

**Kamchukchee and Eskimo Glottochronology and
Some Altaic Etymologies Found in the 100-word Etymostatistics List**

New glottochronological research in Kamchukchee and Eskimo languages is based on the new results in Kamchukchee (KCh) and Proto-Eskimo (PE) historical phonology studies and the etymological dictionaries made by the author. These two families, it could be said, have not had any genetic connections for at least the latest 5-10 millennia (although the connections between their ancestors may possibly be traced up to the levels of macrofamilies where Nostratic is one of several branches). But during the last 2-3 millennia they have been in contact on the territory of North-Eastern Asia. Results of glottochronology agree with our subjective experience based on what we know of the levels of relationship between languages, quantities of etymologies and complicated developments of phonology in daughter languages.

The first KCh family goes back about 2800 years (55% of matches within the 100-word list). Based on the average (not the minimal) number of possible matches, we will have to assume a splitting not earlier than 2500 years ago. At that time the KCh family became divided in two branches - Proto-Chukchee (PCh) and Proto-Kamchadal (PK). After that point contacts between the two became minimal and various innovations began taking place. Then, at the beginning of the 6th century (83% matches), the PK unit had split in several parts - among them were the Southern and the Western Kamchadal branches the languages of which were fixated in the 19th century; the last Southern language, attested by B. Dybowski, had disappeared by the beginning of the 20th century. It is possible that an Eastern branch also existed, but the last dialectal material from Eastern Kamchatka was attested at the end of the 18th century, and according to those recordings it was probably a dialect close to WK, with a relatively low level of differentiation.

Around the same time, maybe a little more early (around 510 A.D. - 82% matches) the PCh unity had become split into the Chukchee (Northern) branch (modern Chukchee) and the Kamchatkan (Southern) branch. [Of course, there is no need to take these datings literally - they are rather provisional, and variations within the limits of one or two generations are possible]. On the edge of the 1st and the 2nd millennia Koryaks (Chawchuwen 'herdsman', mod. Koryak) lost contact with other PCh Kamchatkan dialects remaining in the north part of the Kamchatkan peninsula along the Sredinny ridge. This may be related to changes in the traditional Koryak style of life (salmon-fishing, still preserved among remaining PCh languages speakers on the Kamchatkan peninsula) and to the adoption of the caribou stockman culture. The separation of "dialect of Western Kamchadals" described by B. Dybowski in the 19th century (presumably Sedanka dialect) from other WK languages around 1100 A.D. (92% matches) was a result of Koryak migration. Later, in 1250 (95% matches) the Kamchatkan (Nymylan) languages had split into the Palana language (the so called Koryak dialect of Palana, located on the western part of the ridge facing the Okhotsky sea) and the Alutor (Olutor) language on the eastern part of the ridge closer to the Pacific ocean. About 1420 (97% matches) the remaining WK language had become divided into the Itelmen language based on the Napana dialect (described by A.P. Volodin in his monography) and the Itelmen language used as a foundation for the new short

Itelmen-Russian dictionary (written by A.P. Volodin and K.N. Khaloyмова, dialects of Kovran and Upper Khayriuzovo). This is an exhausting list of KCh languages which one can use for comparative studies and glottochronology. It is interesting that the dates of splitting of KCh languages have their analogies in the Eskimo results.

The Proto-Eskimo (PE) language had become divided in two about 2700 years ago (57% matches) - not later than 2400 judging by the averaging list of number of matches. These two branches have been traditionally recognized as Proto-Inupik (PI) and Proto-Yupik (PY). In 140 B.C. (68% matches) the Sirenik language split from PY; in 180 A.D. (75% matches) Siberian Yupik (SY) and American Yupic (AY) were formed. The SY unity was shattered in 510 (82% matches), after which Chaplinski (Unazigmit) and Naukanski (Nyvukagmit) lost contact and became different languages. At about the same time, as shown above, Chukchee had split from other PCh languages and it seems that the migration of Chukchees to the territories between Naukanski (now located on the North-Eastern part of Chukotkan peninsula) and Chaplinski was the main reason for this separation of SY languages. The first subbranch of AY became separated about 760 (87% matches); it includes such closely related languages and dialects as Nunivak (Nun) (used here for glottochronological calculations), Norton Sound, Chevak, Egegik. Speakers of these languages now inhabit islands and select parts of the Western Alaska seaboard close to the Bering sea. The separation of Yupik dialects (Chevak and Koniag) from the Central Alaskan Yupik (CAY) took place around 1180 (94% matches). It is possible that the marginal position of Nunivak and similar dialects is a result of CAY expansion. The splitting of PI began around 640 (85%), when the Inupik of the Seward peninsula (SPI) became an independent subbranch - in reality its speakers remained on the original territory, while the rest of the Inupik migrated to the North-East. It is possible that Nun was the first wave of Yupik colonisation of free Alaskan territories where other Inupik had been living previously. Later, at around 1050 (93% matches), the Eastern subbranch, including Greenlandic and Eastern Canadian Inupik, was formed. These languages became distinct from one another around 1430 (97% matches). The Western branch split into North Alaskan Inupik and Western Canadian Inupik at around 1340 (96% matches). Of course, operating with the closely related Inupik languages is rather problematic, but the fact that the PI unity at some time split into SPI and the rest is undeniable.

It is interesting that the loanwords in Eskimo (PE, PI, PY), present in the etymological dictionary, look like old borrowings from KCh. Their phonetics and semantics show an active contact with a KCh source closer to PK than to PCh. We may suggest that the breakup of the KCh family and migrations of PCh language speakers actually provoked the migration of a part of PE speakers across the Bering straight, and, subsequently, their partial isolation which caused the forming of the PI subgroup with its independent developments. It is also necessary to say that there are some KCh and PC borrowings in the Eskimo 100 wordlist ('small', 'moon', 'leaf'), but reverse loans from PE have not been attested.

The PE-Nostratic phonetic correspondences were established by the author more than 20 years ago. At the same time the hypothesis about a specific relationship between the Altaic family (Proto-Altaic, PA) and PE was put forward. It was interesting to perform glottochronological calculations between modern languages descending from PE and PA. The results of etymological researches show that only about 10 PE roots (out of about 200 roots from modern Eskimo languages

encountered in the 100-wordlist) do not have any phonetically regular parallels with close semantics in PA. In fact, it is possible to say that practically for every one of them one can offer a PA etymology (with a few exceptions, all of these roots can be found in EDAL). As a result, every modern Eskimo language has at least 10 reliable phonetic and semantic parallels in modern Altaic languages. The exact distribution is as follows: modern Eskimo language/ modern Turkic language - more than 11 (but with Chuvash, Tuvinian, Kirgiz - more than 12, with Turkmenian - more than 13), modern Eskimo language/ modern Mongolian language - about 11, modern Eskimo language/ Modern Tungus-Manchu language - about 13 (but with Nanai - more than 15, with Evenki - about 16, with Negidal - more than 17), modern Eskimo language/ modern Korean 10 (but with Ancient Korean, Phionyang - more than 11), modern Eskimo/ modern Japanese - about 13. The unexpected surplus of Tungus parallels may be the result of close separate contact after the disintegration of the Altaic unity.)

There is a list below of Proto-Eskimo (PE) and Altaic root correspondences found in the data of the one hundred word lexicostatistics list (really it was taken 100 and 10 additional words). The different Eskimo entries have own PE etymology, but it was surprising that the most part of them has besides wide Eurasiatic or Nostratic etymologies special Altaic correspondences in lexics and semantics. Partially they have the same affixation or untrivial development as **m-* > **v-* in the auxillary words and the 1 person pronouns. The proposition of the Nostratic origin was done by author about twenty years ago, at the same time were found some evidences which illustrate a special relationship between Eskimo and languages of Altaic family. Some roots are preserved in the other branches as Uralic or Indo-European, but there are lexical isoglosses typical only for PE and Altaic. The preliminary table of consonantal correspondences is listed before the etymologies, but it can be changed as well as the all corpus of words be filled by new enries. The main characteristics of PE phonological system are: 1. pairs of voiceless stops and voiced spirants, 2. interdiction of initial voiced spirants and interdiction of voiceless stops in the end of the last syllable, 3. interdiction of cluster more than two consonants in inlaut, 4. interdiction of clusters in the initial position and in the end of the words, 5. interdiction of the *-ti-* context, 6. some traces of old vowel harmony resulting in the difference of velars and uvular consonants on the PE level, 7. etymological reduction of vowels in some positions probably because of old accentuation, 8. old recomposition of some roots **TəTV* into **VTTV* with the "false" first vowel same as the second.

ALTAIC	PROTO-ESKIMO	
*p	p-, -p-, -v-?	
*p̣	p	
*b	0-, -v-, -0-?, (-p-)	
*t	t/ c	The palatalized variants are the result of PE development <i>*ti</i> > <i>*ci</i> in all cases (t before -i- is prohibited), sometimes they are found before Altaic front row vowels or diphtongs.
*ṭ	t/ c	See the development of <i>*t</i> .
*d	0-, -t-	See also the development of <i>*b-</i> , <i>*g-</i> in the anlaut position.
*k	k-/ q-, -k-/ -q-	The difference between velar and uvular row of stops is

		secondary in PE. It is a result of consonantal accommodation because of old front or back vowel in root. It was a vowel harmony between root vowels and some derivative affixes (-γ-, -β- - so called 'stem modifiers' of nouns and verbs). The synchronous pronunciation of *qu and *qi as [qo] and [qe] is a trace of reserving an old differentiation between two rows of vowels (presumably high-raise and middle-raise rows as Tungus or Mongolian).
*k`	k-/ q-, -k-/ -q-	See comments under *k.
*g	0-, -0-/ -γ-/ -β-	See also the development of *b-, *d- in the anlaut position. See comments under *k. Sometimes it is found -q- reflex with Altaic *-g- correspondence, may be in is a trace of an old voiceless spirant.
*% _{oo}	c-, -c-, -tə	
*% _o	c-, -c-, -tə	
*ǰ	0- (ci-?), -j-	
*s	c-, -c-, (-tə ?)	
*š-	c-	
*m	m	
*n	n-, n̄-, -n-, -n̄-	The second reflexation was found before Altaic diphthongs and *-i-.
*ñ	n̄-, -n̄- ~ -n̄-, -βə	See comments under *j. So here it is a result of development *-ñ# > *-j# and then > -βə.
*ŋ	0-, n̄-, -nγ/β-, -ŋ-	The second palatalized reflexation was found before Altaic diphthongs. Sometimes there are consonantal complexes instead the simple velars. Such complexes can be split by reduced vowel.
*l	n-, -l-	The reflex with the initial *l- is found very rare due the transforming initial laterals in n- in the most part of languages.
*l̄	N-, -l-, -rə	Cf. *r.
*-j-	-j-, -γ-, -0-, -βə	The early PE had a special development of "-j# in the end of syllable in -β with automatical inserted reduced vowel after the last consonant of the root. Cf. development of *ñ, *r.
*r	0-, -r-, -βə -j-	See comments under *j. There is a non-predictable reflex -j- in PE which can reflect any Nostratic phoneme as *r ₁ or it may be unknown phonemic circumstances.
*r̄	-r-, -tu	Cf. *l̄.
*-Nd-	-n̄-, -n(ŋ)-	
*-md-	-mŋ-	< "-mn̄- ?
*-ng-, -nk-	-n̄- ~ -ŋ- ?	

*-jn-, *-rj-	-j-, -ʃə	See comments under *j.
--------------	----------	------------------------

7 PE **acay* 'paternal aunt' > PYup **acay* id., PInup **accay* (~ -ʃ) id. The geminate reflex in Inup can show a vocative form of this relative's name. (CED 2).

Altaic **ǎ%ǎ* 'elder relative, ancestor' (mostly female in languages, but male relative with meaning 'father, ancestor' must be another root), Turk **ǎ%aj* / **ě%əj*, T-M **asī* 'wife, woman', Kor **ǎ%ǎ-*, An expressive kinship "nursery" word with the typical structure *VCV. The Mongolian reflexes are problematic: Mong *eʒei* 'mother, elder sister' is probably < Turk (EDAL 271, 272).

570 PE **aci* 'area below, downward' > PYup **aci* 'area below, downward; to go down; earth, ground (Sirenikan)', PInup **aci*, **at-* 'area below, down; ground, floor', (CED 3, 47).

Altaic **dē* 'to lie', Turk **jət-*, Mong **de-b-*, T-M **dē-du-*, Jap **dantə-r-*, One of the common Altaic monosyllabic verbal roots. Note dental suffixation (probably **dē-ta-*) reflected in Turk, TM and Jap (EDAL 466). Cf. also Turk **bat-* 'to get down, to sink'.

599 PE **aci-ʃ-* 'good, to like' > PYup **aci-ʃ-* 'good; to like', (CED 47). 2154, PInup **aca-* 'to love' (CED 61).

Altaic **gǎte* 'strong, very', Turk **ged*, Mong **küdür*, T-M **gata-* / **kada-*, Jap **kətə*, The root reveals some phonetic irregularities - probably because of contaminations with **kétə* 'much, many' and **kadi(rV)* 'strong, tough' (EDAL 532, 533). Another comparison also has to be noticed: Altaic **odi* (~ -e) 'sexual passion', Turk **öd-i*, Mong **(h)uʒid*, T-M **uda-* (EDAL 1042).

594 PE **ayə-* 'to go on walks' > PYup **ayə-* ~ **ay-ub-* 'to go on walks' (CED 7, 55), PInup **ai-*, **ai-k-ləʃ-*, **ai-t-ruʃ-* 'to go; to go home; to fetch, to give'. There is also a common root with close semantics **ayi-ʃ-* 'to come' (556) (CED 7).

Altaic **ǎja* 'to go, walk', Turk **Aj-*, Mong **aja-*, T-M **āj-*, Jap **ǎjüm-* (EDAL 277, 278).

706 PE **ayə-* 'that, on the other side, across' > PYup **ayə-* (*-kurə*, *-rumə*, *-ani*) 'that, over there, on the other side, across', This is the main pronoun for 'that' and it has the specific declination paradigm unlike other demonstrative pronouns but analogical with **u-* and **tā-u-* 'this'. (CED 453). PInup **ay-na* (**ak-kua*, **ay-ruma*, **a(γ)-ani*) 'that, on the other side, across', Some ECI and GRI forms in the declination are replaced by the phonetically similar pronoun **av-* 'over there, going away' in paradigm (CED 453, 456).

Altaic **é* 'that (deictic root)', Turk **ǎ(-n)*, Mong **e-ne*, T-M **e-*, Kor **ā-mə*, Jap **ǎ-* (EDAL 487).

556 PE **ayi-ʃ-* 'to come' > PYup **ayi-ʃ-* 'to come; to bring', See also **ayə-* ~ **ay-ub-* 'to go on walks', PInup **ayyi-ʃ-* (*-t-*) 'to come, to come from afar; to take sth. home, to bring home', (CED 7).

Altaic **aje* (~ **ejo*) 'to reach, come close', Mong **aji-su-*, Jap **ǎjǎmp-*, A Mong-Jap isogloss (EDAL 279).

1 PE **ayru-*, **ayri-* 'star' > 1902, PYup **aRyu-*, **ayRa(ʃ)* 'star', cf. 39 (CED 1, 9). 5, PInup **ayru-*,

**ayri-aq-* 'constellation: the Pleiades, constellation of two stars (appearing on the shortest day of the year)' (CED 1).

Altaic **ǰǎk* V-rV 'light, white', Turk **Ak*, Mong **jagayan*, T-M **ixere*, Kor **ikir-*, Jap **áká-(r-)*. The final vowel is not quite clear: some languages point to *-i or *-e, others - rather to *-a (EDAL 598). It can be compared Altaic ? **bjaga* (~-i) 'moon, brilliance' preserved only in T-M **biaga*.

727 PE **aǰna-* (~ **-ǰn-*) 'woman, female' > PYup **aǰna-* 'woman, girl, female (in compounds)', PInup **aǰna-* 'woman, female (in compounds)' (CED 43).

Altaic **kune* (~ *g-*) 'one of several wives', Turk **güni*, Jap **kuanami*, A Turk-Jap isogloss (EDAL 739, 740).

513 PE **aǰra* 'ashes, powder' > PYup **aǰra* [a] 'ashes; drug, powder', The Chap form has the metathesis of consonant: "ayrə- > yārə-, so the stem accepts untrivial voiced initial y-. The word for 'drug' looks like Alaskan cultural loanword in Siberian Eskimo (CED 6, 41). PInup **aǰra* 'ashes; gunpowder' (CED 41, 42).

Altaic **gari* (~ *-r-*, -o) 'light', Mong **gere-l*, T-M **garpa* (EDAL 531). PE should have original semantics like 'flaring, blazing coals'.

666 PE **akma-Lu-* 'round' > PInup **agmalu-* 'round' (CED 36).

Altaic **gék'á* 'hook, bend', Turk **Kek-* / **Kak-*, Mong **gek-*, T-M **gek(u)-*, Jap **kánkám-* (!) (EDAL 536, 537).

664 PE **akra-γ-* (**aqra-ǰ-*) 'wheel, to roll, round' PYup **ak(r)a-γ-*, **ak(r)a-m-kə-* (-*m-tu-*), **aq(r)a-ǰ-* 'wheel, round; to roll', PInup **akra-γ-* (-*lu-*), **aqraǰ-* 'to roll, to turn round or over; wheel, tyre, wheeled vehicle' (CED 10, 36). There is also PE **aqra-* ~ **aRqa-* 'ball' (665).

Altaic **kǰúru* 'a k. of vehicle, wheel', Turk **Kǰrak*, **Kǰragu*, Mong **kür-dün*, T-M **kur-*, Jap **kúrúma* (EDAL 708).

662 PE **aku-* 'root of plant' > PYup **aku-* 'root'. PInup **aku-* 'root of plant'. It is necessary to distinct this root from **aku(və)* 'skirt, part of garment, waterproof garment' (1615) despite CED (CED 14).

Altaic **gokV* 'a k. of reed or leek (корнеилюд)', Turk **Koga* (~ *-k-*), Mong **gogu-*, A Turk-Mong isogloss: not quite reliable because of late attestation, but borrowing in either direction seems improbable (EDAL 563, 564).

736 PE **ali-(va-)* 'far, in the distance' > PYup **ali-* 'from afar', PInup **ali-(va-)* 'to be far; to retreat a little' (CED 17).

Altaic **gǰǎla* 'to stay behind, be separated', Turk **Kiāl-*, Mong **gal-*, T-M **giala-*, Jap **kára-*, The original meaning is well reconstructable as "to lag behind > become separated" (EDAL 547, 548).

523 PE **amə-* 'many, much' > PYup **amə-* (-*lə-*, -*tV-*) 'frequent, perpetual; many, much', PInup **ami-* (-*lǰa*, -*tu-*) 'many; to increase in numbers' (CED 22, 23).

Altaic **ēma* (~*o*) 'to stay, be left, leave', T-M **emē-n-*, Jap **ama*- 'plenty', АПиПЯЯ 279. A T-M~Jap isogloss. Cf. perhaps also MKor. *məmír-* 'to stay, remain' (< **Vmə-mír-*, with a rather usual Korean loss of initial vowel?) (EDAL 503, 504).

740 PE **am-ərtə-* with negation affix 'thin, narrow' > PYup **amərtə-* 'thin in girth; narrow', PInup **amit-* 'narrow, thin' (CED 24). Literarry 'not wide'.

Altaic **ámbe* 'heavy, big', Mong **amban*, T-M **amba-*, Kor **mí-*, Jap **óm(p)ə-* (EDAL 295).

681 PE **ami-* 'hide, skin' > PYup **ami-* (*ba-*) 'hide, pelt, skin', PInup **ami-* (*-ba-*) 'hide, skin; fish skin; tree bark' (CED 23).

Altaic **emV(ŋV)* 'saddle, belt', Turk **ədye-r*, Mong **emeye-l*, T-M **emu-l*. A Western isogloss (EDAL 506).

502 PE **āmtu-* ~ **mətu-* 'leaf, coltsfoot' > PYup **amtu-* 'coltsfoot'. PInup **məlu-* ~ **mulə-* 'leaf of plant; coltsfoot'. The metathesis of vowels in GRI took place under the influence of **mulə-* 'paddle blade' (303). (CED 202, 255).

Altaic **mōro* 'a k. of weed', T-M **mōr-*, Kor **mā́r*, Jap **mə* (~**mua*), Whitman 1985, 144, 155, 237. An Eastern isogloss. In Turk. cf. perhaps Oyr., *Shor parga* 'weed' (which would require a modification of the PA form to **mjàro*). The loss of resonant in Jpn. presupposes a suffixed form like **mòr(o)-gV* (cf. the Turkic parallels) or **mòr(o)-ŋV* (cf. Evk. *moriŋa*) (EDAL 945). But PE shows the reflex of **r*.

528 PE **amqə-* 'to bite' > PYup **am(ə)qə-* 'to bite 1, to bite off, to nibble lips 2', PInup **apqa-la-* 'to eat quickly' (CED 16).

Altaic **āmo* 'mouth; taste (**amo-t'a*, **amo-sa*)', Turk **um-*, **um-sa-*, Mong **ama-*, **amsa-*, **amta*, T-M **amŋa*, **amta-*, Kor **más*, Jap **ámá-*, **ántí* (EDAL 296, 297).

729 PE **ana-ʃ-* 'rust' > PYup **ana-ʃ-* 'rust'.

Altaic **beńa* 'red clay, dirt', Turk **bAńak*, T-M **beŋ-ge-*, Jap **páni*. If the Negidal form belongs here, it may reflect, together with Turk **bAńak*, a common derivative **beńa-kV* (EDAL 339).

580 PE **anəʃ-* 'spark, fire' > PYup **anəʃ-* (*-iʃ-*) 'spark, fire' (CED 28).

Altaic **ǰjajna* 'to burn; ashes, tar', Turk **jan-*, **jan-tir-*, T-M **žian-*, Kor *%*ǰi*, Jap **dani*. Medial *-j- accounts for loss of *-n- in Kor. (EDAL 1539).

1588 PE **aniŋa-* 'moon, month' > PInup **aniŋa(a-)* 'moon' (CED 28). The connection to the word 'elder brother' cited in CED is a real 'folk-etymology'.

Altaic **ānu* 'moon, moon cycle', Turk **āńk*, Mong **oj*, T-M **aniŋa* (EDAL 303). Really Turk and T-M show a postconsonantal velar stop.

745 PE **anuqə* 'wind' > PYup **anuqə* 'wind', PInup **anuʃə*, **anuq-liʃ-*, **anuʃ-raʃ-* 'wind, to be windy' (CED 30).

Altaic **jangu* Turk *(i)añki- 'emit odour', Mong *(h)onguli- 'to gasp, breathe heavily', T-M **un̄gu*- 'to smell' instead Turk **in-tik* 'to become tired, exhausted. (see *jun̄gu* (~ -a) 'to breathe, smell' EDAL 620).

519 PE **aŋ(u)*- 'big' PYup **aŋ(u)*- 'big, great' (CED 32, 35), PInup **aŋə-na*- 'big 1, wide, last long 2, too big for 3, to make too big (large) 4' (CED 32). There are derivatives **aŋ(ə)-li*- 'to grow up, to become bigger' (520), **aŋ-tu*- 'big, bigness' (521). Not related to **aŋu-nt* 'man, old man, male animal' (628).

Altaic **āni* 'very', Turk **eŋ*, Mong **aŋ-ka*, T-M **ana*-, Kor **ānī* (EDAL 300). Perhaps Turkic and Mongolian do not reflect a suffixed form **āni-k* V, with assimilation *-n- > *-ŋ- (with further reduction in Turkic), but show original reflex of the velar nasal.

684 PE **apju*- 'smoke, fume, vapour' > PYup **apju*- 'smoke, fume', PInup **apju*- 'smoke, haze, mist' (CED 38).

Altaic **ap* i 'wind, vapour', Turk **Ep*-, Mong **ayur*, T-M **apka* (EDAL 311).

517 PE **aqja* (=qu-) 'belly, stomach' > PYup **aqja* (-qu-) id., PInup **aqia*- (-bu-) (~ *-qj-) id. (CED 41).

Altaic **kéra* 'belly; body, ribs', Turk **Karin*, T-M **kerimuk*, Kor **kari*, Jap **kára*-(n)ta (EDAL 669).

602 PE **arya* 'hand' > PYup **arya* 'hand', PInup **aryay* (~ -ly-) 'hand, wrist' (CED 4).

Altaic **gará* (~ -e-) 'arm', Turk **Kari*, Mong **gar*, Jap **katá* (EDAL 530, 531).

539 PE **aruŋ* 'blood' > PYup **aruŋ* (-ja-) 'blood, clotted blood', PInup **a(r)uŋ* (-ia-), **arrə-β*- 'blood, to bleed, clotted blood, red' (CED 5).

T-M **erin* 'breath, life, soul' hardly connected to Altaic **ěra* 'to be', Turk **er*-, Mong **ere*-, Jap **ar*- (EDAL 515) but semantic development 'blood' ~ 'strength, soul' is quite common in many languages.

651 PE **atabu-ci*- 'one' > PYup **atabu-ci*- 'one', PInup **ataucci*- 'one' (CED 50).

Altaic **gāgtā* 'one of a pair', Turk **Kat*, Mong **gag%a*, T-M **gagda*, Jap **katā*, Rozycki 85 (TM-Mong.) (EDAL 525, 526).

641 PE **atəβ*, **atRiβ*- 'name; to name' > PYup **atəβ*, **atjiβ*- id., PInup **atəβ*, **acciβ*- 'name, namesake; to name' (CED 51).

Altaic **ōt`e* (~-t-) 'sound', Turk **öt*-, Mong **ö%ib*-, T-M *(x)ot-, Jap **ōtō* (EDAL 1068).

732 PE **ava-nt*, (-t-li-) 'area around, outermost, far-away' > PYup **avantə*, **avali*- 'area around, locality; far-away', PInup **ava-nt*, **ava-lli*- 'surrounding area, outermost, furthest to one side' (CED 54).

Altaic **ebo* 'enough, big', Mong *(h)öŷ- / *(h)öb-, T-M **ebi*-, Kor **o`á*-. Cf. Jap **əpə*- 'big' which may reflect a merger of this root with **ěp`o* (EDAL 490, 491).

541 PE *caHunəb̥ (~-ŋ-, -r-) 'bone' > PInup *caunəb̥ (~-ab̥) 'bone; seed' (CED 72).

Altaic *s̥iŋu 'bone; shin bone', Turk *siŋök / *siŋok, Mong *siya, T-M *siŋa-, Kor *s̥in, Jap *s̥unai (EDAL 1254, 1255). But cf. also Altaic *%iŋu (~*%iŋe) 'a sharp bone, sharp instrument' (EDAL 439).

546 PE *cakima- (~-ŋ-) 'chest, rib cage' > PYup *cakima- (~-ŋ-) 'breast, chest, breastbone, rib (of animal)', PInup *caki(m)a 'chest, breastbone, breast, rib cage3' (CED 65).

Altaic *%ek V 'part of shoulder close to neck', Turk *%ekn, Mong *%ekerej (EDAL 422).

567 PE *caluv- 'to tan skin, thin, dried, lean' > PYup *caluy- 'dry, dried out', PInup *caluy- (-m-), *callu 'to tan (skin), thin' (CED 66).

(CED 66). Cf. *t̥iule (~-o) 'to weaken, be exhausted' (2400), *t̥ulu (~-o) 'torn and scraped skin' (2731).

Altaic *t̥iule (~-o) 'to weaken, be exhausted', Mong *tul-, T-M *tüla- (EDAL 1443). For the anlaut consonant development cf. PE *ciyər-qu-, *cir-qu- 'knee', *ciluy (~*cü-), *culuk-Ruy 'feather of wing, dorsal fin'.

719 PE *ca-ŋu- (-ra, -na) interrogative pronoun "what", "what to do" > 1432, PYup *ca-ŋu-ra (-na), *ca- 'what, why, what to do', PInup *cu-na, cu-a, *cu-(r-) 'what, why, what to do' (CED 90). For the first part cf. PChuk *šən, *šeq- id. (1152) < KCh *nə-qə (471). (CED 90). The second part of this pronoun can be correspond to

Altaic *ŋ[iV] 'what, who', Turk *nē, Mong *jaju-n-, *jajuma, T-M *ŋü, Kor *nú-, Jap *nV̄ (EDAL 1034).

542 PE *carə- 0 'to turn towards, to face, to pass in front' > 1435, PYup *ca(r)u- 'to turn towards, to face', (CED 72). 659, PInup *caa-t-, *car-ɬut-, *car-va-ɬ- 'to face, to turn towards 1, to pass in front 2, to move, to put forwards 3', (CED 62, 63). Verbal stem, see *carə (543).

543 PE *carə 'front, breast' > PYup *carə 'breast, front of body' (CED 62, 73), PInup *caa-, *ca'-mun (-mi-, -lə-ɬ-) 'front of body, in front, to turn forwards, foremost', (CED 62). See *carə- 'to turn towards, to face, to pass in front' (542), *caR-qV- 'front part, chest' (1498). (CED 62).

Altaic *%le 'front, front part', Turk *döl, Mong *döli, T-M *žule, Kor *%rə (EDAL 403, 404).

1499 PE *ca(r)u 'earth or snow covering sth., humus' > PInup *cau 'to bury, to cover with earth or snow' (CED 72).

Altaic *s̥iari 'earth, sand; marsh', Turk *siar, Mong *sirayu, T-M *siru-, Kor *hark, Jap *situ (EDAL 1269, 1270).

671 PE *cəya-ɬ- 'to see, to look, to open eyes' > PYup *cəya-ɬ- (> *cəɬa-ɬ-) 'to see, to look; to open eyes, to wake up'. Cf. PInup *cay-viΓ- 'to become visible' (1774).

Altaic *s̥igá (~-z-) 'to look, search', Mong *sigiya-, T-M *sig-, Kor *%há%, Jap *sánk-. Kor *%há% is an assimilation < *sVhá% = PJ *sá(n)kas- (EDAL 1242).

657 PE **cəla* `universe, atmosphere, weather' > PYup **cəla* ~ **əcla* 'universe, atmosphere, weather, external world, area outside', PInup **cila* 'universe, atmosphere, weather, external world' (CED 78).

Altaic **zāli* 'wind', Turk **jeł*, Mong **salki*, T-M **sal-di-*, Kor **sar-* (EDAL 1508).

549 PE **cətu(m)-* (-*qu-*), **cətu-ʃ-* `nail, claw, hoof; to extend out legs' > PYup **cətu-γ* (-*m-qu-*), **cətu-ʃ-* 'nail, claw, hoof; to extend out legs' (CED 86, 87), PInup **cittu-ʃ-* 'to extend legs' (CED 87). The Rus equivalent for verbal meanings is 'отбросить копыта' = 'to hustle away hoofs', usually such phrase connotes 'to die, to lay with elongate legs'.

Altaic **šjudu* (~ *-a*) 'a hoof deformation', Turk **sidir-gak*, Mong **södürge*, T-M **sudu*, Jap **sia* (~ **sai*). An interesting common Altaic body part name. The final vowel is difficult to reconstruct because of contraction in Jap (EDAL 1287, 1288).

609 PE **ciyər-qu-*, **cir-qu-* `knee' > PYup **ciyər-qu-*, **cir-qu-* 'knee, knee-cap, patella', PInup **ciətqu* 'knee' (CED 74).

Altaic **tjüre* 'leg; knee', Turk **dır*, Mong **türej*, T-M **türē-kse*, Kor **tari*. Mongolian and Tungus forms are genetically related to PT **dır* (**dır*). This is one of the few cases of secondary voicing in PT (before **r*, **r*): the original voiceless reflex is preserved within the Common Turkic derivative **tir-sgek* 'elbow' (EDAL 1447). For the anlaut consonant development cf. PE **caluv-* `to tan skin, thin, dried, lean', **ciluy* (~ **cũ-*), **culuk-Ruy* `feather of wing, dorsal fin'.

569 PE **ciyunt* `ear' > PYup **ciyunt* 'ear', PInup **ciunt* 'ear' (CED 75). Formally this stem looks like a deverbal instrumental noun from the unknown verb.

Altaic *%*[ja]k* 'i' temple, ear', Turk *%*əke*, Mong *%*iki*, T-M *%*akar*, Kor *%*ākami*. The vocalism is not quite certain: a reconstruction of **-ja-* is possible if we admit a secondary monophthongisation *%*ia-* > *%*a-* in T-M (EDAL 437, 438).

669 PE **ciβu-γ-*, **ciβ-mi-* `to become covered with dirt, sand, ice' > PYup **ci[β]u-γ-*, **ciβ-mi-* 'to become iced, covered with dirt' (CED 85), PInup **ciuβa-ʃ*, **ciβ-mi-* 'sand; ice on an object' (CED 87, 85).

Altaic *%*ija* 'cold, frozen snow', Mong *%*a(g)-su*, T-M *%*iaga*, Kor *%*hā-*, Kor. %*hiw-* 'cold' is a secondary derivation from %*hā-*. Mong. %*a-sun* may actually reflect a contamination with *%*ar-sun*, cf. *%*ar* 'crust (of snow), наст' (see *%*era*, Turk *%*ar-*, Mong *%*ar* EDAL 424); Southern Mongolian languages seem, however, to preserve traces of a velar *%*ag-su* (EDAL 436).

749 PE **ciβu-nəʃ* `horn' > PYup **ciβu-nəʃ* 'horn, antler' (CED 85, 86).

Altaic **šjūjo* 'thorn, (pine) needle', Turk **sojagu*, Mong **sojuγa*, T-M **šūje*, Kor **sāi*, Jap **səjā* (EDAL 1339).

578 PE **ciluy* (~ **cũ-*), **culuk-Ruy* `feather of wing, dorsal fin' > PYup **ciluy* ~ **culuy*, **culuk=juγ-* 'feather; wing; body hair; dorsal fin'. Cf. **culuy-* (1865). PInup **culu(γ)*, **culuRRuy-* 'feather of wing;

dorsal fin; wing' (CED 92).

Altaic **dé̌li* 'mane; collar', Turk **jēl*, Mong **del*, T-M **delü-n*, Jap *(*d*)*iarì*. The diphthong in Jap may indicate PA **dé̌jli* (EDAL 470). Cf. **dáIV*. For the anlaut consonant development cf. PE **ciyər-qu-*, **cir-qu-* 'knee', **caluv-* 'to tan skin, thin, dried, lean'.

658 PE **cita-tuy*, **ciHa-* (-*j-*, -*r-*) 'bad weather, rain' > PYup **cita-tuy* (~ **cəta-*) 'rain; bad weather', PInup **cila(q)-luy*, **cialə-* 'bad weather ; rain, to be rain' (CED 78). In the first sense this is a derivate from **cəla* 'weather etc.' (657), but it may be a secondary confusion as show Inup variants with the meaning 'rain' opposed in GRI and found in some Inup languages. (CED 78).

Altaic **šjūrì* 'to flow, drip', Turk **sūr-*, Mong **sūr-*, T-M **sir-*. A Western isogloss (EDAL 1298, 1299). The root may in fact be the same as **sjōri* (reflected in the Eastern area, EDAL 1283), but modified under the influence of a synonymous **šjūru* (EDAL 1342). The first PE variant shows the development of **r̄*, the second may reflect **-r-* in the case of PE **-j-*, and **-r-* or **-r̄-* in the case of PE **-r-*.

510 PE **ciṭə-m-* (~ **cəṭə-m-*) 'full, to fill' > PYup **cəṭə-m-* 'full, all; to fill', PInup **ciṭə[m]-* (~ -*v-*, -*ŋ-*) 'to have a full stomach; to fill completely' (CED 79).

Altaic **ṭalo* 'full, fill', Turk **döl-*, Mong **del-*, T-M **žalu(-m)* (!), Kor **ṭara-*, Jap **tár-* (EDAL 390, 391). The affixation noticed in T-M and PE is probably the same.

683 PE **cinəy-* 'to sleep' > PInup **cinəy-* (**cəniy-*) 'to sleep; sleep' (CED 80, 81). (CED 80).

Altaic **šjōŋə* 'dream, echo', Turk **jaŋ*, Mong **žeyü-* 'sleep', T-M **žōŋi-*, Kor **ṭa(ŋ)-*, Jap **dīmài / dùmài*. Semantically a challenging etymology, with some mythological connotations (EDAL 1543, 1544). The PE reflex rather shows a consonantal cluster **-ng-* instead **-ŋ-* in Altaic.

701 PE **ciqi-nəṭ* 'sun' > PYup **ciqi-nəṭ* 'sun', Plup **ciqi-nəṭ* 'sun, to be sunshine' (CED 84).

Altaic **šjōgu* 'sun; sky', T-M **sigūn*, Kor **hái*, Jap **sua-rá*. Eastern isogloss. It is also interesting to note MKor. *hanár* 'sky', which may, together with PJ **suará* id., go back to a complex form **sjog[u]n-* IV (EDAL 1274). The PE reflex of uvular stop rather shows an original (Nostratic) uvular or voiceless spirant. Cf. PE **əqa-tuy* 'fish'.

597 PE **cuṭ-ra-* 'blue, green, blue-berry' > PYup **cuṭ-(R)a-* 'blu blue-berry', Cf. **əcuṭə-mə-* 'murky' in PYup (1875), PInup **cuṭṭa-* 'blue-berry' (CED 95).

Altaic **ṭaik̄e* (~ -*k-*) 'grass, weed', Turk **əkin*, T-M **ṭaiKa*, Kor **soksäi*, Jap **tukúsi*. Mong **ike-n* in names of plants may be a merger of this root and **ṭaik̄a* (EDAL 427). Kor *soksäi* 'horse-tail' is hard to separate from Jap *tukusi* id.; most probably we are dealing with an assimilation here (*soksäi* < **əksäi*) (EDAL 440).

613 PE **cuja-* 'willow leaf' > PYup **cuja-* 'willow leaf', (CED 96).

Altaic **šjāgi* 'a k. of foliage tree', Turk **següt* 'willow', Mong **siyer*, T-M **siakta* 'willow' (EDAL 1263).

600 PE *cuŋa- 'gall, bile, blue, green' > PYup *cuŋa- 'gall; blue, green; rubicund', (CED 93, 94). PInup *cuŋa- 'gall, bile; green' (CED 93).

Altaic *sǰǰe(rV) (~z-) 'yellowish, greyish', Mong *saya-, T-M *siŋa(r)-, A Mong.-Tung. isogloss (EDAL 1268).

601 PE *cuŋa- 'bead' > 1636, PYup *cuŋa- 'bead', PInup *cuŋaura- 'bead' (CED 93). It can not be an unaffixed derivate from *cuŋa- 'gall, bile'. In addition, adjectives with more wide semantics 'blue, green' have stem-forming affixes after root. The attempt to propose an original semantics like 'colour of turquoise' implicates the semantical development to concrete 'gall' and 'bean' without any markers. And also it can be found too much realities connected to 'blue, green' like 'sea' or 'sky', 'grass' etc. and the question why those selections were finished on 'bile' and 'beans' is incomprehensible.

Altaic *sunà 'seed, grain', Turk *sunu, Jap *sànaì (EDAL 1318).

633 PE *əb[r]ə-t- 'to dawn, light' > PYup *əb-tə-, *əb-cu-γ-, *əbr-unt- (~*a-) 'light; dawn, to dawn on', PInup *Ibrə-β- (-t-) 'to become visible, to be clear, visible', These stems in languages have no connection to root 'to hide' despite CED (CED 122). See *əb[r]ə-nəb 'day' (634).

Altaic *obri (~-e) 'dawn', Turk *ürüy (*örüy), Mong *öwr, T-M *(x)oru- (EDAL 1040, 1041).

548 PE *əkə(-) 'to burn, fire' > PYup *əkə(-) 'conflagration, fire; to burn', PInup *ikə- (-t-) 'to burn, to ignite' (CED 101). Cf. also *əkuma- 'to burn' (547), *əknə- 'fire' (581).

Altaic *dékà 'to burn', Turk *jak-, T-M *deg-že-gi-, Kor *thà-, Jap *dák- (EDAL 469).

581 PE *əknə- 'fire' > PYup *əknə-β (~*kənə-β), *əknə-ŋə-, *əkn-a- 'fire; to build a fire under, to start to burn, to cook', PInup *iknə-β, *ikn-a- 'fire; to strike fire; flintstone' (CED 101). The stem looks like a derivate (deverbal noun) from *əkə(-) 'to burn' (548), but such affix must preserve a constant auslaut uvular. As show Nauk and Inup data there is a "dropping" uvular on the contrary. So it can be treated as a secondary associating with a trivial word-formation by the suffix -nəb (CED 101). This stem has a correspondence in Nostratic *HenkV 'fire, to burn' (> IE *ngn-i- etc.).

547 PE *əkuma- 'to burn' > PYup *əkuma- 'to burn', PInup *ikuma- 'to be burning' (CED 101). This stem formally looks like a derivate from *əkə(-) 'to burn, fire' (548) with the suffix of a perfective, but this word does not have any perfective semantics. Else in modern Yup languages (except Nauk) there is a loss of the initial *ə-. So it could be a secondary contamination and rethymologisation in Eskimo languages.

Altaic *k`ume (~-ju-) 'black; coal', Turk *kömür, Kor *kəm- (EDAL 852).

687 PE *ələ-γ- 682 'to inflame, to fume, to burn' > 585, PYup *ələ-γ- 'to inflame 1, to fume 2, to get scorched, to burn 3', (CED 104). 788, PInup *ələ-γ- 'to get scorched, burnt', (CED 104). (CED 104).

Altaic *íla 'to fry, burn', Turk *íl, Mong *ila-, T-M *(x)ila- (EDAL 584). But also Altaic *giola (~-Í-, *gialo) 'to burn, fire' (Mong-Tung isogloss, EDAL 554) may be compared.

610 PE **əli-(ma-)* 'to know, to have a feeling' > PYup **əli-ma-*, **əli-γ-(ikə-)* 'to know; sensitive, understanding; to cognize, to take in mind', PInup **əli-ma-* 'suspicious, apprehensive; to suspect' (CED 105). Cf. also a transitive derivative **əli-t- (-ima-)* 'to learn, to know, to recognize' (611) (CED 105).

Altaic **ǎli-tV* 'to know; to listen, hear', Turk **ǎlit-*, Mong **aldar*, T-M **ala-*, **aldu*, Kor **ār-* (EDAL 293).

512 PE **əlu-*, **əlav-* 'all, whole' > PInup **əlu-*, **əlav-* 'all, whole, to be whole', (CED 107, 129). Also Yup AAY *lūciɓ-* id.

Altaic **bjolo* 'all, completely', Turk **bile (bula)*, Mong **bul-tu*, T-M **bil-*, A Western isogloss (EDAL 351).

563 PE **əmə-ɓ-* 'to drink' > PYup **əməɓ-* 'to drink', PInup **əməɓ-* 'to drink' (CED 110). See also **əməɓ* 'water' (566) and deverbal derivatives **əmi-c-* 'to soak, to drench, to give a drink', **əməɓ-unt* 'cup, vessel' (564), **əməq=juγ-* 'to be thirsty' (565).

Altaic **umV* (~ **o-*) 'to drink', Mong **umda*, T-M **um(i)-*, Kor **ma-* (EDAL 1499, 1500).

566 PE **əməɓ* 'water' > PYup **əməɓ* 'water (fresh)', PInup **əməɓ* 'water' (CED 110).

Altaic **mjūri* 'water', Mong **mören*, T-M **mū*, Kor **mír*, Jap **mí(-n-tú)*. Turkic has preserved the root only within the archaic compound **jag-mur* 'rain'. Tone in Jap is irregular (probably because of reduction and the position within a compound; suffixless **mi* is also attested in OJ, but its accent is unknown); loss of resonant presupposes a suffixed form: **mí* < **mjūr(i)-gV* (cf. Manchu *mū-ke*). Contrarily the verb 'to drink' this nominal stem has undropping *-ɓ* before all suffixes, so it is a part of stem in this case. The development of the monosyllable structure **TəT* > **əTəT* is obligatory through the PE phonotactic.

649 PE **-ənɓi-ɓ-*, **-ənɓi-t* negative affix: 'to stop doing, not (imperat.)' > PYup **-ənɓi-ɓ-*, **-ənɓi-t* (CED 416, 417), PInup **-ənɓi-ɓ-*, **-ənɓi-t* (CED 417). Cf. **-(ŋ)i-* (650).

Altaic **ǎni* 'not, negative verb', Turk **en*, T-M **ā(n)-*, Kor **ǎn-*, Jap **na-*, **-(a)n-*, **iná* (EDAL 300, 301).

717 PE **əpRuy-(a-)* 'to walk' > PYup **pəjuγ-(a-)* 'to walk, to go on foot', PInup **picuγ-(a-)* 'to walk' (CED 265).

Altaic **p'ǎlo* (**ǎ-d*, **ǎ-b*) 'to walk, to run', Turk **ǎl-*, Mong **hülde-*, T-M **pele-* (/ **puli-*), **pelbu-*, Kor **pǎrb-*, Jap **pāsir-* (EDAL 1133, 1134). PE rather shows the development from affixal variant **p'ǎl-bo-* with the reflex of **ǎ* in the position of the end of syllable.

582 PE **əqatuy*, **i-* 'fish' > PYup **iqatuy* 'fish', PInup **əqaluy*, **i-* 'fish; polar cod, tomcod 2' (CED 141, 142).

Altaic **dǎgi* (~ *-jo-*) 'fish', Mong **ǎiya-*, Kor **thi*, Jap **(d)iwuá* (EDAL 477). T-M **ǎoji* (in fact

*ǰobi) 'Salmo lenoc' (compared in some of the above sources) has a precise match in Mong *ǰebeye and has to be separated (Altaic *ǰiabo, EDAL 1539) The Jap form rather belongs there phonetically. See PE *ivica (751) 'game-fish'. PE has a reflex *-q- in this root like PE *ciqi-nəb 'sun' and Altaic *sǰoǰu 'sun; sky'.

713 PE *(ə)qəruy (-iǰ-) 'wood, to chop wood, to stoke' > PYup *əqəruy, *əqəri-ǰ- 'wood, tree; to stoke, to chop wood' (CED 101, 295). PInup *qəruy, *qərriuǰ- 'wood; to chop wood' (CED 295).

Altaic *k(̣)arU-gV 'wood, shrub', Turk *kargaj 'pine tree', Mong *kargali- 'shrub sp.', Kor koro- 'a k. of maple'.

598 PE *(ə)qruy 'blue, green, dark (sky)' > PYup *qəru-(Γ-) 'green, greenery; blue, bluish reflection in sky from open water; to become bluish, bruised', PInup *qIcuγ 'to be dark cloud over open water' (CED 310).

Altaic *ḳaru (~ḳ-) 'black', Turk *Kara, Mong *kara, Jap *kurụa- (EDAL 651, 652).

554 PE *ərrə- 'cold, to be cold' > PYup *əcə-kə-na- (*əcu-) 'cold', PInup *ərrə- 'cold, to be cold' (CED 147, 146).

Altaic *ǰǰi (~-e) 'to freeze', Turk *ǰǰi- / *ǰi-, Mong *ǰǰir 'able to stand the cold', T-M *ula-n (EDAL 496, 497).

544 PE *əvjəǰə- 'breast (usually female)' > PYup *əvjəǰə- 'breast', PInup *iviǰi- 'breast' (CED 121).

Altaic *əp̣á 'breast, rib', Mong *eb-, Kor *əp-, Jap *ámpará (EDAL 513, 515). PE rather reflects the affixation *-rV as Jap and a Mong variant *ebür.

525 PE *ica-qu- (-Hi-) 991 'wing, to flap wings' > PYup *jaqu- (-Hi-) 'wing; to flutter or flap (wings); bird, butterfly' (CED 149, 70, 10). PInup *icaǰu, *icaqqi- 'wing; to flap wing; butterfly', (CED 149, 70).

Altaic *g̣a%oi (~ *g̣e%oa) 'branch, bough', Turk *i-γa%o 'tree' (the second part), Mong *g̣a%o, Kor *ká%ób (EDAL 525). PE reflects rather the second variant of reconstruction.

606 PE *iǰca-qu- 'heart' > PYup *iǰca-qu- 'heart', PInup *iqca-ǰu- 'heart' (CED 144).

Altaic *bǰ(g)si (~ -o-, -e) 'kidney, liver', Turk *böğse(k), Mong *büse, T-M *bosa-hta. A Western isogloss - but cf. also MKor. khõᅇ-pháś 'kidney' (khõᅇ 'bean'), where pháś is also folk-etymologically analysed as 'bean', but may in fact continue the same Altaic root (EDAL 387).

614 PE *in-[r]aǰ- 'to lie down, to go to bed' > PYup *inaǰ- id., PInup *innaǰ- id., (CED 136, 137). This stem is confused with *iᅇ-aǰ- 'to lie' (615) in CED. (CED 136).

Altaic *ǰnV (~ū-) 'to fall, lie', Mong *una-, T-M *ǰn- (EDAL 1054).

620 PE *inuy 'person, man' > 617, PYup *juγ 'person, human being; man', PInup *inuy, *innuy-,

**inuq-unt* 'person, owner; family member; servant' (CED 137, 138).

Altaic **gendV* (~ *k-*) 'male, self', Turk **[g]əntü* (*-nd-*), Mong **gendü*. A Turk.-Mong. isogloss (EDAL 541, where it is reconstructed as **gentV* due the incorrect reconstruction of the cluster in Turk).

ПAУ3A

572 PE **irə* 'eye' > PYup **irə* (*-(y)-miy-*, *-ya-*) 'eye; air-hole, ventilate', PInup **irə* (*-(y)-miy-*), **ir-ya-*, **irri-t-* 'eye; to wink; to get sth. in one's eye' (CED 97, 98). Cf. verbs **irə-ku-* 'to see, to look' (571), **irə-ɬuy-* 'to become blind (= 'to have bad eyes')' (573). (CED 97).

Altaic **göre* 'to see; understand', Turk **gör* (= **gör-s*) / **gör-*, Mong **gori*, T-M **gur-*, Kor **kiri-* (EDAL 567, 568). Cf. Mong. *girkaj* 'having good eyesight'.

508 PE **irəbu-(na-)* 'all, whole, complete' > PYup **irəbu-(na-)* 'all, whole, complete'.

Altaic **ǰuru(-gV)* 'to gather, crowd', Turk **irk-*, Mong **ir-*, **irge-*, T-M **urū-*, Kor **ur*, Jap **u(n)ti* (EDAL 622).

584 PE **itəy-(a-)* 'footpoint, foot' > PYup **itəy-(a-)* (*-miy-*) 'toe-cap, footpoint; foot; to kick by top of foot' (CED 146, 124), PInup **itəy-(a-)* (*-miy-*) 'ankle skin of caribou; foot; to kick', (CED 146, 147)

Altaic **būktV* 'leg, thigh', Turk **būt*, T-M **begdi* / **bugdi* (EDAL 380).

751 PE **ivica* 'game-fish' > PYup **ivica* 'flounder, halibut' (CED 148), PInup **ivita-* (*-bu-*) 'trout, salmon' (CED 149). This root is strongly influenced by **əvitəb-* (**əvitəra-*) 'red stone, ochre' so it develops the meaning like 'red trout'.

here, cf. also modern Jap *iwasi* 'herring' with the same affixation as in Eskimo languages.

Altaic **ǰiobe* (~ **ǰiabo*) 'fish, salmon', Mong **žebeye*, T-M **žobi* 'Salmo lenoc', Jap *(*d*)*iwuá*, cf. also modern Jap *iwasi* 'herring' with the same affixation as in Eskimo languages (EDAL 1539).

376 PE **iv=ju(y)-*, **ivəba-* 'rain' > PYup **ivRuɣ* 'rain' (CED 229), PInup **ivba-ɬ-*, **iv-cu-* 'to be wet from rain; rain' (CED 229, 148).

Altaic **ǰiöbu* 'to pour', Turk **ju(b)-*, Mong **jeɣü-le-*, T-M **niabe-*, Kor **nüb-*. It is tempting to compare OJ *mjiwo* 'water-way, seaway' (if *mji-* is to be analysed as 'water', the *-wo* part stays completely obscure) (EDAL 1031).

12 PE **kayə-(ru ?)* 'walrus hide peeled off' > PYup **kay(r)u* 'walrus hide: blubber with fat (walrus hide); walrus skin for thongs; walrus' (CED 162), PInup **kaa-t-*, **kau-y* 'slice blubber from whale skin; to split or to be split into two layers (walrus hide); walrus skin with blubber' (CED 151, 162).

Altaic **kak`u-* (~ *-k-*) 'tanned skin, leather', Turk **kakma*, T-M **kak-* (EDAL 632).

11 PE **kaj(a)-* 'hungry, weak' > PYup **kaja-*, **kajə-y-* 'poor, indigent; weak, hungry' (CED 151, 162), PInup **kaa-y-*, **kajjə-ɬa-* 'hungry; to starve, to devour food hungrily' (CED 151, 163).

Altaic **kǰāru* 'need, necessity', Turk **gərge-*, Mong **kara*, T-M **kor-pi-*, Kor **kari-* (?) (EDAL 691, 692).

37 PE **kanuɣ* 'blood' > PYup **kanuɣ* 'blood, bloody stain', PInup **kanuɣ* 'blood' (CED 156).

Altaic **kǰāno* 'blood; blood vessel', Turk **Kīān*, T-M **xuŋi-*kta** (EDAL 797).

49 PE **katə-* 'to come near, to join, to gather' > PYup **katə-* 'to come near, to overtake, to catch up; to gather, to append; to join, to gather (refl.)' (CED 160, 161, 154), PInup **katə-* 'to join; gathered' (CED 160, 161).

Altaic **kǰǰi* 'to pass, go through', Turk **ge%*, T-M **kas-*, A Turk-Tung isogloss (EDAL 627).

54 PE **kavir-(u-)* 'red' > PYup **kavir-(u-)*, **kaviɬ-* 'red; red fox' (CED 162, 163), PInup **kaviɬ-*, **kajuɬ-* 'red; red fox' (CED 162, 163).

Altaic **kǰūru* 'red, reddish; brown, dark', Turk **Kīr-*, Mong **küre-* (**küri-*), T-M **xuri-*, Kor **kuri*, Jap **kura* (EDAL 828, 829).

66 PE **kəɣə-* 'to bite' > PYup **kəɣə-* 'to bite', PInup **kiɣə-*, **kiɣɣə-q* 'to bite; bite, bitten' (CED 164). Cf. **kəɣə-m-* 'to bite, to grip between teeth' (68).

Altaic **kiku* 'to bite; rub, scrape', Turk **Kik-*, Mong **kegze-*, T-M **kik-*, Jap **kukum-* (EDAL 677, 678).

69 PE **kəɣuntə* 'tooth' > PYup **kəɣuntə* 'tooth', PInup **kiɣunt* 'tooth' (CED 165). Formally it looks like a derivative from **kəɣə-* 'to bite' (66) with an instrumental suffix.

Altaic **kǰūge* 'palate, jaw', Turk **Kögme*, Mong **köyemej*, T-M **xükte* 'tooth', Kor **kəhüm*, Jap **k(u)i* 'tusk' (EDAL 815).

85 PE **kəməɣ* 'flesh, skin' > PYup **kəməɣ* 'skin (human); flesh, body; fatty' (CED 168), PInup **kəmə-ɣ* 'inner force, power, influence; strong, effective' (CED 169).

Altaic **kami* 'a k. of cloth', Turk **KEmek*, Mong **kemerlig*, T-M **kam-*, A Western isogloss (although the Turkic reflex is somewhat dubious). MKor. kamtho 'a horsehair cap worn by officials' (EDAL 640, 641).

118 PE **kica-* 'stone, anchor' > PYup **kica-* (*-unt*) 'stone; anchor', PInup **kica-* 'anchor' (CED 177). This word is hardly derived from **kitə-* 'to sink', because of the neutral meaning 'stone'. The development from 'stone' to 'special stone - anchor' is quite reliable, but from 'to sink' to 'stone' very problematic. It is clear that the semantic development 'stone' > 'anchor' had realised due the contamination with homophonic PE root **kitə-* 'to sink'. (CED 177).

Altaic **kósV* (*~ -u-*) 'chain, ring (of stones)', T-M **kosa*, Kor **kúsir*, Jap **kúsari*, An Eastern isogloss. Cf. Old Koguryo **kos* 'gem, jewel' (EDAL 726).

104 PE **ki-na* (**kiR-kur*, **kira-m*) interrogative pronoun: 'who' > PYup **kina* (*kin-kur*, *ki[r]am*, *ki-tu-*) id., PInup **kina* (*kit-kut*, *kia/ kinaup*) id. (CED 173, 174). PE has a variant **qa-* in the interrogative pronouns 'where, why, how, how much'.

Altaic **k`a(j)* 'who', interrogative pronoun, Turk **kem*, **Ka-*, Mong **ken*, **ka-*, T-M **xia* (**xai*), Kor

*ka, Jap *ka (EDAL 74).

111 PE *kinəθ- 'to dry' > PYup *kinəθ- 'to dry; dried; dried meat or fish', Cf. PYup kənəθ- 'viscous' (1974) (CED 169, 175). PInup *kinəθ- 'dry, without water'. This root merges with 'wet, damp, dirty' and other words beginning with *kin... or *kən... in CED.

Altaic *k`úne 'to burn, get burnt', Turk *kón-, Mong *köye, Kor *k`nir-, Jap *ku`nkara-, The Jap form reflects a suffixed *k`úne-KV- (EDAL 853).

113 PE *kiɣuɣ 'insect, shrimp, worm' > PYup *kiɣuɣ id., PInup *kiɣuɣ 'shrimp, sand flea' (CED 176).

Altaic *k`juɣu 'worm, grub', Mong *kiɣur-, T-M *xuɣVI-, Jap *kuá, The Jap form goes back to *k`juɣ(u)-gV (EDAL 823).

705 PE *kuyim-Ra- 'to swim; wave' > PYup *kuyim-Ra- id. (CED 180).

Altaic *k`éja-pV- (~ -o) 'to slide, swim', Turk *Kāj- (Turkish dial. kajp-), Mong *kajiba-, T-M *xeje-, A rather complicated Western isogloss. because of Evenki kajama, Orok qajama 'bare (not fur-lined) skis' which can go instead *xeje-.

140 PE *kukəɣ, *kukəkra- 'nail, claw' > PYup *kukəɣ-, *kukəkra- 'arrowhead', PInup *kukiy, *kukurva- 'nail, claw; hoof; barb', (CED 180). Inup *kukurva- < *kukuyra-.

Altaic *k`ókí 'hook', Turk kök, *köken, Mong *kögene, T-M *kūkta, Jap *kunki 'nail, peg, hook'. Initial *k- in PTM is probably due to assimilation (*kūkta < *k`ūkta) (EDAL 833, 834).

142 PE *kumay 'louse' > PYup *kumay 'louse', PInup *kumay ' louse' (CED 181).

Altaic *kumi (~ -o-, -ju-) ' a k. of insect', Turk *Kumir-, Mong *kömörege, T-M *kumke, Kor *kəmí, Jap *kumua, SKE 105, Lee 1958, 119, Martin 242, ОСНЯ 1, 309, АПиПЯЯ 290, Дыбо 9, Лексика 184. An expressive root: cf. *kiuma, *kajamV.

420 PE *luna 'land, eart, country' > PYup *luna 'land, earth, country; tundra', PInup *nuna (-viɣ) 'land, earth, inland' (CED 240). (CED 240).

Altaic > Mong *nuntug / *nintug 'fatherland, own territory' rather goes to this root than to *n`iagu / *n`iagu 'field, grazing place, hunting place', Turk *(i)añr-, T-M *ɣuɣi, Kor *nón, Jap *nua (EDAL 988), cf. also IE *lendh-, Ural *lamte 'lowland'.

153 PE *maca- 'sun' > PYup *maca- 'sun', PInup *maca-θ 'sun' (CED 184).

Cf. IE *mens- 'moon'.

182 PE *mańi- (~ *manɣi-) 'egg' > PYup *man(ɣ)i- 'egg', PInup *ma[nɣ]i- 'egg' (CED 190).

Altaic *nāmo 'testicle', Turk *jum-, Mong *(n)im, T-M *nāma / māna (*māna) (EDAL 962). It is interesting the T-M parrallel, also Ural *muna 'egg, testicle', Dravidian *māṅ- show the original construction with the first labial consonant.

184 PE **mańu[ŋ]* 'lower part in front of hood below neck, breastplate' > PYup **mańu(ŋ)* 'breastplate, bib; part of capote under chin; front side of sth. ; apron, front lap', PInup **manu(ŋ)* 'lower part in front of hood below neck; breastplate, bib; front of (snow) house, house entrance' (CED 191).

Altaic **mōjno* 'neck', Turk **bōjn*, Mong **mundaya*, T-M **moń-ga-n*, **moń-pen*, Kor **mjə-k*, Jap **nəmpV* (EDAL 939).

189 PE **maŋ(r)u-* 'to plant, to sit down, root, base' > PYup **maŋ(r)u-* 'to sit down; to plant, to shove in', PInup **maguy-*, **maggu-ʙ* 'to drive in (peg, stick), to plant, to stick in; root' (CED 192).

Altaic **meń[o]* 'dwelling place, village', Mong **maji-kan*, T-M **mēne-*, Kor **mańarh*, Jap **múra*, The Kor.-Jpn. form is a derivative in **-rV* (**-IV*). The Tungus form fits very well semantically, but raises some phonetic doubts: vowel length and the quality of *-n-* (instead **-ń-*) do not correspond to other languages. Cf. perhaps Turk. (Oyr.) *man* 'fence' (EDAL 913).

216 PE **məl-qu-* 2795 'fur, pile, feather' > 1017, PYup **məlqu-* 'fur, pile, feather', PInup **mətqu-* 'fur, pile, hair ; feather' (CED 197). The stem is affixed with a popular marker of body parts *-qu*. (CED 197).

Altaic **mol%a* 'tassel', Turk **bal%ak* 'spike of cereals' (Chuvash *poś*), Mong **mol%ag* 'tassel'.

787 PE **mimci* ~ **miŋci* (**p-*) 'dried fish' > 2240, PYup **miŋci-* (~ **p-*) 'dried fish', PInup **pipci* (~ **m-*) 'dried fish, dried meat' (CED 262). The unvoiced variant is presented as a result of assimilation before voiceless stop in the beginning of second syllable (CED 262).

Cf. IE **mēms-* 'meat'.

255 PE **naya-(qə-)* 'to listen, to understand, to read' > PYup **naya-q[u]-* 'to memorize; to hear, to understand; to listen, to read, to count', PInup **naa-qə-*, **naa-lay-* 'to read; to listen' (CED 206). The reconstruction proposed in CED **nađaqə-* is impossible, because the ignored Chap form *nayaq-* strictly shoes the intervocal PE **-y-*.

Altaic **lejk`á* 'to intend, demand', Mong **neke-*, T-M **leKe-*, Kor **njəki-* / **nəiki-*, Jap **niánkə-p* (EDAL 869, 870).

322 PE **Naʙcə-y-* (~ *-ʙic-* ?) 'to wrinkle nose, to push up nose, pug-nosed' > PYup **Naʙ(i)cə-y-* 'to push up nose', PInup **naqci-y-* 'to push up (nose), to wrinkle nose, to have a pug nose' (CED 218). The connection with **Naʙə-* (*-ru-ʙ-*, *-ma-*) 'to smell sth.' (321) is unclear. (CED 218).

Altaic **ŋiák%a* 'nose, part of nose', Mong **nag%arkaj*, T-M **ŋiakso*, **ŋiaksi-n*, Kor **nǎ%h* (EDAL 1030).

540 PE **nǎnəʙ* 'bone' > PYup **nǎnəʙ* 'bone, skeleton; to choke on bone'. Chap forms reflect "nə/aŋ-qu- with -qu- affix of anatomical terms (CED 226, 227).

Altaic **ńapo* 'nut', Turk **jAŋgak*, Mong **žiŋyag*, T-M **ńaŋu-*, Jap **mamai* (EDAL 1006).

304 PE **naŋə-ʙ-* 'to stand up' > PYup **naŋə-ʙ-* 'to stand up', PInup **naŋə-ʙ-* 'to be standing up' (CED 215).

Altaic **nǰańa* 'to arrange, steer', Turk **jań-*, T-M **ńiani-*, Jap **nama-*. The original meaning is well reconstructable as 'to arrange, take or lead (smb. or smth.) in a row' (EDAL 987).

295 PE **Najit-* 'short' > PYup **Nanit-* 'short', PInup **nait-* 'short' (CED 213).

Altaic **ńǰ%ǰ* 'thin, narrow; short', Turk **jǰ%ǰe*, Mong **ǰǰǰig*, T-M **nisi-*, Jap **mǰnsika-* (EDAL 1010).

262 PE **nagru-* 'wrist, antler' > PYup **nagru-* 'wrist; thumb' (CED 336), PInup **nagruy* 'antler, horn' (CED 208).

Altaic **ńǰúdurǰi* 'fist', Turk **ǰidruk / *ǰudruk*, Mong **nidurga*, T-M **nurga*, Jap **ńinkír-* (EDAL 991). As Turk variant **ju(m)druk* and Jap **ńinkír-* show it rather must be **ńǰú(ǰ)durǰi* in Altaic. So here the Eskimo correspondence *-ǰ-* for **-ǰd-* is quite available.

310 PE **Napar* 'tree (foliar)' > PYup **Napa* 'tree (growing); asp', PInup **napaaqtu-*, **napar-* 'tree; mountain ash' (CED 216). Probably it is quite secondary conjunction with the root **ńapa-(ǰ-)* 'to stand erected, pole, mast' (311).

Altaic **liǰap [ǰ]* 'leaf', Turk **ǰapur-gak*, Mong **lab%ǰ*, Kor **ńiph*, Jap **napai* (EDAL 874).

518 PE **Nara-ǰ* 'belly, abdomen' > PInup **nara-*, **narray* 'belly, abdomen; to get a big belly', Jen. also has the meaning 'stomach' (CED 205).

Altaic **ńǰǰVrV* (*~ -ǰ-*, *-ǰ-*) 'gland', Mong **nojir*, T-M **ńi(a)ru*, Jap **múra-túa* (EDAL 1023). The reconstruction must **ńǰǰru* in case of dialectal alternation in Evenki.

ПAУ3A

619 PE **Nəbǰrtə* 'louse, parasite' > PYup **Nəbǰrtə* 'louse, parasite' (CED 230).

Altaic **neji* 'louse, nit', Mong **ni-sa-*, T-M **nej(l)e-*, Kor **ńi* (EDAL 966).

379 PE **nəbǰ(v)-* 1193 'to eat' > PYup **nəbǰ-* (*-(v)qə-*, *-viǰ*) 'to eat; feed; place to eat', PInup **nəbǰi-* (*-v-ka-ǰ*), **nəbǰǰ-viǰ* 'to eat; to feed; table' (CED 230, 231).

Altaic **lega/o* 'to eat greedily', Mong **laga-* 'to chew, champ, to eat as a swine', T-M **legbe-* (not **lebge-*) 'to eat greedily' (this word should be taken from the Altaic ethymology **lebV* (*~ -p-*) 'to eat greedily', Mong **labsi-*, instead it would be better to compare T-M **labada-* 'to grasp with teeth' or **lupku-* 'to suck' (EDAL 869). Cf. IE **leig'h-* 'to lick'.

715 PE **(Nə)k[r]uǰa-* (*~ *Nəkəvǰa-*) 'tree, spruce tree' > PYup **(Nə)kuǰa-* (*~ *Nəkəvǰa-*) 'tree, spruce tree', (CED 225). This is not a derivative from **ńəkuv-*, **ńəvkə-* 'to stand up, to be standing' (353). There is a latest contamination after the development **-kru-* > **-kū-* with the reinterpretation of this contest like *-kuv-* ~ *-kəv-* due the influence of a phonetically similar verb.

Altaic **ńikrV* 'a k. of thorny tree', Mong **ǰeyergene*, T-M **ńikri-hta*, Jap **míkuri* (EDAL 1009).

362 PE **nəməǰja-* 'worm, snake, eel' > PYup **nəməǰja-* 'worm; ', PInup **nimibǰia-* 'water worm, snake; eel' (CED 226).

Altaic **li̇amba* (~ **l̇*-, -o) 'a k. of big fish', T-M **liamba*-, Jap **nàma(n)tù*. A Tung-Jap isogloss; but cf. perhaps also Turk **jom*:- Khakas *nomza* 'dace' and Tatar *jumba*, *žumba* 'burbot' (VEWT 210) and Mong *nümer* 'octopus' (EDAL 874).

367 PE **nəŋti*-, **-ŋl*- 'cold, cool' > PYup **nəŋti* (-aɬ-), **nəŋlə*- 'frost, cold; to be cold; to cool off, to feel cold (person)', PInup **nəŋli*-, **nəŋla*- 'to cool off; cold, cool' (CED 228).

Altaic **l̇üni* (~ -e) 'snow', T-M **l̇üne*, Kor **nūn* (EDAL 891, 892).

377 PE **nəqə* 'meat, food' PYup **nəqə* (-k-ra-, -liHuɬ-) 'meat; food; to prepare food; to make poison', PInup **nəqə* (-k-ra-, -liuɬ-) 'meat; food; to cook a meal, to prepare food' (CED 230).

(CED 230). Jap *niku* 'meat' (homophonous with Chinese borrowing but cf. *jaku-niku* 'roasted meat' in constructions usual just for own words). Mo *nugulūr* 'bloated part of stomach filled with meat', *nugu%ib*- 'to dress the corpse of an animal' (there is no connection to 'to bend').

Altaic **nuki* 'meat', Mong **nugu*- > Khalkha *nugulūr* 'bloated part of stomach filled with meat', *nugu%ib*- 'to dress the corpse of an animal' (there is no connection to 'to bend'), Jap **niku(N)* 'meat' (homophonous with Chinese borrowing, but cf. *jaku-niku* 'roasted meat', *niku-buto*, *niku-zuki* 'fat, fatty' in constructions which are usual just for own words - other parts have "kun" reading and the mixed "on"- "kun" readings are quite rare).

604 PE **niŋə*-(t-) 'to see, to hear, to listen' > PYup **niŋə*-t- (-ruŋ-) 'to see; to hear; to listen'. The affixation in Nauk is the result of contamination with root **naya-q-u*- 'to hear, to listen, to read etc.' (1247). The strange Sir form is cited in CED (214) *naŋət*(ə)- 'to see, to watch', 'to open eyes' [Orr]. It is the confusion of the normal form *nəŋət*- widely attested in derivatives for meaning 'to see' and Chap *naŋtáxtaŋq* 'to open eyes wide'. (CED 206, 214).

Altaic **Nint* V (~ L-) > Turk **jint*- 'to seek, search' (should be taken out from **zini* 'shape', EDAL 1513).

428 PE **nugəru*- (~ **ni*-) 'moon, star, light not bright' > PYup **nuɬ(r)u*-, **nuɬəra*- (~ **ni*-) 'light; to lighten'. There is a usual conjunction of this root with nouns 'sun', 'moon', 'star', 'dawn', 'lightning', 'electricity' in Chap vocabulary examples. PInup **nugu*-, **nui*ra- (<**nugru*-, **nugərra*-) 'moon (not full)' (CED 133, 237).

Altaic **l̇uŋu*-(r) (~ **l̇*-, -o-, -i) 'morning or evening dawn', T-M **luŋur*, Kor **no'ir*, Jap **nūN*- / **nūiN*- / **nūaN*-, An Eastern isogloss (EDAL 881, 882). T-M and Kor data shows the auslaut (suffixal?) -r.

434 PE **nu-ta*- 'new, young' > PYup **nuta*- 'new; just now, right now', PInup **nuta*- 'new; young person' (CED 242, 243). Cf. **nuka*- 'younger sibling' (411). (CED 242).

Altaic **nébi* 'new', Turk **jub-ga*, Mong **niyu-n*, T-M **nebi*, Kor **nə*-, Jap **nípi*- (EDAL 964). Turk **jub-ga* 'bastard, adopted son' and Mo **niyu-n* 'child, boy' (MMo *no'un*, but Kalkha *nugūn*) reflect the Altaic affixation **-ga* in relation terms preserved in PE **nuka*- 'younger sibling' (411).

553 PE **Nuvəja* 'cloud' > PInup **nuvəja* 'cloud; to be cloudy' (CED 243).

Altaic **nibi* (~ -e) 'to smoke, to smell', Mong **neyü-*, T-M **nibu(p)-*, Kor **nai*, Jap **nipə-p-* (EDAL 974, 975).

275 PE **naluyə-* 'to lie down, to land, to settle' > PYup **naluy]a-(t-)* 'to land (bird)', It means 'to become ripe, to maturate and lie down on earth' in Nauk. PInup **nala-*, **nallaʃ-* 'to be lying down; to lie down, to lie on one's back' (CED 209).

Altaic **ne(L)* 'to lie, put', Mong **niyu-*, T-M **ne-*, Kor **nū-b-*, Jap **na-* (EDAL 964). Length in T-M and Kor may reflect an auslaut sonant like **-l̥-* or **-l-* dropping regularly in eastern languages. On the other hand it may compare to this Altaic root

389 PE **nəvəʃ-* 'to lie on one's back' > PYup **nəv]əʃ-* 'to lie on one's back', PInup **nəvəʃ-*, **nəvʃala-* 'to lie on one's back; to fall backwards' (CED 233). Put an attention on Mong **niyü-* and Kor **nū-b-* with a labial stop.

311 PE **nəpa-(ʃ-)* 'to stand erected, pole, mast' > PYup **nəpa-ʃ-* 'to erect, to set upright; pillar, pole, mast', PInup **nəpa-* (**-ru-*, **-ʃ-ia-*), **nəppa-ʃ-* 'to stand erected, to be upright; to erect, to raise up; sth. upright, post 3' (CED 216, 217). Perhaps it is not the generative root for **Nəpa-(ʃ-)* 'tree' (310). (CED 216).

Altaic **lep̌o* (~ **-l̥-*) 'to rise, high', T-M **lep-* / **lupu-*, Kor **noph-*, Jap **nəmp̌ər-* (EDAL 873).

337 PE **nəra-qu-* 'head' > PYup **nəra-qu-* 'head; skull; to have a headache', PInup **niaqu* id. (CED 222). Cf. derivatives: Chap *nasqināq* (bət) 'part of tree with roots' and ECI *najuquti* 'root of tree' (CED 222).

Altaic **nibřo* 'face, resemblance', Turk **jür*, Mong **niyur*, Jap **nər-* (EDAL 975), Ural **nere* 'front, beak, nose', Dr **nerři* 'forehead'.

385 PE **nəʃiruy-* 'light, expectation, hope' > PYup **nəʃiru(y)-* 'light, glare, shine; hope, expectation', This stem merges with 'to eat greedily' in CED, but it is quite outranged semantically (CED 231). PInup **nəʃiu-y-* 'to expect, to hope; to promise', NAI *nibiu-yi-* trans. is opposed to *nibisuk-* 'to want to eat'. There are two different roots despite CED where the second has a prototypic **nəʃə-ju-y-* with a desiderative affix from the verb 'to eat' (CED 232). Cf. a probable variant **Nəʃu]a-* (~ **-r-*) 'to choose' (384). (CED 231).

Altaic **neřá* 'day, sun, light', Turk **jar-in*, Mong **naran*, T-M *ner(i)-*, Kor **nár*, Jap **aři-* (EDAL 1028, 1029).

353 PE **nəkuv-*, **nəvkə-* 'to stand (up)' > PYup **nəkuv-* (-*Γa-*), **nəvkə-* 'to stand (up); to build up' (CED 225), PInup **nəkuv-*, **j-* (-*ʃa-*, -*raʃ-*) 'to stand (up); to stand on tiptoe' (CED 225).

Altaic **nioǩe* (~ -*k-*) 'to rise, elevation', Turk **jok-*, T-M **noKe* ~ **noKu*, Jap **oǩe-*. The reconstruction of the diphthong in this root is based on PT **j-*: one should suppose an early development **niō-* > **jo-* in Turkic (which explains the vocalic reflex) (EDAL 1031, 1032)

373 PE **n̄əpə*-*Ju*- 'rain, drizzle' > PYup **n̄əp(ə)ju-γ* 'rain', cf. Chap *nəptaḅaqā* 'to wet in water'. PInup **nɪpə*- (-*caγ*-, -*l/ju*-) 'rain; damp, sweaty' (CED 229).

Altaic **n̄iābo* (~ -*o*-) 'storm, natural disaster', Turk **jubug* (~ **jabug*), Mong **nöye-le*-, T-M **n̄ō[be]-kte*, Jap **n̄aw(u)í*. The vocalism is not quite secure due to assimilations; nevertheless the root seems well reconstructable (EDAL 982). But cf. also Altaic **n̄iōbu* 'to pour', Turk **ju(b)*-, Mong **jeγüle*-, T-M *n̄iabe*-, Kor **nūb*- (EDAL 1031).

403 PE **n̄iβ(u)-lu* 'upper part of backbone, carcass, rib of boat' > PYup **iβu-lu*- 'rib of boat; upper bar of a carcass' PInup **nɪβlu*-(*β*-), **niulə*- 'to break back near head; backbone of bird; first vertebra' (CED 231, 235). This stem merges with **n̄iβu* 'leg' in CED.

Altaic > Mong **nigur-su* 'backbone'. This word should be taken from Altaic **n̄iāke* 'neck, vertebra', Turk **jaka*, T-M **nikimna* (EDAL 983, 984). Instead that entry it is better to put Mong **žaka* 'edge, collar, neckpiece', so it will be the reconstruction **n̄iāke* for this root.

438 PE **n̄uja*-, **nuja*- 'hair' > PYup **n̄uja*-, **nuja*- 'hair', PInup **nuja*-, (**nujja-t*) 'hair' (CED 244).

Altaic **n̄iūrā*-(*k* V) (~ -*í*-) 'hair', Mong **norakai*, T-M **n̄ūrikte*, Kor **narot* (EDAL 993).

650 PE *-(*ŋ*)*i*- negative affix 'no, without, have no more, to lack etc.' > PYup *-(*ŋ*)*i*- id., PInup *-(*ŋ*)*i*- id. (CED 417, 418, 419). The intervowel -*ŋ*- is a result of morphological changes in PE and corresponds to the glottal stop in the anlaut prevowel position.

Altaic **e* 'not', Mong **e-se*, T-M **e*- (EDAL 488).

473 PE **palqə* 'ashes, hot, dry' > PYup **palqə* 'ashes', PInup **pa[t]qə*- 'hot; dry', (CED 249).

Altaic **p`ol̄ne* 'ashes; grey', Turk **on* (~ -*j*), Mong **hüine-sü*, T-M **pul̄ne*- (EDAL 1170).

470 PE **paməju*- (-*βa*-) 'tail, back part' > PYup **paməju*-(*βa*-) 'tail; back part of carcass; bulge at base of harpoon; tailbone, coccyx', PInup **pamiu*, **pamia*- (-*lluy*) ' tail (of an animal); tailbone, coccyx; peg, tail end of arrow or harpoon' (CED 248, 249). CED 248, 249).

Altaic **p`ojme* (~ -*o*) 'trousers, stockings', Turk **ojma* Mong **hojmu-su*, T-M **pe(j)m*-, Jap **pəmuta* (EDAL 1166).

474 PE **panə-β*- 'to burn, ashes, to dry out, to become skinny' > PYup **panə-β*- 'to burn; ashes; to starve to death', PInup **panəβ*-, **panna-β*- 'to dry out; to lose weight, to become skinny; to be very dry' (CED 249).

Altaic **peńo* (~ **b*-, **p*`-, -*o*-) ' flame, light', Kor **pāńá*~, Jap **pənə*, A Kor.-Jpn. isogloss.

477 PE **papəγ*, **papər*- 'tail' > PYup **papəγ*, **papər*- 'tail (of mammal); fish tail; to wag tail', PInup **papəγ*, **papaa*- 'bird tail, fish tail; animal placenta; to wag tail, to wriggle, to jump around' (CED 250).

Altaic **p`objV* ? > TM **pojpu*- 'tail', Evenki *hojpon* (TMC 2, 330), Jap **bə* (**bua*), Ryukyū *jū* < **bujwa* 'tail'. A Tung-Jap isogloss.

498 PE *pək(ə)ju- (~ *pəkəRu-) 'egg, to gather eggs' > PYup *pəkju- 'egg; to lay eggs; to find eggs', PInup *pIkiu- 'wild egg; to find eggs, to gather eggs' (CED 254).

Altaic *póǵí(rV) 'kidneys, testicles', Turk *böǵür, *böǵrek, Mong *böǵere, T-M *pugi- / *puki-, Kor *pír / *pur, Jap *púnkúri (EDAL 1101).

501 PE *pətu- 'leaf' > PYup *pətu- 'leaf', PInup *pIlu- 'leaf; bilberry shrub' (CED 255).

Altaic *púre 'leaf, bud', Turk *büir, Mong *bor-, Jap *pá. Jap presupposes a suffixed form *púr(e)-gV (= Mong. *bor-gu-) (EDAL 1111, 1112). PE reflects *-r-.

728 PE *pə(r)i-ǂ 'rufuous, yellow' > PYup *pəri-ǂ 'rufous', Imaq (Inup) pəšítóq 'to become yellow'.

Altaic *puli (~ p-, -ǂ-, -o-e) 'red', Mong *hulayan, T-M *pula-, Kor *pírk- (EDAL 1109). PE reflects *-ǂ-.

762 PE *pətyə-ǂ 'flea' > PYup *pətyə-ǂ 'sand flea, dandruff', (CED 257). Probable connections to *mətyə- ~ *pətyə- 'to jump, to leap up, to spring up' (760) are secondary. Cf. Inup SPI (KI) pizuaq* 'louse, parasite' [Jen.].

Altaic *pāt`e 'louse, biting insect', Turk *bit, Mong *batagana, T-M *pānta- / *pēnte-, Kor *pátáí (EDAL 1081).

670 PE *pi(j)-, *pi-ru- 'to do, to say, to be, to happen, thing' > PYup *pi(j)-, *pi-ru- 'to do; to say; to be, to happen; thing', PInup *pi-, *pirru-nt 'to do; to say; to be, to happen; thing' (CED 258). (CED 258). There are mixed two roots in PE: the first of them has meaning 'to be, to happen' and the second - 'to say'.

Altaic *bíju 'to be, sit', Mong *büji, T-M *bi-, Jap *bú(i)- (EDAL 342).

Altaic *ip`i (~p-, -e) 'mouth; to say', T-M *(x)ipke-, Kor *íp, Jap *íp-. An Eastern isogloss (but cf. perhaps Mong. abija(n) (L 4), Khalkha áva, Bur. ába 'sound' (< *ibaja ?) (EDAL 589, 590).

596 PE *píni- (~ *pingi-) 'good, beautiful' > PYup *pini- 'to love; beautiful, good, the best; to do sth. better; to ornament', PInup *pinni, *pinnaǂ- 'good, pretty, beautiful; ugly, bad (with negation)' (CED 262, 263)

Altaic *pańi (~p-) 'ornament, attire', T-M *pani-, Kor *pín-, Jap *pina, An Eastern isogloss (EDAL 1078).

676 PE *pitə- (~ *m-) 'plant, to grow up (plant)' > PYup *pitə- (~ *m-) 'plant; to sprout, to grow up (plants); to blossom; flower' (CED 261).

Altaic *pūt`o 'poplar, branch, stick', Turk *būta-, Mong *buta, T-M *pota, Kor *pətír, Jap *pəta (EDAL 1114, 1115).

For Sir misúqxəx 'seed' are some consideration points: in this language and other Yup languages it is noticed some unstability of initial voiced *v-*, *m-* before the voiceless stop of the second syllable, so instead these consonants is recorded *p-*. On the other hand in such positions sometimes one can see "hypercorrect" forms with fictive *m-* (e.g. Chap mitə- 'ochre' < "vitə). Really *m-* is voiceless in these

contents, but some languages including Sir do not have voiceless spirant *f*- as phoneme). Perhaps Chap *pīstauq* 'to spring, to grow up (plant)' has the same root. In this concrete example the proposition is **picu* for PE, so it has as support

Altaic **pisV* (~ *p̣*-, *-ja*-) 'seed, grain', T-M **pise*-, Kor **psí* (EDAL 1091).

702 PE **puyimər(a)*- 'to swim' > PYup **puyiməra*- 'to swim', PInup **puumət*-, **puuvra-ʃ*- 'to swim' (CED 266). This stem looks similar to **puyə*- 'to emerge, to surface' (704) but with untrivial endings which are the result of contamination the different root with **puyə*-:

Altaic **pábVrV* (~ *p̣*-, *-p*-, *-ṛ*-) 'to swim, flow', T-M **pabri*-, Jap **pápúr*- (EDAL 1071).

685 PE **puju*- 'smoke, soot' > PYup **puju*- 'smoke; soot', PInup **puju* (*-ʃa*-) 'smoke; steam, fog; to smoke, to give off smoke; soot' (CED 272).

Altaic **pónē* (~ *p̣*-) 'smoke', Mong **huni*-, T-M **puń*-, Kor **p̣ínə̀k* (EDAL 1105).

The PE reflex **-j-* in the place of **-ń-* is unusual.

562 PE **puŋ(r)u*- 'dog' > PInup **puŋŋuu*- 'dog' (CED 269).

Altaic **p̣jun[e]* 'a small wild animal', Turk **enük* (~ **ünek*) 'puppy', Mong **hünegen* 'fox', T-M **pün*-, A Western isogloss, with not quite secure correspondences: in TM one would rather expect **pun*-. Thus it is not excluded that the Evenki and Even forms reflect a vowel metathesis < **puni-ki* (EDAL 1161).

516 PE **qaca-ʃuy* 'bark' > PInup **qaca-luy* 'bark of tree' (CED 273). An intervocalic *-t-* has been reserved in the Seward Peninsula Inup (CED 273).

Altaic **ká%ou* 'covering, skin', Turk **KA%o(g)a%o* Mong **ku%ü*-, T-M **ka%ü*-, Kor **ká%o* (EDAL 627, 628).

724 PE **qǎʃ-cu-ʃ* 'white, bleached' > PYup **qǎʃ-cu-ʃ*-, **qəʃi-ʃ* 'white; shiny, brightly gleaming' (CED 278, 310). PInup **qaqcuʃ*- 'white; to be bleached (skin)' (CED 278).

Altaic **kák`á* 'bright, shine', Mong **kaka-rkaj* (~ *-g*-), T-M **akta*-, Jap **kánká*- (EDAL 633).

723 PE **qakru-ʃ(na)*- 'frost' > PYup **qakru-ʃ(na)* (**k*-) 'frost on trees; pounded ice', PInup **qaku-ʃna*- 'frost; ice fog'. The connection to **qakəru*- 'to whiten, dawn' (722) is quite problematic (CED 279).

Altaic **ḳj̣āra* (~ *-j̣ō-*) 'thin snow, hoar-frost', Turk **Kīār*-, Mong **karig* (EDAL 799).

639 PE **qali-(ʃ)* 'covering, membrane, to cover' > PYup **qali-* (*-ʃ*-) 'membrane, pellicle; to put on raincoat; to cover' (CED 274, 275, 290). PInup **qalə-ʃ*-, **qalli-ʃ*-, **qallint* 'outer covering; to cover; fatty mass around internal organs', Cf. also PInup **qallə-pia*- 'membrane' (1029) (CED 274, 275, 290). This root merges with **qarə-(ti)* 'top, upper part, surface' (638) in CED.

Altaic **k`áli* 'napeless skin, membrane', Turk **kel*-, Mong **kali-su*, T-M **xalukta* (EDAL 758).

514 PE **qaltə* 'bark, scale' > PYup **qaltə* 'bark; scale' (CED 280)

Altaic *k`úll(t)a 'bark, scales; scab', Turk *Kúl, Mong *kolta-su, *koli-, T-M *xolda-ksa, Jap *kásá (EDAL 851).

640 PE *qanəʃ(-) 'mouth, to speak' > PYup *qanəʃ(-) 'mouth; rumour; to speak', (CED 283). 743, PInup *qanə-ʃ 'mouth; to speak' (CED 283).

Altaic *keɣV 'to bite, gnaw', Turk *KEɣdi-, T-M *keɣi- (EDAL 666, 667).

738 PE *qan-tə-, *qan(ə)-li- 'near, to approach' > PYup *qan-tə-, *qan-li- 'to be near; nearby; recently, short time ago; to approach', PInup *qanə-(t-), *qa'li- ~ *qanə'li- 'to be near; to approach' (CED 283). (CED 283).

Altaic *kánt`V 'to reach, attain', Mong *kan[t]u-, T-M *kānta- (EDAL 644). And for the PE form affixed with *-li-:

Altaic *kalV (~ -Í-) 'near, to come near', Mong *kalu-, T-M *kal- (EDAL 637, 638) if here was simplified consonant cluster.

637 PE *qarə-qa- (-qi-) 'mountain, hill, to climb up' > PYup *qarə-q(a)- (-qi-) 'steep of bank; to reach the top', PInup *qatqa-, *qatqi- 'mountain; to reach the top' (CED 274). Derived from *qarə- 'top, upper part' (638) (CED 274).

Altaic *k`ori 'hill; embankment, boundary', Turk *Korum, Mong *küri, T-M *xurē, Kor *kòráŋ, Jap *kùrùā (~ -rua) (EDAL 843).

515 PE *qariβu 'bark, upper layer' > PYup *qariβu 'bark; to take away the upper layer of sth.' (CED 275). PInup *qaiβu- 'bark' (CED 276). Cf. also PE *qaru 'sore on head, to rind, detach' (902). There are some contaminations of vowels in Inup due the influence of this root. (CED 275).

Altaic *k`érá 'bark', Turk *Kár, *Kár-dír, Mong *kajir(a)-, T-M *xerekte, Jap *kárà (EDAL 782). Mong word could show possible reconstruction with *-jr-.

682 PE *qava-β- 'to sleep' > PYup *qava-β- 'dream; to sleep', PInup *qava-β- 'to sleep on back in water (seal)' (CED 291).

Altaic *kejbe 'to lie', Mong *keb-, T-M *kebi-, Kor *kibúr-, Jap *kəjə- 656, 657).

526 PE *qavə-(ya-) 'duck, eider, bird' > PYup *qavə-(ya-) 'bird' (CED 292, 276). PInup *qavə(γ), *qauya- 'eider, duck' (CED 292).

Altaic *kìòpù 'a k. of aquatic bird', T-M *kiab-, Jap *kùpìnà, A Tung-Jap isogloss. It is worth noting Yak. kuba 'swan' - usually derived from PT *Kugu, but with a quite inexplicable -b-; it is, in fact, possible that some other Turkic forms - cf. Turkm. Guv, Nogh. quv etc. also go back to PT *Kub(a) - naturally confused in most modern languages with the reflexed of *Kugu (see under *kūgu) (EDAL 699).

667 PE *qavja(-) 'sand, gravel' > PYup *qavja- 'sand; pebble' (CED 292, 276), PInup *qavia 'sand' (CED 292).

Altaic **kjaʒur*V 'sand, steppe, earth', Turk **Kajir*, Mong **kuʒir*, T-M **kuʒur*- (EDAL 693).

750 PE **qəci-ʒ* 'to spit' > PYup **qəci-ʒ* 'to spit; spit', PInup **qici-ʒ* 'to spit; spit' (CED 294). Cf. **qitə*- 'fog, drizzle, rain' (656). (CED 294).

Altaic **kʒuso* 'to vomit', Turk **Kus*-, T-M **xüise*- (EDAL 830).

537 PE **qənbə*- (~ **qiHənbə*-?) 'fox, polar fox, wolf' > PYup **qənbə-ʒ* ~ **q[i]bna-ʒ* 'polar fox; wolf' (CED 166, 308, 307). PInup **qianbə-ʒ*-, **qibnəbə*- 'fox; wolf' (CED 301, 308, 302).

Altaic **kāp*V 'dog', Turk **KAḡ-%k*, T-M **ka%k-kan*, Kor **kāp*- (EDAL 645).

668 PE **qənu* 'slush ice' > PYup **qənu* 'frazil, slush; sand', PInup **qənu* 'slush snow, ice; thin layer of new ice on water' (CED 298).

Altaic **kʒung*o (~ -o-) 'to freeze, snow', Mong **kuḡgar*- / **künger*-, T-M **xuḡ-da*-, Jap *kənkə*- (EDAL 854).

645 PE **qəḡa*- 'nose' > PYup **qəḡa*- 'nose', PInup **qəḡa*- 'nose' (CED 298).

Altaic **kʒöḡa* 'nose', Turk **K(i)ḡa*-(*ir*-), Mong **ka[m]ar*, T-M **xoḡa*-, Kor **kóh*, Jap **kan-k*- (EDAL 806).

559 PE **qəpə-nəʒ* 'dog' > PYup **qəpə-nəʒ* 'dog'.

Altaic **kʒop*I 'dog', Turk **köpek*.

931 PE **qəḡḡə*- 'to gather' > PYup **qəḡḡə*- 'together; to gather, to assemble', PInup **qIḡnə*- 'cache' (CED 298). There is a metathesis of the consonantal group *-ḡḡ- in PInup.

Altaic **kʒéro* 'to remunerate, repay', Turk **Karḡan*- (~ -*rḡ*-) 'to obtain, to gain', Mong **kerig* 'miserly', T-M **xeri*- 'price, payment', Jap **kətə-pək*- 'to celebrate' (EDAL 783). It may be Altaic semantics looking like Rus 'сборы (ingathering, exaction), собрание (meeting)'.

538 PE **qibnə-ʒ* 'black, dark' > PInup **qibnəʒ*- 'black, dark' (CED 308).

Altaic **kʒiri* 'dirt, dirty', Turk **kir*, Mong **kir*, T-M *(*x*)*ir*-, Jap **kità-nà*- (EDAL 791, 792).

551 PE **qilaya*- 'palate, roof of mouth' > PYup **qilaΓa*- 'palate, roof of mouth', PInup **qilay(a)*- 'palate'. This stem is not connected to **qilay* (-*ʒuy*) 'sky, cloud' (550) (CED 304).

Altaic **kʒäli* 'tongue', Turk **kele*-, Mong **kele*-, TM **xiljü*, Kor **kāró*- (EDAL 796, 797).

550 PE **qilay* (-*ʒuy*) 'sky, cloud' > PYup **qilay* (-*ʒuy*) 'sky; cloud', PInup **qilay* (-*luy*) 'sky; cloud; roof, ceiling' (CED 304, 305).

Altaic **gäl*V 'clear (of sky, weather)', Turk **K(i)ali*- 'sky; clear sky', T-M **galu*- (EDAL 528).

673 PE **qinəʒ*- ~ **qənə-ʒ* 'to look in, to look through, to watch' > PYup **qinəʒ*- ~ **qənə-ʒ*- 'to look

in, to look ahead; to look through sth.', PInup **qinəḫ-* ~ **qənə-ḫ-* 'to see, to look; to look at, to watch; to look through' (CED 306).

Altaic > Turk **kōn-* 'to agree, ttrust'.

656 PE **qitə-* 'fog, drizzle, rain' > PYup **qitə-* 'mist, drizzle; rain', Chap has the first vowel -ə- due the contamination with **qəciḫ-* 'to spit' (579). PInup **qitə-ḫ-*, (~ **-c-*) 'drizzle, fog' (CED 294). This root contaminates with **qəci-ḫ-* 'to spit' in Inup due the phonetic development **-it-* > **-ic-* in some languages, so it has been included in that entry in CED.

Altaic **k'édō* 'wind, fog', Turk **Kad*, Mong **küdey*, T-M **xedün*, Jap **kəti* (~ *-ua-*) (EDAL 771, 772).

568 PE **qumV-* 'to become dry, to stale' > PYup **qumV-* 'to become dry'.

Altaic **k'òmu* (~ *-o-*, *-a*) 'drought, hunger', Turk **Komił-*, Mong **komu-kai*, T-M **xomi-*, Kor **kāmār* (EDAL 838).

643 PE **quḡər-(a-)* (**quḡru-*) ~ **quḡəv-* (**quḡvu-*) 'neck, scruff of neck' > PYup **quḡHuḫ-* 'scruff of neck, top of back; to hang one's head; cachalot, humpbacked whale', Cf. PYup **qutḡuḫ*, **qutəḡa-* 'hump' (2381) (CED 317, 297). PInup **quḡəcci-*, **quḡia-* 'neck', (CED 317).

Altaic **kuḡtV* (~ *-o-*) 'rump, anus', Turk **Koḡ*, Mong **koḡdu-*, **koḡḷi-*, T-M **kuḡdu-*, Kor **kuḡtuḡ-* (EDAL 742, 743).

746 PE **qupəlḫu-* 'maggot, grub, worm' > PYup **quḡpəlḫu-* 'maggot, grub; worm', PInup **qupəlḫu-* 'maggot, grub; worm' (CED 318). Cf. PCh **qopalḡo-* 'butterfly' (769). (CED 318).

Altaic **k'jāp`e* 'a k. of insect, butterfly', Turk **kepelek*, Mong **kibe*, Jap **kəpəronki* (~ *-ua-*) (EDAL 798).

731 PE **quq-juy-* ~ **quḫcuΓ-* 'yellow, green' > PInup **quqcuΓ-* 'yellow; green', (CED 319).

Altaic **k'ōk`e* (~ *-i*) 'blue, green', Turk **gōk*, Mong **kōke*, T-M **kuKu* (EDAL 714). PE rather reflects **k'ōke* with metathesis of consonants.

985 PE **qura-* 'pinworms, eel' > PYup **qu[r]a-ḫta-*, **qu[r]a-Γut-na-* 'pinworms, anal itch; eel', PInup **quaqta*, **qurrau'na-* (~ *-r-*) id. (CED 312). The stem with meaning 'eel' has trivial semantic connections to 'worm', but in any case it could not be compared with stem 'to split with wedge' as it was done in CED. (CED 312).

Altaic **k'jōro* 'worm', Turk **Kürt*, Mong **koro-kaj*, T-M **xirga* (EDAL 807, 808).

574 PE **quvi-* 'thick, fat' > PYup **quvi-na-* 'to become thick, fat (of person); fat', PInup **qui-ni(r)-*, **quiv-tə-t-* 'to be fat' (CED 313).

Altaic **kōp`é* 'to bend; elevation, convexity', Turk **göpe(ne)*, Mong **kōb-* / **küb-*, T-M **kupe-*, Kor **kōp-*, **kūp-*, Jap **kəmpu* (EDAL 723).

555 PE **tayi-* 'to come, to visit' > PYup **tayi-* 'to come (here); to bring', PInup **tayi-ʃ-* 'to go from place to place; to go visiting' (CED 325).

Altaic **t`oga`* (~ -u-) 'to see, beware', Mong **toya-*, T-M **tuga-* (~ -b-), Jap **taku`* (EDAL 1450).

530 PE **tay(i)t-uy`* 'fog, mist' > PYup **tayituy`* 'fog, mist', PInup **taktuy`* (~ **tayituy-*), **takci-ʃ-* 'fog; to be foggy' (CED 324, 325).

Altaic **t`eku`* 'to become thick (of liquids)', T-M **tekti*, Kor **tuthə-b-*, **tōi-*, Jap **tuka-* (EDAL 1412). T-M **tekti* and Kor **tuthə-b-* show a cluster **-kt-*.

536 PE **tayŋə-* (~ -ŋŋ-) 'black' > PYup **tayŋə-* ~ **tayŋə-* 'black; dark, darkness; shadow', PInup **tayŋa-* 'total darkness' (CED 333). This stem is not connected to **tar-(r)u-* 'dark, black' (531) and others (see ditto).

Altaic **t`āgo`* 'dirt (dust, clay)', Turk **Tog*, T-M **tāksa* (EDAL 1391).

739 PE **taʃju-* (**taʃəRu-* ?) 'salt' > PYup **taʃju-* 'salt', PInup **taʃ(ə)ju`* 'salt; salt water, sea' (CED 334).

Altaic **t`āk`u`* (~ -k-) (?) 'salt, to pickle', T-M **taK(V)*, Jap **tūkā-*, A somewhat dubious Tung.-Jpn. isogloss: the comparison is possible only if Jpn. **tūkā-* 'pickle' is distinct from **tūkā-* 'soak' (EDAL 1396).

618 PE **takə(v)-* 'long, (high)' > PYup **takə(v)-* (**-li-*) 'long, high; length, height; to get or make long', PInup **takə-*, **tak(ə)li-* 'long; to become or make long' (CED 325).

Altaic **tēga`* 'high, top, mountain', Turk **dāg*, Mong **deye-*, T-M *deg-*, Kor **tə-*, Jap **taka`* (EDAL 1359).

674 PE **takuv-* 'to check out, to visit, to see' > PYup **taku-* (*-jaʃ-*) 'guard, examination; to check out', PInup **taku* (*-caʃ-*), **takku-* 'to check on; to visit; to see' (CED 327, 326). Cf. PE **takviŋ-*, **tak(u)vi-ŋ* 'to see well, pupil of eye' (675).

Altaic **t`āku`* 'to repair', Turk **Tagra-*, T-M **taku-*, Jap **tukur`* (EDAL 1393).

509 PE **tama[ŋ]-* 'all, whole' > PYup **tama[ŋ]-* 'all, whole, every', PInup **tamaΓ-* 'all, both, whole' (CED 328, 329)

Altaic **t`āmu`* 'to put into, gather', Mong **tama-* / **tem-*, T-M **tama-*, Kor **tām-*, Jap **tūm-* (EDAL 1399).

672 PE **taŋə-* 'to see, to look at, truth, evidence' > PYup **taŋə-* 'to see; to watch out for; to look at, to watch', PInup **taŋə-*, **taŋə-ʃ-* 'truth, evidence' (CED 330).

Altaic **t`āŋV`* 'to count, recite', Turk **taŋu-*, Mong **taŋa-*, T-M **taŋ-*, Cf. also Kor. *tā-* 'to tell, indicate, confess' (SKE 249, EAS 120); MMong. *ta`ul-* (HY 40) 'to understand, distinguish' (< **taŋul-*) (EDAL 1399, 1400).

631 PE **taRqi-* 'moon, bright' > PYup **tanqi-* 'moon; to be bright', PInup **tatqi* 'moon; to make the lamp light brightly' (CED 330).

Altaic **t̥jɔlgu* 'moon', Mong **tergel*, Kor **tǎr*, Jap **tukui* (EDAL 1435). PE reflects **-Ĵ-* in cluster.

531 PE **tar-(r)u-* 'dark, black' > PYup **tarru-* 'darkness, dusk; to become dark', PInup **tau-ʃ-* (*-si-*), **taru-ʃa-* 'darkness; dark; black' (CED 333, 334). All words including meanings like 'shadow, dark, black' are merged in close but different entries in CED on pp. 333, 334. See related PE stems **tar-ʃa-*, **tar-ʃə-t-* 'black, dark, shadow' (532), **tar-ʃə-nəʃ* 'shadow, darkness' (533) and different **taʃ-(nəʃ)* 'soul, life force' (534), **taɣɣə-* (*~ -ɣɣ-*) 'black' (536).

Altaic **t̥elbu* 'dirt', Turk **TAlagu*, Mong **tolbu*, T-M **telbe*, Kor **t̥ɛrəʃb-*. In Kor. the reflex is hard to distinguish from that of **t̥ɛru* (EDAL 1413, 1414). PE reflects **-Ĵ-*.

590 PE **tat(a)-* 'all, to be full' > PYup **tatV-* 'all, complete, whole', PInup **tat(a)-* 'to be full; to bump into' (CED 335).

Altaic **todV* 'to be full (of stomach, belly)', Turk **dod-*, T-M **tude-*, cf. perhaps also Mong. to-sun 'melted fat' (< **tod-su-n* ?) (EDAL 1376).

707 PE **ta-u-*, **tam-ani* 'this, right here' > PYup **ta-(v)u-na* (**ta(v)u-kurə*, *-rumə*, **tam-ani*) 'this right here'. This is the one of two main pronouns for 'this' and it has the specific declination paradigm unlike other demonstrative pronouns but analogical with **āy-* 'that' (CED 328, 480, 455). PInup **ta(a)m-na*, (**tav-ruma*, **tav-ra-ni*, **tam-ani*) 'this, right here; finished' (CED 480).

Altaic **t̥a* (**t̥e*) 'that', Turk **ti-(kü)*, Mong **te-re*, T-M **ta-*, Kor **tjə*, Jap **tə-* (EDAL 1389).

527 PE **təʃmira-* 'bird, goose' > PYup **təʃmi(r)a-* 'bird; goose', PInup **təʃmi(r)a-* 'bird; small bird' (CED 343, 342).

Altaic **turu* (*~ *t̥uro*) 'crane', Turk **durunja*, Kor **turu*, Jap **turu* (EDAL 1388).

1089 PE **təki-ja-* 'tern (arctic bird)' > PYup **təki-ja-* 'tern (arctic bird)' (CED 339).

Altaic **t̥jak̆a* 'hen', Turk **tiak̆igu*, Mong **takija*, T-M **tiaku* (EDAL 1431).

557 PE **təkit-* 'to come, to arrive' > PYup **təkit-* 'to come, to arrive', See homonym **təkit-* 'to hit, to knock' (2181), PInup **təkit-* 'to arrive at' (CED 338). . Alt **t̥jok̆e* 'to touch, reach' (2199) (the original meaning in Mo and Turc is 'to reach, to approach' as it can be seen in the archaic gerund became an adverb *tegi* 'вплоть до, down to' characterizing route of movement.

Altaic **t̥jok̆e* 'to touch, reach', Turk **değ-*, Mong **dökü-*, A Turk.-Mong. isogloss; not quite reliable, because in Turkic one has to suppose assimilative voicing (**değ-* < **deḡ-*). (EDAL 1372). The original meaning in Mong and Turk is 'to reach, to approach' as it can be seen in the archaic gerund became an adverb *tegi* 'вплоть до, down to' characterizing route of movement.

583 PE **təʃə-* 'to fly (up)' > 1770, PYup **təʃə-* 'to fly', PInup **təʃə-*, **təʃmi-* (*-l/ra-*) 'to fly (up); to be flying' (CED 341, 342). It should be analyzed a Turk entry in the Altaic root **t̥aŋgiri* 'oath, God, Mong

**tangarag* 'oath', T-M **taŋgura-* 'to bow while praying', Jap **tinkir-* 'to swear' (EDAL 1402). There are two roots which are contaminated in some languages: - one of them has front vowel vocalism and means 'sky', the second has back vowel vocalism (with some variation) with meaning 'God, spirit'. It is possible to show groups: 1 E (with front vowel) Runic *teŋri* 'sky; gods', MK *teŋri* 'sky; Buddha' (but in case of Buddha there is no difference in Arabic script), Saryg-Yughur *teŋer* 'sky', Hakas *tigər* 'sky', Shor *teŋri* 'sky', Oirot *teŋeri* 'God; sky', Tuva *dēr* 'sky', Tofa *dēre* 'sky', Kirgiz *teŋir* 'God; sky', K-Balqar *teŋri* 'God; sky'; 2 A (with back vowel) all examples have meaning 'God, spirit' without any allusion to 'sky' Turkish, Azeri *tanrı*, Turkmen *taŋrı*, Salar *tanru*, Chagatay *teŋri* ~ *taŋrı*, Uzbek *teŋri* < **taŋrı*, Uighur *teŋri* < **taŋıri*, Tatar, Bashkir *təŋre*, K-Kalpak *teŋir* etc., Jakut *taŋara*, Chuvash *tura*. So the Turk root 'sky' can be taken with Mong **teŋgeri* id., Jap **tiántaN* in Ryukyu 'sun' and compared with the PE root 'to fly up'.

1137 PE **tuluḅ-* 'to drowse' > PYup **tuluḅ-* 'to drowse'. This root is included in **tuluḅ-* 'sharp tusk, to hit wit tusks' (1137) with unknown associations in CED.

Altaic **t̪ū́lke* (~ *-i*) 'dream, sleep, divination', Turk **dū́l* (*/*dū́l*), Mong **tölge*, T-M **tolki-n* (EDAL 1473, 1474).

661 PE **tumavja-* 2428 'round, oval' > 0, 764, PInup **tumavja-* (**tuməvja-*) 'round, oval', This root has no connection to **tumə* 'trail, road' (763) despite CED. (CED 349).

Altaic **t̪ṓmū* 'to spin, round', Turk **tom-*, Mong **tomu-*, T-M **tomka-*, Jap **tū́mū*, EAS 50, KW 399, Poppe 14, 68, Ozawa 261-262. Despite Doerfer MT 27, TM cannot be borrowed from Mong.

660 PE **tumə*, **tum-raḅ-* 'trail, track, road' > PYup **tumə*, **tum-raḅ-* 'track, trail, step, road; to follow tracks', PInup **tumə*, **tuv-raḅ-*, **tuv-li-* 'trail, track, road, path; footstep; to track, to follow tracks' (CED 349, 350).

Altaic **t̪ṓmi* 'trail, road', Mong **tom* 'trail of land animal', T-M **tū́m-se* > Evenki *tū́mpek* 'trail, тропа', Even *tṓmRe* 'step', Udighe tumihe 'mountain trail, road' (TMC 2, 202-203 in entry 'to press down, to step'), Jap **timata* (chimata) 'crossroad, street', cf. also Turk > Turkmen **tū́m-ajak* 'with naked legs, pedestrian', Oyrot *tomul* *ajak* 'on foot (without skis)' etc.

605 PE **tunə-* 'to hear, to perceive' > PYup **tunə-* 'to hear', PInup **tunaaḅə-*, **tunəq-ci-* 'to have eyes fixed on; to rely on, to put trust in', The wide spectre of meanings of *tuniqsi-* goes back from 'послушный, obedient' i.e. 'one who obeys, listens' as in Rus. (CED 350).

Altaic **t̪u̯ne* 'to inform', Turk **Tū́ŋ-*, Mong **tuŋ-*, T-M **tuŋ-*, Jap **tuanap-* (EDAL 1477).

593 PE **tun(i)-* 'to give' > PYup **tunə-* 'to give; to spend', PInup **tunə-*, **tuni-uqqaḅ-* 'to give; to sell; to distribute' (CED 350).

Altaic **t̪ū́ja* 'to give, give a feast', Turk **toj*, Mong **tayu-*, T-M **tju-* (EDAL 1468). The origin of PE **-n-* is unknown.

558 PE **tuqu-* (*-t-*) 'to die; to kill' > PYup **tuqu-* (*-t-*) 'to die; death; to kill', PInup **tuqu* (*-t-*) id. (CED

354).

Altaic **tʰuki* 'to come to an end, be exhausted', Turk **tüke-*, Mong **tögüs-*, Jap **tuku-*. It seems worth mentioning Evk. dial. *tiko-* 'to die (of exhaustion), starve' - which may, however, be a derivative of *tik-* 'to fall' (EDAL 1469).

1167 PE **turapay* 'gravel, pebble' > PYup **tu(r)apay* 'pebble; gravel' (CED 356), PInup **tuapay*, ? **tujakpay* 'gravel', The form cited in SPI is quite strange because of the -y in the auslaut position. Moreover the -j- reflexion has not a support in other languages. (CED 356).

Altaic **tʰapʰorV* 'earth, dust', Turk **topra-k*, Mong **toyur-*, T-M **tap-* (EDAL 1404).

1165 PE **tu(v)ta-* 'labret, knar' > PYup **tu(v)ta-ʃ* 'mushroom; labret (ornamentation around pierced lips)', PInup **tuuta*, **tutta-* 'labret; jewel' (CED 356).

(CED 356). **%ʰtakV* (~ -ukV) 'pulp, mushroom, lip' (251).

Altaic **%ʰtakV* (~ -ukV) 'pulp, mushroom; lip', Turk **dōtak*, T-M **žudakta* / **žedukte* (EDAL 404).

630 PE **uyla-* 'numerous, many' > PYup **uyla-* 'many; to become numerous', PInup **uyla-* 'to crowd together; to visit' (CED 361).

Altaic **éǵó* 'big, many', Turk **ēg-id-*, Mong **ayu-*, T-M **egdi*, Kor **əʰuí-*, Jap **ənki-rə* (EDAL 495, 496).

689 PE **ujaʃa-y* 160 'stone, rock' > 1515, PYup **uj(a)ʃa-y*, **jəHa-ma-* 'stone 1, anchor 2', For Alaskan languages cf. Chap *juvāq* (ʃəʔ) 'standing high or long stone resembling a man'. (CED 386, 388). 0, There is a metathesis **uja* > **jua-* in some Yup languages. (CED 386).

Altaic **bjǔǵe* 'rock, hill', Turk **böǵür*, Mong **böyerüǵ*, T-M **bug-*, Kor **pàhói*, Jap **bə* (EDAL 357).

642 PE **uja-(qu-)* 'neck' > 1506, PYup **uja-qu-* (-miy) 'neck; sth. worn around neck; shoulder load', PInup **uja-miy* 'necklace' (CED 385). Cf. Altaic **gurgi* 'palate' (but Mong 'front part of throat') (EDAL 573). But it seems better to confer

Altaic **ǵǔje* 'long hair (esp. on neck)', Turk **öjek*, Mong **öjekej*, T-M **ǵǔjelse* (EDAL 1037).

708 PE **u-*, **u-a* 'this near, here it is' > PYup **u-na* (-kurə, -rumə, *u-ani), **u-a* 'this near; here it is; now, right now, promptly', PInup **u-na* (-kua, -uma, -ani), **u-aa* 'this near; here it is' (CED 480, 385).

Altaic **ó* 'this, that (deictic particle)', Turk **o(-l)*, Mong **on-*, T-M **u-*, Jap **ó-* (EDAL 1040).

1194 PE **uk(a)-* 'to give, to want to get' > PYup **uka-* 'to give', PInup **ukə-*, **ukka/i-tə-* 'to want more of the same' (CED 363).

Altaic **ókʰè* 'to give, to put', Turk **ōk-*, Mong **ōǵ-*, T-M **ok-*, Kor **ukir*, Jap **ók-* (EDAL 1047, 1048).

1195 PE **uki(r)-* 'to stare at' PInup **ukki-ri-*, **ukki-tə-* 'to stare at' (CED 363).

Altaic **uk*`*u* 'to understand, look into', Turk **uk-*, Mong **uka-*, T-M *(*x*)*oksa-*, Jap **úká-(n)káp-* (EDAL 1490, 1491).

747 PE **ukju[r]* (-*a*, -*i*) `winter, autumn, year' > PYup **ukiju-* (-*Ha-*, -*Hi-*) 'winter; year; autumn, fall', PInup **ukiu-*, **ukia-*, **ukii-* 'winter; year; autumn, fall' (CED 364, 365).

Altaic **kúre* (~ -*i*) 'autumn; rain, storm', Turk **gūr*, Mong **kura*, T-M **kure-* (EDAL 747, 748).

592 PE **uLiv-ka-* `full, to fill' PYup **uləv-* 'to overflow, to overload (e.g. a car by people); to fill to overflowing', PInup **ulipka-* 'to fill; to be full', The stem strongly merges with **ulə(-)* (-*t-*), **uləv-Ra-* 'high tide, flood, afflux' (703), but it has the second vowel *-*i-* as NAI shows and an original semantics like 'to be full' about different things. (CED 365).

Altaic **ulu* (~ -*o*) 'big, many; good', Turk **ulug*, Mong **olon*, T-M **ule-*, Kor **ōr-* (EDAL 1494).

710 PE **ulu* 'tongue' > PYup **ulu* 'tongue; language', Imaq (Inup) *ulújiq* 'tongue of whale' is borrowed from Nauk cf. *ulúíχtuβéquq* 'to cut out deer tongues', Chap *ulúzik (t)* 'tongue of whale' < **ulu-ri-*. (CED 367).

? Altaic > T-M **lusimā* 'upper jaw, muzzle, upper lip' (TMC 1, 513).

688 PE **umtu-* `day, morning, star' PYup **umtu-* 'day; long time', PInup **uvlu-* 'day; today; morning; star', (CED 370). (CED 370).

Altaic **jumi* 'fog, dusk', Turk **im(ir)*, **imirt* (~ *-*i-*) 'fog, brume, dusk', T-M *umul-* 'shadow' > Evenki *umulge* (TMC 2, p. 270). PE reflexes suffixal extension with *-*r*. See also PE **unur (-a)* 'night' (644).

1227 PE **una-* `to handle, to obtain, to kill' > PYup **una-* (-*nt*, -*kə-*, -*ŋə-*) 'to handle; to rob, to devastate; to obtain, to catch', PInup **unataβ-* 'to beat, to kill, to struggle' (CED 371).

Altaic **guna* 'to rob, attack, torture', Turk **Kun-*, Mong **gani*, Tung **gun-* (EDAL 571).

716 PE **unabə-ci-* `wood, drift-wood, tree' > PYup **unabə-ci-* 'tree (lying, cut); wood, balk', PInup **unaqci-* 'drift-wood; tree' (CED 371). (CED 371).

Altaic **ugt*`*V* or **uni-* 'pole in the house', Mong *(*h*)*uni-*, T-M **unde(ken)* (EDAL 1502).

644 PE **unur (-a)* 600 `night' > 1563, PYup **unuy (-a)* 'night 1, morning 2, tomorrow 3', (CED 373). 747, PInup **unnuy*, **unnua-/unurra-* 'evening 1, night 2', (CED 373). (CED 373).

Altaic **inÉ(r)* instead **ina* 'dawn, dusk', Turk **ijir*, T-M **ine-*, Kor **əñir-im* (EDAL 586, 587). It is necessary to distinct two roots in the Turk entry **ijir* 'dusk' in EDAL: I **ijir* ~ **ejir* with original meaning like 'evening' and 'dusk' (with marking below as X) - OUighur *ijir* X, MK *ijir* X, Turkmen *ijrek* X, Azeri *ingiraz* X, Turkish dial. *inirik*, *ijirik* X, Halaj *áŋgür*, *áŋgür* X, Karaim *ejir* X, Balqar *ijgir* 'evening', Tat. *enger-menger* X, Bashkir *eyer* X, K-Kalpik, Kazakh *ijir* X, Kirgiz *ijir(t)* X, 'early evening', Ojrot *ejir* 'evening', Hakas, Shor *ir* 'evening', Saryg-Yughur *jeŋir* 'evening', Tuva *enir* 'last, some time ago', Chuvash *əner* 'yesterday', *ənərək*, *ənd(ə)rək* X. II **im(ir)*, **imirt* (~ *-*i-*) with

meanings like 'fog, brume' and 'dusk' - MK *imir* 'darkness, brume, thick fog', Chagatay *imir* 'fog, evaporation going up from ground to sky', Turkmen *ümür* 'fog, brume, evaporation', Turkish *ümez* 'fog', Uzbek *umūr*, *imir* X, Tatar *imzi* X, K-Kalpak, Kazakh, Kirgiz *imirt* X (on the morning or on the evening), 'brume, thick fog, grey air', Ojrot *inir* X, Shor *inar* 'evaporation', Tuva *imir*, *imirtij* X, *imireš* 'glimpse', *imistel-* 'to dusk', Jakut, Dolgan *im* 'morning and evening dawn'. The first of these roots should be compared with T-M **ine-* 'it is becoming the day' (**ine-ge* 'day, morning dawn', **ine-ren* 'day which is becoming' etc. and Kor **əñir-im* 'evening, dusk') and becomes from **ĭnE(r)* 'evening, dusk'. The second (with another T-M parallel) is going to PE **umtu-* 'day, morning, star' (688).

607 PE **uŋ-uma-* 'alive, heart' > PYup **uŋuva-* (-nt), **uŋuŋ-si-* 'alive; heart; (land) animal' (CED 376). PInup **uuma-* (-ru-), **uummant* 'alive; heart; animal' (CED 377). The word 'heart' is a deverbal noun with the instrumental suffix. The verb is formed with the perfective verbal affix **(u)ma*. (CED 144).

Altaic **jūni* 'to live, rest', Mong **ün-ži-*, T-M **in-*, Kor **nūi*, Jap **inə-ti*, MKor. has a frequent initial vowel reduction (EDAL 619).

712 PE **uqa-* 'tongue, to speak' > PInup **uqa-* 'tongue; to speak, to say' (CED 377, 378).

Altaic **oki* 'to sing, recite', Turk **oki-*, Mong **üge*, T-M **(x)og-* ~ **(x)ok-*, Kor **o'äi-*, Jap **uka-ip-*. Despite poor representation in TM, the root is well preserved elsewhere and appears to be well reconstructable for PA (EDAL 1045).

1252 PE **uq(a)-* 'to sleep (with neg.)' > 2515, PYup **uqa-ma-(ŋ)i-* neg. 'to sleep (with neg.)', PInup **uq-uma-ŋia-* 'to sleep (with neg.): to have a nightmare, to be half-sleep'. The verb stem has a perfective formant **(u)ma-* before the negation. (CED 379).

Altaic > Turk **ujku* 'sleep (n.) > Hakas *ujyzi*, Chulym *ujyu*, Tofa *u'jgu*, Chuvash *ijyʒ*.

577 PE **uqru-* 'fat, blubber' > PYup **uqru-*, **uqriŋu-* 'fat, grease; blubber', PInup **uqru-*, **uqri-ŋu-* 'fat, blubber; to feel sick eating too much fat, oil' (CED 378).

Altaic **jürgi* (?) 'fat; brain', Turk **ür*, T-M **irg[ü]* (EDAL 622). The PE reflex *-q-* is the same as in **ciqi-nəb* 'sun'.

1190 PE **ur-(tə-)* 'to burn, to get burnt' > PYup **ur-(tə-)* 'to get burnt', PInup **uu-(t-)*, **uttə-* 'to be or get burnt; to burn oneself', This stem separates from the PInup root **uu-t-*, **uu-ru-ʒ* 'to boil, to cook' by semantic reasons and it has another PYup parallel. (CED 361, 362).

Altaic **dure* (~*t-*, *-r-*, *-i*) 'to burn, set fire', Mong **dür-*, T-M **dur-* (EDAL 485).

1264 PE **utu-*, **uci-* 'old' > PYup **utu-*, **uci-* 'old', PInup **utuqqa-* 'old; old person' (CED 383).

Altaic **öt* 'old', Turk **ötü-*, Mong **öte-*, T-M **(x)ut-*, Jap **ötə-nä* (EDAL 1067, 1068).

608 PE **vi* sg., **va(ŋ)-* pl. personal pronouns: 1sg. "I", 1pl. "we" > PYup **vi* (-ŋa), **vaŋ-ku-ta* id., PInup **uva-ŋa*, **uva-ŋ/ŋu-t* id. (CED 383). The Sir forms with the initial *m-* may reflect the oblique case stem **mVŋ-*, or it may be a secondary development the untrivial initial **v-* to *m-* before nasal in the

beginning of the second syllable. (CED 383).

Altaic **bi̯* (*min-*) 1sg., **b(u)E* (*m̄jun-*) 1pl. 'I, we', Turk **be* (**men-*), Mong **bi*, **min-* acc.; **ba*, **man-* acc., T-M **bi*; **bue*, **m̄ü-n-*, Kor **úri*, Jap **ba̯-*. An alternation **bi* / **mi-ne-* (sg.) ; **ba* / **m̄ju-n-* (pl.) should be reconstructed. Korean has undergone an irregular (dialectal) loss of **b-* (**úri* < **bú-ri*) (EDAL 341, 342). The specific Altaic denasalisation in these pronouns is clear seen cross the Nostratic parallels. The same example of denasalisation in the same pronominal roots is found also in PE.

709 PE **ə̯t-və̯r* sg., **ə̯t-və̯ci* pl. personal pronouns: 2sg. "thou", 2pl. "you" > PYup **ə̯t-və̯r*, **ə̯t-və̯ci* id., PInup **ə̯l-vit̄n*, **ə̯l-ə̯vci* id. (CED 106). The first part of these pronouns is the same as in personal pronouns of 3sg., 3pl. "he, she", "they" PE **ə̯t-ŋa*, **ə̯t-ŋi-r* (1324). It is the pronominal stem with deictic character presumably the same as Turk **íe/o* 'this, that'. The interest is in the second parts of forms. There are etymologically the compounds of **-və̯-* going back to the Nostratic pronoun of the 2nd person > IE **u-* and the third part **-r/ -ci*. As shows the alternation of PE consonants this suffix is a reflex of early PE **-t/ *-ti*. So it has a correspondence

Altaic **t̄i*, **t̄a* 'thou', Mong **%i*, **ta* (EDAL 1424).

The Main Literature

Мудрак О.А. К вопросу о внешних связях эскимосских языков. Материалы международной интердисциплинарной конференции Лингвистическая реконструкция и древнейшая история Востока, ч. I, ИВ АН СССР, М., 1984.

Мудрак О.А. Опыт реконструкции фонологической системы берингоморских и американских эскимосов. Палеоазиатские языки, Наука, Ленинград 1988.

Мудрак О.А. Этимологический словарь чукотско-камчатских языков. Языки русской культуры, М., 2000.

CED, Comparative Eskimo Dictionary (with Aleut Cognates), Fortesque M. and others. Alaska Native Language Center, Research Paper Number 9, University of Alaska, Fairbanks 1994.

EDAL, Starostin S, Dybo A., Mudrak O. Etymological dictionary of the Altaic Languages. HdO vol. 8-1, 8-2, 8-3, Brill, Leiden-Boston, 2003.

Jenness D. Comparative Vocabulary of the Western Eskimo Dialects: Report of the Canadian Arctic Expedition 1913-1918. vol. XV, part A, Ottawa 1928.

Mudrak O.A. Escalutian Roots. Reconstructing Languages and Cultures, Bill, Bochum 1989.