SUBGROUPING OF NOSTRATIC: COMMENTS ON A. DOLGOPOLSKY'S "NOSTRATIC MACROFAMILY AND LINGUISTIC PALEONTOLOGY"

Dolgopolsky's book (hereafter — *NM*) is an excellent introduction to the Nostratic theory, which I completely support. Most of the lexical material that he presents is valid and reflects, in my opinion, a deep genetic unity of the languages involved — Indo-European, Kartvelian, Altaic, Uralic, Dravidian and Hamito-Semitic. However, before we proceed with "linguistic paleontology", we must first decide a couple of rather urgent linguistic questions.

I omit here a section that could be very large — the discussion of whether long range comparison is theoretically possible and admissible. The book that we are discussing is the best proof of the validity of traditional comparative method and its applicability to distantly related genetic units.

There is, however, a problem that cannot be left without discussion: the problem of Nostratic taxonomy. Almost ten years ago I have already expressed my position on the classification of Nostratic languages based primarily on lexicostatistics and considerations of time depth (see [NSC]). The crucial point here is the position of Hamito-Semitic within Nostratic. If I am right (and some scholars — for example, Joseph Greenberg — share this point of view) in separating Hamito-Semitic from the rest of Nostratic families, this will certainly have an impact on our debates around the time of Nostratic split and the homeland of Nostratic.

At first glance, Dolgopolsky's book is an overwhelming proof of Hamito-Semitic belonging to Nostratic — in fact, occupying a central position within Nostratic. Among 124 lexical items included in the book, 106 have reflexes in Hamito-Semitic — as against, e. g., only 75 having reflexes in

Indo-European or 91 in Altaic. I shall, however, attempt to show that this is a very superficial evaluation.

Below I shall combine the evidence from Dolgopolsky's book with the material of three other families of the Old World — namely, North Caucasian, Sino-Tibetan and Yeniseian. I have written a number of papers where I proposed to unite these three families within a single macrofamily called "Sino-Caucasian", and there is a number of scholars who now support this hypothesis. Several authors have added some other linguistic units (Na-Dene, Basque, Burushaski), but I myself have studied only the three families above and shall confine myself here to their evidence. A preliminary list of phonetic correspondences was given in my paper "Nostratic and Sino-Caucasian", where I tried to demonstrate a possibility of distant genetic relationship between these two macrofamilies.

A chart of all Nostratic roots from Dolgopolsky's book with their proposed Sino-Caucasian cognates is given below. In this paper I would not like to get involved into a detailed discussion of technicalities — comparative phonology, lexicostatistical and grammatical considerations etc. All of this should be the subject of a much larger work which I hope to produce. I shall only attempt to propose a simple statistical procedure which will help us in the classification of linguistic families involved.

The eight families participating in our test (Indo-European, Hamito-Semitic, Uralic, Altaic, Kartvelian, Dravidian, North Caucasian, Sino-Tibetan, Yeniseian) are subdivided into three types:

I. Kartvelian, Yeniseian: these are very small linguistic units (only 4 languages in Kartvelian, and only 4 languages in Yeniseian — and of those only one is still living and more or less well recorded). It is therefore not surprising that the overall number of reconstructed Proto-Kartvelian and Proto-Yeniseian roots is rather small (about 1000 roots in each family). In families like this even a word attested in a single language (e. g., Georgian or Ket) has a good chance of reflecting a common root.

II. Uralic, Dravidian, North Caucasian. These are larger families, but they all share a common feature: a dichotomic split. Uralic consists of Fenno-Ugric vs. Samoyedic; Dravidian consists of North Dravidian vs. South-Central Dravidian; North Caucasian consists of East Caucasian vs. West Caucasian. For families like this the probability of a common root being preserved within only one branch is rather high, so that, e. g., a root present only in Fenno-Ugric has a good chance of being Common Uralic, even though it is absent in Samoyedic.

III. Indo-European, Hamito-Semitic, Altaic, Sino-Tibetan. These are very large families, with multiple branching. In families like these the

probability of a common root being preserved within only one branch is quite small, so that a root present only in Turkic or Japanese has a very little chance to be actually Common Altaic. A great number of roots isolated within one branch may be explained as later loans. Certainly there must be exceptions, and not every root like this should be just thrown away, but one should certainly apply caution while dealing with etymological isolates within large genetic families.

With all that in mind, I shall proceed with the analysis of the data in *NM*. The data given below is structured as follows:

1) number of the Nostratic root according to the book;

2) the root itself;

3) the distribution of the root within Nostratic. I regard the root as reflected in a family of type III only when it is present in at least two of its subbranches (e. g. in Semitic and Egyptian; in Slavic and Germanic; in Turkic and Tungus etc.). Otherwise I regard the reflex as insecure and demanding some further evaluation. In families of type I and type II no such restriction is possible, and a root may be withdrawn from the comparison only if it can be shown to be irregular in phonology, dubious in semantics or borrowed from some other known source;

4) etymological comments;

5) Sino-Caucasian evidence. This section is necessarily short (only reconstructions are included). I hope to provide soon a larger paper (or book) on the Sino-Caucasian comparison;

6) the distribution of the root within Sino-Caucasian.

[1] **ʔibrE* 'fig tree' (2: HS, D).

[2] **ĉ[i]bVɣV* 'hyena' (0). HS: only Semitic. A: only Ewenki Ayan, and very probably — a loan from Turk. Alt. *čepke* 'wolverine' (< Turk. **jepken*). D: the Dravidian root is actually the same as in [4] **SiwVŋgE*.

[3] **ʔ[ü]ŕVwV* 'large feline' (2: HS, D). In Altaic: only OTurk. *irbiš ~ irbič*, cf. Chagadai *ilbirs* — possibly a tabooistically corrupted form of Common Turkic **jolbars* 'leopard' (which in its turn is a compound of **jolb-* = TM **dolbi* 'fox' and the borrowed **bars*).

SC: ST **wăr* 'a beast of prey' (ST).

[4] **SiwVŋgE* 'leopard' (3: IE, D, A). TM **sibige* = Turk. **jebke-n* 'wolverine' (Mong. *ǯeɣeken* 'wolverine' is a contamination of this root and another one, represented by TM **ǯaga-ri* 'bear') < Alt. **zibke* (~ **zipge*).

SC: NC **ɕ̃ānq̇V* 'lynx, panther', ST **chi(ə)k* 'leopard' (NC, ST).

[5] **ʔoŕ[u]* 'antelope, deer' (3: HS, A, D). A: besides the listed forms cf. also Turk. **ar-kun* 'cross-bred horse', **ar-ga-mak* 'stallion'.

[6] **maŋ[g]V* ‘monkey’ (1: D?). In HS: only East Chadic. Otherwise: only Drav. **maŋk-* ‘monkey’; Manchu *mońo* is actually a variant form, the basic one being *bońo* (also reflected in Jurch. *bonen* < PTM **bońa* ‘monkey’). The phonetic match between Drav. **maŋk-* and Manchu **bońa* is impossible. On the other hand, Drav. **maŋk-* could go back to **malVk-* and be compared (as a loanword?) with ST **mlŭk* ‘monkey’. On the whole, a very dubious case.

SC: ST **mlŭk* ‘monkey’ (ST?).

[7] **šüŋU* ‘snow’ (3: IE, U, A). In HS: only an uncertain Eg. word. See [МССНЯ: 366] (IE, U, A).

SC: ST **ś(r)ɨăŋ* (= **r-śɨăŋ*) ‘cold, frost’. See [NSC: 62] (ST).

[8] **čaĺ[U]gV* ‘snow, hoar-frost’ (3: HS, U, A).

[9] **ç̣[a]R?V* ‘hoar-frost’ (5: IE, K, A, U, D). The analysis presented here raises many doubts. In HS we have only an isolated Arabic form. The dialectal Georg. *čχar-* ‘hoarfrost’ may have a NC source: cf. NC **čowqī* ‘drizzle, rain; snow-storm, cold’ (or else Nakh **tχir-* ‘hoarfrost’). The Altaic form given probably has the original meaning ‘crust, hard cover’: besides the Turk. and Mong. forms presented cf. Ewk. *čerī* ‘excrescence (on birch bark)’ < Alt. **čʿera*. This all rather favours the original etymology of Illich-Svitych, who compared the Altaic form with IE **sker-* ‘crust, hard cover’, Ural. **ćarV* ‘film; to harden’, Drav. **carV-* ‘coarse, brushy’ and Kartv. (Chan.) *cara* ‘hard earth’, reconstructing PN **ĆarV* ‘hard crust’ (see [ОСНЯ: I, 205]).

SC: NC **c̱ħārV* ‘skin, shell’, PY **tər-ap-* ‘crust’. See [NSC: 52] (NC, ST, Y).

[10] **ķir(u)qa* ‘ice, hoar-frost, to freeze’ (5: HS, K, IE, U, A). See [ОСНЯ: I, 353] (HS, IE, U, A).

SC: NC **=irḠwVr* ‘to freeze, get cold’; ST **kră-ŋ* / **kră-k* ‘cold’ (NC, ST).

[11] **Sah(i)bV* ‘saline earth, desert’ (2: D, U). HS: an Arabic-East Cush. match with irregular correspondences. A: Turk. **saj* (not **sāj*) actually goes back to PA **sajV* ‘stony or shallow place’ (besides Turk., cf. also Mong. *sajir* ‘stony riverbed, pebbles’, PTM **saj-* ‘sandbank’ and OJap *se* ‘shallow place’), and cannot be compared with forms containing *-b-*. We are left with the comparison of Drav. **cava* ‘brackish/saline earth’ and Uralic **ś/ŝojwa* ‘clay’ — which actually reflects a different Nostratic root (**śab[ʔ]V* ‘soil, clay’, quoted ibid.).

[12] **tälwA* ‘cold season, rain’ (3: IE?, U, A). IE **del-* is somewhat dubious (a not quite secure Armeno-Celtic isogloss). A: **tōlu* (besides Turk. **dōlu* [not **tolu*] one could also compare OJap. *turara* ‘icicle’).

[13] **yamV* ‘water body’ (3: HS, U, D). Illich-Svitych compares also Drav. (North Drav.) **am-* ‘water’, which seems quite plausible. See [ОСНЯ: I, 279] (HS, U, D).

[14] **moRE* ʻwater bodyʼ (5: HS, D, IE, K, A). The root actually means ʻwater, moistureʼ. HS: the distinction of HS **mar-* ʻdrop, rainʼ and **mir-* ʻriverʼ [HSED] is hardly plausible — the two roots are perfectly well unitable. D: **maẓai-* ʻrain, cloudʼ. K: besides Megr. ʻlakeʼ cf. Svan. *mare* ʻcloudʼ. A: **mŭ̄ri* ʻwaterʼ (besides Mong. forms, certainly MKor. *mɨr* ʻwaterʼ, OJap. *mi-du* and PTM **mū*). Such was the analysis of Illich-Svitych, and I see hardly any reason to modify it. See [ОСНЯ: II, 60] (HS, D, IE, K, A).

SC: NC **mărʎĂ* ʻcloud, rain cloudʼ; Y **pVr* (< **mVr*) ʻcloudʼ; ST **mrə̆w* ʻfog, mistʼ (earlier I compared ST **mūk*, but this has different Caucasian parallels). See [NSC: 59] (NC, Y, ST).

[15] **qaRp/ṗV* ʻto harvestʼ (1: A). HS: only Semitic. IE: only Hittite (possibly < Sem.?). Corrections for PA **arpʿa* ʻbarleyʼ: for Turk. **arpa*, Mong. **arbaj* cf OJap. *apa*; Manchu *arfa* is most probably borrowed from Mong.

[16] **ʒükV* ʻedible cerealsʼ (1: U). HS: only Arabic; the Eg. word is usually given a different etymology (Berb. **sVk-* ʻplough, tillʼ etc.).

[17] **GalV* ʻcerealsʼ (1: K?). HS: only Arabic. IE: Greek ἄλις is usually derived from ἀλέω ʻto grindʼ, the relationship of which to Hitt. *ḫalki-* ʻgrain, cropsʼ is not at all clear.

[18] **χänṭV* ʻkernel, grainʼ (3: HS, IE, D).

SC: NC **ħwăṭi* ʻa cereal; flour, doughʼ; ST **wāt* ʻgrass roots; flowerʼ (NC, ST).

[19] **mälge* ʻbreastʼ (3: IE, HS, U). See [ОСНЯ: II, 57] (IE, HS, U).

SC: NC **nħĕʎV* ʻmilkʼ. See [NSC: 59] (NC).

[20] **ħalbV* ʻwhiteʼ (3: HS, IE, D).

[21] **mayʒ̂V* ʻtasty beverageʼ (4: U, IE, D, A). HS: only East Cushitic. A: besides Turk. **bal* ʻhoneyʼ cf. TM **mala* ʻsesame oilʼ. K: Laz *mža* ʻmilkʼ is not quite clear (it is usually considered to be derived from PK **(s)ʒe-*, but Manaster-Ramer reconstructs the PK form as **mlʒe*, deriving it rather from PN **mälge*, see above). Note that Dolgopolsky excludes from the comparison the traditionally linked Drav. **maṭṭ-* ʻhoney, sweet juiceʼ (to compare it with IE **medhu*, see below) — although it belongs here quite plausibly. See [ОСНЯ: II, 38] (U, IE, D, A).

SC: NC **mĭʒ:V* ʻsweetʼ, **hwmĭʒ:ū* ʻhoneyʼ (probably borrowed in IE as **medhu*). ST: OC *mit* ʻhoneyʼ is usually regarded as an Indo-Europeanism, although it may as well be genuine. (NC, ST?).

[22] **ḳadV* ʻto wicker, wattleʼ (4: K, HS, IE, D). A: the basic meaning of the Turk. root **kat-* is rather ʻto mixʼ, and it goes back, together with Mong. *qudqu-* and OJap. *kata-*, to Alt. **katʿV* (**kʿ-*) ʻto mixʼ). See [ОСНЯ: I, 316] (K, HS, IE, D).

SC: NC **ḳwăd̆V* ʻa big vessel, jar', **kŭ̆dwV* ʻbasket, receptacle', ST **k(h)ŏt* ʻa k. of basket' (NC, ST).

[23] **ḳoʔć|cV* ʻbasket' (6: HS, IE, K, U, D, A). A: Besides Tung. forms, cf. also Turk. **Kača* ʻa k. of vessel' < Alt. **kʻačʻV*. See [ОСНЯ: I, 365] (with much less evidence: HS, IE, U).

SC: NC **q̇HečwV* ʻa k. of vessel, jar' (cf. also **q̇weč̣V* ʻwineskin, leather sack' and **q̇wɨ̄cVrV* id.); Y **(x)ɘ̄ʒ̄* ʻvessel made of birch bark' (NC, Y).

[24] **ṗ|pat[a]* ʻbasket, box' (3: IE, U, D). HS: only Akk. See [МССНЯ: 366] (IE, U, D).

SC: NC **pħăṭ̣V* ʻa k. of vessel', ST **Put* ʻbasket'. See [NSC: 60] (NC, ST).

[25] **ʕ|ɣarḲ[u]* ʻsinew' (3: IE, D, K). Here Dolgopolsky modifies the traditional etymology, within which IE **ark^{w}-* ʻbow, curve' was compared with PK **ɣreḳ(w)-* ʻto bend, bow' (see [ОСНЯ: I, 240]: K, IE). While the addition of Drav. **eŕVt-* ʻbow' may be plausible (if **eŕVt-* < **erkVt-*), Alt. **arkʻa* ʻto bind, rope', as well as the isolated Sem. (only Arabic) *ʕirq-* ʻroot, sinew' probably have nothing in common with the other forms.

SC: cf. NC **=ig(w)Vr* (or **=irg(w)V-r*) ʻto bend, fold'; ST **kuar* ʻbent, crooked'; PY **kər* (~ *-l-*) ʻcrooked, bent'. See [NSC: 53] (NC, ST, Y).

[26] **yaŋ[y]V* ʻsinew, tendon' (1: U). HS: only an isolated Eg. form. The reconstruction relies on a dubious match of Turk. **jāń* ʻbow' with Ural. **jäntä* ʻsinew, tendon' or **joŋ(k)se* ʻbow'. The two Uralic forms are hardly related to each other (the former being derived from **jäntV-* ʻto stretch, strain', and compared by Illich-Svitych with Drav. **ēnt-* ʻto stretch (arms)', Turk. **jēt-* ʻto lead, pull', see [ОСНЯ: I, 147]). The match between **joŋ(k)se* and Turk. **jāń* is hardly more reliable: the Turkic form goes fairly well with Tung. **ǯeje-n* ʻsharp point' and OJap. *ja* ʻarrow' < Alt. **ǯēja*.

[27] **łoŋḲa* ʻto bend' (3: IE, U, D?). HS: only Hausa-Eg. with irregular correspondence. A: only TM (the Mong. parallel *toŋga-* given by Illich-Svitych is dubious). Illich-Svitych draws here also Drav. **toŋk-* ʻto bow, bend; dangle', which is possible if the correspondence **ł-* = Drav. **t-* is justified. See [ОСНЯ: II, 27] (IE, U, D, A).

[28] **ńoɣ|ʕlE* ʻsinew, to tie together' (1: U). HS: only Sem., with the meaning ʻshoe, sandal; (shoe) strap', thus hardly comparable with Ural. **ńōle* ʻarrow'. A: an isolated Ewk. form.

[29] **p|ṗešqE* ʻspear' (2: HS, U).

[30] **ṭul(i)[G]V* ʻto spread like a net, catch with a net' (4: K, U, A, D). HS: only Sem. (ʻspread') with a highly dubious Eg. match.

SC: ST **t(h)ol* ʻnet, trap'. See [NSC: 63] (ST).

[31] **goki* ʻtrack' (3: HS, U, A). See [ОСНЯ: I, 309] (U, A).

SC: NC **q̇̄əq̇ə* ʻstreet; canyon'; PY **χɨ̇χ* ʻroad'; PST **kāŋ* id. (NC, Y, ST).

[32] **[d]eʕSV* ‘to follow the tracks’ (1: K). Neither Georg. *ʒi-* ‘search, look for’ nor Georg. *ʒɣ(w)-* / *ʒeχ-* ‘to follow’ can be satisfactorily compared with IE **des-* ‘to find, meet’. Mong. *des* ‘following’ does not have exact parallels in other Altaic languages; it should be perhaps analysed as a suffixal form *de-s-* < **di-se-*, with an early vocalic assimilation, where the root **di-* is the same as in Old Mong. *ǯi-rin* ‘two’ (< Alt. **tiuwa*, reflecting a quite different Nostratic root). HS: a different etymology for Arabic *dʕs-* see in [HSED] (HS **diʕas-* ‘to walk’). The comparison in general is very shaky.

[33] **šubyV* ‘spike, spear, to pierce’ (2: U, A). HS: only Arabic. The comparison of PFU **šuye* ‘spear, spike’ with Mong. *sojuɣa* and Manchu *sujfun* (also *sujχun*, *sojχon*) seems quite probable. Besides the mentioned forms in Altaic cf. Ewk. *čije* ‘needle of a coniferous tree’ (pointing, together with the Manchu form, to PTM **šüje*), Turk. **sojagu* ‘cock's spur; pine needle’, OJap. *soja* ‘arrow’, MKor. *sāi* ‘straw’. However, Georg. *šub* ‘spear’ can hardly belong here, being rather related to Alt. **sūbi* ‘(sharp) edge’.

[34] **ṭaṗV* ‘to hit (the target)’ (4: IE, U, A, D). HS: only Semitic. See [МССНЯ: 356] (IE, U, A, D; different, but also unreliable HS reflexes).

SC: ST **tūp* ‘answer, correspond, fit’, Y **tVPV* ‘hear, perceive’. See [NSC: 63] (ST, Y).

[35] **menṭV* ‘to miss one's aim’ (3: U, IE, A). HS: only West Chadic. I would also add Alt. **umVŋ[t]o* ‘to forget’ (Turk. **umnɨt-*, Mong. *umta-*, TM **omŋa-*), although the initial *u-* is not quite clear; Illich-Svitych provides a different (and less reliable) Altaic parallel, uniting several different Altaic roots. See [ОСНЯ: III, 52] (U, IE, A, HS).

[36] **gurHa* ‘antelope’ (3: HS, A, IE, D). A: Dolgopolsky apparently makes the same division between PN **gurHa* ‘antelope’ and **gʊjrä* ‘wild animal’ as Illich-Svitych ([ОСНЯ: I, 234, 237]: HS, A, IE, D), based on the distinction in Mong. between *gura(n)* ‘a k. of antelope’ and *görüɣe* ‘wild animal’. However, Mong. *gura(n)* means actually ‘roe-buck, male wild goat’ and should be rather compared with PTM **ŋur* ‘male (of small wild animals)’ and probably OTurk. *urɨ* ‘male child, son’< Alt. **ŋurV* (with a regular development **ŋ-* > *g-*). It is thus quite safe to compare MKor. *korani* ‘deer’ with Mong. *görüɣe* ‘wild animal’ (cf. perhaps also PTM **gur-ma* / **gur-na* ‘hare; squirrel’) and reconstruct Alt. **gurI* (~ **gorI*) ‘deer, wild animal’ — which can be very satisfactorily compared with IE **ĝhwēr-* ‘wild animal’ and Drav. **kūr-* ‘deer, antelope’ < PN **gujrV*.

SC: ST **khij* ‘barking deer’, Y **gəʔj* ‘deer, game’. See [NSC: 53] (ST, Y).

[37] **ʔEl|ɬi* ‘deer’ (4: IE, A, K, D). HS: only Semitic. U: only Yukagir. See [ОСНЯ: I, 272–273] (IE, A, K, D).

SC: ST **lă* 'musk-deer'. See [NSC: 54] (ST).

[38] **boča* 'young deer' (2: K, U). A: The Tungus forms cited (Neg. *bočan*, Ulcha *bočan* etc.) actually go back to Manchu **bugu-čan* (*bučin*), with **bugu* (also attested in Manchu as *buɣu*, *buχu*) being most probably borrowed from Mong. *buɣu* 'deer, aurochs'. HS: only Arabic with a very unsecure East Chadic (Lele) parallel.

[39] **buḴa* 'bovine(s)' (1: A). Despite superficial resemblance, IE **bŭk-* 'bull' (if such a form really existed, which is doubted by many scholars) can hardly be compared with Turk. **būka* 'bull' (certainly borrowed in Mong. as *buqa*). The latter is quite plausibly explained from Alt. **mūkʿu* 'male' (whence also Mong. **mok-* 'one- or two-year-old deer; penis'; PTM **muka-* / **muke-* 'male; man'; OJap. *mukwo* 'bridegroom').

SC: Altaic **mūkʿu* 'male, young man' can be perhaps compared with: NC **mVχ̲wa* 'fiancé, son-in-law', ST **māk* 'son-in-law', Y **-mVχV* / **pVχV* 'nephew' (NC, ST, Y).

[40] **čoma* 'aurochs, wild bovine' (2: D, K).

SC: NC **c̱imV* 'goat' (NC).

[41] **č[a]w(V)RV* 'bull, calf' (2: IE, A). HS: only Semitic.

[42] **ɣ|GawV* 'wild sheep/goats' (2: IE, HS). Dolgopolsky compares Turk. **āb* 'wild game, hunt' with Mong. *aba* 'chase, hunt' (quite correctly); however, he adds TM **abdu(n)* 'cattle, flock' which actually means 'herd (of deer or horses)' and is quite transparently related to Mong. *aduɣu(n)* 'herd (of horses); horse', and further — to Turk. **at* 'horse' < Alt. **at-bu(n)* 'herd, horse herd'. The actual TM parallel for Turk. **āb* and Mong. **aba* 'hunt, chase' is TM **wā-* 'to hunt, kill' (where the quite exceptional initial **w-* points to a vowel reduction: **wā-* < **awā-*) < Alt. **āba* (**āwa*) 'hunt, kill' — most probably related to IE **əwā-* 'to wound, hurt'.

SC: Y **χ̄j* 'deer', ST **ɣŭ* 'deer, sheep' (ST, Y).

[43] **diq̇a* 'goat' (2: K?, HS). Irregular phonology and distribution in IE may suggest a loan: the source, both for Kartv. and IE, could be EC **dV(r)q̇wV* 'goat'.

SC: NC **dV(r)q̇wV* 'goat'; ST: OC **dhək* 'male animal, bull' (NC, ST).

[44] **k[ä]ćV* 'wild goat' (2: K?, HS). A: only Turk. **geči* 'goat'.

SC: NC **k̲ĭʒ̆V* / **ʒ:ĭkV̆* (~ *-ă̆-*) 'goat, kid' (NC).

[45] **bukEɣ|ʕV* 'billy goat, ram' (2: HS, A). For Alt. **pʊkV* should be reconstructed (besides Turk. **bugu* and Mong. **bugu* cf. also Ewk. *heglen*, *hewlen* 'young of elk').

[46] **ʕVṗVrV* 'wild boar' (1: IE). HS: only Arabic.

SC: ? Cf. OC **prā* 'pig'.

[47] **ʕir[i]* '(male, young) artiodactyl' (3: K, IE, D). HS: only Semitic.

SC: ST **ra* ‘goat’ (ST).

[48] **ṗoḴü* ‘pack, wild cattle’ (2: IE, A). HS: only one East Chadic language (Ndam). See [ОСНЯ: III, 126] (IE, A, HS?).

[49] **gadi* ‘kid, young goat’ (3: HS, IE, D).

[50] **buyẑV* ‘fur-bearing animal’ (4: IE, U, A, D).

SC: NC **bħěrçĭ* ‘wolf, jackal’; ST: OC **prāts* ‘a mythical predatory animal’ (?); Y **pes-tap* ‘glutton, wolverine’ (NC, Y).

[51] **ʔ|hUrV* ‘squirrel or a similar animal’ (3: IE, U, D, A). HS: only a very unsecure Akk. form. A: from Alt. I would add **Uri-kʹV* ‘ground-squirrel’ (Turk. **örke*, TM **urike*).

SC: ST **ru* (~ *-iw*) ‘a k. of small animal (flying squirrel, bamboo rat)’ (ST).

[52] **ḳun|ńV* ‘small carnivore’ (4: K, IE, HS, A). See [МССНЯ: 346] (IE, A, K).

SC: NC **ħą̇wānā* (~ **ħnāą̇wā*) ‘mouse, rat’; Y **kūń* (~ *g-*) ‘wolverine’ (NC, Y).

[53] **diḳV* ‘eatable cereals or fruit’ (2: K?, D). HS: only Berber with a questionable Eg. parallel. Altaic **diK-ktä* ‘eatable berries’ does not exist: Tungus forms like Ewk. *ǯikte* etc. are most probably borrowed from Mong. *ǯedege(ne)* ‘berry’, the latter being itself borrowed from Turk. **jigde* — for which genuine matches are Mong. *ǯeɣe-rgene* ‘a k. of berry’ and TM **ǯüksi(-kte)* ‘blueberry’.

SC: NC **diḳwi* ‘a k. of cereal (millet, rice)’ (NC).

[54] **ʒ/ʑugbV* ‘a k. of fig tree’ (3: HS, D, A). I would add here Alt. **ǯiugV* ‘berry’ (see under **diḳV*).

SC: NC **ǯăgV* ‘a k. of berry (cherry, raspberry)’ (NC).

[55] **b[i]ŕ[uw]ą̇a* ‘a k. of eatable fruit’ (3: K, IE, D). HS: only a very dubious Arabic form.

SC: NC **pĭrą̇wĂ* ‘a k. of fruit’; ST **phrŭŋ* (/ **phrŭm*) ‘grain; fruit’ (NC, ST).

[56] **ḲuSV* ‘nut’ (2: IE, A). The match looks fine, but IE **k-* (instead of the expected **g^{w}-*) is not quite clear. [Note that Dolgopolsky confuses two Altaic roots here: Turk. **Kusik* ‘nut’, Mong. **kusi-gan* ‘nut’, TM **koši-kta* ‘nut’ (also OJap. *kusi* ‘a k. of nut’) < Alt. **kušu*, and Mong. *kusi* ‘cedar, thuja’, TM **xusi-kta* ‘acorn, oak-tree’, OJap. *kasi* ‘*Quercus acuta*’ < Alt. **kʹusa* ‘a k. of tree, oak-tree’].

[57] **LVǯV* ‘a k. of nut’ (2: K, IE). HS: only Semitic.

[58] **buṭV* ‘pistachio’ (0). HS: only Semitic. A: only Turk., with an unclear variation of **butur-gak* ‘a thorn tree’ and **bitrik* ‘pistachio nut’.

[59] **mar(y)V* ‘berries’ (4: IE, K, U, A). A: instead of Azer. *müri* ‘strawberry’ — which is borrowed from Lezghian — one should cite Turk. **bürü-lgen* ‘a k. of berry’. See [ОСНЯ: II, 43] (IE, K, U, A).

SC: NC **mer(ʔ)V* ‘a k. of berry’; Y **barɪɨn* ‘bird-cherry’. See [NSC: 59] (NC).

[60] **m[o](y)ẑV* ‘a k. of berry’ (2: U, A). HS: only a very unsecure Arabic parallel. Alt.: besides TM **mile-kte*, cf. also Turk. **beleĺ* ‘ashberry’. IE: **māl-* ‘apple’ more probably = **(a)mas-l-* and hardly belongs here.

SC: NC **ʕwmārc̣ŏ* ‘rowan, a k. of berry’; Y **puʔs* ‘bilberry’ (NC, Y).

[61] **ĶERV* ‘fruit of a leguminous plant’ (2: HS, IE).

SC: NC **qŏrʔā* (~ *-rɦ-*) ‘pea(s)’ (NC).

[62] **m[u]rḳV* ‘root, sinew’ (3: K, IE, D). HS: only East Cushitic. A: Ewk. *muŋi* ‘tendon’ hardly belongs here, being related to Turk. **büŋüŕ* ‘horn’, Mong. *möɣe(r)-sün* ‘cartilage, gristle’ and MKor. *(nis)-mɨi(ŋ)im* ‘gums’ < Alt. **mujŋe* ‘horn, cartilage, tendon’).

SC: NC **mĭrqwă* ‘root’; ST **mrēk* ‘vein, root’ (NC, ST).

[63] **mol|ɬV* ‘to pound, smash, gnaw’ (3: IE, U, A). HS: only Semitic. Alt.: Alt. **muĺe* (besides Mong. *mölǯi-* ‘to gnaw into pieces’ cf. also Manchu *muĺa-* ‘to swallow’, *muĺan* ‘jaw’, MKor. *mɨr-* ‘to bite’, OJap. *musir-* ‘to pluck out, pick out’). See [ОСНЯ: II, 69] (IE, U, A, HS).

SC: ST **mjal* ‘cut into little pieces’. See [NSC: 59] (ST).

[64] **ʔäPHi* ‘to bake’ (4: HS, A, D, IE?). Alt. **epʹe* (besides Turk. **ep-mek* ‘bread’ cf. also TM **epe-* ‘cake’, OJap. *opo-mono* ‘food’).

SC: NC **=Hēwχ̌V(n)* ‘to bake, warm’; ST **kăŋ* ‘to roast’; PY **(h)əqan* ‘to boil’ (NC, ST, Y).

[65] **qUbźV* ‘food made of ground cereals’ (1: K). HS: only Semitic. Kartv. **qweza-* ‘loaf’ can hardly be compared with TM **upa* ‘flour’ — especially since the latter goes back to Alt. **opʹV* ‘powder’ (whence also Turk. **opa* ‘white powder, white lead’, Mong. *oɣo* ‘white lead’).

[66] **[ʔ]omśa* ‘meat’ (4: U, IE, HS, D). HS: the evidence can be perhaps strengthened if we take into account Cush. **HVmS-* / **HmVS-* ‘cow’ (Illich-Svitych). D: Dolgopolsky does not list Drav. **ūñ(c)-* ‘meat’, compared by Illich-Svitych. See [ОСНЯ: I, 252] (U, IE, HS, D).

SC: NC **jəmcō* ‘bull, ox’; ST **chŭ* (~ *-o*, *-ăw*) ‘cow, bull’; PY **ʔise* ‘meat’. See [NSC: 54] (NC, ST, Y).

[67] **q̇[u]ʒV* ‘intestines’ (3: K, IE, D).

SC: NC **ḳ̡wĭc̣Ĕ* / **c̡ĭḳ̡wĔ* ‘spleen; intestines’ (also **q̡wič̡V* / **č̡iq̡wV* (~ *-ä-*)); Y **kic* (~ *g-*, *-č*) ‘meat, carcass’ (NC, Y).

[68] **ʔayŋo* ‘marrow, brain’ (2: HS, U). Here PIE **ong^{w}-* ‘to smear’ is compared with Ural. **ajŋe* ‘brain, marrow’ (?), and, even less convincingly, with Turk. **eŋ* ‘cheek’ (for the latter cf. also Manchu *eŋge* ‘beak’ < Alt. **eŋgV*). I think, however, that the match between HS **Hang^{w}-* ‘brain’ and Ural. **ajŋe* (**ajŋo*) id. is quite acceptable.

[69] **mag(i)za* ‘liver’ (2: HS, U). HS **mayz-* presupposes rather Nostr. **mayzV* (Ural. **maksa* < **mas-k(s)a*?).

SC: NC **wĕmc̣Ŭ* (~ *-ŏ-*) ‘liver, spleen’ (NC).

[70] **ń[a]Ḳu* ‘soft parts of the animal's body’ (2: IE, U). HS: only Arabic. Altaic: only Old Turkic.

SC: NC **hwnĕrq̇ŭ* ‘meat soup’; ST **nuk* ‘meat; roe’ (NC?, ST?).

[71] **muńa* ‘egg’ (3: U, D, A). HS: an isolated Musgu form. IE: only Slavic. In Alt. we can compare **mVŋe* / **ŋVme* ‘testicle’ (TM **ŋāma* / **māŋa*, Mong. *nim* / *im* ‘testicle’). See [ОСНЯ: II, 72] (U, D, HS, IE).

[72] **ʔ[a|o]ħ|χi* ‘egg’ (1: IE). HS: only a dialectal Arabic form. The Old Japanese *u* ‘egg’, cited according to my own personal communication in 1976, is unfortunately a misunderstanding: I must have confused the character for ‘egg’ with a similar character used for the 4th cyclic sign of the 12-sign cycle, ‘hare’ (actually *u* is an artificially shortened form of OJap. *usagi* ‘hare’). Therefore the traditional etymology, deriving IE **ōwio-* from **əwi-* ‘bird’ seems preferable (the latter, in fact, has a very good match in Alt. **āwi* ‘a k. of water-bird’).

[73] **Ḳolv* ‘large fish’ (6: HS, U, A, IE, D, K). Alt. **kʿula* (Kor.-Jap. **kurV-ra* ‘whale’ also belongs here). K: Illich-Svitych compares also Svan *ḳalmax-* ‘fish’. See [МССНЯ: 362] (HS, U, A, IE, K).

SC: Y **kol(a)* ‘a k. of big fish (eel, sterlet)’ (Y).

[74] **doTgiHu* ‘fish’ (3: IE, U, A). HS: only Semitic. See [ОСНЯ: I, 219] (IE, HS, A).

SC: Y **təʔG* ‘perch’ (Y).

[75] **mEn|ńi* ‘a k. of fish’ (3: IE, D, U?, A). I would also add Alt. **mańu-kV* ‘a k. of fish’ (reflected in Turk. Yak. *majaɣas* ‘white-fish’, Mong. *munig*, *man-šag* ‘different sp. of fish’, TM **māń-gu*, **mań-ma* id., MKor. *məijuki* ‘trout’, OJap. *munagi* ‘eel’).

SC: ST **mă̆n* ‘eel; shark’; Y **boŋ-* ‘herring’ (ST, Y).

[76] **p|ṗayV* ‘a k. of fish’ (2: U?, D?). I would prefer to regard IE **peisk-* as a borrowing from North Caucasian **bV̄s̱wA* ‘fish’.

[77] **ṭüRV* ‘hard-roe’ (2: U, A).

[78] **[ḳ]ür(w)V* ‘hard-roe, span’ (1: IE). The Alt. forms here are questionable: Azer. *kürü* ‘hard-roe’ is quite isolated within Turkic and most probably has a Lezghian source: cf. Lezgh., Tab. *kür* id. < PL **k^{w}ir*. A good West Caucasian match is Abkh. *a-k^{w}ər-t* (presupposing NC **k^{w}irV*), which is no doubt the source of Georg. *kvirita*. We are left thus only with a not quite clear parallel between IE **krek-* ‘fish eggs’ and Alt. **kʿiurpe* ‘young (of animal, fish)’ (besides the cited TM **xürbe-* ‘spawn’ cf. Turk. **körpe* ‘newborn; newborn lamb’; Mong. *körbe* id.).

[79] **madu* ‘honey’ (0). HS: only Omotic, with a quite obscure second consonant. Otherwise IE **medhu* ‘honey’ is compared with Drav. **maṭṭ-* — the latter, however, can be quite plausibly derived from **mayʒV* q. v. A very probable source for the isolated IE **medhu* is NC **hwmĭʒ:ū* ‘honey’ (derived from the adjective **mĭʒ:V* ‘sweet’).

[80] **č̣[ü]rV* ‘flint-stone, knife’ (3: HS, A, D). Alt. **čʿiora*: besides Tungus forms cf. Turk. **čar* ‘whetstone’.

SC: ST **ćVr(H)* (~ *ʒ́-*) ‘hoe, pick-axe’ (ST).

[81] **buRV* ‘flint, cut/carve with a flint’ (4: HS, A, IE, D). Although Dolgopolsky places a question mark here, the root seems rather reliable — although it tends to contaminate with PN **pʿurV* ‘to dig, hole’ (the two roots are also confused by Illich-Svitych in his **bura* ‘to bore’ [ОСНЯ: I, 186–187]). In Altaic, besides TM **burV* ‘flint’, we have Ewk. *burbe-* ‘to pierce, bore through’, Turk. **buragu* ‘drill’, Mong. *burgui* ‘wire (for cleaning pipes)’, OJap. *por-* ‘to bore, engrave’ < Alt. **burV*. This root can be quite plausibly compared with IE **bherə-* ‘to cut with a sharp instrument’, Ural. **pura* ‘drill, to drill’ and Drav. **pōẓ-* ‘to split, chisel, bore’.

[82] **ti|e(ʔa)Ílo* ‘stone’ (3: A, K, D). HS: only Semitic. Cf. [МССНЯ: 343] (A, K).

SC: NC **ʎ̣ăłŭ* ‘stone’. See [NSC: 63] (NC).

[83] **kiw(V)ħE* ‘stone’ (3: HS?, K, U). Cf. [ОСНЯ: I, 298] (HS, K, U).

SC: NC **ʔăwqV* ‘mountain slope’; ST **khʷɨ* ‘hill, mound’; Y **qäiʔj* ‘mountain’ (NC, ST, Y).

[84] **boruʕ|ɣV* ‘trunk, log’ (3: IE, U, D). HS: only Semitic, with the meaning ‘reed’, hardly corresponding to ‘log, board’ in other languages. See [МССНЯ: 332] (IE, U).

[85] **ć̣UłV* ‘stalk, stick’ (4: K, HS, U, D). A: only an isolated Tung. (Solon) form.

SC: NC **č̣ħwɬū* (~ *-ʕ-*) ‘beam, girder’; ST **ćeł* ‘a k. of bamboo (used for arrows)’ (NC, ST).

[86] **ķožʕV* ‘tree trunk’ (2: HS, K). A: only an isolated Mong. form which may be actually derived from *qožɨ-(ɣa)-* ‘to be naked, bald’: ‘the bared part of tree’).

[87] **kańV(-bV)* (4: IE, HS, D, U, A). There must be at least 3 different roots here: a) IE **gen(ə)bh-* ‘peg, stalk’ : Drav. **kāmp-* ‘stem, stalk’; b) HS **kann-* : Drav. **kańń-*; c) Ural. **kanta* ‘ground, base’, for which cf. Alt. **kentʿa* ‘floor, threshhold’.

SC: NC **ħq̇wĭnV̆* ‘nail, peg’; Y **(x)īń-* ‘nail, finger-nail’; ST **kūŋ* ‘plant, branch’ (NC, Y, ST).

[88] **ǯuRV* ‘pole, long piece of wood’ (3: HS, IE, K). A: Mong. *ǯoruɣa* ‘arrow with a horn head’ can not be parted from Alt. **ńöra* ‘blade, edge’ (whence, e. g. TM **ńuru* ‘arrow’) and thus does not belong here.

[89]: **ʒ̑irɣu|ü* ‘vein, sinew’ (4: K, IE?, A, D). HS: only a very unsecure Cush. (Iraqw) form. Illich-Svitych had also added Drav. **cīr-* ‘root’, and I see no reason to separate it from the etymology. Cf. [МССНЯ: 341] (IE, A, D; Illich-Svitych also lists Ural. and HS forms which are — probably correctly — moved by Dolgopolsky to a different Nostratic root).

SC: NC **rʔēć:wV̆* / **ć:wVrʔV* ‘string, bow-string’; ST **sVr* ‘thread’ (NC, ST).

[90] **ʔeẑekU* ‘thorn, hook?’ (1: A). Here Alt. **ə̄lke* ‘hang on a hook’ is compared with HS **ŝikk-* ‘thorn, pin, tooth’ — a very dubious comparison.

[91] **ḳ[a]k(w)V* ‘tooth, fang, hook’ (5: K, IE, U, A, D). HS: only Semitic. A: Dolgopolsky compares Tung. **xūkte* ‘tooth’, but this goes back to Alt. **kʻiūkʻi* ‘tooth; root’, and perhaps a better match would be Common Altaic **gekʻo* ‘hook’.

SC: ST **kŭk* ‘bend’, **khjŏk* ‘bend, crooked’ (ST).

[92] **toŕV* ‘bark’ (1: A). HS: only Chadic. IE: **der-* goes back to PN **teri* ‘to tear, burst’. The Altaic form alone is insufficient for reconstructing a special PN root.

[93] **Ḳa[pʔ|ʕE]* ‘bark’ (4: HS, U, A, K). Cf. [МССНЯ: 344] (A, U, with a different Kartv. parallel — quite correctly transferred by Dolgopolsky to a different root, **ṭo(w)q̇a*).

[94] **Ḳ̇ayerV* ‘bark, film’ (4: A, I, K?, U). K: Kartv. **kerk-* has a somewhat unclear **k-* instead of **ḳ-*: perhaps it would be better to compare Georg. *ḳr-ol-* (cited under **Ḳ̇aĺ[ü]*). U: FU **kōrV* has a different Altaic parallel: **kʻiuru* ‘bark, shell’, and should be regarded as a different root. Cf. [ОСНЯ: I, 341–343] (IE, U, A, K, with addition of Semitic **ḳ̇rm*).

SC: NC **ḳ̇ħəri* (~ *-ʕ-*) ‘bark, skin’; ST **khrāw* (~ *gh-*, *qh-*, *Gh-*) ‘shell, bark’ (NC, ST).

[95] **ṭo(w)q̇a* ‘hide, skin’ (5: K, IE, U, A, D). HS: only Chadic. A: **tʻukʻi* (the PTM form is not **tiki-*, but **tüki-*, cf. besides the cited forms Manchu *tuku* ‘fur-coat cover’; cf. further Turk. **tük* / **tüg* ‘fur, hair (on body)’, Mong. *toqum* ‘cover of saddle, saddle blanket’).

[96] **ṭal(u)ya* ‘skin, fell’ (3: U, D, A). HS: only Chadic. A: besides TM **talu* ‘birch bark’ cf. Turk. **tul-gak* (**tol-gak*) ‘bared skin; leather sack’, perhaps also Mong. *tulum* id. < Alt. **tʻalo*.

SC: ST **[t]aɬH* ‘membrane, pellicle’ (ST).

[97] **Ḳ̇aĺ[ü]* ‘skin, film, bark’ (4: IE, U, A, D). Cf. a somewhat different analysis in [ОСНЯ: I, 289], where this root is confused with **kaĺV* ‘bare,

naked'; however, Drav. **kaḷ-* 'to skin' should still be kept here (it cannot be regarded as a reflex of **Ḳoẑ́V* 'to peel, skin').

SC: NC **q̇wăłV* 'bark, crust' (NC).

[98] **ḳoRuṗV* 'bark, skin' (2: HS, IE). A: only Mongolian (and rather dubious semantically).

SC: NC **qārṗV* / **ṗārqV* 'fur-coat'; ST **qruap* 'scale, shell' (NC, ST).

[99] **Ḳoẑ́V* 'to skin' (2: U, A). HS: only Arabic. A: **kˈUĺV* 'bark, scales' (besides the cited Mong. form *qoltu-* 'bark; peel off' cf. also TM **xolda-ksa* 'bark; board' and possibly Turk. (Osm.) *kuš* 'a hairless spot (on horse's skin)'.

[100] **ḲVRVHṗ|pV* 'piece of leather' (2: IE, D). HS: only Chadic (with an irregular initial consonant). One wonders if this is not in fact the same root as [98] **ḳoRuṗV*.

[101] **ṗiχ|γyA* 'sharp bone, sharp tool' (5: K, IE, U, A, HS?). A: Alt. **pˈegV* 'to cut, mow, tear' (besides Manchu *fe-* 'mow' cf. also the TM derivative **pegde-* 'to tear, tear off'). Cf. [МССНЯ: 352–353] (K, IE, U, A).

SC: ST **ph(j)ăj* 'to divide, split' (ST).

[102] **pišV* 'bile' (3: IE, U, D). Cf. [МССНЯ: 340] (IE, U).

[103] **[ṭ]äχl|ła* 'spleen' (2: A, K). HS: only Semitic. A: Alt. **tiāle* (besides the forms cited, cf. also TM **dilba* 'diaphragm' and Kor. *čira*, *čirä* 'spleen').

SC: NC **HłälV* (/ **HläłV*) 'liver' (NC).

[104]: **l[ä|e]ṗA* 'spleen' (4: HS, U, A, IE). The somewhat feeble match of Ural. **läppV* (or **leppV*) 'spleen' with the isolated Orok word *lipče* 'spleen' can perhaps be strengthened. In Altaic cf. also Mong. *naɣalta*, *niɣalta*, Khalkha *nālt* 'spleen', allowing, together with the Orok form, to reconstruct **lipˈa* (or **liapˈa*) 'spleen'. Cf. also the isolated Germanic **libara-* 'liver' and Armenian *leard* id. (which are very hard to trace back to Common IE **i̯ekʷr-*). See [ОСНЯ: II, 17] (HS, U, IE).

[105] **ṭeqmE* 'sinciput, crown of head' (3: K, A). IE: only Slavic. HS: a very disputable comparison of Arabic *ʔaṭχam-* 'anterioris pars nasi' with Awngi *dūmī* 'top' and Oromo *ḍuma* 'end'. A: Alt. **tˈúmu* (Mong. *teme-sü* 'edges of a net' hardly belongs here, though; one should rather compare Tung. **tumŋu-* 'sinciput' with Turk. **tumak* 'hat', Mong. *tomi-la-* 'chief', *tumur-liɣ* 'hat', OJap. *tumuri*, *tuburi* 'head, top').

[106] **[g]edi* 'occiput, hind part' (4: A, IE, K, HS). A: Alt. **gedi* (cf. also OJap. *kita* 'North'). Cf. also IE **ĝhed-* 'behind, hind part' (traditionally compared, but for some reason omitted by Dolgopolsky). See [МССНЯ: 342; ОСНЯ: I, 227–228] (A, IE, K, HS).

[107] **Go|atḲE* 'popliteal space, armpit' (2: A, IE). HS: only Semitic, with a quite irregular Eg. parallel. The Altaic and IE forms point rather to **Ho|aḲE*.

[108] **ńiĶa* ‘jugular vertebra, nape’ (3: IE, U, A). Cf. [МССНЯ: 355; ОСНЯ: II, 92] (IE, U, A).

SC: NC **nVqV* ‘behind’; ST **nŏk* ‘cervical vertebra; back’. See [NSC: 60] (NC, ST).

[109] **kälu|ü* ‘a woman of the other moiety’ (5: K, IE, U, A, D). HS: only Semitic. Cf. [ОСНЯ: I, 295–296] (K, IE, U, A, D, HS).

[110] **küda* ‘a man of the other moiety’ (3: U, A, K). Cf. [ОСНЯ: I, 302–304] (U, A, K).

[111] **śeʒA* ‘a relative of the other moiety’ (2: K, U). HS: only East Cushitic, with a dubious Eg. parallel.

SC: Cf. Proto-Lezghian **siq̲̌V* ‘relative-in-law’.

[112] **[ħ|χV]wäń|nV* ‘relative of the other moiety’ (2: U, D). HS: only Egyptian. A: TM **bene-* ‘wife's sibling’ can hardly belong here — both because initial **b-* is unclear (Nostr. **w-* normally yields Alt. **Ø-*) and because TM **bener* very probably goes back to **bere-n*, cf. Mong. *beri*, *ber-gen*.

[113] **n|ńu|üśV* ‘woman of the other moiety’ (2: HS, K?). Besides HS, we are presented with a comparison of Kartv. **nusa* ‘son's wife’ with IE **snuso-* id. (note that Hitt. *nasarti* ‘concubine’ is a transparent loan from Hurrian *našardə* and does not reflect IE **snuso-*). However, the IE form is much better explained as a loanword from North Caucasian: cf. NC **nŭsA* id. Borrowing allows also to explain the enigmatic **s-* in IE: cf. forms like Khin. *ṣi-nas* ‘bride, son's wife’ — actually a compound: **ṣă̆n-nusA* lit. ‘new bride’. For Kartvelian the possibility of borrowing from North Caucasian also cannot be ruled out.

SC: NC **nŭsA* (~ *-ŏ-*) ‘daughter-in-law’; ST **nŏ* ‘female relative’ (ST, NC).

[114] **Hić|cχV* ‘father, head of a family’ (3: IE, U, A). HS: only a dubious Geʿez form. IE: **esHo-* ‘master, lord’ (besides Hittite, also Lat. *erus*). In Altaic Dolgopolsky cites dubious forms (Sarı-Yughur *ise* goes back to **edi-si* and Mong. *eǯen* to **edi-n*: the latter form is listed as a reflex of two roots simultaneously, see [115]). There are, however, some forms that can be related to IE **esHo-* and Ural. **ićä*: cf. Turk. **eči* (**ečü*) ‘ancestor, elder relative’, TM **ačV* ‘ancestor; father’.

SC: ST **ćɬH* ‘govern, rule, lord’ (ST).

[115] **ʔediNV* ‘pater familias’ (2: HS, A). The reconstruction is rather **ʔedi* (*-n*, occurring in some Altaic forms, is certainly a frequent nominal suffix).

SC: NC **dājV* / **ʔādājV* ‘father’.

[116] **ʔemA* ‘mother’ (5: HS, U, A, IE, D). Cf. also **mā-* in IE **mā-tēr* id. A “Lallwort”, but no doubt archaic.

SC: ST **məH* ‘mother, woman’; Y **ʔama* ‘mother’ (ST, Y).

[117] **ʔ[ä]yV* ‘mother’ (2: U, D). HS: only Cushitic. IE: only a somewhat dubious Germanic form.

SC: NC **jājV* ‘mother, grandmather’ (NC).

[118] **ʔaba ~ *ʔaṗa* ‘father’ (4: HS, A, IE, D). I would also add **pə-* in IE **pə-tēr*. Certainly a “Lallwort”, but archaic.

SC: NC **ʔŏbV̄(jV)* ‘father’; ST **p(h)aH* ‘father’; Y **ʔob* ‘father’ (NC, ST, Y).

[119] **[ʔ|h]oq̇l|ɬV* ‘child’ (3: K, A, D). HS: only Cushitic. Svan. *q̇law-* ‘child, boy’ should be perhaps compared not with Alt. **uka(lV)* ‘child, son’ (besides Turk. **ogul* ‘son’ cf. also MKor. *àhăi* ‘child’, and possibly Mong. *uɣal-ǯa* ‘male mountain goat’), but with Alt. **kūlV* ‘slave, servant’. A possible Drav. match is D **kūli* ‘hired labourer, servant’.

SC: NC **q̇Vlē* (*~ q̇-, -i*) ‘child, young one’; ST **kʷāɬ* ‘servant’ (NC, ST).

[120] **ʔarV* ‘member of the clan’ (3: HS, IE?, U?). IE **ar-* (**arị̂o-*, cf. perhaps also Hitt. *arawa-* ‘free’) could be regarded as a borrowing from North Caucasian.

SC: NC **ʔwəhri* (*~ -e*) ‘troop, army’; ST **raH* ‘troop, enemy’; Y **(h)ar-* ‘servant; Arin (ethnonum)’ (NC, Y, ST).

[121] **ʔarba* ‘to make magic’ (1: U). HS: only Semitic (and rather dubious semantically). A: only Turkic. Cf. [ОСНЯ: I, 261–262] (U, A, HS).

[122] **ʕ[a]llV* ‘to burn (sacrifices)’ (3: IE, K, U). HS: only Semitic. The Altaic parallels are somewhat unsecure: Turk. **alka-* ‘to bless, sacrifice’ goes back to **pʻiolko*, cf. TM **pulgu-*, Mong. **hörgil* and cannot belong here, while a comparison with Alt. **āli* ‘deceit, cunning’ raises semantic doubts. Cf. [ОСНЯ: I, 276] (IE, K, HS).

[123] **ŝoṭV* ‘to exercise magic force’ (5: HS, U, D, K, A). A: cf. Alt. **sVtV* ‘to curse’ (Turk. **satga-*; Mong. *sadur* ‘treacherous’).

SC: NC **sVrdV* ‘curse, to curse’ (NC).

[124] **tulV* ‘to tell, pronounce magic texts’ (3: HS, IE, U).

SC: ST **tiəlH* ‘scold, rebuke’ (ST).

In the statistics below I shall take into account only those Nostratic roots that are (according to the rules formulated above) represented in more than one Nostratic branch — that is, the roots that we are actually able to call Nostratic. It is clear that Alt. **tōŕV* ‘birch bark’ (under № 92) can have a Nostratic origin, but since IE **der-* compared with it has a different origin (PN **ter[i]* ‘to tear, burst’), and the Hamito-Semitic match for it is only attested in one subbranch (Chadic), the Nostratic etymology as such is rather weak. The number of valid roots among Dolgopolsky's evidence is rather

high — 106 out of 124. Within that subset we have the following distribution of reflexes:

IE	A	U	D	NC	HS	ST	K	Y
63	61	60	56	47	47	46	42	22

The low figures for Kartvelian and Yeniseian are easily explained by the fact that both of the families belong to group I (very small families with insufficient lexical material). Other evidence — basically lexicostatistical and morphological — proves beyond doubt their affiliation with respectively Nostratic and Sino-Caucasian.

Among other families, however, there is a very clear division between Indo-European, Altaic, Uralic and Dravidian, on one hand (with more than 56 reflexes in each family), and North Caucasian, Hamito-Semitic and Sino-Tibetan, on the other hand (with less than 47 reflexes in each family). This does not mean, of course, that North Caucasian and Hamito-Semitic are closer to each other — they are just equally distant from Nostratic proper. The fact that Hamito-Semitic roots are so abundant within Dolgopolsky's material is explained by a — probably unvoluntary — violation of the "rules of the game". The huge amount of Hamito-Semitic languages and, unfortunately, a not very good state of comparative Hamito-Semitic linguistics allows to find matches for almost any root — in some Hamito-Semitic subbranch or even in a single isolated Hamito-Semitic language.

The fact that Proto-Nostratic and Proto-Hamito-Semitic reveal a system of regular phonetic correspondences does not change the situation: regular correspondences are observed between, e. g., Russian and German, although the former belongs to Slavic, and the latter to Germanic. It just suggests a relationship on a deeper taxonomic level.

This statistics, of course, is very preliminary — being based on a very restricted material of A. Dolgopolsky's 124 Nostratic roots. It would be highly desirable to make a large scale investigation on the whole volume of Nostratic etymologies in A. Dolgopolsky's forthcoming (and long awaited) Nostratic Etymological Dictionary. The evidence available until now, however, seems to favour the following conclusions:

1. Three macrofamilies of the Old World — Hamito-Semitic, Nostratic and Sino-Caucasian — are quite possibly related on a deeper level. I would call the super-family uniting them all Eurasiatic (not to be confused with Greenberg's "Eurasiatic" — which is actually a subset of Nostratic proper).

Although we are still nowhere near a reconstruction of the hypothetical Austric (Austronesian-Thai-Austroasiatic) protolanguage, there are some hints that it could belong there, too.

2. Nostratic proper includes Dravidian (probably the earliest split off family) and a core of more closely related families: Indo-European, Uralic, Altaic, Kartvelian. The inclusion of Eskimo-Aleut and Chukchee-Kamchatkan languages into Nostratic also seems quite probable to me, although their exact position within the Nostratic genealogy is not clear yet.