buttocks' (Go 117). [Starostin Yen 204 & Hyp 39 Cauc + Yen + ST \**naik'w* 'to sink'; Nikolaev 1991 § 7.17 Cauc + ND].

170. Bsq *anai* ~ *anaie* ~ *ānāie* (S) 'brother (male speaking)', *ne-ba* (V) 'brother (female speaking)'// Yen \**ʔēñe* 'son-in-law' (Ket *eñ* ~ *e:ne*, Kott *ani* ~ *añe* Yen 158)// ND: TI *hUnXw* ~ *hUnX* 'man's older brother', Ath \**onay(e)* = \**onayə* 'older brother': Chip *-ùnàyà*, Tol *onigi*, Nav *-inaí* (P § 27).

171. Kus *gita-sē* 'child' (G, H)// Yen \**gəʔt* 'children' (Ket *kʌʔt*, Kott *kat* Yen 161)// ND: Haida *gIt* ~ *giit* 'son', TI *gIt* ~ *yIt* 'son' (P § 42) [cf. also Nahali *gita* 'younger brother'; Ruhlen 1989 a Yen + ND + Nahali; Gurov 1989; 43 Kus + Yen].

172. Sum *na* 'person', *ni-ta*, *ni-taḥ* 'man' (B)// Kus *niyu* 'person' (R)// ND: TI *na* 'tribe, people', Ath \**ne* ~ \**n* 'person, people': Sar *di-ná*, Nav *di-né*, Mat *-ni* (P § 19) [Bengtson NSC § 129 Sum + ND].

173. Cauc \**hñwV* ~ \**lñwhV* (*l* ~ *l̥*) (Arch *ñele* 'man', Ag *ile-f* 'male', Hur *tur-* id., Darg (dial.) *gal* 'boy', Chech *-lo* 'man (suffix denoting profession)' HU 52)// Bur (W) *duł-ás* 'boy, lad, youth, servant'// Sum *lu* 'person' B, J) ~ (Emesal) *mu-lu* 'man' (B), *lu-lu*<sup>1u</sup> 'gens' (J)// ST: \**la* (masculine suffix) "used with words for animals (in Tsangla, Digaro, Nung, Kachin, Burmese-Lolo, Konyak, Garo-Bodo, Mikir, and Meithei);" (STC 96)// ND: Haida *háál* 'husband', Eyak *tilaa?* 'man', Yak *lilia* id. (P 22, NDE) [Independent but parallel processes of suffixation and truncation may be observed in cauc and ST].

174. Cauc \*jəlsV 'husband', (Lak *las*, Av *ros* X 99// Yen: Pump *ils-et* 'husband' *ils-em* 'wife', Kott *ilitt* 'Mensch' (Yen 155; Xelims-kij 1986: 209; Klapproth 1823: 176).

175. Kus *duwai* 'husband' (R)// ST \*do 'to be related by birth or marriage' (Kach *do*, Burm *tau* STC 59).

176. Cauc \*tinhV ~ \*tinhV (Arch *tenne* 'female', *lonno-l* 'woman, wife', Darg *xunu-l* 'woman' Trub 239, Komm 443)// Bur *yen-iš* ~ (W) *yend-eš* 'queen'// ND \*tinh (Hare *c'e-line* 'woman', Chip *-lê-é* 'daughter', Sar *-lê* 'co-wife', Hupa *h'in-č'e?* 'companion wife' Li 1930; Li 1933; Go 117; Hoijer 1956) [Bouda 1964– 606 Cauc + Bur; Nikolaev 1991: § 2.10 Cauc + ND].

177. ? Bsq *-ska* in *neska* 'girl' (if *ne-* is a separate etymon; cf. *ne-ba* 'brother', above)// ST: Tableng *šikaw* 'woman, wife', Mulung *čikō*, Banpara *sikau* id., Garo *žik* 'wife', me<sup>2</sup>-*čik* 'woman' (IST 448)// ND: Kato *č'ek* 'woman', Dogrib *čikwe*, Gal *c'qakee* id., Chip *c'ékè* 'woman, wife' (Go 114) [Trombetti 1923: 488 ST + ND].

178. Cauc \*nusV ~ \*nosV (Bats *c'i-nus* 'bride', *nus* 'daughter-in-law', West Cauc \*nəsa id., Hur *naž-ardə* 'concubines' HU 37)// Sum *munus* ~ (Emesal) *nu.nus* 'woman, wife'.

179. Bsq *hauzo* ~ *auzo* ~ *áizo* (S) 'neighbor, neighborhood'// Cauc \*[h]Vč'wV 'guest' (Ad *hāč'a*, Chech *hāša*, And *č'e* Yen 225)// Bur *oš-in* ~ *lušo* ~ *ošo* (SV) ~ (W) *auš-in* ~ *ayiš-en* (Z) 'guest, visitor'// Yen: Kott *ča-ŋ* 'guest' (Yen 225) [Bouda 1964: 605 Bsq + Bur; Starostin Yen 225 Cauc + Yen].

180. Bsq *bero* 'hot'// Cauc: Tsez *boboru*, Khw *bobolu* 'hot' (Boka-rev 1959: 241)// Bur *barbar-um* 'hot (taste); hot, ardent (temper)'; cf. *biri* 'boiling'// Sum *bar* 'briller' (J)// ST \*par ~ \*bar (Kan *bar* 'to burn' tr., *par* 'to burn' intr., Ochin \*bar STC 50, DK 340).

181. Bsq *e-phel* (BN, L, S) ~ *e-pel* (V, G, AN) 'lukewarm, tepid'// Cauc: Circ \*Pla 'to burn, shine' (Ad, Kab *bla*) and/or \*Plə 'to blaze, get hot' (Ad, Kab *plə*) (Kp 46, 48)// Bur *bal-* 'to burn', *bubūlo* ~ *bul-būlo* 'lukewarm'// Sum *bil* 'to burn' (T, J)// ST \*ploŋ (Kach *proŋ* 'to be burned, as a house', Mikir *phloŋ* 'to burn the dead' STC 40); cf. OCh \*plèw ~ \*phlèw 'leaping flames' (Bodman 1985: 153)// Yen: Kott *pal* ~ *fal* 'hot, warm', Assan *pa'la*, *pfol-tu*, *pal-tu* Castrén; Dul'zon 1961: 167) [Bouda 1948: 186 Bsq + Cauc; Bouda 1950b: 38 Bur + Yen; Berger 1956: 10 Bsq + Bur; Boisson 1989a Bur + Sum].

182. Kus *bhoq* (R), *bhrok* (H) 'hot'// ST \*bok 'white' (OCh \*bhāk, Garo *gi-bok* ~ *gi-pok* STC 181); cf. Kan *bokh* 'hot' (Bailey)//

Yen \*boʔk 'fire' (Ket *boʔk*, Pump *buč* Yen 161) [Semantics as in IE \*bhel- > Slav *bělŭ* 'white' vs. OIc *bāl* 'flame' Pokorny 1959: 119].

183. Sum *kum* 'warm' (B)// ST: Baric \*kam 'to burn' (IST 427).

184. Kus *qaaiwan* 'dry' (R)// Yen \*qʌj- 'dry' (Kott *xuj-*, Arin *goija* Yen 164) [An alternative, or complementary, etymology is given by Starostin Yen 212, and Bengtson NSC § 115].

185. Bsq *hotz* ~ *otz* '(to be) cold'// Cauc: Av *kʷač-* 'coolness, frost'// Yen: Pump *kiič-idin*, *kyč-idin* 'cold' (Dul'zon 1961: 187)// ND: Ath \*k'az? '(to be) cold' (Hupa *k'ac'*, Mat *k'ac'*, Nav *-k'áz*, *-k'ás*); ? Haida *k'ac'a-láán* 'hailstone' [Uhlenbeck 1924: 585 Bsq + Cauc; Trombetti 1926: 129–130 Bsq + Cauc].

186. Cauc \*[ʔi]qV or \*ʔirGwV 'to get/be cold' (Lzg *reqi-z*, Hur *eg-o*, *egi* ~ *igi* HU 60)// Kus *yoʔau* 'cold' (R).

187. Bsq *gozo* ~ *goxo* [gošo] (dim.) 'sweet, tasty, gentle, soft, mild'// Cauc: Circ \*q'aš'wə 'sweet' (Ad *ʔaš'wə*, Kab *ʔaf* Kp 65); East Cauc \*q'^(w)Vlč'č'V 'sour' (Lak *q'urč'-iša* X 107)// Bur *gaš-ar-um* 'salt-sweet'// Sum *kušə* 'miel, doux' (J)// ND: Eyak *q'ihž* 'rancid, bitter, sour, spoiled', Chip *-k'úž* 'to be sour', Nav *-k'òš*, *-k'óšž* 'sour, salty, brackish', Mat *-k'ooʔž* 'sweet' [Nikolaev 1991: § 11.12 Cauc + ND].

188. Cauc: Lzg *č'uru* 'sour', Kryz *äi-zur-ä*; Kab *sər* 'bitter', Ad *stərə* 'hot, bitter, sharp (taste)' (X 107; Kp 16, 23)// ST \*sūr (OCh \*sōr 'sour', Kan *sur-k*, Lush *thūr* STC 23, DK 341)// ND: Sar *-zúú* 'to be sour', *-zúw-aa<sup>a</sup>* 'a little sour' (Li 1930) [Shafer 1952: 17 ST + ND].

189. Bsq \*čanhu 'clean, pure' > *xahü* [šáhü] (S) ~ *xahu* (L, BN) ~ *txau* (AN, BN)// Cauc \*ʒVnʃ/u/ 'clean, clear' (Chech *c'ena*, Ub *p'-c'a* Yen 217)// Bur *sisin-um*, (W) *sesén-um* 'clear, clean; slight, slender'// ST \*chiaŋ (Starostin-Pejros) = \*(t)syaŋ (Benedict): OCh \*sheŋ + \*zeŋ? 'clear', West Tib *sigs-po* 'thin, clear', Lush *thiaŋ* 'clear, clean' (STC 52–53, DK 255) [Bouda 1964: 607–608 Bur + ST; Starostin Yen 217 & Hyp 40 Cauc + ST + also Yen: Yug *tul-en* 'clean, clear'].

190. Bsq *itsu* ~ *ütsü* (S) ~ *utsi* (R) 'blind, dark'// Cauc \*HöcV ~ \*HöčwV 'blind, dark' (Av *b-ēca-*, Botl *b-oču*, Tnd *b-ēcow* Bok 46; Trub 253)// ND: ? Mat *-coi* 'to be blind' [Bouda 1948: 192 Bsq + Cauc].

191. Cauc: Circ \*daR<sup>w</sup>(a) 'good' (Ad *daR<sup>w</sup>ə*, Kab *daR<sup>w</sup>a* Kp 17)// Sum *dùg*, *dùg-ga*, *du<sub>10</sub>* 'good' (B), *dùg* 'to be/make good, pleas-

ant' (T)// ST: Tib *s-dug* 'schön, hübsch' [Bouda 1938: 19 Sum + ST].

192. Bsq *zuzen* 'right (rectus, justus)'// Cauc \**c'in*?V 'new' (Tsez *ec'no*, Ub *c'a*, Bats *c'in* 'nouveau', *c'ain* ~ *c'ani* 'propre, saint' Yen 216; Sommerfelt 1938: 122)// Kus *jinda* / *jina*?i 'new' (R)// ST \**s'in* ~ \**s'ij* (Burm *sac* 'new', Tib *g-šin* 'good' Yen 216–217) [Starostin Yen 216 and Hyp 21 Cauc + ST + Yen \**tur*; note semantic parallels in Bsq, Bats, Tib].

193. Bsq *tintin* (V) 'poquito / très peu', *tin-gi* (V) 'un poco / un peu'// Cauc: Bzht *i-t'ino* 'small', Avhi-*t'in*-ab, Cham *t'an*-ab (X 107)// ST: OChin \**tōn*? 'short', Tib *thuŋ*, Kach *gà-dùn* (DK 183)// ND: Haida *t'Am*- 'thin and rounded', Chip *-t'ànè* 'thin', Gal *is-t'an* 'small', Nav *-t'á*? 'thin (of cloth, skin, stone)', *-t'ìhí* 'little, tiny' (NDE).

194. Bsq *txiki* [éiki] [V, G, AN, BN] 'small' (beside *txipi*, *txipi* in various dialects)// Cauc \**žik*'V 'short' (Tab *žiqi*, And *č'ik*'k'u-b, Hur *zugə* HU 41); cf. West Cauc \**č'ək'*<sup>wə</sup> 'small, young, boy, youngster'// Bur (W) *čiki* 'small'// Sum *sig* 'thin, narrow' (B), 'petit, humble' (J)// Yen: Kott *tūki* 'short' (Castrén)// ND: Haida *c'iyaa* 'thin person', Mat *č'ix* 'thin', Nav *-c'ísi*, *-c'íisi*, *-c'íhi* 'to be small' (NDE) [Uhlenbeck 1924: 584 Bsq + Cauc: Cirikba 1985: 99 Bsq + Cauc; note parallels in European languages: Span *chico*, Cat *xic*, Ital *zichi*, Alb *cikë* 'un peu', from DC substratum (Berger 1959: 38; Polak 1967: 143)].

195. Bsq *guti* ~ *gúti* (S) 'few, little, little bit'// Cauc \**kot*'V 'short' (Lak *kut'a-ša*, Arch *kut'i-tūt* X 107)// Bur *khūt* 'short'// Sum *gud-ga* 'short' (B)// ND: Eyak *gut* 'very small, tiny' [Bouda 1949: 24 Bsq + Cauc; Bouda 1964: 605 Cauc + Bur].

196. Bsq *bethe* 'full, to fill', *i-phete* 'thick, fat'// Cauc \**bVtV* (Kab *bəda* 'strong, solid', Chech *butu* 'solid, dense' Yen 202)// Bur *būt* 'much, many, numerous, very'// Yen \**bid*- 'solid, tough' (Ket *bīt*, Yug *bīt*, *bīd*-am Yen 202) [Bouda 1949: 44 Bsq + Cauc + Yen; Bouda 1957: 94 Cauc + Yen; Tailleur 1958: 424 Bsq + Cauc + Yen; Starostin Yen 202 Cauc + Yen].

197. Bsq *aski* 'enough', *asko* 'much'// Cauc \**HVč'**əqwV* 'big' (And *b-eč'uXa*, Lzg *č'eXì* X 104)// Bur (W) *čhik* 'all'// ST \**čok* 'enough' (Tib *čhog*-pa, Chin \**tsyōk* IST 53)// Yen \**suK*- 'fat, thick' (Ket *suk-ŋ*, Kott *suk-ŋ* Castrén)// ND: EA \**čühk'*: Beaver *-čik*' 'big' (Hoijer 1956) [Starostin Hyp 40 Cauc + ST + Yen; Nikolaev 1991: § 11.2 Cauc + ND].

198. Cauc: Botl *biši* 'greasy, fat', Cham *beš*-ab, Hnz *boš*-eru (Gud 90)// Bur *bīs* (pl. *bīšo*) ~ (W) *bes* 'fat' (n.)// Kus *biji* 'fat' (adj.) (H) [Bouda 1964: 604 Cauc + Bur].

199. Cauc \**lawqV* 'much, many', (Arch *labXa*-n 'many, much', Lzg *luX* 'to a high degree' Alekseev 1985: 106)// ST: BL \**luk* 'enough' (Burm *lauk* > *lau?*, Ahi *lu?*, Nyi *lu* STC 88).

200. Kus *manyi* 'many' (R)// ST \**maŋ* (Trung *də-maŋ* 'big; older', OCh \**mǎŋ* 'eldest; great, principal' STC 189).

201. Bsq *luze* ~ *lúze* (S) 'long'// Bur *γus*-an-um 'long, tall, distant' [Bsq *l*, (Cauc \**l*-), Bur *γ*- is regular, see table in introduction].

202. Bur *daldal*-um 'wide'// Sum *tál* 'wide' (B, T)// ST \**dhel* 'to spread, stretch' (N & SC 62)// ND: Chip *-tél* 'to be wide', Sar *-taal*, Mat *-teel*, *-teel*, Nav *-tèl*, *-téel* (Hoijer 1938: 77).

203. Bsq \**ha(u)ndi* 'great, big' > *handi* ~ *andi* ~ *aundi*// Cauc: Circ \**k<sup>hw</sup>a(n)də* 'much, many' (Ad *k<sup>hw</sup>andə*, Kab *k<sup>w</sup>ad* Kp 57)// ? ND: Haida *qoan* 'many', Tl *k'uun* (P § 220).

204. Cauc: Arch *ba*-sa 'when', God *e-bu* 'what'// Bur *be*, (W) *bo* 'what', *be-se* 'why'// Sum *a-ba* 'who'// ST: Burm *ba* 'what', Karen *bei* 'what, how'// Yen \**wi*-*we*- (Ket *bi-šše* 'who' (masc.), *bi-l'a* 'how', etc. (Yen 204) [Bouda 1950b: 38 Bur + ST + Yen; Bengtson Sum § 27 Bur + Sum].

205. Cauc \**ma* (interrogative stem): Tnd *ima*-la 'who', Chech *mi*-la id., *ma*-sa 'how much', Lzg, Ag *mu*-s 'when' (Yen 204)// Bur *men* 'who', *a-min* 'which'// Sum *ma*-*da*-*na*, *me*-*na* 'when', *me*-*a*-*bi*, (ki-)*me*-*a* 'where', *àm* 'how' (B)// ST: Kacari-Garo *ma* 'what'// ? Yen \**wi*-*we*- (interrogative stem; see preceding entry) [Tailleur 1958: 423 Cauc + Yen; Starostin Yen 204 Cauc + Yen].

206. Bsq *al* (G), *ala* (S) (question particle: Larrasquet 1939: 58; Saltarelli 1988: 3)// Bur *al*- (inflected for number and class: "These forms convey a vague kind of reference to something known to the hearer" ... "what's his name?", ... "thingamy", etc. Lorimer 1962: 12)// ST: BL \**la* (interrogative suffix): Burm *lâ*, Lisu *là* (Burling 1967: 84); Cantonese \**le* (interrogative particle) (McCoy 1980: 208)// ND: Haida *hu* 'when', Slave ?*e-háú* id., Chip *-há*- (interrogative stem) (NDE; Li 1933).

207. Bsq *a-nu*, *a-no* 'to deny, refuse' (Bouda 1949: 47)// Cauc: Udi *na*, Tsez *a-nu* 'not'// ? Bur *na* 'not?' (only after final verb; seems to be a loanword from IE)// Sum *nu* 'not'// Kus *ānio* 'not' (R) [Cf. Georg *nu* 'not', and similar forms in many languages].

208. Sum *la-*, *li-* (negation used before prefixes /*ba-*/, /*bi-*/; Thomsen 1984: 190) // ND: Tl *l* 'not', *lll* 'don't!', Ath \**la*, \**li-* (negative): Chip *-lè*, *-lé*, Chasta Costa *ta*, *lá* 'don't' [P § 258].

209. Cauc \**nV* (demonstrative stem: Abkh, Abz *nə* 'that' (remote), Zsez *ne-* id., Hur *a-nnə* 'that' HU 82) // Bur *ine* 'he, she', (W) *ne*, *in* 'he' // Sum *ne*, *ne.e*, *ne.en* 'this' (animate), *e.ne* 'he', *e.ne.ne* 'they' (B) // ST: Khyang *na-*, Naga *an* (3rd person sing. pronoun) // Yen \**n* (affix of the animate-active noun class) // ND: Haida *nan* 'he, she, it, someone, one (indef.)'.

210. Bsq *-r-* in *ho-ri* 'this', *ho-r* 'there', *ha-r* 'that, yonder', *no-r* 'who', *ze-r* 'what', *no-ra* 'where' // Cauc: Abkh *ari* 'this', *ar-t* 'these', *ur-t* 'those', Abz *ara-sa* 'thus, so', Circ *mə-r* 'this', *mo-r* 'this here' // Sum *ri* 'that' (T), *ur<sub>5</sub>* 'this' (B) // ST: Tib *re* 'the, one, a certain, single, everyone, some', Lpch *a-re* 'this', *o-re* 'that', *-re* 'the', OCh \**re*: 'this, this is, to be right' (Bodman 1980: 91) [Čirikba 1985: 97 Bsq + Cauc].

211. Cauc \**nV* (nominal plural, e.g. Tsez *es-na-bi* 'brothers') // Bur *-n* (pl. of nouns in object class) // Sum *-ene* (animate noun pl.) // ST \**-n* (collective suffix) // Yen \**-n(V)* (pl. suffix) [Trombetti 1923: 105 Cauc + Sum; Tailleur 1958: 419–420 Cauc + Yen; Toporov 1971: 115 Bur + Yen; Starostin N & SC 65 Cauc + ST + Yen].

212. Bsq *-k* (Plural suffix) // Cauc: Abkh *-k<sup>w</sup>a* (pl. of 'non-reasonable' class) // Bur *-ko*, *-ko(-n)* (p. of certain nouns) // ND: Tl *-x'* ~ *-x'<sup>w</sup>* (pl. or collective suffix), Ath \**-k(e)*, \**-kai* (noun pl. suffix, e.g. Kato *-k*, Nav *-ke*, *-kei*) (P § 253) [Dumézil 1933: 136 Bsq + Cauc].

213. Bsq *-z* ~ *-ez* (instrumental suffix) // Cauc \**-s(ē)*: Abkh *-as-* (inst.), Hur *-(u)s* (ergative), Chech *-s* (animate erg.), etc. (HU 75) // ST: Tib *-s* (inst.), Kan *-s* (agent), Dhimal *-so* (inst.) (Shafer 1965: 448) // Yen: Ket *-aś* (inst.-comitative), Kott *-os* (com.), *-s(e)* (inst.) [Tailleur 1958: 418–419 Bsq + Cauc + Yen; Čirikba 1985: 95 Bsq + Cauc].

214. Bsq *-la-* (in *-eki-la(-n)* comitative) // Bur *-ale* *-ele* (locative) // ST: Tib *la*, Nyising *alo* (locative), Aimol, Langang *-le* 'with, and' (IST 195, 253) // ND: Haida *at* 'with, of', Mat *-t* 'with', Nav *-t*, *-it* 'with, along with, together with' (P § 255).

215. Bsq *-n* (inessive) // Cauc \**nV*: Abkh *-n* (locative), Nakh \**-na* (lative), Lak *-nu* (adverbial) // Bur *-ane* ~ *-aje* ~ *-eye* (comitative) // ST: Tib *-na* (locative), Lush *na* (postposition 'place of')

(Shafer 1965: 449) // ND: Haida *-n*, *-ŋ* (general postposition), Tl *-n* 'with' (also local postposition), Ath \**-n*, *-ŋ* (local postposition) (Sapir 1915: 552) [Čirikba 1985: 96 Bsq + Cauc].

216. Bsq *-ta-* (locative, e.g. mendi-*ta-n* 'on a mountain') // Cauc \**-da* (allative): Lzg, Ag *-di*, Hur *-ta/-da* (HU 75–76) // Bur *-ate* ~ *-ete* (adessive) // Sum *-ta* (ablative-instrumental) // ST: Dhimal *-ta* (loc.), Newari *-ta* (dative), Thami *-te* (loc.) (Trombetti 1923: 679) // Yen \**-ta* (loc.) and/or \**-di/-id* (inst.) // ND: Haida *ta-oan* 'alongside of', Tl *-taa-k<sup>w</sup>* 'in the middle of', Ath \**-ta* 'among' (Sapir 1915: 553).

217. Bsq *-ki* 'with', *-ki* (adverbial, as in *eme-ki* 'sweetly') // Cauc \**k'E* ~ \**gE*: abkh *-gə* (emphatic particle), And *-gu* id., Rut *-ki* 'and, also, though', Urt *kui/kue* 'even, also' (HU 96) // Bur *ka* ~ *ke* 'and, if, when', *ke . . ke* 'both . . and' // Sum *-ga-* (coordinative, emphasizer).

218. Bsq *-(e)-n* (past tense: Saltarelli 1988: 224) // Cauc: Abkh *-n* (imperfect), Chech *-n* id., Av *-an* (preterit), Tab *-an*, *-un* (aorist) // Bur *-n-* (pret.) // Yen *-n-* (pret.) // ND: Haida *(-g)-an* (simple past, experienced), Tl *-in* (decessive), *-(γ)-in*, *-(w)-un* (past tense), Ath \**-n*: Sar *-n*, Hupa, Mat *-n*, *-ŋ*, Chip, Nav *-n* (perfect suffix) (P § 292) [Dumézil 1933: 146 Bsq + Cauc; Tailleur 1958: 420 Bsq + Cauc + Yen; Toporov 1971: 118 Bur + Yen].

219. Bsq *edo* 'or' // Bur *da* 'and' // Sum *-da* (coordinative/comitative postposition) // ND: Tl *dè* 'indeed, so then', Nav *-dà* 'and, or' (enclitic), *-dó?* 'also, too'.

#### EPILOG: The Dene-Caucasic People

Much has been written here about sounds, words, and affixes, but what can we know about the people who spoke Proto-Dene-Caucasic?

One problem that immediately comes to the mind of an anthropologist is the fact that modern DC peoples vary from Caucasoid types in the West (Basque, Caucasian, Burushaski) to Mongoloid types in the East (Sino-Tibetan, Yeniseian, Na-Dene). This division, in fact, coincides with Movius's Line, which for millennia has split Eurasia into distinct genetic and cultural zones. Starostin's glottochronology dates Dene-Caucasic "approximately to the 9<sup>th</sup>



and 8<sup>th</sup> millennia B.C." (Starostin 1989b: 43). If this is so, populations crossing Movius's line, in either direction, would have had ample time to assimilate culturally as well as genetically to surrounding peoples. Other macrophyla bear witness to the same type of racial variation: Afro-Asiatic is even older than DC (according to Starostin, *ibid.*) and its speakers vary from Caucasoid in the northeast to Negroid in the southwest. Eurasiatic (or Nostratic) speakers vary from Caucasoid to Mongoloid in a way that parallels DC. So the racial problem is no problem.

The recovered vocabulary of DC is consistent with Starostin's dates. The great majority consists of pronouns, names of body parts, names of plants and animals, simple descriptives, and other basic terms. Correspondences of numeral words are few and tenuous, which would be expected of a macrophyllum of this time depth. (Starostin's etymology for 'hundred' (Hyp 35) is anachronistic as well as phonologically improbable, and Yen \**jus* 'hundred' is evidently a loanword from Turkic.)

DC technological terms are all consistent with the late Upper Paleolithic period: awl, thread, rope, cord snare, strap, basket, wooden spoon, wooden bowl, trough, knife (originally of stone), arrow, fence. The house was possibly of a hurdle type (interlaced twigs), supported by a sturdy frame. Starostin (Hyp 33) posits one word for metal, possibly copper, which would have been free copper and not an indication of metallurgy. So DC culture was a typical Upper Paleolithic, hunter-gatherer culture.

Where was the DC homeland? For such a far-flung entity, this is very difficult to determine purely by the linguistic evidence. Fleming (1991), basing his judgment on several lines of evidence, places DC and its sister macrophyla (Afro-Asiatic, Nostratic, and Amerind) in greater Iran ca. 45,000 B.P. (At that time, they must have been dialects of the same language.) Much later, he posits an "eastern flank" of DC passing through the Himalayan passes to the Tibetan plateau and beyond, some heading north (Yen) and others northeast (ND). Greenberg (1987: 333) identifies Na-Dene with the Beringian culture (7,000–10,000 B.P.), which would jibe well with Starostin's chronology. Finally, Fleming credits the western flank of DC with carrying Neolithic culture and farming into North Africa and Europa (via Iberia, ca. 5,000 B.P.). This is intriguing, but more definite answers will depend on future research.

In terms of population dynamics, the Sino-Tibetans have fared the best, thanks mostly to the great fecundity of the Chinese peoples. In North America the Na-Deneans have had mixed success: the Athapaskans expanded out from the Yukon area, the Navaho becoming the most numerous American Indian tribe north of Mexico (through only about 150,000). European colonization took a heavy toll, and several languages (Tsetsaut, Galice, Mattole, etc.) are now extinct, and others, including the linguistically important Eyak, are moribund.

Everywhere else DC languages have been recessive for centuries. Yeniseian (which once ruled a vast area between the Irtysh and Angara rivers) is reduced to one extant language (Ket, about 800 speakers). Basque, Burushaski, and Caucasian all have lost territory within historic times; Sumerian is of course long gone, and Kusunda is "vanishing" (Reinhard 1976).

#### Abbreviations of Languages and Dialects

Abkh	Abkhaz (Cauc)	Ing	Ingush (Cauc)
Abz	Abaza (Cauc)	Jic	Jicarilla (ND)
Ad	Adyghe (Cauc)	Kab	Kabardian (Cauc)
Ag	Agul (Cauc)	Kach	Kachin (ST)
Akh	Akhwakh (Cauc)	Kan	Kanauri (ST)
Alb	Albanien (IE)	Khin	Khinalug (Cauc)
AN	Alto Navarro (Bsq)	Khw	Khwarshi (Cauc)
And	Andi (Cauc)	Krt	Karata (Cauc)
Arch	Archi (Cauc)	Kus	Kusunda (isolate)
Arm	Armenian (IE)	Kurd	Kurdish (IE)
Ath	Athapaskan (ND)	Kut	Kutchin (ND)
Av	Avar (Cauc)	L	Labourdin (Bsq)
Bag	Bagwali (Cauc)	Lpch	Lepcha (ST)
Bats	Batsbi = Thusch (Cauc)	Lush	Lushei (ST)
BL	Burmese-Lolo (ST)	Lzg	Lezgi (Cauc)
BN	Bas-Navarrais (Bsq)	Mag	Magari (ST)
Botl	Botlikh (Cauc)	Mat	Mattole (ND)
Bsq	Basque (Euskara)	MCh	Middle Chinese (ST)
Bud	Budukh (Cauc)	N	Nagir (Bur)
Bur	Burushaski (Khajuna)	Nav	Navaho (ND)
Burm	Burmese (ST)	ND	Na-Dene
Bzht	Bezhta (Cauc)	OCh	Old Chinese (ST)
Cauc	Caucasic ("North Caucasian")	Pump	Pumpokol (Yen)
Cham	Chamalal (Cauc)	R	Roncalés (Bsq)
Chech	Chechen (Cauc)	S	Souletin (Bsq)

Chep	Chepang (ST)	Sar	Sarsi (ND)
Chin	Chinese (ST)	Slav	Slavic (IE)
Chip	Chipewyan (ND)	Span	Spanish (IE)
Circ	Circassian (Cauc)	ST	Sino-Tibetan
Darg	Dargi, Dargwa (Cauc)	Sum	Sumerian
DC	Dene-Caucasic	Tab	Tabasaran (Cauc)
Dim	Dimasa (ST)	Tib	(written) Tibetan (ST)
EA	Eyak-Athapaskan (ND)	Ti	Tlingit (ND)
G	Guipuzcoano (Bsq)	Tnd	Tindi (Cauc)
Gal	Galice (ND)	Tol	Tolowa (ND)
Georg	Georgian (Kartv)	Tskh	Tsakhur (Cauc)
Gk	Greek (IE)	Ub	Ubykh (Cauc)
God	Godoberi (Cauc)	Urt	Urartian (Cauc)
Hitt	Hittite (IE)	V	Vizcaíno (Bsq)
Hnz	Hunzib (Gunzib) (Cauc)	W	Werchikwar (Bur)
Hur	Hurrian (Cauc)	Yak	Yakutat (ND)
Illyr	Illyrian (IE)	Yen	Yeniseian
Imb	Imbat (Yen)		

## Abbreviations of Sources

AA	American Anthropologist
B	Boisson 1989b
Bok	Bokarev 1981
D	Delitzsch 1914
DK	(Drevnekitajskij) Starostin 1989a
Etm	Bengtson 1991b
G	Grierson 1909
Gi	Giginejšvili 1977
Go	Golla 1964
Gud	Gudava 1979
H	Hodgson 1857
HU	(Hurro-Urartian) Diakonoff & Starostin 1986
Hyp	(Hypothesis) Starostin 1991
IJAL	International Journal of American Linguistics
IKAS	Montiano & Urquijo 1976
IST	(Introduction to Sino-Tibetan) Shafer 1966–1974
J	Jestin 1965
JAOS	Journal of African and Oriental Studies
JRAS	Journal of the Royal Asiatic Society
K	Krauss 1964
KL	(Kul'turnaja leksika) Starostin 1985
Komm	(Kommentarii) Starostin 1987
Kp	Kuipers 1975
LM	López-Mendizabal 1960
MSFOu	Mémoires de la Société Finno-Ougrienne
NDE	(Na-Dene Etymologies) Ruhlen 1989b
NSC	(Notes on Sino-Caucasian) Bengtson 1991a
N & SC	(Nostratic & Sino-Caucasian) Starostin 1989b

P	Pinnow 1966
Plantas	Bouda & Baumgartl 1955
R	Reinhard 1976
RT	Reinhard & Toba 1970
STC	(Sino-Tibetan Conspectus) Benedict 1972
Sum	(Sumerian) Bengtson 1990b
SV	S. Varma 1941
SZ	(Severokavkazskie zaimstvovanija) Nikolaev 1985
T	Thomsen 1984
Tal	Talibov 1980
TP 2	(Thesaurus Praeromanicus 2) Hubschmid 1965
Trub	Trubetskoy 1987
UCPL	University of California Publications in Linguistics
WBKM	Wiener Beiträge zur Kunde des Morgenlandes
X	Xajdakov 1973
Yen	Yeniseian) Starostin 1982
Z	Zarubin 1927

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