

NOSTRATIC AND ALTAIC

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Since the first volume of Illich-Svitych's "Opyt sravneniia nostratichekikh iazykov [An attempt to compare Nostratic languages]" appeared in 1971, it has continuously been greeted with criticism (Clauson 1973, Andronov 1982, Serebrennikov 1982, Shcherbak 1984, Vine 1991). The only positive evaluation of the Nostratic theory coming from outside of Nostratic camp seems to belong to Manaster Ramer (1993, 1994). Despite the fact, demonstrated in the negative reviews, that many of the etymologies proposed by Illich-Svitych can be dismissed, the task of evaluating the Nostratic theory in general remains largely unaccomplished (Manaster Ramer 1994:157).

The goal of this article is three-fold: first, I intend to demonstrate that Nostratic theory cannot be dismissed out of hand by a responsible historical linguist as something not being worthy further discussion; second, that much remains to be done within the Nostratic macrofamily, particularly in the area of assessment of its internal structure and classification, and third, as the title shows, I intend to investigate whether Altaic should be included in Nostratic or not.

I will investigate in this article the interrelationships of three members of the Nostratic family: Altaic, Indo-European, and Uralic. The choice of Altaic is due to the fact that my linguistic interests are connected mostly with the Altaic family, especially with its Eastern members: Japanese, Korean, and Manchu-Tungusic. Besides, I have some knowledge of Indo-European and more of Uralic. These three branches of Nostratic, as proposed by Illich-Svitych, cover the Northern area of Eurasia. Meanwhile, my expertise in three "Southern" Nostratic branches: Afroasiatic, Kartvelian, and Dravidian is pretty much close to zero, and that naturally led me to limiting my "base of operation" to the first three branches only, with my emphasis being on interrelationship between Nostratic and Altaic.

I consider my task to be mainly the evaluation of Vladislav M. Illich-Svitych's work, and not that of his followers. Therefore, only the first two

volumes of Illich-Svitych's Nostratic dictionary (Illich-Svitych 1971, 1976) are taken into consideration, and the third volume, though it bears Illich-Svitych's name on the cover (Illich-Svitych 1984), is left out since it is mostly compiled by a group of Moscow linguists under the direction of V. A. Dybo. I allowed myself, however, to introduce some minor changes, mostly in reconstructions of Altaic materials, when it was necessary to correct Illich-Svitych's mistakes, or to make other changes on the basis of materials which were not available to him. Thus, in particular, I have made in Nostratic reconstructions in several cases some changes on the basis of recent proposals by Alexis Manaster Ramer (Manaster Ramer 1994).

There is certainly a number of individual problems concerning lower-level reconstructions. Thus, for example, though below I preserved the reconstruction of PA vocalism as presented by Illich-Svitych, I actually believe that it is not valid any longer and even actually can be presented only in a tentative form. The same, though to a lesser extent, can be applied to PU vocalism, too. However, I think that these particular problems should not prevent us from giving a *preliminary estimate* of the validity of the Nostratic theory: when Indo-European specialists discuss Indo-European they still can do it in spite of the fact that there are still particular unsettled problems in Slavic or Germanic reconstruction.

The following evaluation of the Nostratic family is based on an ultra-conservative approach in phonology and semantics. There are 353 Nostratic etymologies presented in Illich-Svitych (1971) and Illich-Svitych (1976). I have chosen among them only those which connect Indo-European, Uralic, and Altaic, or any pair of those three branches. Afroasiatic, Kartvelian, and Dravidian parallels are not included into the following lists, even if they are present in Illich-Svitych's dictionary. I have excluded all suspicious parallels, and the most important requirement is that these etymologies have identical or almost identical semantics. I also excluded all cases when a word is attested in only one language or dialect within a language family, even if such cases are extremely likely proto-language forms. Needless to say, the phonetic correspondences among the chosen parallels are regular.

Words common to Indo-European, Uralic, and Altaic

- 1) PN ****bok/a-** 'to run away' > PIE ***bheug/*bhegw-** 'id'; PU ***pok-tV-** 'to run'; PA ***p[']V-k-** 'run' (PMT only, if PA aspirated, then unrelated) (Illich-Svitych 1971:181).
- 2) PN ****bura** 'to drill' > PIE ***bher-** 'to drill'; PU ***pura** '[to] drill'; PA ***bura** 'to turn' (PT only) (Illich-Svitych 1971:186–187).

- 3) PN ****burΛ** 'snow/sand storm' > PIE ***bher** '[to] storm'; PU ***purka** 'snowstorm'; PA ***bora/*burΛ** 'storm', 'snowstorm' (Illich-Svitych 1971:188–190).
- 4) PN ****skalu** 'to split', 'to cut' > PIE ***skel** 'to split'; PU ***sale** 'to split', 'to cut'; PA ***calu** 'to cut' (Illich-Svitych 1971:195–197).¹
- 5) PN ****gi/4/ħu** 'smooth and glimmering' > PIE ***ǵhelh^w-/*ǵhle^w-** 'glimmering'; PU ***kī/4/Λ** 'smooth and glimmering'; PA ***gilu-/*gila-** 'smooth and glimmering' (Illich-Svitych 1971:229–230).
- 6) PN ****gop'a** 'empty', 'hollow' > PIE ***geup-** 'cavity', 'hole', 'pit'; PU ***koppa** 'empty', 'hollow'; PA ***goba-/*gobi-** 'empty', 'hollow' (Illich-Svitych 1971:232–233).
- 7) PN ****?a** 'that over there' > PIE ***he-n-** 'over there'; PU ***a-** 'that over there'; PA ***a-** 'that over there' (Illich-Svitych 1971:257–258).
- 8) PN ****?i-/*?e-** 'this' > PIE ***hei-/he-** 'this'; PU ***i-/*e-** 'this'; PA ***i-/*e-** 'this' (Illich-Svitych 1971:270–271).
- 9) PN ****kal'Λ** 'to bark (a tree)', 'to skin' > PIE ***gol-** 'naked', 'bald'; PU ***kal'Λ** 'skin', 'naked', 'smooth'; PA ***Kal₂/i/-** 'to skin', 'naked' (Illich-Svitych 1971:289–290).
- 10) PN ****Kar'ä** 'bark', 'shell' > PIE ***ker** 'bark', 'skin'; PU ***kore/*kere** 'bark'; PA ***k'Er'ä** 'bark' (Illich-Svitych 1971:341–343).
- 11) PN ****KirΛ** 'frost' > PIE ***ker-** 'frost', 'ice', 'frozen snow-crust'; PU ***kirte**, ***kirΛ** 'frozen snow-crust'; PA ***k'ir₁(a)** 'frost' (Illich-Svitych 1971:353–354).
- 12) PN ****Kō** 'who' > PIE ***k^wo** 'who'; PU ***ko-/*ku-** 'who'; PA ***k'o-/*k'a-** stem of interrogative pronoun (Illich-Svitych 1971:355–356).
- 13) PN ****lip'a** 'sticky' > PIE ***leip-** 'to stick', 'sticky'; PU ***Lipa** 'slippery', 'sticky'; PA ***lipa-** 'to stick', 'sticky' (Illich-Svitych 1976:18–20).
- 14) PN ****LaHm/u/** 'swamp' > PIE ***lehm** 'swamp', 'puddle'; PU ***Lampe** 'swamp', 'lake'; PA ***laamu** 'sea', 'swamp' (Illich-Svitych 1976:29–30).
- 15) PN ****marja** 'berry' > PIE ***mor-** 'blackberry'; PU ***marja** 'berry'; PA ***mürV** 'berry' (Illich-Svitych 1976:43–45).
- 16) PN ****mi** 'what' > PIE ***mo-** stem of interrogative adverbs; PU ***mi** 'what'; PA ***mV** 'what' (Illich-Svitych 1976:66–68).
- 17) PN ****pelHi** 'be afraid' > PIE ***pelH-** 'be afraid'; PU ***pele-** 'be afraid'; PA ***peeli-** 'be afraid' (Illich-Svitych 1976:98–99).

¹ Illich-Svitych originally reconstructed PN ****calu** here; I changed it to ****skalu** following recent proposal by Alexis Manaster Ramer, who demonstrated that PIE clusters could not originate from PN affricates suggested by Illich-Svitych (Manaster Ramer 1994).

- 18) PN **p'är'/a/ 'to tear', 'to break', 'to split' > PIE *(s)per- 'to tear', 'to break'; PU *pärä 'to break'; PA *p'örü/*p'ürü 'to tear', 'to crush' (Illich-Svitych 1976:100–101).
 19) PN **tap̥a 'to hit' > PIE *tep- 'to hit', 'to pound'; PU *tappa- 'to hit', 'to kick'; PA *t'api 'to hit', 'to forge', *t'äpi 'to kick' (Illich-Svitych 1976:108–109).
 20) PN **wol(a) 'big' > PIE *wel 'big'; PU *wola 'many'; PA *ola 'many' (Illich-Svitych 1976:109–111).

Words common to Indo-European and Uralic

- 1) PN **bara > PIE *bher- 'good'; PU *para 'good' (Illich-Svitych 1971:175).
 2) PN **berg/i/ 'high' > PIE *bherǵh/*bhreǵh 'id.'; PU *p/e/r-kV- 'id.' (Samoyedic only) (Illich-Svitych 1971:177).
 3) PN **bur'a 'to boil', 'to seethe' > PIE *bhreu 'id.'; PU *pura 'id.' (Illich-Svitych 1971:190).
 4) PN **čäjha 'glimmer' > PIE *skeih 'id.'; PU *šäjä 'id.' (Illich-Svitych 1971:199–200).
 5) PN **skela 'to jump' > PIE *(s)kel 'id.', PU *čela 'id.' (PA parallel is dubious) (Illich-Svitych 1971:203–204).
 6) PN **gäti 'hand/arm' > PIE *ǵhes- 'id.', PU *käte- 'id.' (Illich-Svitych 1971:227).
 7) PN **Henka 'to burn' > PIE *Heng- 'to burn', *Hng-n-i 'fire'; PU *eŋka 'to burn' (Illich-Svitych 1971:245–246).
 8) PN **Herä 'to tumble down', 'to fall to pieces' > PIE *her- 'to tumble down', 'to fall to pieces'; PU *erä- 'to tumble down', 'to fall to pieces' (Illich-Svitych 1971:246–247).
 9) PN **Homsa 'meat' > PIE *(H)mēms 'id.'; PU *omša 'id.' (Illich-Svitych 1971:252–253).
 10) PN **Hosa 'ash-tree' > PIE *h^wes 'id.'; PU *oška 'id.' (Illich-Svitych 1971:255).
 11) PN **jaHu/**joHu 'to gird' > PIE *ieh^ws- 'to gird', 'girdle'; PU *jōya 'girdle' (Illich-Svitych 1971:278–279).
 12) PN **kanpa 'soft excrescence' > PIE *gemb 'excrescence', 'fungus'; PU *kampa 'fungus' (Illich-Svitych 1971:291–292).
 13) PN **karΛ/**kura 'crane' > PIE *gerH 'id.'; PU *karke/*kurke 'id.' (Illich-Svitych 1971:292–293).
 14) PN **kojHa 'skin', 'bark' > PIE *g^weiH 'skin'; PU *koja 'bark' (Illich-Svitych 1971:299–300).

- 15) PN **KuPša 'to die out', 'to extinguish' > PIE *g^wes- 'to die out'; PU *kupsa-/ *kopsa- 'to die out' (Illich-Svitych 1971:311).
 16) PN **Käp'ä 'paw' > PIE *RepH 'paw', 'hoof'; PU *käppä 'paw' (Illich-Svitych 1971:347).
 17) PN **laḵa- 'to lick', 'to lap' > PIE *lak- 'to lick', 'to lap'; PU *lakka- 'to lick', 'to lap' (Illich-Svitych 1976:15).
 18) PN **ļejna 'soft', 'weak' > PIE *lei 'soft', 'weak'; PU *ļejna 'weak' (Illich-Svitych 1976:26–27).
 19) PN **īwa 'dirt' > PIE *leu(H) 'dirt', 'silt'; PU *īwa 'dirt', 'sand', 'marsh' (Illich-Svitych 1976:27).
 20) PN **lonKa 'to bend' > PIE *lenk 'to bend'; PU *lonka 'to bend' (Illich-Svitych 1976:27–28).
 21) PN **Lawša 'not stretched', 'weak' > PIE *leus 'not stretched', 'weak'; PU *Lawša 'not stretched', 'weak' (Illich-Svitych 1976:31–32).
 22) PN **mänä 'man', 'male' > PIE *m/o/n 'man'; PU *mäñce 'man', 'person' (Illich-Svitych 1976:58–59).
 23) PN **moLa 'to break to pieces' > PIE *mel- 'to break to pieces', 'to grind'; PU *moLa- 'to break', 'to break to pieces' (Illich-Svitych 1976:69–70).
 24) PN **muça 'to wash' > PIE *mesg- 'to wash', 'to dive'; PU *muške- 'to wash' (Illich-Svitych 1976:71–72).
 25) PN **nimi 'name' > PIE *Hnōm 'id.'; PU *nime 'id.' (Illich-Svitych 1976:82–83).
 26) PN **Nüqa 'now' > PIE *nuH- 'id.'; PU *Nüka 'id.' (Illich-Svitych 1976:97–98).
 27) PN **p'oĵa/**p'odqa 'thigh' > PIE *bhe/dh/ 'id.'; PU poĵka 'id.' (Illich-Svitych 1976:102–103).

Words common to Uralic and Altaic

- 1) PN **biČa 'small' > PU *pičV 'small' (Baltic Fennic only), PA *bičä 'small' (PT *bičä, PM *bičV) (Illich-Svitych 1971:178).
 2) PN **bilwi 'cloud' > PU *pilwe 'id.', PA *bulit 'id.' (PT only) (Illich-Svitych 1971:179–180).
 3) PN **bur(H)Λ/**bor(H)Λ 'dust', 'loose ground' > PU *pora 'dust', 'dirt', 'ground'; PA *bōr₁ 'dust', 'loose ground' (Illich-Svitych 1971:187–188).
 4) PN **Hanga 'to open mouth' > PU *aŋa 'mouth'; PA *aŋa 'opening', 'mouth' (Illich-Svitych 1971:244–245).
 5) PN **H/E/mi 'to suck', 'to swallow' > PU *ime- 'to suck'; PA *ämV- 'to suck', 'to swallow' (Illich-Svitych 1971:248–249).

- 6) PN **ʔe- negative verb > PU *e- id.; PA *e- id. (Illich-Svitych 1971:264–265)
- 7) PN **kal₁ ‘fish’ > PU *kala ‘fish’, PA *kal₁V- ‘whale’ (Illich-Svitych 1971:288–289).
- 8) PN **kā/IH/Λ ‘to go’, ‘to stroll’ > PU *kālā- ‘to go’, ‘to stroll’; PA *kāl- ‘to come’ (Illich-Svitych 1971:293–295).
- 9) PN **koja ‘moth’, ‘larva’ > PU *koja ‘moth’; PA *kuja ‘moth’, ‘larva’ (Illich-Svitych 1971:298–299).
- 10) PN **kojwa ‘birch’ > PU *kojwΛ ‘birch’; PA *kiba ‘birch’ (Illich-Svitych 1971:300).
- 11) PN **koλΛ ‘to skin’ > PU *koδ’Λ-/*kuδ’Λ- ‘id.’; PA *koLa- ‘id.’ (Illich-Svitych 1971:300–301).
- 12) PN **kül’Λ ‘to feel cold’, ‘cold’ > PU *küLmä ‘cold’, ‘to feel cold’; PA *Köl’V ‘to feel cold’, ‘cold’ (Illich-Svitych 1971:304–305).
- 13) PN **kUłΛ ‘snake’, ‘worm’ > PU *kołΛ ‘worm’; PA *kuli ‘snake’, ‘worm’ (Illich-Svitych 1971:308–309).
- 14) PN **Kumä ‘upside down’ > PU *kuma ‘upside down’; PA *k’öm(ä) ‘upside down’ (Illich-Svitych 1971:310–311).
- 15) PN **KümTä ‘fog’ > PU *küntä ‘fog’, ‘smoke’; PA *küdü- ‘fog’ (Illich-Svitych 1971:312).
- 16) PN **KawingΛ ‘armpit’ > PU *kajjala ‘id.’; PA *k’awinji ‘id.’ (Illich-Svitych 1971:312).
- 17) PN **Kä/IH/ä ‘tongue’ > PU *kēle ‘tongue’, PA *k’āla ‘tongue’, ‘to speak’ (Illich-Svitych 1971:346–347).
- 18) PN **Ke ‘who’ > PU *ke- ‘who’, PA *k’e- ‘who’ (Illich-Svitych 1971:348–349).
- 19) PN **KulΛ ‘to fall’ > PU *kulΛ- ‘to fall’; PA *k’ulV- ‘to fall’ (Illich-Svitych 1971:358–359).
- 20) PN **kükΛ ‘to pierce’, ‘to prick’ > PU **kükκΛ ‘to pierce’, ‘to prick’; PA *lükä- ‘to pierce’ (Illich-Svitych 1976:28–29).
- 21) PN **Λa/mH/u ‘bird-cherry tree’ > PU *dōme ‘bird-cherry tree’; PA */d/ime ‘bird-cherry tree’ (Illich-Svitych 1976:37–38).
- 22) PN **miña ‘woman’, ‘female relative’ > PU *miña ‘daughter-in-law’; PA *mi[n̄/n]a ‘woman’, ‘daughter-in-law’ (PJ *miCa, *bQ-mina ‘woman’; PK *minol-i ‘daughter-in-law’). PA not given by Illich-Svitych (— A.V.) (Illich-Svitych 1976:68–69).
- 23) PN **muri ‘to turn’ > PU *murΛ- ‘to turn’; PA *muri ‘to turn’ (Illich-Svitych 1976:74–75).

- 24) PN **ñafra ‘young’, ‘newly born’ > PU *ñōre ‘id.’; PA *ñar₂V ‘id’ (Illich-Svitych 1976:83–85).
- 25) PN **ñämΛ ‘soft’ > PU *ñämΛκΛ/*ñimΛκΛ ‘soft’; PA *ñämV/*ñimV ‘soft’ (Illich-Svitych 1976:86–87).
- 26) PN **ñohra ‘wet’, ‘swamp’ > PU *ñōra ‘wet’, ‘swamp’; PA *ñōru ‘wet’, ‘swamp’ (Illich-Svitych 1976:89–90).
- 27) PN **ñiKa ‘neck’, ‘jugular vertebrae’ > PU *ñika ‘vertebrae’, ‘neck’, ‘joint’; PA *ñika ‘neck’, ‘jugular vertebrae’, ‘collar’ (Illich-Svitych 1976:92).

Words common to Indo-European and Altaic

- 1) PN **bAHLi ‘wound’, ‘pain’ > PIE *bhehl ‘wound’, ‘pain’; PA *baal₂ ‘wound’ (PT only) (Illich-Svitych 1971:172).
- 2) PN **balqa- ‘sparkle’ > PIE *bhelg-/*bhleg- ‘id.’; PA *balkV- ‘id.’ (PT *balki-, PK *pV[+back]lk- ‘bright’, ‘clear’, PJ *para-Ci- ‘clear up’) (Illich-Svitych 1971:174–175).
- 3) PN **bari ‘take’ > PIE *bher- ‘take’, ‘bring’; PA *bari- ‘take’, ‘get’ (PT *bari-, PM *bari-) (Illich-Svitych 1971:176–177).
- 4) PN **bor’a ‘brown’, ‘grey’ > PIE *bher ‘brown’, PA *bor₂ ‘brown’, ‘grey’ (PT *bor₂, PM *bora) (Illich-Svitych 1971:183–184).
- 5) PN **buHi ‘to grow’ > PIE *bheuH ‘to grow’, ‘to become’; PA *büi- ‘to be’; ?? PU *puGe ‘tree’ (Illich-Svitych 1971:184–185).
- 6) PN **büKa ‘to bend’ > PIE *bheug-/*bheugh- ‘id.’; PA *bökä-/*bükä- ‘id.’ (Illich-Svitych 1971:191).
- 7) PN **dEwHi ‘to blow’, ‘to shake’ > PIE *dheuH ‘to blow’, ‘to shake’; PA *dEbi ‘blow’, ‘to wave’ (Illich-Svitych 1971:217–218).
- 8) PN **diga ‘fish’ > PIE *dhgh-u-H ‘id.’; PA *diga ‘id.’ (Illich-Svitych cites only PM *jiga-sun, also PJ *(d)iwo) (Illich-Svitych 1971:219).
- 9) PN **güpa ‘to bend’ > PIE *gheub- ‘to bend’, ‘bent’; PA *gübä-/*göbä- ‘to bend’ (Illich-Svitych 1971:236–237).
- 10) PN **gUjRä ‘wild [animal]’ > PIE *ghwer- ‘wild [animal]’; PA *göra ‘game’, ‘wild animal’ (Illich-Svitych 1971:237).
- 11) PN **gUrΛ ‘hot charcoals’ > PIE *gwher- ‘to burn’, ‘hot’, ‘hot charcoals’; PA *gur(V)- ‘to burn’, ‘hot charcoals’ (Illich-Svitych 1971:239).
- 12) PN **HoKi ‘point’, ‘spike’ > PIE *HeK- ‘point’, ‘spike’; PA *oki ‘arrow’ (PT only) (Illich-Svitych 1971:251–252).
- 13) PN **Horä ‘to rise’ > PIE *hwer- ‘to rise’, ‘to move’; PA *ora-/*öra- ‘to rise’, ‘to ascend’ (Illich-Svitych 1971:254–255).

- 14) PN **ʔili 'deer' > PIE *h₁el-n- 'deer'; PA *ili 'deer' (Illich-Svitych 1971:272–273).
- 15) PN **kamu- 'to seize', 'to squeeze' > PIE *gem- 'to seize', 'to squeeze', 'to take'; PA *kamu- 'to seize', 'to squeeze', 'to take' (PU *kama-l/*kama-ra 'handful' is far-fetched semantically) (Illich-Svitych 1971:290–291).
- 16) PN **kājwλ- 'to chew' > PIE *ǵieu-/*ǵieu- 'to chew'; PA *kāb/ā- 'to chew'. (Illich-Svitych 1971:293)
- 17) PN **Kār/ä/ 'black', 'dark' > PIE *ker-(s)- 'black', 'dark'; PA *k'ar₁a 'black' (Illich-Svitych 1971:337–338).
- 18) PN **Karb/i/ 'belly', 'intestines' > PIE *Kerp/*Krep 'belly', 'body'; PA *k'ar₁bi 'belly' (Illich-Svitych 1971:338–340).
- 19) PN **Korλ 'worm' > PIE *k_wr-mi- 'id.'; PA *KorV 'id.' (Illich-Svitych 1971:358).
- 20) PN **Küpä 'to boil', 'inflate' > PIE *keu(H)p 'to boil'; PA *k'öpä- 'to inflate', 'to foam', 'to froth' (Illich-Svitych 1976:363–365).
- 21) PN **NajRa 'man', 'male' > PIE *ner 'id.'; PA *ñarV 'id.' (Illich-Svitych 1976:92–93).
- 22) PN **purčλ 'flea' > PIE *bh₁lus/*plus 'flea'; PA *pürägä/*bürägä 'flea' (Illich-Svitych 1976:92–93).
- 23) PN **qoti 'to set fire', 'fire' > PIE *He₁[:t] 'fire', 'fireplace'; PA *ooti 'fire', 'spark' (Illich-Svitych 1976:103–104).
- 24) PN **zap'a 'to hold' > PIE *sep- 'to hold', 'to undertake smth.'; PA *japa 'to hold', 'to arrange' (Illich-Svitych 1976:111).

Statistical distribution of the above etymologies

	PIE	PA
PU	47	47
PA	44	

As always, the existence of parallels between the two or more languages may invite three possible interpretations: 1) all these parallels are random and due to chance; 2) they are loanwords; 3) they demonstrate that languages in question are related. In our case, the possibility of a sheer chance can be ruled out from the beginning because all our parallels are based on regular phonetic correspondences, the very existence of those would be impossible in case of random parallels. Therefore, we are left with two choices only: loanwords or common heritage.

Borrowing seems also unlikely, due to the following considerations, though the smaller number of PIE-PA parallels may lead to such suspicion. First, in the

case of borrowing, the direction of borrowing would be likely either from PIE to PA via PU, or from PA to PIE via PU. However, under either of these scenarios the number of PIE-PA etymologies not present in PU would be either insignificant or non-existent. Therefore, since the number of PIE-PA is only slightly less than number of PIE-PU and PU-PA parallels, both scenarios can be excluded. Second, though the possibility of borrowing by both PIE and PA from PU theoretically exists, it can be easily dismissed on historical grounds: the technologically more advanced PIE and PA societies were unlikely to borrow from a hunter/gatherer community like PU. Even more fantastic would be a proposal that both PIE and PA have a PU "substratum": nothing in the above parallels or in their distribution seems to indicate such a possibility. Finally, any of these scenarios can be easily dismissed on phonological grounds.

Let us consider that all above examples are loanwords. Let us take first six:

- 1) PN **bok/a/- "to run away" > PIE *bheug/*bhegw- "id"; PU *pok-tV- "to run"; PA *p[']JVk- "run" (PMT only, if PA aspirated, then unrelated) (Illich-Svitych 1971:181)
- 2) PN **bura "to drill" > PIE *bher- "to drill"; PU *pura "[to] drill"; PA *bura "to turn" (PT only) (Illich-Svitych 1971:186–187).
- 3) PN **burλ "snow/sand storm" > PIE *bher "[to] storm"; PU *purλ "snowstorm"; PA *bora/*burλ "storm", "snowstorm" (Illich-Svitych 1971:188–190).
- 4) PN **skalu "to split", "to cut" > PIE *skel "to split"; PU *sale "to split", "to cut"; PA *calu "to cut" (Illich-Svitych 1971:195–197).
- 5) PN **gi/ī/hu "smooth and glimmering" > PIE *ǵhelh^w-/*ǵhlehw- "glimmering"; PU *kī/ī/λ "smooth and glimmering"; PA *gilu-/*gila- "smooth and glimmering" (Illich-Svitych 1971:229–230).
- 6) PN **gop'a "empty", "hollow" > PIE *geup- "cavity", "hole", "pit"; PU *koppa "empty", "hollow"; PA *goba-/*gobi- "empty", "hollow" (Illich-Svitych 1971:232–233).

Let us suppose that the following examples are all loanwords with the direction of borrowing: PIE > PU > PA. If they are PIE loanwords in PA borrowed via PU, we are faced with a phonetic development which will be very difficult to explain in a situation of borrowing:

C[+voice] > C[-voice] > C[+voice]

C[-stop]C[+stop] > C[-stop] > C [+stop]

How could PIE voiced stops possibly have been borrowed into PU as voiceless, but passed on to Altaic as voiced? How could a PIE cluster have been

borrowed into PU as single fricative but resurface in PA as an affricate? If we assume the opposite direction of borrowing, that is PA > PU > PIE, we again find ourselves in no better position:

C[+voice] > C[-voice] > C[+voice]
C[+stop] > C[-stop] > C[-stop]C[+stop]

Quite similarly to the previous scenario, PA voiced stops become voiceless in PU, but resurface as voiced in PIE. PA affricates shift to PU fricatives, but the latter generates consonant clusters in PIE. We will confront the same phonological nonsense if we assume that all these parallels are due to borrowing by PIE and PA from PU. Let us add two more examples from above:

- 17) PN **peIHi “be afraid” > PIE *pelH- “be afraid”; PU *pele- “be afraid”; PA *peeli - “be afraid” (Illich-Svitych 1976:98-99).
18) PN **p’är/a/ “to tear”, “to break”, “to split” > PIE *(s)per- “to tear”, “to break”; PU *pära “to break”; PA *p’ör₂ü/*p’ür₂ü “to tear”, “to crush” (Illich-Svitych 1976:100-101).

Assuming that these two examples as well as previous six are all PU loanwords in PIE and PA, we are faced with the following developments:

PU C[-voice] > PIE C[+voice], C[-voice]
> PA C[+voice], C[-voice]

PU C[-stop] > PIE C[-stop]C[+stop]
> PA C[+stop]

Under this scenario PU voiceless stops chaotically become either voiceless or voiced in PIE and PA, yet PU fricatives produce PA affricates and PIE clusters.

One can possibly bring forward an argument that all these words were “borrowed” not from proto-languages, but from different languages and in different times. However, this is highly unlikely since all these parallels are attested throughout these three language families, and, therefore, must go back to all three proto-languages (the reader will remember that I cut off all parallels with limited attestation). In addition, the regularity in correspondences under such a scenario would not exist, and we would be faced with the chaotic system of correspondences or with several different systems of correspondences which occur when we deal with loanwords from different languages at different times.

Therefore, the only reasonable solution to this problem is to admit that common genetic origin is the likeliest hypothesis to explain all these parallels.

Thus, I come to the general conclusion that Nostratic theory, at least concerning Indo-European, Uralic, and Altaic, is a valid working hypothesis, which cannot be dismissed right out-of-hand. However, that does not mean that all problems are solved now, and that Nostratic now has the same status as, let us say, Indo-European. Below I intend to address one of the numerous issues which Nostraticists face and which must be solved before Nostratic can reach the same level of credibility as lower-level families constituting it.

Let us look at the personal pronouns in different branches of Nostratic as reconstructed by V. M. Illich-Svitych (1971:6):

	“I”	“thou”	“we” incl.	“we” excl.	“you”
PN	**mi	**i/*Si	**mä	**nA	**tä
PA	*bi/*min-	*ti/*si	*bä/*män-	—	?*ta
PU	*mi/*minA-	*ti/*tuu-	*mä/*me	—	*tä
PD	—	*ti	*ma[a]	*naam incl.	—
PIE	*me/mene-	*te/teWe-	*me-s	*ne-/*noo- obl.	*-te
PKA	*me/*mi	*se-/*si- (obl.)	*m-	*naj, *n-	—
PAA	—	*?an-tA, *t-	*m(n)	*nahnu	—

If we isolate the PA line from this chart and have a closer look at it, we will discover that it has a strange peculiarity, unparalleled by any other Nostratic branch:

	“I”	“thou”	“we” incl.	“we” excl.	“you”
PA	*bi/*min-	*ti/*si	*bä/*män-	—	?*ta

All pronouns except “you” have double forms starting either with *b- or *m- for the first person and either with *s- or *t- for the second person. Let us examine personal pronouns in different branches of Altaic:

Personal pronouns in different Altaic branches:

	PMT	PJ	PK	PM	PT
“I”	*bi	*ban	*na	*bi	*bän
“me”	*min-	—	—	*min-/*na-	*bän-/*män-
“thou” ₁	*si	*sQ-	—	—	*sän
“thee” ₁	*sin-	—	—	—	—
“thou” ₂	—	*na	*ne	—	—
“thou” ₃	—	—	—	*ci < *ti	—
“thee” ₃	—	—	—	*cim-/*cin- <*tin-	—

"we" excl.	*bu	*ban	*(b)uri	*ba	*bir ₂
"us" excl.	*mun-	—	—	*man-	—
"we" incl.	*bit	*ban	*(b)uri	*bida	*bir ₂
"us" incl.	*min-t-	—	—	*bidan-	—
"you" ₁	*suu	*sq-	—	—	*sir ₂
"you" ₁ obl.	*suun-	—	—	—	—
"you" ₂	—	*na	*nehuy	—	—
"you" ₃	—	—	—	*ta	—
"you" ₃ obl.	—	—	—	*tan-	—

It becomes clear from this chart that forms with initial *m- for the first person are secondary: they appear only in oblique cases, due to assimilation of *b- by nasality to the following formant *-n-. As for the second person, the form with initial *t- is attested only in Mongolic, and it is not related to PMT, PJ, and PT forms with *s-, since PM *t- does not correspond to PMT, PJ, and PT *s-. Therefore, the isolated Mongolic form can hardly be projected onto a PA level. Therefore, the following reconstruction of PA pronouns seems to be in order:

1sg.	*bV(-n-) "I"	1pl.	*bV-n-/-r2- "we"
	*na- "me"		
2sg.	*sV(-n-) "thou"	2pl.	*sV-n-/-r2- "you"
	?*nä "thou"		

However, Illich-Svitych provides the following correspondences for Altaic and other Nostratic languages (1971:147–150):

PN	PAA	PKA	PIE	PU	PD	PA
**b-	*b-	*b-	*bh-	*p-	*p-	*b-
**m-	*m-	*m-	*m-	*m-	*m-	*m-
**t-	*t-	*t-	*d-	*t-	*t-	*t-
**t̥-	*t̥-	*t̥-	*t-	*t-	*t-	*t'-
**s-	*š-	*s-	*s-	*s-	*c-	*s-

Therefore, if one admits that PA and Nostratic personal pronouns are related, that will violate this system of correspondences: PA *b- is not a reflex of PN **m-, and PA *s- is not a reflex of PN **t̥-. Moreover, even if we accept PM *ti "thou" and *ta "you" as PA, that still will be violating correspondences: PM *t- may reflect only PA *t' - and never PA *t-, and PA *t' - corresponds to PAA *t̥-, but not to PAA *t- (cf. the above chart of personal pronouns in different Nostratic branches). Compare also PN **mA direct object suffix > PIE *m; PU

*-m; PD *-m; PA *-ba/*-bä, which exhibits the same broken correspondences (Illich-Svitych 1976:48). It is not possible to claim that there are different correspondences for lexical and grammatical morphemes, since there are regular correspondences for other grammatical markers: PN **mA nominalizing affix > PAA *m-, PK *m-, PIE *-mo, PU *-ma/*mä, PD *-mai, PA *-ma/*-mä.

Thus, the unescapable conclusion is that PA personal pronouns are unrelated to Indo-European or Uralic personal pronouns. That creates an obvious distinction between Altaic on one side, and Uralic with Indo-European on the other: the common origin of PIE and PU personal pronouns seems to be beyond any reasonable doubt. PIE and PU exhibit, therefore, a considerably more close-knit relationship with each other than any of them with Altaic, or, as far as one can judge on the basis of the above chart of personal pronouns, with any other Nostratic language.

In sum, the above review of PIE, PU, and PA parallels shows that they are based on regular sound correspondences and therefore are not random. The phonological nature of these correspondences is such that they cannot be attributed to borrowing either. That leaves only one option: Altaic is likely to be related to both PIE and PU. However, taking into consideration the lack of the common personal pronouns, I believe that it may be premature to classify Altaic as "Nostratic": it may be, in fact, related to Nostratic on a deeper level, that is to be a member of another macrofamily, coordinate with Nostratic. In particular, some Altaic-Eskimo-Aleut and Altaic-Nivx parallels may look no less promising than Altaic and Nostratic. However, this problem falls outside the scope and limits of this paper and I will not discuss it here. Before this and many other questions could be answered with any degree of certainty, one must first reach a considerable improvements within reconstruction Altaic proper. Only after this preliminary work is done, it will be safer to compare Altaic with other language families, and to find its exact place among them.

Abbreviations

PA	Proto-Altaic
PAA	Proto-Afro-Asiatic
PD	Proto-Dravidian
PIE	Proto-Indo-European
PJ	Proto-Japanese
PK	Proto-Korean
PKA	Proto-Kartvelian
PM	Proto-Mongolian
PMT	Proto-Manchu-Tungus
PN	Proto-Nostratic

PT Proto-Turkic
 PU Proto-Uralic

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