

NOSTRATIC AND SINO-CAUCASIAN

After the appearance of Vladislav Illich-Svitych's *Nostratic Dictionary* [ОЧЯ] — a decisive step in proving the genetic relationship of the Nostratic languages — several crucial questions still have to be answered. They can be formulated as follows:

a) How, precisely, should the Nostratic languages be classified? (For example, does there exist a distinct Altaic branch of Nostratic? Can the Nostratic languages be subdivided into “Eastern” and “Western” Nostratic? What are the exact boundaries of the Afro-Asiatic branch within Nostratic?)

b) Are there any other linguistic families that can be included in Nostratic?

c) Can we locate the hypothetical disintegration of Proto-Nostratic in space and time?

d) If there are other macrofamilies besides Nostratic (which now seems to be obvious), is Nostratic genetically related to them?

Any progress in answering any of these questions could be of great importance for our understanding of linguistic prehistory. In this paper I shall express my present views on some of them.

A. Although there has been much debate about the problem of Altaic as a branch of Nostratic, I think that the Altaic family (which includes Turkic, Mongol, and Tungus, as well as Korean and Japanese), can be documented as a distinct entity, and the date of Proto-Altaic split can be placed somewhere on the border of the 6th and 5th millennia B. C.

The problem of Afro-Asiatic is much more complicated. In fact, even among the advocates of the Nostratic theory there is no consensus on the

place of Afro-Asiatic within Nostratic. Recent research, both comparative-lexicographic and lexicostatistic, has revealed a great degree of diversity within Afro-Asiatic itself. Preliminary glottochronological analysis (more positive results could be obtained only after compiling the new Afro-Asiatic etymological dictionary) seems to indicate the possible date of the Proto-Afro-Asiatic split as somewhere in the 11th–10th millennium B. C. — which means that Afro-Asiatic must be as old as Nostratic itself (all other subgroups of Nostratic reveal a much higher rate of coincidences within the basic vocabulary). I think that the final solution to this problem should be postponed until we obtain an improved reconstruction of Proto-Afro-Asiatic and its complete volume of etymologies.

One consequence of this “cautious approach” to Afro-Asiatic is that I prefer presently to exclude Afro-Asiatic material from the Nostratic comparisons. This does not mean, of course, that Afro-Asiatic parallels for Nostratic roots presented in Illich-Svitych's dictionary and elsewhere (notably in Aron Dolgopolsky's works) are all accidental “look-alikes”: they may purely reflect a relationship between Afro-Asiatic and Nostratic at some deeper level. I shall return to this point later in this paper.

As for the division of Nostratic into “Eastern” and “Western”, I think that it certainly exists (Indo-European and Kartvelian have a lot of individual common features), but is areal rather than genetic by nature (lexically Indo-European seems to be even closer to Uralic than to Kartvelian). Again, the position of Afro-Asiatic relative to Nostratic seems to speak against the Western Nostratic unity (features that Proto-Afro-Asiatic shares with Proto-Indo-European and Proto-Kartvelian can be explained as a result of a secondary “linguistic alliance”).

B. Several attempts have been made to relate some other linguistic families (Eskimo-Aleut, some American languages, Yeniseian, Nivkh, Sino-Tibetan, North Caucasian) to Nostratic. The only probable theory by now seems to be that of including Eskimo-Aleut in Nostratic (Oleg Mudrak). On the other hand, I have tried to demonstrate the special relationship between Sino-Tibetan, North Caucasian and Yeniseian. (“Sino-Caucasian”, which must be dated approximately to the 9th and 8th millennia B. C.; rather probable is also the inclusion of Na-Dene languages into Sino-Caucasian, proposed by S. L. Nikolaev). There is also a good critical survey of this problem, by Eugene Helimsky [Хелимский 1984]. I will therefore in this paper confine Nostratic to Indo-European, Kartvelian, Uralic, Altaic, Dravidian, and probably Eskimo-Aleut.

Since I am a supporter of glottochronology (although I believe that some of its principles are to be modified), I believe in the possibility of absolute linguistic dating (although, of course, highly approximate). One point, however, must be especially stressed: we can obtain satisfying glottochronological results only for language families with a well-developed comparative phonology and lexicography. Nothing has done more harm to glottochronology than its uncritical application to poorly studied linguistic data. Since we cannot yet claim to have full knowledge of Nostratic comparative phonology (and what is perhaps even more important — of Nostratic comparative vocabulary; I am sure that the bulk of existing common Nostratic roots can be substantially increased), any attempts to date the Proto-Nostratic split by means of glottochronology are in fact premature. Still, a very approximate guess is 10th-12th millennium B. C. (This dating is of course liable to future verification; it seems however to be probable as well for some reasons other than glottochronology). As to the possible Nostratic homeland, I can only say that it deserves further joint investigation by linguists, archaeologists and other specialists, and depends largely on improving our knowledge of Proto-Nostratic vocabulary.

Recent decades have witnessed substantial progress in long range linguistic comparison. Besides Nostratic, we can now more or less positively speak of the existence of several other macrofamilies: Austro-Tai (and probably even broader: Austric), Afro-Asiatic (if excluded from Nostratic), Sino-Caucasian, Amerind. Comparative research within most of these macrofamilies is only beginning (exceptions are, of course, Afro-Asiatic and Nostratic itself, which are somewhat better explored). Still I think that the question about mutual relationship of macrofamilies is wholly justified — even if the answer by now must be but preliminary.

The rest of this paper will present an attempt to make a genetic link between Nostratic and Sino-Caucasian. To do that, I shall first put forward some phonological observations, since any comparison is futile without at least rough phonetic correspondences.

1. **Nostratic.** I will in general preserve the phonological system of Proto-Nostratic as outlined in the Nostratic Dictionary. But there are some points I would like to dwell upon:

a) The system of Nostratic affricates and sibilants probably needs a revision [Долгопольский 1974]. But recently, some work has been done on reinterpreting the affricate systems of Proto-Kartvelian (Y. Testelets) and Proto-Altaic (myself), and until the results of these studies are checked with

Illich-Svitych's and Dolgopolsky's reconstructions, I would prefer to hold onto the original notation.

b) The reconstruction of the set of uvular consonants for Proto-Nostratic by Illich-Svitych was based only on Kartvelian evidence. However, all other Nostratic languages lack this series of stops and it is quite probable that in Kartvelian they are secondary, acquired under the influence of neighboring North Caucasian languages. External evidence shows that PN $*q'$ has exactly the same counterparts as PN $*k'$, and we will treat them as one and the same phoneme (reflexes of rk' and $*q'$ coincide in all Nostratic languages except Kartvelian). As for Nostratic uvulars $*q$ and $*g$, they can be treated in most cases as velar fricatives $*x$ and $*\gamma$ (although in some cases Kartvelian $*q$ seems to be a result of a secondary shift $*k > *q$ analogous to $*k' > q'$).

c) There has been a recent attempt to reinterpret the Nostratic system of stops [Bomhard 1987], stimulated mainly by the so-called glottalic theory of Indo-European stops. According to Allan Bomhard, Indo-European voiced (aspirated) stops correspond to Kartvelian voiced stops (in this point his theory coincides with that of Illich-Svitych); Indo-European glottalised (traditionally, voiced unaspirated) stops correspond to Kartvelian glottalised stops, and Indo-European voiceless (aspirated) stops correspond to Kartvelian voiceless stops. The two latter correspondences are strongly opposed to Illich-Svitych's rules (according to which PIE $*d$, $*g$ = PK $*t$, $*k$, while PIE $*t$, $*k$ = PK $*t$, $*k$).

If one excludes Afro-Asiatic data (as we proposed to do above), the weakness of Bomhard's theory immediately becomes apparent. Searching through the material adduced in [Bomhard 1987], I could not find a single example of PIE $*t$ (or $*t^h$ in the "glottalic" notation) = PK $*t$ or PIE $*k$ ($*k^h$) — PK $*k$. On the other hand, in one of Illich-Svitych's basic works [Иллич-Свитыч 1968] we find several good examples of PIE $*d$ (or $*t$ in the "glottalic" notation) = PK $*t$ and PIE $*g$ ($*k$) — PK $*k$ (cf. PIE $*del(H)$ - 'split, trim' = PK $*tal$ - 'trim, plane'; PIE $*deH$ - 'drip, flow' = PK $*tx$ - 'pour'; PIE $*skeid$ - 'split' = PK $*cīt$ - 'hew', PIE $*ǵal(ō)u$ - 'husband's sister' = PK $*kal$ - 'woman'), and more examples can be added. As to the correspondence PIE $*d$ ($*t$) = PK $*t$, PIE $*g$ ($*k$) = PK $*k$ (or $*q$), in [Bomhard 1987] we find four examples of it: PIE $*deH$ - 'cleave asunder, divide' = PK $*t̥ex$ - 'to break'; PIE $*gel/*gol/*g̊l$ - 'neck, throat' = PK $*q̊eli$ id. (but cf. PIE $*kol$ - id.); PIE $*g^wer$ - 'to swallow; neck, throat' = PK $*q̊war$ - 'pharynx, throat, gullet' (probably PK $*q̊orq̊$ - is meant [ЭСКЯ: 213]); PIE $*g^wel$ - 'strike, kill' = PK $*q̊wel$ - 'slay, kill'. Only the last example is satisfactory (in fact, Illich-Svitych lists it [МССНЯ: 370] in spite of its irregularity). On the other hand, Bomhard completely disregards a very considerable number of correspondences

like PIE **t*, **k* = PK **t̥*, **k̥* (**q̥*), cf. [Иллич-СВИТЫЧ 1968]: PIE **terp-* ‘be satiated, satisfied’ = PK **t̥r̥p-* ‘enjoy’; PIE **lat-* ‘wet, liquid’ = PK **l̥t̥w-* ‘soak’; PIE **mat-* ‘worm, grub’ = PK **mḁt̥l-* ‘worm’; PIE **k^wel-* ‘turn round’ = PK **k̥wer-* ‘round’; PIE **ker-* ‘bind’ = PK **k̥(a)r-* id.; PIE **ket-* ‘building, room’ = PK **k̥ed-* ‘build’; PIE **kel-* ‘rise, high’ = PK **k̥latx-* ‘high’; PIE **kerd-* ‘heart’ = PK **m̥kerd-* ‘breast’; PIE **lu̥k-* ‘lynx’ = PK **lḁk(w)-* ‘dog’; PIE **kleu-* ‘hear’ = PK **q̥ur-* ‘ear’; PIE **(e)lek-* ‘elbow’ = PK **d(l)ḁq̥w-* id., etc. That is why I now deem it impossible to justify Bomhard’s revision of the Nostratic phonological system and think that the original system of correspondences established by Illich-Svitych is to be preserved (although its phonetic interpretation may be different; see below).

2. Sino-Caucasian. In 1984 I presented a rather complicated system of correspondences between North Caucasian, Sino-Tibetan and Yeniseian [Старостин 1984]. However, recent developments in the field of North Caucasian comparative phonology (connected with my joint work with Sergei Nikolayev on the Etymological Dictionary of North Caucasian languages) have now made it possible to modify and simplify this system considerably.

It appears now that Proto-NC had no opposition between voiced and tense voiceless stops (**k-g*, **t-d* etc.) as we originally thought. This opposition can be shown to have arisen secondarily only in Eastern Daghestan languages due to a split of a single Proto-Daghestanian voiced stop series. Now the so-called geminates in Proto-NC (e. g. **cc*, **λλ*) appear to have had a specific distribution: within one root there could only co-exist only either “geminated” consonants (e. g. **qqaqqa* ‘seed, grain’) or “non-geminated” (e. g. **čäčwV* ‘stone’) ones, the only obligatory exception being the roots with an inlaut resonant (e. g. **cwarggwV* ‘weasel, martin’, not **ccwarggwV*). Thus it is possible to regard Proto-NC “geminates” as allophones of simple (non-geminated) consonants arising under special conditions (probably prosodic, something like “tense voice”). Below we shall mark such cases by underlining the neighboring vowel (e. g. **čäčwV* as opposed to **qāqā* and **cwārgwV*). It is necessary to note also that the sounds that we originally interpreted as “strong” (“tense”) fricatives (**s̥*, **x̥*, etc.) reveal the same kind of distribution as “geminates” and thus can also be treated as allophones of simple (“lax”) fricatives (**s*, **x*, etc.).

After these (and some other) modifications have been introduced, the reinterpreted set of correspondences between Sino-Caucasian languages looks as follows:

SC	NC	ST	PY
*p	p	ph / bh, -p	p
*b	b	p(h), -p	p/b
*p̥	p̥	b, -p	b
*t	t	th / dh, -t	d
*d	d	t(h), -t	t
*t̥	t̥	t / d, -t	d
*k	k	k / gh, -k	g
*g	g	k(h), -k	k
*k̥	k̥	k(h) / g, -k	g, -k
*s	s	s, -∅	s (/d)
*c	c	c(h), -t	č/s
*ʒ	ʒ	s / ʒh, -t	ʒ/s
*ç	ç	s / ch, -t	c/s
*st	c	?	t
*sd	z	ch-	t
*st̥	ç	s-	t
*š	š	š-, -∅	s (/d)
*č	č	č / ʒ, -t	č-/ʒ-, s
*ʒ̣	ʒ̣	č-	č-, s/ʒ
*č̣	č̣	č- / ʒh-, -t	č-/ʒ-, s/ʒ
*št	č	-t	t
*šd	ʒ̣	č (h)-	t
*št̥	ç̣	?	t
*ś	ś	s-, -∅	s (/d)
*ć	ć	č, -t	ʒ-, s
*ǰ	ǰ	č, -t	ʒ-, s
*ç̣	ç̣	č / š, -t	c/s
*λ	λ	l	∅-, l/l̥
*λ̥	λ̥	l / λ, -k	?-, r
*Ł	Ł	l / λ, -k	k-, r
*λ̥	λ̥	l / λ, -k	j-, k-. l/l̥
*xk	λ̥	-k	-x̣-
*xg	g	gh-, -k	q-, -x̣-/x-
*xk̥	k̥	-k	q-, -G- (?)
*x	x	x/q (h)-, -∅/-k	x/x
*χ	χ	k(h)/qh ^(w) , -∅/-k	x/q
*q	q	q ~ G, -k	x̣-, q/G
*q̣	q̣	Q ^(w) /K, -k	x̣/q
*xq	q	k	x (/k)
*xG	G	k	k
*xq̣	q̣	k	g/x

For other consonants (resonants, voiced fricatives, laryngeals and pharyngeals), see [Старостин 1984: 22].

3. **Nostratic and Sino-Caucasian.** At present, the lexical evidence presented below can be regarded only as a preliminary list. I have confined the Nostratic vocabulary strictly to the set of roots presented in [ОСНЯ] and [МССНЯ] (only a few roots quoted in several of Dolgopolsky's papers have been added) and have completely ignored parallels where only one of the Nostratic subgroups is present (such as Altaic-Sino-Caucasian). It is thus evident that the list can be substantially enlarged, but that is a matter for future studies.

For a considerable amount of roots in the list parallels from other macrofamilies (at least from Afro-Asiatic and Austric) can be found; in fact, a great number of Afro-Asiatic parallels are already published in the works of Illich-Svitych, Dolgopolsky, and others. I have no reason at all to suppose a closer genetic link between Nostratic and Sino-Caucasian than, say, between Nostratic and Afro-Asiatic or between Afro-Asiatic and Sino-Caucasian. (In fact, a preliminary study together with A. Militarev and V. Orel has revealed quite a lot of probable isoglosses between Afro-Asiatic and Sino-Caucasian.) That is why no attempt has been made to reconstruct "Proto-Nostratic-Sino-Caucasian" — one should rather postpone it until we know more about the interrelationship of the world's several macrofamilies (phyla).

However, some observations of phonological nature certainly can be done. They concern primarily the system of stops, where the correspondences are as follows:

Nostratic	Sino-Caucasian
*p-, -p- / -p' -	*b-, -p̄-
*p'	*p
*b	*b
*t	*tw, *t̄w
*t'	*t, *t', *dw
*d	*d
*k	*kw, *k̄w, *qw, *q̄w
*k'	*k, *k', *q, *q', *gw
*g	*g, *G

Notes:

1) The distinction between intervocalic *-p- and *-p' - in Nostratic is rather vague, and in many cases we are not able to draw it. On the other

hand, word-initial $*p$ is extremely rare in Sino-Caucasian. Therefore I thought it possible to unite the correspondence rows PN $*p$: SC $*b$ - and PN $*-p/-p'$: SC $*-p'$.

2) There are three cases when SC $*g(w)$ or $*G(w)$ correspond to PN $*k$ (48, 51, 52): in all of these cases there appears a postvocalic $*-j$.

The above correspondences are hard to explain if we presume that PN glottalised consonants were really glottalised. However, if we keep in mind that the reconstruction of PN glottalised (as well as uvular) stops is based only on Kartvelian evidence, and suppose that the Kartvelian glottalisation may have substituted (probably under a substratum influence) some other earlier laryngeal feature, things become much easier. All of the above correspondences can be explained by assuming that:

a) in the dental and velar series original glottalised (non-labialised) stops were preserved in SC but merged with plain stops in PN, yielding probably aspirates (in fact, reflexes of these consonants are aspirated in Indo-European and Altaic; the Kartvelian shift of aspirated to glottalised stops, as already mentioned, must be due to substratum);

b) the additional feature of labialisation vanished in PN, but conditioned a specific shift of laryngeal features: original aspirated labialised stops (going back to voiceless and glottalised labialised stops) must have lost their aspiration and become PN $*t$, $*k$ (reflexes of these consonants are unaspirated in Indo-European and Altaic); while original voiced labialised stops must have inversely acquired aspiration and merged with voiceless aspirated stops;

c) labial stops could not have been labialised, and therefore in this series we observe straightforward correspondences (SC $*b$ = PN $*b$, SC $*p$ = PN $*p'$ [= $*p^h$]). However, original labial glottalised consonants did not merge with plain voiceless stops in Nostratic, being reflected as the combination $*pw$ (i. e. resulting in PN voiceless $*p$).

Thus the external evidence seems to indicate that consonants traditionally reconstructed in Nostratic as glottalised (emphatic) had, in fact, been voiceless aspirates — and this also may better explain some of their reflexes in Nostratic daughter languages.

Another observation can be made concerning the fate of lateral consonants in Nostratic. In most cases the Sino-Caucasian laterals correspond to Nostratic $*l$ (or $*l$ + velar in the intervocalic position, see examples 40, 45, 96, 100, 103, 106, 108, 120, 138, 142, 200, 202, 204; this $*l$ gets lost after a preceding $*-r-$, cf. examples 114, 122). However, if a liquid $*l$ follows a lateral affricate, the latter by dissimilation becomes a stop:

a) a dental stop if the original lateral had no labialisation (cf. examples 196, 197), and

b) a velar stop if the original lateral was labialised (cf. examples 61, 89, 199).

Of course, this is only a beginning: there are still many gaps both in the Nostratic and Sino-Caucasian reconstructions, and the data of other macrofamilies are yet to be investigated. No correspondences are as yet available for the complicated systems of Nostratic and Sino-Caucasian affricates, fricatives and postvelar consonants, as well as for vowels. Still I think that the existing evidence is already enough for assuming a distant genetic relationship between the two macrofamilies of the Old World.

LEXICAL PARALLELS BETWEEN NOSTRATIC AND SINO-CAUCASIAN

1. PN **balk'a* 'shine, gleam' [OCHЯ №5]: ST **P5k* 'white'.
2. PN **bongä* (**~ -p'*) 'thick, swell' [OCHЯ №17]: SC **pVnKV* 'swell' (ST **phōŋ* / **phun* 'swell, blow up', PY **piʔŋ* 'swell, swelling').
3. PN **boʔa* 'grayish-brown' [OCHЯ №18]: NC **bHürV* id.
4. PN **bulV* 'to mix, stir up' [OCHЯ №20]: ST **puat*.
5. PN **bayV* 'much, enough' [OCHЯ №28]: Alt. **bājV* 'rich, plentiful' should be added): SC **bVHV* 'big, many' (ST **pā* 'big, great', PY **baj-* 'many', NC > WC **bHV* 'thick, big').
6. PN **bara* 'big, good' [OCHЯ №7]: ST **p(h)Vr* 'big, great, increased'.
7. PN **biĀa* 'small' [OCHЯ №11]: NC **bi(n)ĀV* id.
8. PN **calu* 'split, cut' (also 'mow') [OCHЯ №33]: SC **cVlHV* 'mow, reap' (NC **?o-cVll-* 'mow', **cōlV* 'scythe', ST **chāH* (*~ *chāH*) 'reap').
9. PN **cu]ħa* 'thorn' [OCHЯ №34]: ST **cūH* id.
10. PN **cājħa* 'shine, shimmer' [OCHЯ №37]: SC **ĉAjV* 'shine, light; fire' (ST **ziāj* 'shine, light', NC **ĉajĭ* 'fire; glitter').
11. PN **curV* / **corV* 'drip, ooze' [OCHЯ №35]: SC **3wVrV* (*~ sdw-*) 'strain, pour' (ST **ch/ōr*, NC **?i-3wVr-*).
12. PN **ĉapa* 'beat, chop' [OCHЯ №41]: ST **ĉ/Vp* 'break, tear up'.
13. PN **ĉaj/rV* 'pale, white, yellow' [MCCHЯ: 363]; roots with the meaning 'moon' should be kept apart, see below: SC **ĉArV* (*~ st-*) id. (ST **sVr* / *~*ch-?* 'yellow, gold'; NC **H-ĉarV* 'gray, pale').
14. PN **ĉarV* (*~ ĉ-*) 'rind, crust' [OCHЯ №47]: SC **štArV* id. (PY **tār-ap*, NC **ĉHārV*).
15. PN **ĉ'abV* 'clay, glue' [MCCHЯ: 344]: SC **ĉebV* 'clay, model' (ST **ĉap* 'to stick, adhere', NC **ĉebV* 'clay, model').
16. PN **ĉ/āmV* 'astringent, sour' [OCHЯ №54; MCCHЯ: 368] with irregular correspondences between PIE and PU: SC **ĉwE/m/HV* 'salt' (ST **ĉum* (*~ c-*), NC **ĉwenHV*).

17. PN *č'ikV 'cut' [OCHЯ №55]: SC *čwVk(w)V 'a cutting tool' (ST */žh/āk^w 'chisel', PY *čok 'axe', NC *čwīk^wV 'knife').
18. PN *čVfmV 'eat' [OCHЯ №57] (only Kartvelian): SC *čwVmV 'chew, hold in mouth' (ST *žhī(a)m (~ -ē-), NC *He-čwVm-).
19. PN *č'alHa (~ č-) 'spread out, broad, plain': SC *зVIHV id. (ST *čel (~ t) 'spread out', NC *зalHV 'plain').
20. PN *č'okV (~ č-) 'big, many' [MCCHЯ: 331]: SC *čVqwV id. (ST *čok 'enough, plenty', (?) PY *suK- 'thick', NC *(HV)-čaqwV 'big'). We should expect *-k- in PN: -k- is probably due to assimilation.
21. PN *dikV 'earth, clay' [OCHЯ №69]: SC *dVQV 'clay' (ST */t/iak, PY *taq-).
22. PN *ga(HV) 'take, obtain' [OCHЯ №77]: SC *(a)GV 'take, hold' (PY *-aq-, NC *?ā-GV-).
23. PN *gāndu 'male' [OCHЯ №79]: SC *KenT^wV 'man, male' (PY *ke?t 'man', NC *kwVn(V)ṭV '(young) man, male'). Due to dis- or assimilations it is hard to reconstruct precise laryngeal features for SC.
24. PN *gUjra 'antelope, deer' [OCHЯ №90, 93] (90 and 93 are probably one and the same root): SC *xgVjV 'deer' (ST *ghij '(barking) deer', PY */q/Vja 'deer').
25. PN *güpa 'to bend, bow' [OCHЯ №92]: ST *g(h)üp id.
26. PN *yark'u (< *yak'ru?) 'bend' [OCHЯ №97]: SC *-g^wVrV id. (ST *kuar, NC *?i-g^wVr-).
27. PN *yuru 'flow, flood' [OCHЯ №98]: SC *HwVrHV 'flow; pool, water body' (ST *Hor 'flow, soak'; NC *žwirHi 'water pool').
28. PN *yVmV 'darkness, night' [OCHЯ №99] (only Kartvelian): SC *χVmHV 'dark, evening' (ST *yVm 'dark, shadow', PL *χIam 'evening, darkness').
29. PN *Hanga 'open (the mouth), opening' [OCHЯ №105]: SC *HamgV 'hole, opening' (ST *khāH 'opening', PY: Ket ag-di 'mouth cavity', NC *fiāmgV 'hole, window').
30. PN *Henka (~ Hekna) 'to burn' [OCHЯ №106]: SC *-χAnV 'to warm up' (ST *kaŋ 'roast, fry', PY *(h)aqan- 'boil', NC *He-χVn- 'warm up').
31. PN *H/E/mi 'suck, swallow' [OCHЯ №109]: ST *?Vm 'drink, suck, hold in mouth'.
32. PN *Hok'i 'sharp edge' [OCHЯ №113]: SC *-xkV 'sharp, sharpen' (PY: Ket i- 'to sharpen', NC *?V-kV 'sharp(en)').
33. PN *Homsa 'meat' [OCHЯ №114]: SC *jVm^wV 'ox; meat' (ST *chu (~ -o) 'a kind of ox', PY *?ise 'meat', NC *jāmco 'ox').
34. PN *Ho(k)sV 'ash-tree' [OCHЯ №117]: PY *?oksi 'tree'.
35. PN *Huk'a 'eye, see' [OCHЯ №118]: SC *-g^wV 'see' (? ST *k^wē-n (~ g^w-) 'look' — can be related here if -n is a suffix; NC *?agwV 'see').

36. PN **Huwa* 'flood, stream' [ОЧЯ №119] (cf. also IE: Hitt. *heu-* 'rain'): SC **-γwV* 'rain, to rain' (ST *(*r*)-*qh^waH*, PY **xu-r*, NC **?V-γwV*).

37. PN **?anχV* 'breathe' [ОЧЯ №125] (perhaps it would be better to add Alt. **?inV* 'live, life' and reconstruct PN **HinχV*): SC **HwEnHV* 'blood; breath, soul' (ST *(*s*)-*γ^wtj* 'blood; breath', NC **hwenHV* 'blood'). The semantic shift 'blood <> soul, breath' is fairly common.

38. PN **?aSa* 'fire, be hot' [ОЧЯ №127]: SC **-cV* 'burn, heat' (ST **ca* / **cha* 'hot, heat', NC **γe-cV* 'hot, heat, roast').

39. PN **Ha-* 'be, become' [ОЧЯ №102]: SC **?a(HV)* id. (ST **?a*, NC **?a(hHV)*-).

40. PN **?elA* 'live' [ОЧЯ №131]: SC **-λV* 'be; stay' (ST **λV* 'stay', NC **?ō-λV* 'be, become').

41. PN **?esA* 'be, settle down' [ОЧЯ №132]: SC **-swV* 'sit' (PY **VsV*, NC **?o-swV*).

42. PN **?ilV* 'deer': ST **la* 'musk-deer'.

43. PN **γEk'u* 'water, drink' [ОЧЯ №139] (Alt. **āk-* 'flow' should be added): SC **-qV* 'fluid, drink' (ST **Ku* 'fluid, to spill': PY: Ar. *-ag-* 'drink', NC **?V-qV* 'drink').

44. PN **jela* 'bright' [ОЧЯ №148]: ST **liaj* (~ *λ-*) 'gleam, glitter'.

45. PN **k'áIV* 'peel; bark, skin' [ОЧЯ №156] (initial *k'* - because of Alt. **k'áli-*; forms with the meaning 'naked' should be kept apart): NC **qaλV* 'bark, skin'.

46. PN **kanpV* 'soft excrescence (mushroom; lip)' [ОЧЯ №158]: SC **kwVm(P)V* 'lip' (ST **k(h)am*, NC **kwēm(p̄)-t̄i*).

47. PN **karV* / **kurV* 'crane' [ОЧЯ №159]: SC **q(w)VrǫwV* id. (OC **g(h)āk^w*, NC **q(w)ǫrǫwə*).

48. PN **kājwV* 'chew' [ОЧЯ №160]: SC **xGVjV* 'bite' (ST **k(h)aj*, NC **?V-GV*-).

49. PN **kENV* 'know' [ОЧЯ №163]: ST **qēn* 'see, know'.

50. PN **kirHV* 'old' [ОЧЯ №165]: ST **Kri* 'old'.

51. PN **koja* 'moth, grub, worm' [ОЧЯ №167]: SC **gWVjV* 'worm' (ST **gh^wə* (~ *kh^wə*), PY **kVj*).

52. PN **kojHa* 'fat; healthy, alive' [ОЧЯ №168]: SC **GwVjV* 'thick' (PY: Ket *qōj*, NC **?V-GwV*-).

53. PN **kojw/al* 'birch' [ОЧЯ №170]: PY **χi?w-* 'birch bark'.

54. PN **kolV* 'peel, bark' [ОЧЯ №171] (**kol-γV* in [Долгопольский 1972: 363]): SC **qwałHV* 'bark, skin' (ST **qhrōw* (~ *kh-*), PY: Ket *qōl* 'dandruff', NC **qwałHV* 'bark').

55. PN **kOrí* 'lamb, sheep' [ОЧЯ №174]: SC **kwAr-NV* 'young (of animals), shoot (of plants)' (ST **krurj* (- *q-*) 'be born; shoot (of a plant)'; NC **kwarnV* 'young (of animals)').

56. PN **küjñA* ‘knee/elbow’ [ОЧНЯ №175]: SC **HgVNV* ‘knee, leg’ (ST **Koŋ* ‘thigh, leg’, NC **HgenV̄* ‘knee, leg’).
57. PN **küta* ‘lake’ [ОЧНЯ №177]: SC **k(w)AlHV* ‘lake, river’ (ST **klū-ŋ* ‘river’, PY **χɔʔl* (~ *q-*, *-r*) ‘bay, creek’, NC **k(w)alHV* ‘lake’).
58. PN **käl/HV* ‘to step, ford’ [ОЧНЯ №161]: SC **gAtHV* ‘step; ford’ (ST **Ghāl* (~ *qh-*, *kh-*, *gh-*) ‘ford’, NC **gaHV* ‘step’).
59. PN **kurV* ‘swallow, throat’ [ОЧНЯ №91] (**k-* because of IE **g^{w-}*): SC **kwVrV* ‘throat, crop’ (ST **khřōw* (~ *gh-*), PY **gər-Vʒ* (~ *k-*), NC **kwirV* (~ *-i-*)).
60. PN **küni* ‘wife, woman’ [ОЧНЯ №178]: SC **qwEnV* ‘woman’ (PY **qVm-* (~ *χ-*), NC **q(w)änV*).
61. PN **kUV* ‘snake, worm’ [ОЧНЯ №179]: SC *(*wHVr*)-*šwVtV* ‘snake, worm; leech’ (ST **p-rül* ‘snake’, PY *(*h*)*urɔl* ‘leech’, NC **wHVr-šwVtV* ‘snake, worm’).
62. PN **komtV* ‘lid (of a receptacle)’ [МСЧНЯ: 356]: SC **gVmtV* ‘a cover, pillow’ (ST **g(h)um*, PY **χot-* (~ *q-*), NC **gVmtV*).
63. PN **kun-če* ‘nail, peg’ [Долгопольский 1965: 263] (-*če* is probably a suffix as in **pArĀ*, **pAr-čV* ‘finger, nail’, *q. v.*): SC **χqwinV* id. (PY *(*x*)*īne* ‘nail, claw’, NC **Hqwinā* ‘nail, peg’).
64. PN **KümTä* ‘fog, mist’ [ОЧНЯ №187]: SC **kwVmHV* id. (also metathesised **mHVkwV*: ST **mūk* ‘fog’, PY: Yugh *xoŋ* ‘fog’, NC **kwimHV* / **mHikwV* ‘cloud, rain’).
65. PN **KütV* ‘bind, tie’ [ОЧНЯ №188]: SC **kwEtV* ‘tie, bind; reel’ (ST **kwāt* (~ *g^{w-}*) ‘tie, bind’ — here rather than to NC **q̄wHarʔV-IV* ‘belt’ as in [Старостин 1984: 32]; NC **kwetV* ‘reel’).
66. PN **k’acV* ‘man, young man’ [ОЧНЯ №191]: WC **qaça* ‘man’.
67. PN **k’adv* ‘interweave (twigs), build’ [ОЧНЯ №192]: SC **qVmdV* ‘fence, wall’ (ST **Kat* ‘fence; room’, NC **q̄emdā* ‘wall’).
68. PN **k’ala* ‘leave, stay’ [ОЧНЯ №194] (**k’al-γa* in [Долгопольский 1972: 358]): NC **?i-lgwVn-* (~ **?i-gwVl-*) ‘stay’.
69. PN **k’apV* ‘vessel, pot; scull’ [ОЧНЯ №195]: SC **qApV* ‘vessel’ (OC **khāp*, PY **qā(?)p* (~ *-b*) ‘boat’, NC **qāpā* ‘vessel; boat’).
70. PN **k’äcä* ‘cut’ [ОЧНЯ №196]: SC **qaçV* ‘cut, divide’ (ST **qāt* ‘cut, divide’, NC **qaçi* ‘piece, part’).
71. PN **k’ärV* ‘bind (tightly)’ [ОЧНЯ №197]: SC **-qVrV* ‘plait, weave’ (ST [with metathesis] **rāk* ‘plait, weave’, NC **?V-qVr* ‘weave’).
72. PN **k’ErdV* ‘heart, breast’ [ОЧНЯ №200]: NC **kirV* ‘breast; belly’.
73. PN **k’oIV* ‘round, roll’ [ОЧНЯ №202]: SC **gwVl(g)V* id. (ST **k^w(r)et* ‘roll, wind’, NC **gwēlgV* ‘round’).
74. PN **k’uла* ‘secret, steal’ [ОЧНЯ №204] (**k’ul/-γ/V* in [Долгопольский 1972: 364]): SC **-gwVIV* ‘hide, steal’ (ST **kol* (~ *q-*, *-j*) ‘hide’, NC **?i-gwVl-* ‘loose, steal’).

75. PN **k'UtV* 'small' [ОЧНЯ №205]: NC **kq̄tV* 'short'.
76. PN **k'ajwV* 'dig' [ОЧНЯ №209]: SC **-xqVwV* id. (ST **gaw*, PY **?uk-* (~ *-g-*), NC **HV̄-qwV-*).
77. PN **k'aLi* 'rise, high' [ОЧНЯ №210]: NC **?ə-lqV* (*?ə-qVIV*) id.
78. PN **k'ap'a* 'cover, close' [ОЧНЯ №212]: ST **Gāp* 'cover'.
79. PN **k'ar/äl* 'black, dark' [ОЧНЯ №213]: NC **k̄arV* 'black, coal'.
80. PN **k'arV* 'rock' [ОЧНЯ №216]: SC **GwVrV* 'stone' (ST **Kor*, NC **GwērV*).
81. PN **k'arä* 'bark' [ОЧНЯ №217]: NC **k̄arī* 'bark, shell'.
82. PN **k'awingV* 'armpit' [ОЧНЯ №220]: ST **qhōŋ* 'hole, gap'.
83. PN **k'ü/lH/ä* 'tongue, speak' [ОЧНЯ №221]: NC **?V-gwVl-* 'speak'.
84. PN **k'äp'ä* 'paw, hoof' [ОЧНЯ №222]: SC **χwHabV* 'paw, leg' (ST **k(h)ap* 'crotch', PY: Ket *q̄p-ku* 'calf (of leg)', NC **χwHabV* 'paw').
85. PN **k'EñU* 'empty, light' [ОЧНЯ №226]: ST **khian* (~ *gh-*) 'light, thin'.
86. PN **kErV* 'horn' [ОЧНЯ №227] (**k-* rather than **k'-* because of PK **kr-*): SC **qwVrHV* 'horn' (ST **Kruā* (~ *-ŋ, -k*), PY **χo?*, NC **qwä(r)HV*).
87. PN **k'urV* 'plait, weave, knit' [ОЧНЯ №236]: NC **?i-mχwVr-* 'knit, weave, spin'.
88. PN **k'ujnA* 'wolf, dog' [ОЧНЯ №238]: SC **χwEjV* 'dog' (ST **qh^wij*, NC **χwε(H)jV*).
89. PN **k'ülä* 'kin, community' [ОЧНЯ №239]: SC *(*H*)*χiwVIV* 'root; kin, tribe' (ST **t-ruat* 'village, kin', NC **HχiwivV* 'root; kin').
90. PN **k'üp'ä* 'boil, foam' [ОЧНЯ №240]: PY **χopVr* 'foam'.
91. PN **k'UmV* 'swallow, devour' [ОЧНЯ №242]: SC **qVmV* (~**G-*) 'eat, hold in mouth' (ST **Kuam* 'hold in mouth', NC **?V-qVm-* [*-G-*] 'eat').
92. PN **k'U/p/a* 'heap' [ОЧНЯ №243]: NC **gwāpV* 'group, heap'.
93. PN **kama* (~ *k'-*) 'husk, shell' [МССНЯ: 372]: SC **kOnmV* 'skin, husk' (ST **kuam* 'husk, shell', NC **konmo* 'skin').
94. PN **k'ulV* 'fall' [ОЧНЯ №235]: ST **klaH* 'fall'.
95. PN **kopV* 'bark, rind' [МССНЯ: 344]: ST **q(r)uap* 'rind, shell, scale'.
96. PN **k'iwIV* (~ *-lw-*) 'hear, ear' [ОЧНЯ: 18; МССНЯ: 366]: NC **?i-lkV* (~ **?i-kVl-*) 'hear'.
97. PN **ko(H)IV* 'kill, die' [МССНЯ: 370] (**k-* on the basis of PIE **g^{w-}*; *q-* in PK **qwil-* is highly irregular): SC **-lqwV* (< **qwVIV*) 'die, kill' (PY **qo-* 'die', **-VqV-* 'kill'; NC **?i-lqwV* 'die', **?i-lqwV* 'kill').
98. PN **lakV* 'lick' [ОЧНЯ №247]: ST **χiak* 'tongue, lick'.
99. PN **lulV* 'sleep' [МССНЯ: 367] (only Kartvelian with HS parallels): NC **?lēχa* 'night'.

100. PN **luńge* (**luŋe*) ‘snow’ [OCHЯ №354]: NC **Hłwini* ‘winter’.
101. PN **łama* ‘soften, knead’ [OCHЯ №254]: ST **luam* ‘mild, soft’.
102. PN **ł/alk’a* ‘leg’ [OCHЯ №255]: SC **łEkV* ‘leg’ (ST **łVŋ* ‘leg, thigh, bone’, NC **łäkā* ‘leg bone’).
103. PN **łap’a* ‘flat’ [OCHЯ №256] (Altaic forms with the meaning ‘leaf’ should be kept apart, see below): SC **łApV* ‘flat’ (ST **łēp* ‘flat, plate, slab’, NC **łapV* (~ *-e-*, *-i-*) id.).
104. PN **łejna* ‘soft, weak’ [OCHЯ №258]: ST **net* id.
105. PN **łiwa* ‘mud, silt’ [OCHЯ №259]: ST **łəj* ‘mud, slime’.
106. PN **LaHm/ul* ‘marsh, silt, wet’ [OCHЯ №263]: SC **łwHEmV* ‘wet, liquid’ (ST **li(a)m* (~ *ł-*), NC **łwHEmV*).
107. PN **łāpV* ‘to cover’ [MCCHЯ: 356]: ST **łup* id.
108. PN **łokV* ‘count, collect’ [MCCHЯ: 366]: SC **-łVκwV* ‘recite, read’ (ST **łok* ‘read, tell’, NC **?i-łκwV(n)-* ‘read, write’).
109. PN **Lam-d/ił* ‘low, lowland’ [OCHЯ №264]: SC **łanV* (ST **łan* ‘lower, down’, NC **łanā* ‘lower part, bottom’).
110. PN **L/ałtV-* ‘wet, soak’ [OCHЯ №265]: NC **?V-łłV-* (~ **?V-łłV-*) ‘to drip, soak’.
111. PN **L/äljV* ‘water, pour’ [OCHЯ №267]: ST **łāj* ‘pour, flow’.
112. PN **łajpV* ‘leaf’ (this root is to be strictly kept apart from PN **łap’a* ‘flat’ and **ŁopV* ‘to peel’): SC **łApE* ‘leaf’ (ST **łēp* (/ **łap*), PY **jāpe*, NC **łapi*).
113. PN **ŁopV* ‘peel, peeled bark’ [OCHЯ №268]: ST **łep* (~ *ł-*) ‘to peel, to slice’.
114. PN **łajrV* ‘young male’ [OCHЯ №277]: NC **mīrłV* ‘male, man’.
115. PN **łanV* ‘stay, stand still’ [OCHЯ №287]: NC **?i-ma(n)-* ‘stay, be’ (PL **?i-ma-*, HU **mann-*).
116. PN **m/o/nV*, **m/o/ngV* ‘many, big’ [MCCHЯ: 348, OCHЯ 280]: ST **māŋ* ‘many, big’.
117. PN **łanu* ‘think’ [OCHЯ №281]: SC **nVmHV* id. (ST **nVm* ‘think’, PY **?a-n/i/ŋ* ‘think, mind’).
118. PN **łarja* ‘berry’ [OCHЯ №282]: NC **merHV* id.
119. PN **mALV* ‘mountain’ [OCHЯ №286]: SC **mUHAlV* ‘mountain, hill’ (ST: KC **mual*; NC **mułalV*).
120. PN **māłgi* ‘breast, milk’ [OCHЯ №291]: NC **nhełV* ‘milk’.
121. PN **mānV* ‘man, male’ [OCHЯ №292]: SC **mVn-xV* id. (ST **nām* ‘man, person’, PY **pix-* ‘man’, NC **mVnxV* ‘man, male’).
122. PN **māřā* ‘moisture, liquid’ [OCHЯ №294]; SC **marłwV* ‘rain, cloud’ (PY **pVr* ‘cloud’, NC **marłwV* ‘rain’).
123. PN **merV* ‘fat, smear’ [OCHЯ №296]: ST **mar* ‘fat’.

124. PN **mEwV* ‘water, moisture’ (only IE; Altaic forms should be kept apart. See OS 298): SC **HmEHwV* id. (ST **moj*, NC **hmēhwā* ‘moisture, liquid, pool’).

125. PN **mīnū* ‘woman, female relative’ [ОЧЯ №301]: ST **nam* ‘sister-in-law, daughter-in-law’.

126. PN **moLV* ‘break, crush’ [ОЧЯ №302]: ST **mial* id.

127. PN **murV* ‘crush, pound, break’ [ОЧЯ №310]: ST **muar* ‘bite, gnaw’.

128. PN **mVtV* ‘worm’ [ОЧЯ №312]: NC **beṭV* (**bemṭV?*) ‘worm’.

129. PN **mVnžV* ‘luminary’ [ОЧЯ №313] (only Kartvelian **mzie* ‘sun’ is listed (together with HS forms), although it seems highly probable that PIE **mēn(ə)s-* ‘moon’ also belongs here): SC **wVmçV* ‘moon’ (OC **ḡ^wat*, PY **?Vsuj*, NC **wəmço*).

130. PN **nojmV* ‘name’ [ОЧЯ №317] (Altaic **n̄jomV-* ‘name; spell, tale’ should be added): ST **mainj* ‘name’.

131. PN **ñamV* ‘grab, take’ [ОЧЯ №319]: ST **nṽm* id.

132. PN **ñāmV* ‘soft’ [ОЧЯ №195]: ST **nām* id.

133. PN **ñä/wH/ä* ‘hair’ [ОЧЯ №322]: ST **nVj* id.

134. PN **ñila* ‘wet, slippery’ [ОЧЯ №325] (cf. also **ño/H/LV* ‘slime’ in [МССЯ: 365]): ST **nāl* (- *n-*) ‘mud, slime’.

135. PN **nika* ‘neck, back of head, vertebra’ [ОЧЯ №330] (**-k-* and not **-k̄-* on the basis of both Uralic and Altaic reflexes): SC **nVqwV* ‘back’ (ST **nuk* / -*ŋ* ‘back, spinal vertebra’, NC **naqwV* ‘back, behind’).

136. PN **purčV* / **pülčV* ‘flea’ [ОЧЯ №338] (with several irregularities): NC **bēlžwi* ‘gadfly, wasp’.

137. PN **mVnV* ‘miss; be vain, false’ [ОЧЯ №357]: ST **mōn* ‘dull, blinded, confused’.

138. PN **palyV* ‘a fortified dwelling’ [ОЧЯ №368] (**p-* on the basis of Altaic forms). SC **bUḶV* ‘house, home’ (ST **/p/ūk*, NC **bulḶV*).

139. PN **/Pa/se* ‘membrum virile’ [ОЧЯ №371] (according to O. Mudrak, the Eskaleut reflex of this root speaks in favor of **p-*): SC **bVçV* (PY **biʔs* ‘penis’, PL **piç* ‘Schamteile’).

140. PN **palkV* ‘foot’ [ОЧЯ №361] (**-q-* in PK is probably secondary): SC **bol(V)kwV* ‘leg, leg bone’ (ST **phol* ‘ankle, calf (of leg)’, PY **bul* ‘foot, leg’, NC **bolVkwō*). This comparison seems more likely than that in [Старостин 1984: 28].

141. PN **pArä*, **pAr/čV* ‘nail, claw, finger’ [ОЧЯ №362]: SC **bArV* (~ *p-*) ‘claws, paw, cupped hand’ (ST **Par*, PY **pər*).

142. PN **pālgi* ‘belly, intestines’ (reconstructed on the basis of Alt. **pāl(V)gi* ‘belly, intestines’ and PIE **bhelǵh-*): SC **bHeḶV* ‘intestines’ (ST **Pik*, PY **piʔil*, NC **bheḶV*).

143. PN **p'är/äl* 'split, break' [ОСНЯ №339]: ST **phraj* 'split, divide'.
144. PN **p'iywV* 'fire, heat' [МССНЯ: 352]: SC **-pVHV* (~ *b-*) 'heat, burn' (ST **pū* (~ *b(h)-*) 'burn, roast, boil', PY *(?*a*)*pV-* 'heat, hot').
145. PN **p'erV* 'bear, produce' [МССНЯ: 361]: ST **p(h)ria-η* id.
146. PN **p'unčE* '(body) hair' [ОСНЯ №365]: NC **pen/č/V* 'eyebrows, eyelashes'.
147. PN **p'AtV* 'vessel, receptacle' [МССНЯ: 366]: SC **pAṭwV* id. (ST **PUt* 'a big basket', NC **paṭV* 'vessel').
148. PN **p'ulV* 'aspen, poplar' [МССНЯ: 369]: SC **pHVIV* id. (PY *(*h*)*ipVI* 'aspen', NC **pHiṭV* 'aspen, poplar').
149. PN **p'utV* 'hole, vulva' [МССНЯ: 340]: SC **pVṭV* id. (ST : LB **pytx*, NC **pəti*).
150. PN **p'ojV* 'child' [МССНЯ: 360]: SC **pUjV* (ST **Poj* 'be born, child', PY **pu?*- 'child', WC **pV* 'son, daughter').
151. PN **Pe(n)čV* 'pine-tree' [Терентьев 1979: 160]: SC */*p/inšwV* 'resin' (PY **pi?*ṭ 'glue', NC */*p/inčwV* 'resin').
152. PN **p'arV* 'fly' [МССНЯ: 346]: SC **pUrV* id. (ST **phur* (~ *bh-*), NC **purV*).
153. PN **p'uyV* 'blow' [МССНЯ: 339]: SC **pOHwV̄* id. (ST **bhu(H)*, PY **-pV*, NC **pohwV*).
154. PN **p'enV* 'bitch, female' [МССНЯ: 366]: SC **pEnHV* (~ *b-*) 'female' (ST **p(h)ij* 'female', **p(h)in* 'woman', PY **pän* 'female').
155. PN **p'ar(H)V* 'bee' [МССНЯ: 358]: SC **pVrV* id. (ST **P/r/aH* 'bee', NC **porV* 'bee; butterfly').
156. PN **p'alrj/V* 'spread, scatter' [МССНЯ: 369]: ST **phra* id.
157. PN **p'äkV* 'hot, heat' [МССНЯ: 337]: SC **PVgwV* id. (OC **bhāk^w* 'expose to the sun', PY **bo?*ṭ 'fire').
158. PN **p'e/HljV* 'sickness, sore' [МССНЯ: 331]: ST **PijH* 'scab, head sickness'.
159. PN **p'alV* 'many; full' [МССНЯ: 348]: ST **p-lai-η* 'full'.
160. PN **ručV* (~ *-č-*) 'destroy, tear, break' [МССНЯ: 358]: SC **rVčwV* id. (ST **r/a/t*, NC *?*a-rčwV-*).
161. PN **rV(h)bV* 'emotion, agitation' [МССНЯ: 334] (only IE with HS parallels): ST **rap* 'afraid, frighten'.
162. PN **rowV* 'dig, gouge, chop' [МССНЯ: 362]: ST **rəw* 'dig'.
163. PN **Sa(w)k'U* 'sap, resin' [МССНЯ: 366]: SC **šwVnqV* 'ink, dye-stuff' (ST **smāk /-η*) 'ink', PY **suK* 'dye, paint', NC **šwänqi* 'ink, gum').
164. PN **sVwV* 'liquid, drink' [МССНЯ: 341]: SC **-sdwV* 'drink' (PY **ut-*, NC *?*V-3wV-*).

165. PN **sun(g)V* ‘smell’ [MCCHЯ: 342]: SC **sunV* id. (ST **sun*, NC **sunV*, **sun-ṭV*).
166. PN **sājV* ‘bile, pus’ [MCCHЯ: 336]: ST **chij* ‘thick liquid’.
167. PN **śalV* ‘willow’ [MCCHЯ: 343] (it would be better to reconstruct **ča(w)lV* on the basis of PA **čual/i/* ‘willow, branch’): NC **čwHeli* ‘willow’.
168. PN **śuλV* ‘glowing coals’ [MCCHЯ: 370] (**z̄ul̄V* in [Долгопольский 1972: 361]): ST **s-γūl* id.
169. PN **sVχV* / **?VsχV* ‘blood’ [MCCHЯ: 345] (PIE-PK; one should probably add Alt. **sagV* ‘blood; health’): SC **sVHwV* ‘soul, breath’ (ST **suā* ‘breathe, live’, PY **duʔ(χ)* ‘smoke’, NC **s̄iʔwV* ‘soul, breath’).
170. PN **śarV* ‘flow, stream, lake’ [MCCHЯ: 369]: SC **śOrV* id. (ST **śur* ‘flow, pour’, NC **śorV* ‘lake, river’).
171. PN **š/E/wV* ‘bear, produce’ [MCCHЯ: 361]: SC **š(V)wV* ‘bear; son, offspring’ (ST **šū* ‘grandchild, descendant’, NC **-išwV* ‘bear; son, daughter’).
172. PN **šingV* ‘snow’ [MCCHЯ: 366]: ST **šəŋ* ‘hoar-frost, cold’.
173. PN **śVλmV* ‘heart’ [MCCHЯ: 364]: SC **SiMV* id. (ST **siam*, PY **sin(V)b-*).
174. PN **/ś/ajrV* ‘nit, louse’ [MCCHЯ: 336]: SC **śErV* ‘louse; worm, helminth’ (ST **śar* ‘louse’, NC **š/ī/rV* ‘worm, helminth’). There exists also a variant with a suffixed velar both in Nostratic (cf. Alt. **sir-kā*, PU **śa(j)r-kV*) and Sino-Caucasian (cf. ST **šrik*, NC **š̄ir-kV*).
175. PN **tākV* ‘touch’ [MCCHЯ: 369]: ST **t(h)ok* id.
176. PN **tel(h)V* ‘long, stretch’ [MCCHЯ: 339]: ST **dhel* ‘spread, stretch’.
177. PN **ter(H)V* ‘tear’ [MCCHЯ: 360]: NC **?V-ṭwVr-* id.
178. PN **talV* ‘shake’ [MCCHЯ: 369]: ST **tōl* id.
179. PN **to/H/V* ‘give’ [MCCHЯ: 338]: NC **?V-t(w)V-* id.
180. PN **tuʔV* ‘two’ [MCCHЯ: 338]: SC **(t)q̄wE* id. (NC **(t)q̄wE*. In ST and PY the original root obtained a nasal suffix and lost the dental element of the initial cluster: ST **k-nij(s)*, PY **xi-na*).
181. PN **t’anV*, **t’angV* ‘stretch, extend’ [MCCHЯ: 370]: ST **taŋ* (~ *d-*) id.
182. PN **t’anV* ‘chop, cut off’ [MCCHЯ: 352]: ST **tan* id.
183. PN **t’arV* ‘bald’ [MCCHЯ: 347]: ST **ter* (~ *d-*) ‘bald, bare’.
184. PN **t’ap’ḥ/a/* ‘beat’ [ОСНЯ №349]: ST **dhVp* id.
185. PN **t’ājV* ‘louse’ [MCCHЯ: 335]: NC **ṭah-nā* ‘nit’.
186. PN **t’äpV* ‘warm, heat’ [MCCHЯ: 338]: ST **tap* ‘fire-place, stove’.
187. PN **t’umV* ‘dark’ [MCCHЯ: 368]: SC **dwVmV* ‘dark, black’ (ST **t̄Vm* ‘dark’, PY **tum-* ‘black’).
188. PN **t’unKV* ‘lower part of trunk, stump’ [MCCHЯ: 344]: SC **dwV(n)q̄V* ‘trunk, beam, piece of timber’ (ST **tūŋ* (~ *d-*); NC **dwiq̄V̄*).

189. PN **t'urV* 'swift, hurry' [МССНЯ: 332]: SC **t'UrV* 'run, hurry' (ST **t(h)ur*, NC **?V-ṭVr-*).
190. PN **t'o/gV* 'fire' [МССНЯ: 337] (Turk. **toga* — Ural. **tä/y/V(t)* 'fire'; PIE **dheg^wh-* 'burn' should rather be compared with Alt. **dakV-* 'burn'): SC **tVKwV* 'burn, glow, kindle' (ST **/dh/ek^w* id., PY **dVk-* (~ -g-) 'light, candle').
191. PN **t'VkU* 'flow, pour' [МССНЯ: 347]: SC **t'HEkV* 'drop, drip' (ST **tēk* (~ *d-*), NC **t'HänkV* ~ **t'HäkV-nV* 'drop').
192. PN **t'VkV* 'plait, weave' [МССНЯ: 354]: ST **tak* 'weave'.
193. PN **t'VrpV* 'be satiated' [Иллич-Свитыч 1968: 317]: SC **tV(r)ṗV* (~ *b-*) 'eat, taste' (ST **thṖp*, PY **dVbV*).
194. PN **t'apV* 'hit (an aim), pass; guess' [МССНЯ: 356]: SC **dwVṗV* (~ *-b-*) (ST **tuap* 'pass, fit; answer'; PY **-tVb-* 'ask').
195. PN **t'al/H/V* 'flat, level' [МССНЯ: 355]: ST **thāl* (~ *d-*) id.
196. PN **t'/ajlV* 'stone' [МССНЯ: 343]: NC **ḷalV* 'stone, rock'.
197. PN **t'älV* 'young (of animals)' [МССНЯ: 359]: NC **ḷäthä* 'lamb'.
198. PN **TuHlV* 'net, catch with a net': ST **t(h)ol* (~ *-l*) 'net'.
199. PN **gülV* 'house, dwelling' [МССНЯ: 341]: SC **ḷwVlV* 'hedge, fence' (ST **ral*, NC **ḷwəV*).
200. PN **l/a/pV* 'lick' [МССНЯ: 347] (only PIE with HS parallels): SC **ḷVpV* (~ *-b-*) 'tongue' (ST **ḷep*; PY **?alVp*; Hatt. *alip*).
201. PN **warV* 'burn' [МССНЯ: 341]: ST **war* id.
202. PN **welV* 'kill, die' [МССНЯ: 367]: SC *(*wV*)*ḷV-* id. (OC **ḷij* 'corpse', NC **?i-wḷV-* 'kill, die').
203. PN **wetV* 'water' [МССНЯ: 334]: SC **-ṭwV* 'water, pour' (ST **tuj* 'water', NC **?V-ṭwV* 'be wet, soak, pour').
204. PN **wilV* 'wet, soak' [МССНЯ: 333]: SC **ḷwV* 'flow; drink' (ST **luj* 'flow, water', NC **?V-ḷwV* 'drink').
205. PN **wojV* 'swim' [МССНЯ: 355]: ST **jəw* / **wəw* 'float, swim'.
206. PN **ḷantV* 'front' [МССНЯ: 354]: SC **HendwV* 'forehead' (ST [with metathesis] **thjīn*, NC **?endū*).
207. PN **ḷot'i* 'burn, fire' [ОСНЯ №343]: PY **ḷot* id.
208. PN **śVnV* (~ *-š-*) 'year; old' [МССНЯ: 337] (**ʒUnE* in [Долгопольский 1974: 167]): SC **swEnV* id. (ST **s-nī-ŋ* id., PY **sin-* 'old', **si(n)-Ga* 'year', NC **swän(H)i* 'year').
209. PN **zeyV* 'eat' [МССНЯ: 340]: SC **ʒVHV* (~ *-ç-*) 'eat, drink' (ST **ʒhaH* 'eat', PY **siG-* id., NC **ʒaHV* (~ *-ç-*) 'drink').
210. PN **zalV* 'conceal; cunning, treacherous' [МССНЯ: 368]: SC **ʒlV* (~ **-č-*) 'bad, mischief' (ST **cuat* (~ *-č-*) 'to plan mischief', PY **sel-* (~ *-r-*) 'bad').

211. PN *₃AhrV ‘moon’ [Долгопольский 1974: 167] (PIE *(Ha)ster- ‘star’ probably should be added): SC *₃wArHV ‘star’ (OC *sēŋ, NC *₃wHarŋi).

212. PN *₃iNV ‘night, spend a night’ [Долгопольский 1974: 167]: SC *HćwInV ‘night’ (ST *chen (- s-) ‘night, darkness’, PY *si(n)-G ‘night’, NC *HćwɪnV (/ *HnićwV) ‘night, dream’).

213. PN *₃ULE ‘trunk, tree’ [Долгопольский 1974: 170]: SC *ç(w)VIV ‘tree’ (ST *Cal ‘wood, forest’, NC *çalV ‘tree, stick’ /or *çwīlhV id./).

PRONOUNS AND PARTICLES

1. PN *mi (*mV) ‘I’: SC *ŋV (ST *ŋā (*ŋV), PY *b-, NC *nV (/ *mV)).
2. PN *mä ‘prohibitive particle’: SC *mV id. (ST *ma, PY *wə-, NC *mV).
3. PN *mu ‘this, that’: SC *mV id. (PY *wV, NC *mV).
4. PN *mi ‘what’: SC *mI id. (PY *wi / *we-, NC *mV).
5. PN *t’ä ‘this, that’: SC *tV id. (PY *dV, NC *tV). Cf. also SC *dV ‘demonstrative pronoun’ (ST *t, *te, PY *t/ul-, NC *dV-ɛV).
6. PN *ʔi / *ʔe ‘this’: SC *ʔi (ST *ʔi, NC *ʔi).
7. PN *ʔa ‘that’: SC *ʔa (ST *ʔa, NC *ʔa).
8. PN *sa ‘a demonstrative pronoun’: SC *šV id. (ST *še, *ši-ŋ, PY: Ket šī-ŋ, śū-ŋ, NC *šV).
9. PN *k’a / *k’o ‘who’: SC *xV ‘who, what’ (ST *qhā, NC *xV).
10. PN *da ‘a locative particle’: NC *-dV id.
11. PN *ʔe ‘a negative particle’: NC *ʔ(w)V id.
12. PN *ja ‘which, what’: SC *jV ‘an interrogative particle’ (PY: Ket aj ‘what’, NC *jV ‘interrogative particle’).
13. PN *-jV ‘a diminutive suffix’: NC *-jV id.
14. PN *-j(V) ‘a plural particle’: NC *-jV id.
15. PN *-k’a ‘a diminutive suffix’: NC *-kV id.
16. PN *k’o/ ‘a postpositive emphatic particle’: NC *k̄Vj id.
17. PN *kV ‘a directive particle’: SC *-kV id. (PY *-ga, NC *-k̄V).
18. PN *-l/a/ ‘a collective suffix’: NC *-tV ‘a plural suffix’.
19. PN *tA ‘a locative particle’: NC *-t̄V id.
20. PN *-nV ‘oblique noun-form suffix’: SC *-nV id. (PY *-n-, NC *-nV).
21. PN *NA ‘a demonstrative pronoun’: NC *nV ‘this, that’.
22. PN *-NA ‘a plural suffix’: SC *-nV id. (ST *-n ‘a collective suffix’, PY *-n(V), NC *nV).