

## Kamchukchee and Eskimo Glottochronology and Some Altaic Etymologies Found in the Swadesh List

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The latest glottochronological research on Kamchukchee and Eskimo languages is based on new results in Kamchukchee (KCh) and Proto-Eskimo (PE) historical phonology studies and the etymological databases of the two families, made by the author. It can be stated that these two families have not had any genetic connections for at least the last 5–10 millennia (although connections between their ancestors may possibly be traced at the levels of macrofamilies like Nostratic). But for the last 2–3 millennia they have been in constant contact on the territory of North-Eastern Asia. The results of glottochronology agree with our subjective experience, based on what we know of the levels of relationship between languages (e. g. quantity of etymologies necessary for postulating a certain degree of proximity, the level of complexity of the correspondences between the phonological systems of the daughter languages, etc.).

The original KCh family must have existed around 2800 years ago (55 % of matches within the 100-word list). Based on the average (not 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 split in several parts — among them the Southern and the Western Kamchadal branches, whose languages were attested in the 19th century; the last Southern language, written down by B. DUBOWSKI, 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 or a little earlier (around 510 AD — 82

tions 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

. УДРАК.

The unexpected surplus of Tungus parallels may be the result of close separate contact after the disintegration of the Altaic unity.

Below we present a list of Proto-Eskimo (PE) and Altaic root correspondences found on Swadesh's 100-wordlist (plus 10 additional items). What is most striking is that, for the most part, in addition to wider Eurasiatic or Nostratic etymologies, many of the presented Eskimo etymologies display a special connection with Altaic in respect to specific phonetic processes and meaning specification, such as, for instance, the same non-trivial development *\*m- > \*v-* (*\*b-* in Altaic) in the auxiliary words and 1st person pronouns. Some of these roots are preserved in the other branches of Nostratic (such as Uralic or Indo-European), but some are lexical isoglosses typical only for PE and Altaic.

The preliminary table of consonantal correspondences is listed before the etymologies, but it can be subject to further modifications as new lexical entries are gradually introduced. The main characteristics of the PE phonological system are: 1) the opposition between voiceless stops and voiced fricatives; 2) a ban on initial voiced fricatives and voiceless stops at the end of the last syllable; 3) a lack of more than two-consonantal clusters in the inlaut position; 4) lack of clusters in the initial position and in wordfinal position; 5) a ban on the sequence *\*ti*; 6) some traces of old vowel harmony resulting in the differentiation of velar and uvular consonants on the PE level; 7) etymological reduction of vowels in certain positions (probably due to some former accentuation peculiarities); 8) an archaic recomposition of some roots with the structure *\*TəTV* into *\*VTTV*, with the «false» first vowel replicating the second one.

1) PE<sub>7</sub> *\*acay* 'paternal aunt' > PYup. *\*acay* id., PInup. *\*accay* (~-*h*) id. The geminate in Inup. may reflect a vocative form of this relative's name (CED 2).

Altaic *\*āčV* 'elder relative, ancestor' (mostly female; forms denoting a male relative with meaning 'father, ancestor' must represent a different root) > Turk. *\*ā aj* ~ *ej*, T.-M. *\*as* 'wife, woman', Kor. *\*ā* ~ *ā*. An expressive kinship «nursery» word with the typical structure *\*VCV*. The Mongolian reflexes are problematic: Mong. *ežei* 'mother, elder sister' is probably < Turk. (EDAL 271, 272).

2) PE<sub>570</sub> *\*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. *\*j t* ~ Mong. *\*de* ~ T.-M. *\*d* ~ Jap. *\*dantə*. One of the common Altaic monosyllabic verbal roots. Note dental suffixation (probably *\*d* ~ *a*) reflected in Turk, T.-M. and Jap. (EDAL 466). Cf. also Turk. *\*bat* 'to get down, to sink'.

3) PE<sub>599</sub> \*aci-*ʃ*- good, to like' > PYup. \*aci-*ʃ*- good; to like' (CED 47).  
PIInup. \*aca- to love' (CED 61).

Altaic \*gäte strong, very' > Turk. \*ged, Mong. \*k d r, T.-M. \*gata↗\*kada↗  
Jap. \*kətə. The root reveals some phonetic irregularities — probably due to  
contaminations with \*kéfo much, many' and \*kadi(rV) strong, tough' (EDAL  
532, 533). Another possible comparison: Altaic \*odi (~ -e) sexual passion',  
Turk. \*öd↗; Mong. \*(h)užid, T.-M. \*uda↗(EDAL 1042).

4) PE<sub>594</sub> \*ayə- to go on walks' > PYup. \*ayə- ~ \*ay-ub- to go on walks'  
(CED 7, 55), PIInup. \*ai-, \*ai-k-ləʃ-, \*ai-t-rub- to go; to go home; to fetch,  
to give'. There is another common root with close semantics: \*ayi-*ʃ*- to  
come' (CED 7).

Altaic \*āja to go, walk' > Turk. \*Aj↗Mong. \*aja↗T.-M. \*j↗Jap. \*āj m↗  
(EDAL 277, 278).

5) PE<sub>706</sub> \*ayə- that, on the other side, across' > PYup. \*ayə- (-kurə,  
-rumə, -ani) that, over there, on the other side, across'. The main pronoun  
for that', with a specific declination paradigm unlike that of the other de-  
monstrative pronouns, but analogical with \*u↗and \*t. ↗this' (CED 453).  
PIInup. \*ay-na (\*ak-kua, \*ay-ruma, \*a(γ)-ani) that, on the other side, across'.  
Some ECI and GRI forms in the paradigm are replaced by the phonetically  
similar pronoun \*av↗over there, going away' (CED 453, 456).

Altaic \*é that (deictic root)' > Turk. \* (↗), Mong. \*e↗, T.-M. \*e↗Kor.  
\*. ↗, Jap. \*á↗(EDAL 487).

6) PE<sub>556</sub> \*ayi-*ʃ*- to come' > PYup. \*ayi-*ʃ*- to come; to bring'. See also  
\*ayə↗ \*ay-ub↗to go on walks', PIInup. \*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. \*ájámp↗  
A Mong.-Jap. isogloss (EDAL 279).

7) PE<sub>1</sub> \*ayru-, \*ayri- star' > PYup. \*aRyu-, \*ayRa(ʃ) star' (CED 1, 9).  
PIInup. \*ayru-, \*ayri-aq- constellation: the Pleiades, constellation of two  
stars (appearing on the shortest day of the year)' (CED 1).

Altaic \*iákV-rV light, white' > Turk. \* k, Mong. \*jagayan, T.-M. \*ixere,  
Kor. \*ikir↗Jap. \*áká↗(r↗). The final vowel is not quite clear: some languages  
point to \*↗or \*↗, others rather to \*↗ (EDAL 598). Cf. also Altaic ? \*biaga  
(~ -i) moon, brilliance', preserved only in T.-M. \*biaga.

8) PE<sub>727</sub> \*abna- (~ \*bñ-) woman, female' > PYup. \*abñia- woman, girl, fe-  
male (in compounds)', PIInup. \*abña- woman, female (in compounds)' (CED 43).

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

Altaic	Proto-Eskimo	
*p	p-, -p-, -v-?	
*p'	p	
*b	θ-, -v-, -θ-, (-p-)	
*t	t/c	The palatalized variants are the result of PE development <i>*ti</i> > <i>*ci</i> in all cases ( <i>t</i> before <i>i</i> is prohibited); sometimes they are found before front row vowels or diphthongs in Altaic.
*t'	t/c	See the development of <i>*t</i> .
*d	θ-, -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 rows of stops is secondary in PE. It is a result of consonantal accommodation depending on the front/back character of the root vowel. There was also a vowel harmony between root vowels and some derivative affixes ( <i>*qu</i> — so-called stem modifiers' of nouns and verbs). The synchronic pronunciation of <i>*qu</i> and <i>*qi</i> as [qɔ] and [qe] is a trace of an old differentiation between two rows of vowels (presumably high and middle rows such as the ones in Tungusic or Mongolian).
*k'	k-/q-, -k-/q-	See the comments under <i>*k</i> .
*g	θ-, -θ-/y-/β-	See also the development of <i>*b</i> <i>*d</i> in the anlaut position. See the comments under <i>*k</i> . Sometimes Altaic <i>*g</i> seems to correspond to <i>*ɣ</i> this may be a trace of an old voiceless fricative.
*	c-, -c-, -tə	
*c	c-, -c-, -tə	
*ʒ	θ- (ci- ?), -j-	

Altaic	Proto-Eskimo	
*s	c-, -c-, (-tə?)	
*š-	c-	
*m	m	
*n	n-, -, -n-, -	The palatal reflexation is found before Altaic diphthongs and *i̯
*	-, -n- ~ -, -bə	See the comments under *j (i. e. the development is *- > *̣ > *ʃ̣.
*	θ-, -, -nY/ʃ-, -	The palatalized reflexation is found before Altaic diphthongs. Sometimes consonantal clusters (sometimes with a reduced vowel in between) are found instead of simple velars.
*l	n-, -l-	The reflex with the initial */̣ is found very occasionally.
*	N-, -l-, -rə	Cf. *.
*-j-	-j-, -y-, -θ-, -bə	In early PE a special development *̣ > *̣ in syllable-final position has occurred; a reduced vowel was then inserted after the last consonant of the root. Cf. the development of *, *r.
*r	θ-, -r-, -bə    -j-	See the comments under *j. There is an unpredictable reflex *̣ in PE which can reflect a distinct Nostratic phoneme (*r <sub>1</sub> ) or depend on as yet unclarified phonetic conditioning.
*	-r-, -tu	Cf. *̣
*-Nd-	- -, -n( )-	
*-md-	-m -	< *̣ṃ ?
*-ng-, -nk-	- - ~ - - ?	
*-jn-, *-rj-	-j-, -bə	See the comments under *j.

9) PE<sub>513</sub> \**abra* 'ashes, powder' > PYup. \**ábr[a]* 'ashes; drug, powder'. The Chap. form features a metathesis: \**ayrəθ* > *γ. rəθ* so that the stem begins atypically with a voiced initial *γ*. The word for 'drug' looks like an Alaskan cultural loanword in Siberian Eskimo (CED 6, 41). Pinup. \**abra* 'ashes; gunpowder' (CED 41, 42).

Altaic \**gari* (~ -*r*-, -*o*) 'light' > Mong. \**gere*†, T.-M. \**garpa* (EDAL 531). The original semantics in PE should have been something like 'flaring, blazing coals'.

10) PE<sub>666</sub> \**akma-Lu-* 'round' > Pinup. \**aymalu-* 'round' (CED 36).

Altaic \**géká* 'hook, bend' > Turk. \**Kek*†† \**Kak*† Mong. \**gek*† T.-M. \**gek(u)*† Jap. \**kánkám*†(!) (EDAL 536, 537).

11) PE<sub>664</sub> \**akra-γ-* (\**akra-β-*) 'wheel, to roll, round' > PYup. \**ak(r)a-γ-*, \**ak(r)a-m-kə-* (-*m-tu-*), \**aq(r)a-β-* 'wheel, round; to roll', Pinup. \**akra-γ-* (-*lu-*), \**aqraβ-* 'to roll, to turn round or over; wheel, tyre, wheeled vehicle' (CED 10, 36). There is also PE \**aqra*† \**aRqa*† 'ball' (665).

Altaic \**kjúru* 'a k. of vehicle, wheel' > Turk. \**Ki ak*, \**Ki agu*, Mong. \**k r*† n, T.-M. \**kur*† Jap. \**k r má* (EDAL 708).

12) PE<sub>662</sub> \**aku-* 'root of plant' > PYup. \**aku-* 'root', Pinup. \**aku-* 'root of plant'. It is necessary to distinguish this root from \**aku(və)* 'skirt, part of garment, waterproof garment' (1615), despite CED (CED 14).

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

13) PE<sub>736</sub> \**ali-(va-)* 'far, in the distance' > PYup. \**ali-* 'from afar', Pinup. \**ali-(va-)* 'to be far; to retreat a little' (CED 17).

Altaic \**giála* 'to stay behind, be separated' > Turk. \**Ki l*† Mong. \**gal*† T.-M. \**giala*† Jap. \**kára*† The original meaning is well reconstructible as «to lag behind > become separated» (EDAL 547, 548).

14) PE<sub>523</sub> \**amə-* 'many, much' > PYup. \**amə-* (-*lə-*, -*tV-*) 'frequent, perpetual; many, much', Pinup. \**ami-* (-*lba*, -*tu-*) 'many; to increase in numbers' (CED 22, 23).

Altaic \**ěma* (~ -*o*) 'to stay, be left, leave' > T.-M. \**em*† Jap. \**amà*† 'plenty'. A T.-M.-Jap. isogloss. Cf. perhaps also MKor. \**màmír*† 'to stay, remain' (< \**Vmə*† \**mír*† with a rather usual Korean loss of initial vowel?) (EDAL 503, 504).

15) PE<sub>740</sub> \**am-ərtə-* 'with negation affix thin, narrow' > PYup. \**amərtə-* 'thin in girth; narrow', Pinup. \**amit-* 'narrow, thin' (CED 24). Literally 'not wide'.

Altaic \**ámbe* 'heavy, big' > Mong. \**amban*, T.-M. \**amba*† Kor. \**mì*† Jap. \**ám(p)á*† (EDAL 295).



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

Altaic \*emV(ηV) saddle, belt' > Turk. \*čdηe\*, Mong. \*emeγe\*, T.-M. \*emu\*. A Western isogloss (EDAL 506).

17) PE<sub>502</sub> \*āmtu- ~ \*mātu- leaf, coltsfoot' > PYup. \*amtu- coltsfoot'. PInup. \*mātu- ~ \*mulā- leaf of plant; coltsfoot'. The metathesis of vowels in GRI took place under the influence of \*mulā- paddle blade' (CED 202, 255).

Altaic \*mōro a k. of weed' > T.-M. \*m r\*, Kor. \*m̄ r, Jap. \*m̄ (, \*muà) [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 \*miàro). The loss of resonant in Jpn. presupposes a suffixed form like \*mōr(o)\*gV (cf. the Turkic parallels) or \*mōr(o)\*ηV (cf. Evk. *moriηa*) (EDAL 945). But PE reflects a form with original \*.

18) PE<sub>528</sub> \*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-fa, \*amo-sa)', Turk. \*um-, \*um-sa-, Mong. \*ama-, \*amsa\*, \*amta, T.-M. \*amηa, \*amta\*, Kor. \*mās, Jap. \*ámá\*, \*ántí (EDAL 296, 297).

19) PE<sub>729</sub> \*ana-b- rust' > PYup. \*ana-b- rust'.

Altaic \*beña red clay, dirt' > Turk. \*bA ak, T.-M. \*beηge\*, Jap. \*pání. If the Negidal form belongs here, it may reflect, together with Turk. \*bA ak, a common derivative \*be a\*V (EDAL 339).

20) PE<sub>580</sub> \*anəb spark, fire' > PYup. \*anəb- (-ib-) spark, fire' (CED 28).

Altaic \*žiājnà to burn; ashes, tar' > Turk. \*jan\*, \*jan-ir\*, T.-M. \*žian\*, Kor. \*i, Jap. \*dāni. Medial \*j accounts for loss of \*n in Kor. (EDAL 1539).

21) PE<sub>1588</sub> \*aniya- moon, month' > PInup. \*aniya(a-) moon' (CED 28). The connection to the word 'elder brother' cited in CED represents a folk etymology'.

Altaic \*ānu moon, moon cycle' > Turk. \*k, Mong. \*oj, T.-M. \*a ηa (EDAL 303). In both Turkic and T.-M. a postconsonantal velar stop is evident.

22) PE<sub>745</sub> \*anuqə wind' > PYup. \*anuqə wind', PInup. \*anubə, \*anuqə-lib-, \*anub-rab- wind, to be windy' (CED 30).

Altaic \*iangu > Turk. \*(i)an̄ki- emit odour', Mong. \*(h)on̄guli- to gasp, breathe heavily', T.-M. \*u ηu- to smell' (instead of Turk. \*in-ik to become tired, exhausted). See *iun̄ju* (~ -a) to breathe, smell' (EDAL 620).

23) PE<sub>519</sub> \*aη(u)- big' > PYup. \*aη(u)- big, great' (CED 32, 35), PInup. \*aηə-na- big 1, wide, last long 2, too big for 3, to make too big (large) 4' (CED 32). Derivatives: \*aη(ə)ki- to grow up, to become bigger', \*aηtu- big, bigness'. Not related to \*aηu-nt man, old man, male animal'.

Altaic  $\tilde{c}$  *ni* 'very' > Turk. \*eŋ, Mong. \*aŋka, T.-M. \*anaŋKor. \*à í (EDAL 300). The hypothesis that Turkic and Mongolian here reflect a suffixed form  $\tilde{c}$  *ni*  $\tilde{c}$ V, with assimilation \* $\tilde{c}$ ŋ > \* $\tilde{c}$ ŋ (with further reduction in Turkic) can be challenged by the alternative hypothesis that they actually reflect the original velar nasal.

24) PE<sub>648</sub> \**apju-* 'smoke, fume, vapour' > PYup. \**apju-* 'smoke, fume', PInup. \**apju-* 'smoke, haze, mist' (CED 38).

Altaic \*apî 'wind, vapour' > Turk. \*Ep-, Mong. \*ayur, T.-M. \*apka (EDAL 311).

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

Altaic \**kéra* 'belly; body, ribs' > Turk. \*K rin, T.-M. \*kerimuk, Kor. \*kari, Jap. \*kára(n)tá (EDAL 669).

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

Altaic \**gàrá* (~ -e-) 'arm' > Turk. \*Kari, Mong. \*gar, Jap. \*kàtá (EDAL 530, 531).

27) PE<sub>539</sub> \**aruy* 'blood' > PYup. \**áruy* (-ja-) 'blood, clotted blood', PInup. \**a(r)uy* (-ia-), \**arrə-b-* 'blood, to bleed, clotted blood, red' (CED 5).

T.-M. \*erin 'breath, life, soul'; hardly connected to Altaic \**èra* 'to be' > Turk. \*erŋMong. \*ereŋJap. \*àrŋ(EDAL 515). On the other hand, the semantic development 'blood' ~ 'strength, soul' is quite common in many languages.

28) PE<sub>651</sub> \**atabu-ci-* 'one' > PYup. \**atabu-ci-* 'one', PInup. \**ataucci-* 'one' (CED 50).

Altaic \**gàgtà* 'one of a pair' > Turk. \*Kat, Mong. \*gag.a, T.-M. \*gagda, Jap. \*kàtà (EDAL 525, 526).

29) PE<sub>641</sub> \**atəb*, \**atRiəb-* 'name; to name' > PYup. \**atəb*, \**atjib-* id., PInup. \**atəb*, \**accib-* 'name, namesake; to name' (CED 51).

Altaic \**ótə* (~ -t-) 'sound' > Turk. \*ötŋMong. \*ö.iŋT.-M. \*(x)otŋJap. \*ótə (EDAL 1068).

30) PE<sub>732</sub> \**ava-nt*, (-t-li-) 'area around, outermost, faraway' > PYup. \**avantə*, \**avali-* 'area around, locality; faraway', PInup. \**ava-nt*, \**ava-lli-* 'surrounding area, outermost' (CED 54).

Altaic \**ebo* 'enough, big' > Mong. \*(h)öyŋ\*(h)öbŋT.-M. \*ebiŋKor. \*ē.ŋCf. Jap. \*əpə- 'big' which may reflect a merger of this root with \**pə* (EDAL 490, 491).

31) PE<sub>541</sub> \**caHunəb* (~ -ŋ-, -r-) 'bone' > PInup. \**caunəb* (~ -ab) 'bone; seed' (CED 72).

Altaic \**s̥iŋu* 'bone; shin bone' > Turk. \**siŋök* ⇨ \**siŋok*, Mong. \**siya*, T.-M. \**siŋa* ⇨ Kor. \**s̥in*, Jap. \**s̥ nài* (EDAL 1254, 1255). But cf. also Altaic \**ʃaŋu* (⇨ \**ʃoŋe*) 'a sharp bone, sharp instrument' (EDAL 439).

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

Altaic \**čekV* 'part of shoulder close to neck' > Turk. \**ekn*, Mong. \**ekerej* (EDAL 422).

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

Altaic \**f̥iule* (~ -*o*) 'to weaken, be exhausted' > Mong. \**tul* ⇨ T.-M. \**t la* ⇨ (EDAL 1443). For the anlaut consonant development cf. PE \**ciyər-qu-*, \**cir-qu-* 'knee'; \**ciluy* (~ \**cū-*), \**culuk-Ruy* 'feather of wing, dorsal fin'.

34) PE<sub>719</sub> \**ca-ŋu-* (-*ra*, -*na*) 'interrogative pronoun «what», «what to do»' > 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 \**ən*, \**eq* ⇨ id. < KCh \**nəŋə*. The second part of this pronoun may correspond to:

Altaic \**ŋ[iV]* 'what, who' > Turk. \**n*, Mong. \**jayu* ⇨ \**jayuma*, T.-M. \**ŋü*, Kor. \**n* ⇨ Jap. \**nV* (EDAL 1034).

35) PE<sub>542</sub> \**carə-* 'to turn towards, to face, to pass in front' > PYup. \**ca(r)u-* 'to turn towards, to face' (CED 72); PInup. \**caa-t-*, \**car-but-*, \**car-va-ŋ-* 'to face, to turn towards 1, to pass in front 2, to move, to put forwards 3' (CED 62, 63). The corresponding nominal stem: PE \**carə* 'front, breast' > PYup. \**carə* 'breast, front of body' (CED 62, 73), PInup. \**caa-*, \**ca'-mun* (-*mi-*, -*la-ŋ-*) 'front of body, in front, to turn forwards, foremost' (CED 62).

Altaic \**čöl̥e* 'front, front part' > Turk. \**dö* ⇨ Mong. \**döli*, T.-M. \**ʒule*, Kor. \**irə* (EDAL 403, 404).

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

Altaic \**s̥t̥ ri* 'earth, sand; marsh' > Turk. \**sia*, Mong. \**sirayu*, T.-M. \**siru* ⇨ Kor. \**h rk*, Jap. \**situ* (EDAL 1269, 1270).

37) PE<sub>671</sub> \**cəya-ŋ-* 'to see, to look, to open eyes' > PYup. \**cəya-ŋ-* (> \**cəba-ŋ-*) 'to see, to look; to open eyes, to wake up'. Cf. PInup. \**cayəi* ⇨ 'to become visible' (1774).

Altaic \**sigá* (~ *z-*) 'to look, search' > Mong. \**sigiya* ⇨ T.-M. \**sig* ⇨ Kor. \**h̥* ⇨ Jap. \**sánk* ⇨ Kor. \**h̥* ⇨ is an assimilation < \**sVh̥* ⇨ = PJ \**sá(n)kas* ⇨ (EDAL 1242).

38) PE<sub>657</sub> \**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. \**j l*, Mong. \**salki*, T.-M. \**sal* ~~di~~ Kor. \**sar* (EDAL 1508).

39) PE<sub>549</sub> \**cətu(m)- (=qu-)*, \**cətu-ʃ-* 'nail, claw, hoof; to extend out legs' > PYup. \**cətu-ɣ (-m-qu-)*, \**cətu-ʃ-* 'nail, claw, hoof; to extend out legs' (CED 86, 87), PInup. \**cittu-ʃ-* 'to extend legs' (CED 87). The Russian equivalent for the verbal meanings is ' = to throw away the hooves', with the connotation 'to die (to lie with outstretched legs)'.

Altaic \**siudu* (~ -a)

43) PE<sub>749</sub> \**ciβu-nəβ* horn' > PYup. \**ciβu-nəβ* horn, antler' (CED 85, 86). Altaic \**šüjò* thorn, (pine) needle' > Turk. \**sojagu*, Mong. \**sojuγa*, T.-M. \**ũje*, Kor. \**s. i*, Jap. \**sàjà* (EDAL 1339).

44) PE<sub>578</sub> \**ciluy* (~ \**cü-*), \**culuk-Ruy* feather of wing, dorsal fin' > PYup. \**ciluy* ~ \**culuy*, \**culuk=juγ-* feather; wing; body hair; dorsal fin'. Cf. \**cuγ* *luγ* PInup. \**culu(γ)*, \**culuRRuy-* feather of wing; dorsal fin; wing' (CED 92).

Altaic \**déli* mane; collar' > Turk. \**j l*, Mong. \**del*, T.-M. \**del n*, Jap. \*(*d*)*ia* *ri*. The diphthong in Jap. may indicate PA \**déjli* (EDAL 470). For the anlaut consonant development cf. PE \**ciγər-qu-*, \**cir-qu-* knee', \**calw-* to tan skin, thin, dried, lean'.

45) PE<sub>658</sub> \**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). The first meaning suggests derivation from \**cəla* weather etc.', but this may really be a secondary confusion, as shown by Inup. variants with the meaning rain'.

Altaic \**siüri* to flow, drip' > Turk. \**s* *γ* Mong. \**s r* T.-M. \**sir* A Western isogloss (EDAL 1298, 1299). The root may in fact be the same as \**siöri* (reflected in the Eastern area, EDAL 1283), but modified under the influence of a synonymous \**i u* (EDAL 1342). The first PE variant reflects an older \**i*, the second may reflect \**γ* if the PE form is to be reconstructed with \**γ*, and \**γ* or \**γ* if the PE form contains \**γ*.

46) PE<sub>510</sub> \**cita-m-* (~ \**cəla-m-*) full, to fill' > PYup. \**cəta-m-* full, all; to fill', PInup. \**cilə[m]*- (~ -*v-*, -*η-*) to have a full stomach; to fill completely' (CED 79).

Altaic \**čálo* full, fill' > Turk. \**d l* Mong. \**del* T.-M. \**žalu(ɳ)* (!), Kor. \**ara* Jap. \**tár* (EDAL 390, 391). The suffixal *ɳ* in T.-M. and PE is probably the same.

47) PE<sub>683</sub> \**cinəγ-* to sleep' > PInup. \**cinəγ-* (\**cəniγ-*) to sleep; sleep' (CED 80, 81).

Altaic \**žiðjè* dream, echo' > Turk. \**jaη*, Mong. \**žey* *γ* sleep', T.-M. \**ž* *ηi* Kor. \**á(η)* Jap. \**dimài* *γ* *d* *mài*. Semantically a challenging etymology, with some mythological connotations (EDAL 1543, 1544). The PE reflex suggests a consonantal cluster \**γig* rather than simple \**γj* in Altaic.

48) PE<sub>701</sub> \**ciqi-nəβ* sun' > PYup. \**ciqi-nəβ* sun', PInup \**ciqi-nəβ* sun, to be sunshine' (CED 84).

Altaic \**siðgu* sun; sky' > T.-M. \**sig. n*, Kor. \**h* *i*, Jap. \**suà* *á*. An Eastern isogloss. It is also interesting to note MKor. *hàh r* sky', which may, together with PJ \**suàrá* id., go back to a complex form \**siog[u]n* *V* (EDAL 1274). The uvular stop in PE suggests an original (Nostratic) uvular or voiceless fricative. Cf. PE \**əqa-tuy* fish'.

49) PE<sub>597</sub> \**cuḅ-ra-* blue, green, blue-berry' > PYup. \**cuḅ-(R)a-* blue-berry'. Cf. \**acuḅaḅnaḅ* 'murky' in PYup, PInup. \**cuḅḅa-* blue-berry' (CED 95).

Altaic \**čīḍkē* (~ -k-) grass, weed' > Turk. \**ekin*, T.-M. \**ka*, Kor. \**soksaḅi*, Jap. \**t k si*. Mong. \**ikeḅi* in names of plants may be a merger of this root and \**ika* (EDAL 427). Kor. \**soksaḅi* horse-tail' is hard to separate from Jap. \**tukusi* id.; we are most probably dealing with an assimilation (\**soksaḅi* < \**oksaḅi*) (EDAL 440).

50) PE<sub>613</sub> \**cuja-* willow leaf' > PYup. \**cuja-* willow leaf' (CED 96).

Altaic \**siāgi* a k. of foliage tree' > Turk. \**seg t* willow', Mong. \**siyer*, T.-M. \**siakta* willow' (EDAL 1263).

51) PE<sub>600</sub> \**cuḅa-* gall, bile, blue, green' > PYup. \**cuḅa-* gall; blue, green; rubicund' (CED 93, 94); PInup. \**cuḅa-* gall, bile; green' (CED 93).

Altaic \**siāḅe(rV)* (~ z-) yellowish, greyish' > Mong. \**sayarḅ* T.-M. \**siḅa(r)* A Mong.-Tung. isogloss (EDAL 1268).

52) PE<sub>601</sub> \**cuḅa-* bead' > PYup. \**cuḅa-* bead', PInup. \**cuḅaura-* bead' (CED 93). This cannot be an affix-less derivate from \**cuḅaḅ* 'gall, bile', since the attempt to propose an original semantics like 'the colour of turquoise' implicates a semantic concretization to 'gall' and 'bead' without any additional morphological markers; also unclear is the issue of why the specification stopped at meanings like 'gall' and 'bead' instead of 'sky', 'sea', 'grass', etc., which might be more expectable.

Altaic \**sūnà* seed, grain' > Turk. \**sunu*, Jap. \**sànai* (EDAL 1318).

53) PE<sub>633</sub> \**ab[r]a-t-* to dawn, light' > PYup. \**ab-ta-*, \**ab-cu-γ-*, \**abr-unt-* (~ \**a-*) light; dawn, to dawn on', PInup. \**abrā-b-* (-t-) to become visible, to be clear, visible'. These stems have no connection to the root 'to hide', despite (CED 122). See \**ab[r]a-nab* 'day'.

Altaic \**obri* (~ -e) dawn' > Turk. \**r η* (\**ör η*), Mong. \**öwr*, T.-M. \*(*x*)*oru* (EDAL 1040, 1041).

54) PE<sub>548</sub> \**akā(-)* to burn, fire' > PYup. \**akā(-)* conflagration, fire; to burn', PInup. \**ikā-* (-t-) to burn, to ignite' (CED 101). Cf. also \**akuma-* to burn', \**aknā-* fire'.

Altaic \**dēkâ* to burn' > Turk. \**jak* T.-M. \**degḅe gi* Kor. \**th* Jap. \**dák* (EDAL 469).

55) PE<sub>581</sub> \**aknā-* fire' > PYup. \**aknā-b* (~ \**kānā-b*), \**aknā-ḅa-*, \**aknā-* fire; to build a fire under, to start to burn, to cook', PInup. \**iknā-b*, \**iknā-* fire; to strike fire; flintstone' (CED 101). The stem looks like a deverbal noun from \**akā* 'to burn', but if so, the uvular in the affix should have been a constant presence. Yet, as can be seen from Nauk. and Inup. data, it is regularly

«dropped»; thus, we are probably dealing with a secondary association, where some forms are reinterpreted as containing the suffix  $\text{ɲ} \text{ } \text{ʋ}$  (CED 101).

This stem has a correspondence in Nostratic \*HenkV fire, to burn' (> IE \* $\text{h}_2\text{gn}$  etc.).

56) PE<sub>547</sub> \* $\text{akuma-}$  to burn' > PYup. \* $\text{akuma-}$  to burn', PInup. \* $\text{ikuma-}$  to be burning' (CED 101). The stem formally looks like a derivate from \* $\text{akə(-)}$  to burn, fire' (548) with the perfective suffix, but the word does not have any perfective semantics. Also, modern Yup. languages (except for Nauk.) show the loss of the initial \* $\text{ə}$ . We may be dealing with secondary contamination and re-etymologization in Eskimo languages.

Altaic \* $\text{kume}$  (~  $\text{-iu-}$ ) black; coal' > Turk. \* $\text{köm}$  r, Kor. \* $\text{kəm}$  (EDAL 852).

57) PE<sub>687</sub> \* $\text{alə-γ-}$  to inflame, to fume, to burn' > PYup. \* $\text{alə-γ-}$  to inflame 1, to fume 2, to get scorched, to burn 3', PInup. \* $\text{alə-γ-}$  to get scorched, burnt' (CED 104).

Altaic \* $\text{ila}$  to fry, burn' > Turk. \* $\text{ila}$  Mong. \* $\text{ila}$  T.-M. \*(x) $\text{ila}$  (EDAL 584). But cf. also Altaic \* $\text{giola}$  (~  $\text{-l-}$ , \* $\text{gialo}$ ) to burn, fire' (Mong.-Tung isogloss, EDAL 554).

58) PE<sub>610</sub> \* $\text{ali-(ma-)}$  to know, to have a feeling' > PYup. \* $\text{ali-ma-}$ , \* $\text{ali-γ-}$  ( $\text{ikə-}$ ) to know; sensitive, understanding; to cognize, to take in mind', PInup. \* $\text{ali-ma-}$  suspicious, apprehensive; to suspect' (CED 105). Cf. also the transitive derivate \* $\text{ali-t-}$  ( $\text{-ima-}$ ) to learn, to know, to recognize' (CED 105).

Altaic \* $\text{ali-tV}$  to know; to listen, hear' > Turk. \* $\text{ali}$  Mong. \* $\text{aldar}$ , T.-M. \* $\text{ala}$  \* $\text{aldu}$ , Kor. \* $\text{r}$  (EDAL 293).

59) PE<sub>512</sub> \* $\text{alu-}$ , \* $\text{aləv-}$  all, whole' > PInup. \* $\text{alu-}$ , \* $\text{aləv-}$  all, whole, to be whole' (CED 107, 129). Also Yup. AAY l.  $\text{cib}$  id.

Altaic \* $\text{biolo}$  all, completely' > Turk. \* $\text{bile}$  ( $\text{bula}$ ), Mong. \* $\text{bul}$  u, T.-M. \* $\text{bil}$  A Western isogloss (EDAL 351).

60) PE<sub>563</sub> \* $\text{amə-ʋ-}$  to drink' > PYup. \* $\text{aməʋ-}$  to drink', PInup. \* $\text{aməʋ-}$  to drink' (CED 110). See also \* $\text{aməʋ}$  water' (566) and deverbal derivatives \* $\text{ami-c-}$  to soak, to drench, to give a drink', \* $\text{aməʋ-unt}$  cup, vessel' (564), \* $\text{aməq=juy-}$  to be thirsty' (565).

Altaic \* $\text{umV}$  (~ \* $\text{o-}$ ) to drink' > Mong. \* $\text{umda}$ , T.-M. \* $\text{um(i)}$  Kor. \* $\text{mà}$  (EDAL 1499, 1500).

61) PE<sub>566</sub> \* $\text{aməʋ}$  water' > PYup. \* $\text{aməʋ}$  water (fresh)', PInup. \* $\text{aməʋ}$  water' (CED 110). Unlike in the case of the verb to drink', this nominal stem never drops its  $\text{ʋ}$  before suffixes, meaning that here it is a part of the stem.

Altaic \* $\text{mijuri}$  water' > Mong. \* $\text{mören}$ , T.-M. \* $\text{m}$ , Kor. \* $\text{mír}$ , Jap. \* $\text{mi}$  ( $\text{ɲ} \text{ } \text{t}$ ). Turkic has preserved the root only within the archaic compound \* $\text{jag}$

*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* < *\*miür(i)ŋV* (cf. Manchu *m. ʃe*). The development of the monosyllabic structure *\*TəT* > *\*əTəT* is obligatory according to PE phonotactic laws.

62) PE<sub>649</sub> *\*-ənbī-ŋ-*, *\*-ənbī-t* negative affix: to stop doing, not (imperat.)' > PYup. *\*-ənbī-ŋ-*, *\*-ənbī-t-* (CED 416, 417), PInup. *\*-ənbī-ŋ-*, *\*-ənbī-t* (CED 417). Cf. *\*(ŋ)i-*.

Altaic *\*āni* not, negative verb' > Turk. *\*en*, T.-M. *\*(n)ŋ* Kor. *\*ànŋ* Jap. *\*nàŋ* *\*ŋa)nŋ* *\*iná* (EDAL 300, 301).

63) PE<sub>717</sub> *\*əpRuy-(a-)* to walk' > PYup. *\*pəjuŋ-(a-)* to walk, to go on foot', PInup. *\*picuŋ-(a-)* to walk' (CED 265).

Altaic *\*pēlo* (*\*-l-d-*, *\*-l-b-*) to walk, to run' > Turk. *\*~~l~~* Mong. *\*h ldeŋ* T.-M. *\*peliŋ* (*\*puliŋ*), *\*pelbuŋ* Kor. *\*pārbŋ* Jap. *\*pāsirŋ* (EDAL 1133, 1134). In PE it is easier to see the development from the affixal variant *\*pél-bo-*, with reflexation typical of *\*~~l~~* in syllable-final position.

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

Altaic *\*dī* *\*p* *ō* *ō* *cō* *jō* *t* *i* *ō* *ō* *ō*





75) PE<sub>584</sub> \*itəγ-(a-) footpoint, foot' > PYup. \*itəγ-(a-) (-miγ-) toe-cap, footpoint; foot; to kick with top of foot' (CED 146, 124), PInup. \*itəγ-(a-) (-miγ-) ankle skin of caribou; foot; to kick' (CED 146, 147).

Altaic \*búktV leg, thigh' > Turk. \*b. t, T.-M. \*begdi ↗ \*bugdi (EDAL 380).

76) PE<sub>751</sub> \*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', hence secondarily developed meanings like red trout'.

Altaic \*žjōbe (~ \*žjābo) 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).

77) PE<sub>376</sub> \*iv=ju(γ)-, \*ivəba- rain' > PYup. \*ivRuy rain' (CED 229), PInup. \*ivba-b-, \*iv-cu- to be wet from rain; rain' (CED 229, 148).

Altaic \*ŋjōbu to pour' > Turk. \*ju(b) ↗ Mong. \*jeγ ↗ T.-M. \*iabe ↗ Kor. \*n. b ↗ It is tempting to compare OJ *mjiwo* water-way, seaway' (if *mji-* is to be analysed as water', the *-wo* part remains completely obscure) (EDAL 1031).

78) PE<sub>12</sub> \*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-γ slice blubber from whale skin; to split or to be split into two layers (walrus hide); walrus skin with blubber' (CED 151, 162).

Altaic \*kaku- (~ -k-) tanned skin, leather' > Turk. \*kakma, T.-M. \*kak ↗ (EDAL 632).

79) PE<sub>11</sub> \*kaj(a)- hungry, weak' > PYup. \*kaja-, \*kajə-γ- poor, indigent; weak, hungry' (CED 151, 162), PInup. \*kaa-γ-, \*kajjə-ba- hungry; to starve, to devour food hungrily' (CED 151, 163).

Altaic \*kiāru need, necessity' > Turk. \*g rge ↗ Mong. \*kara, T.-M. \*kor ↗ pi ↗ Kor. \*kari ↗ (?) (EDAL 691, 692).

80) PE<sub>37</sub> \*kanuγ blood' > PYup. \*kanuγ blood, bloody stain', PInup. \*kanuγ blood' (CED 156).

Altaic \*kiāno blood; blood vessel' > Turk. \*Ki. n, T.-M. \*xun. ↗ ta (EDAL 797).

81) PE<sub>49</sub> \*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 \*kăči to pass, go through' > Turk. \*ge. ↗ T.-M. \*kas ↗ A Turk-Tung isogloss (EDAL 627).

82) PE<sub>54</sub> \*kavir-(u-) red' > PYup. \*kavir-(u-), \*kaviḃ- red; red fox' (CED 162, 163), PInup. \*kaviḃ-, \*kajuḃ- red; red fox' (CED 162, 163).

Altaic \**k̄iúru* 'red, reddish; brown, dark' > Turk. \**K̄i* ↔ Mong. \**k re* ↔ (\**k ri* ↔; T.-M. \**xuri* ↔ Kor. \**k ri*, Jap. \**k rá* ↔ (EDAL 828, 829).

83) PE<sub>66</sub> \**kəγə-* 'to bite' > PYup. \**kəγə-* 'to bite', PInup. \**kiγə-*, \**kiγγə-q* 'to bite; bite, bitten' (CED 164). Cf. \**kəγə-m-* 'to bite, to grip between teeth'.

Altaic \**kikú* 'to bite; rub, scrape' > Turk. \**Kik* ↔ Mong. \**kegže* ↔ T.-M. \**kik* ↔ Jap. \**k k m* ↔ (EDAL 677, 678).

84) PE<sub>69</sub> \**kəγuntə* 'tooth' > PYup. \**kəγuntə* 'tooth', PInup. \**kiγunt* \*ki

89) PE<sub>113</sub> \**kiŋuγ* insect, shrimp, worm' > PYup. \**kiŋuγ* id., Pinup. \**kiŋuγ* shrimp, sand flea' (CED 176).

Altaic \**kīuŋu* worm, grub' > Mong. \**kiγur* T.-M. \**xuŋVl* Jap. \**kuà*. The Jap. form goes back to \**kīuŋ(u)γV* (EDAL 823).

90) PE<sub>705</sub> \**kuyim-Ra-* to swim; wave' > PYup. \**kuyim-Ra-* id. (CED 180).

Altaic \**kēja-pV-* (~ -o) to slide, swim' > Turk. \**K j* (Turkish dial. *kajp*), Mong. \**kajiba* T.-M. \**xeje* A rather complicated Western isogloss; it is not excluded that PTM \**xeje* sink, float, flow' should be replaced by forms like Evenki *kajama*, Orok *qajama* bare (not fur-lined) skis'.

91) PE<sub>140</sub> \**kukəγ*, \**kukəkra-* nail, claw' > PYup. \**kukəγ-*, \**kukəkra-* arrowhead', Pinup. \**kukiγ*, \**kukurva-* nail, claw; hoof; barb' (CED 180). Inup. \**kukurva* < \**kukuyra*

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

92) PE<sub>142</sub> \**kumay* louse' > PYup. \**kumay* louse', Pinup. \**kumay* louse' (CED 181).

Altaic \**kumi* (~ -o-, -iu-) a k. of insect' > Turk. \**Kumir* Mong. \**kömörege*, T.-M. \**kumke*, Kor. \**kāmí*, Jap. \**k muû*.

93) PE<sub>420</sub> \**luna* land, eart, country' > PYup. \**luna* land, earth, country; tundra', Pinup. \**nuna* (-viγ) land, earth, inland' (CED 240).

Altaic ? > Mong. \**nuntug* < \**nintug* fatherland, own territory'; rather here than to \**niāŋu* / \**ŋiāŋu* field, grazing place, hunting place' > Turk. \*(i)an̄i, T.-M. \**ŋur̄i*, Kor. \**nón*, Jap. \**n a* (EDAL 988), cf. also IE \**lendh-*, Uralic \**lamte* lowland'.

94) PE<sub>153</sub> \**maca-* sun' > PYup. \**maca-* sun', Pinup. \**maca-Ů* sun' (CED 184). Cf. IE \**mens* moon'.

95) PE<sub>182</sub> \**mańi-* (~ \**man̄i-*) egg' > PYup. \**man(ŋ)i-* egg', Pinup. \**ma[ŋ]i-* egg' (CED 190).

Altaic \**nāmo* testicle' > Turk. \**jum* Mong. \*(n)im, T.-M. \**n. ma* < \**m. na* (\**m. ŋa*) (EDAL 962). The T.-M. parallel is of particular interest; cf. also Uralic \**muna* egg, testicle', Dravidian \**m. ŋ* showing the original construction with the first labial consonant.

96) PE<sub>184</sub> \**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. *\*b jn*, Mong. *\*mundaya*, T.-M. *\*mo* *ḡa*, *\*mo* *pen*, Kor. *\*mjə*, Jap. *\*nəmpV* (EDAL 939).

97) PE<sub>189</sub> *\*maŋ(r)u-* to plant, to sit down, root, base' > PYup. *\*maŋ(r)u-* to sit down; to plant, to shove in', PInup. *\*maŋu-*, *\*maŋu-ʃ* to drive in (peg, stick), to plant, to stick in; root' (CED 192).

Altaic *\*meń[o]* dwelling place, village' > Mong. *\*maji-kan*, T.-M. *\*m ne*, Kor. *\*m rh*, Jap. *\*m rà*. The Kor.-Jpn. form is a derivative in *\*V* (*\*V*). The Tungusic form fits very well semantically, but raises some phonetic doubts: vowel length and the quality of *u* (instead of *e*) do not correspond to other languages. Cf. perhaps Turk. (Oyr.) *man* fence' (EDAL 913).

98) PE<sub>216</sub> *\*mäl-qu-* fur, pile, feather' > PYup. *\*mälqu-* fur, pile, feather', PInup. *\*mätqu-* fur, pile, hair; feather' (CED 197). The stem is formed by means of the well-known body part marker *qu* (CED 197).

Altaic *\*mólca* tassel' > Turk. *\*bakak* spike of cereals' (Chuvash *po*), Mong. *\*mol.ag* tassel'.

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

Cf. IE *\*m ms* meat'.

100) PE<sub>255</sub> *\*naya-(qə-)* to listen, to understand, to read' > PYup. *\*naya-q[lu]-* 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 (*\*naðaqa*) is impossible, because the ignored Chap. form *nayaq* can only reflect an intervocal PE *\*y*.

Altaic *\*lějká* to intend, demand' > Mong. *\*neke*, T.-M. *\*leke*, Kor. *\*njəki*, *\*nəiki*, Jap. *\*niànkə* (EDAL 869, 870).

101) PE<sub>322</sub> *\*Nabca-γ-* (~ *-bic-?*) to wrinkle the nose, to push up the nose, pug-nosed' > PYup. *\*Nab(i)cə-γ-* to push up the nose', PInup. *\*naqci-γ-* to push up (nose), to wrinkle nose, to have a pug nose' (CED 218). The connection with *\*Nabə* (*\*u* *ma*) to smell sth.' is unclear (CED 218).

Altaic *\*niàkca* nose, part of nose' > Mong. *\*nag.arkaj*, T.-M. *\*niakso*, *\*niaksi*, Kor. *\*n h* (EDAL 1030).

102) PE<sub>540</sub> *\*nänəb* bone' > PYup. *\*nänəb* bone, skeleton; to choke on bone'. Chap. forms reflect *\*nə* *qu* with the body part suffix *qu* (CED 226, 227).

Altaic *\*núno* nut' > Turk. *\*jAngak*, Mong. *\*žiyag*, T.-M. *\*arju*, Jap. *\*mamai* (EDAL 1006).

103) PE<sub>304</sub> \**naŋə-β-* to stand up' > PYup. \**naŋə-β-* to stand up', PInup. \**naŋə-β-* to be standing up' (CED 215).

Altaic \**niāña* to arrange, steer' > Turk. \**ja* ↗ T.-M. \**iani* ↗ Jap. \**nama* ↗ The original meaning is well reconstructible as to arrange, take or lead (smb. or smth.) in a row' (EDAL 987).

104) PE<sub>295</sub> \**Nayit-* short' > PYup. \**Nanit-* short', PInup. \**nait-* short' (CED 213).

Altaic \**n̄iŋči* thin, narrow; short' > Turk. \**jiŋ* ↗ e, Mong. \**ʒiʒig*, T.-M. \**nisi* ↗ Jap. \**minsikà* ↗ (EDAL 1010).

105) PE<sub>262</sub> \**nayru-* wrist, antler' > PYup. \**nayru-* wrist; thumb' (CED 336), PInup. \**naγruγ* antler, horn' (CED 208).

Altaic \**n̄iúdurgi* fist' > Turk. \**jidruk* ↗ *judruk*, Mong. \**nidurga*, T.-M. \**nur* ↗ ga, Jap. \**nínkír* ↗ (EDAL 991). As shown by the Turk. variant \**ju(m)druk* and Jap. \**nínkír* ↗ the Altaic reconstruction should rather be \**n̄iú(ŋ)durgi*. Thus, the Eskimo correspondence ↗ *j* ↗ for ↗ *ɟ* ↗ is quite expectable.

106) PE<sub>310</sub> \**Napar* tree (foliar)' > PYup. \**Napa* tree (growing); asp', PInup. \**napaaqtu-*, \**napar-* tree; mountain ash' (CED 216). The conjunction with the root \**n̄apa-(β-)* to stand erected, pole, mast' is probably secondary.

Altaic \**līap[ā]* leaf' > Turk. \**japur* ↗ ak, Mong. \**lab. i*, Kor. \**niph*, Jap. \**nàpài* (EDAL 874).

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

Altaic \**n̄VjVrV* (~ -g-, -r-) gland' > Mong. \**nojir*, T.-M. \**i(a)ru*, Jap. \**m rá* ↗ t a (EDAL 1023). The reconstruction may be \**n̄iojru*, judging by dialectal alternations in Evenki.

108) PE<sub>619</sub> \**Nəbərtə* louse, parasite' > PYup. \**Nəbərtə* louse, parasite' (CED 230).

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

109) PE<sub>379</sub> \**nəbə(v)-* to eat' > PYup. \**nəbə-* (-*v*)*qə-*, -*viγ*) to eat; feed; place to eat', PInup. \**nəbi-* (-*v-ka-β*), \**nəbə-viγ* 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 removed from the Altaic etymology \**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 \**leigh* ↗ to lick'.



Altaic *\*lúyu(-r)* (~ *\*l̥-, -o-, -i*) 'morning or evening dawn' > T.-M. *\*luŋur*, Kor. *\*nò'ir*, Jap. *\*n N̥\* n iN̥\* n aN̥\** 'An Eastern isogloss (EDAL 881, 882). T.-M. and Kor. data suggest a (suffixal?) *ɲ* in the auslaut.

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

Altaic *\*nébi* 'new' > Turk. *\*jub̥ga*, Mong. *\*niyu*, T.-M. *\*nebi*, Kor. *\*nə*, Jap. *\*n̥p̥i* (EDAL 964). Turk. *\*jub̥ga* 'bastard, adopted son' and Mo *\*niyu* 'child, boy' (MMo *nò'un*, but Kalkha *nugūn*) reflect the Altaic relative term suffix *\*ɣA*, also preserved in PE *\*nuka-* 'younger sibling'.

117) PE<sub>553</sub> *\*Nuvəja* 'cloud' > PInup. *\*nuvəja* 'cloud; to be cloudy' (CED 243).

Altaic *\*nibi* (~ *-e*) 'to smoke, to smell' > Mong. *\*ney*, T.-M. *\*nibu(p)*, Kor. *\*h̥ i*, Jap. *\*n̥p̥ə* (EDAL 974, 975).

118) PE<sub>275</sub> *\*naluya-* 'to lie down, to land, to settle' > PYup. *\*nalul[ɣ]a-(t-)* 'to land (bird)'; means 'to become ripe, to ripen and fall on the ground' in Nauk.; PInup. *\*nala-*, *\*nallab-* 'to be lying down; to lie down, to lie on one's back' (CED 209).

Altaic *\*né(L)* 'to lie, put' > Mong. *\*niyu*, T.-M. *\*n*, Kor. *\*n*, Jap. *\*ná* (EDAL 964). Length in T.-M. and Kor. may reflect an auslaut resonant like *\*l̥* or *\*ɲ* regularly dropped in Eastern languages.

119) PE<sub>389</sub> *\*nəvəb-* 'to lie on one's back' > PYup. *\*nəv[ə]b-* 'to lie on one's back', PInup. *\*nəvəb-*, *\*nəvəbala-* 'to lie on one's back; to fall backwards' (CED 233).

Cf. Mong. *\*niɣ* - and Kor. *\*n* with a labial stop.

120) PE<sub>311</sub> *\*nəpa-(b-)* 'to stand erected, pole, mast' > PYup. *\*nəpa-b-* 'to erect, to set upright; pillar, pole, mast', PInup. *\*nəpa-* (*\*-ru-*, *\*-b-ia-*), *\*nəpa-b-* 'to stand erected, to be upright; to erect, to raise up; sth. upright, post' (CED 216, 217). Not necessarily connected with *\*Nəpa(b)* 'tree' (CED 216).

Altaic *\*lépó* (~ *\*l̥-*) 'to rise, high' > T.-M. *\*lep*, *\*lupu*, Kor. *\*nəph*, Jap. *\*nəmpər* (EDAL 873).

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

Altaic *\*nəbro* 'face, resemblance' > Turk. *\*jū*, Mong. *\*niyur*, Jap. *\*nə* (EDAL 975), Uralic *\*ere* 'front, beak, nose', Dr *\*ner\_r\_i* 'forehead'.

122) PE<sub>385</sub> *\*nəbiruy-* 'light, expectation, hope' > PYup. *\*nəbiru(y)-* 'light, glare, shine; hope, expectation'. This stem is confused with 'to eat greedily'



in CED, but the semantic range is unbelievable (CED 231). PInup. \**nəbʲiuy-* to expect, to hope; to promise', NAI *nibʲiuyi*↗trans. is opposed to *nibʲisuk*↗to want to eat'. These are two different roots (despite CED), the second of which should be traced back to the prototype \**nəbʲəjuy*↗analyzable as the verb to eat' plus a desiderative affix (CED 232). Cf. a probable variant \**Nəbu[ɣ]a*↗ (~ \**↗*) to choose' (CED 231).

Altaic \**h̥erá* 'day, sun, light' > Turk. \**j r̥in*, Mong. \**naran*, T.-M. *η r(i)*↗ Kor. \**nár*, Jap. \**àrí*↗(EDAL 1028, 1029).

123) PE<sub>353</sub> \**h̥akuv-*, \**h̥avkə-* to stand (up)' > PYup. \**h̥akuv-* (-Γa-), \**h̥avkə-* to stand (up); to build up' (CED 225), PInup. \**nəkuv-*, \**j-* (-ba-, -raβ-) to stand (up); to stand on tiptoe' (CED 225).

Altaic \**h̥iðk̥e* (~ -k-) to rise, elevation' > Turk. \**jok*↗T.-M. \**η Ke* ~ \**η Ku*, Jap. \**ðkə*↗The reconstruction of the diphthong in this root is based on PT \**j*↗ one should suppose an early development \**h̥i*↗ > \**jo*↗in Turkic (which explains the vocalic reflex) (EDAL 1031, 1032).

124) PE<sub>373</sub> \**h̥əpə-Ju-* rain, drizzle' > PYup. \**h̥əp(ə)ju-γ* rain', cf. Chap. *nəptá-baq* to wet in water'. PInup. \**nɪpə-* (-caɣ-, -l/ju-) rain; damp, sweaty' (CED 229).

Altaic \**h̥iābo* (~ -o-) storm, natural disaster' > Turk. \**jubug* ( ~ \**jabug*), Mong. \**nöye*↗T.-M. \* [be]↗te, Jap. \**nəw(u)i*. The vocalism is not quite secure, due to assimilations; nevertheless, the root seems well reconstructible (EDAL 982). But cf. also Altaic \**h̥iðbu* to pour' > Turk. \**ju(b)*↗Mong. \**jeɣ le*↗ T.-M. *iabe*↗Kor. \**n. b*↗(EDAL 1031).

125) PE<sub>403</sub> \**h̥iβ(u)-lu* upper part of backbone, carcass, rib of boat' > PYup. \**h̥iβu-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 \**h̥iβu* leg' in CED.

Altaic ? > Mong. \**nigur-su* backbone'. This word should be removed from Altaic \**h̥iāke* neck, vertebra' > Turk. \**jaka*, T.-M. \**nikimna* (EDAL 983, 984). Instead of that entry, a comparison with Mong. \**žaka* edge, collar, neckpiece' is preferable, so that the proper reconstruction for this root would be \**h̥iāke*.

126) PE<sub>438</sub> \**h̥uja-*, \**nuja-* hair' > PYup. \**h̥uja-*, \**nuja-* hair', PInup. \**nuja-*, (\**nujja-t*) hair' (CED 244).

Altaic \**h̥iūra(-kV)* (~ -r-) hair' > Mong. \**norakai*, T.-M. \* . rikte, Kor. \**narot* (EDAL 993).

127) PE<sub>650</sub> \*-(h̥)i- negative affix no, without, have no more, to lack etc.' > PYup. \*-(h̥)i- id., PInup. \*-(h̥)i- id. (CED 417, 418, 419). The intervocalic *h̥j*↗ is a result of morphological changes in PE and corresponds to the glottal stop in the anlaut prevocalic position.

Altaic \**e* not' > Mong. \**e*↗e, T.-M. \**e*↗(EDAL 488).

128) PE<sub>473</sub> \**palqə* 'ashes, hot, dry' > PYup. \**palqə* 'ashes', PInup. \**pa[tl]qə* 'hot; dry' (CED 249).

Altaic \**połine* 'ashes; grey' > Turk. \**o* ( *o* ), Mong. \**h ne*, T.-M. \**pul e* (EDAL 1170).

129) PE<sub>470</sub> \**paməju-* (-*ba-*) 'tail, back part' > PYup. \**paməju-* (-*ba-*) '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).

Altaic \**pojme* (~ -*o*) 'trousers, stockings' > Turk. \**ojma*, Mong. \**hojmu*, T.-M. \**pe(j)m*, Jap. \**pamuta* (EDAL 1166).

130) PE<sub>474</sub> \**panə-b-* 'to burn, ashes, to dry out, to become skinny' > PYup. \**panə-b-* 'to burn; ashes; to starve to death', PInup. \**panəb-*, \**panna-b-* 'to dry out; to lose weight, to become skinny; to be very dry' (CED 249).

Altaic \**peño* (~ \**b-*, \**p-*, -*o-*) 'flame, light' > Kor. \**p ə*, Jap. \**pəna*. A Kor.-Jap. isogloss.

131) PE<sub>477</sub> \**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 \**pojbuV* (?) > T.-M. \**pojpu* 'tail', Evenki *hojpon* ( 2, 330), Jap. \**bà* (\**buà*), Ryukyū *j.* < \**bujwa* 'tail'. A Tung.-Jap. isogloss.

132) PE<sub>498</sub> \**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 \**poğí(-rV)* 'kidneys, testicles' > Turk. \**bög r*, \**bögrek*, Mong. \**böyere*, T.-M. \**pugi*, \**puki*, Kor. \**pír*, \**pur*, Jap. \**p nk ri* (EDAL 1101).

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

Altaic \**püre* 'leaf, bud' > Turk. \**bür*, Mong. \**bor-*, Jap. \**pá*. Jap. presupposes a suffixed form \**p r(e)γV* (= Mong. \**borγu*) (EDAL 1111, 1112). PE reflects \**γ*.

134) PE<sub>728</sub> \**pər(r)i-b-* 'rufous, yellow' > PYup. \**pəri-b-* 'rufous', Imaq (Inup) *pə itoq* 'to become yellow'.

Altaic \**puli* (~ \**p-*, -*í-*, -*o-ə*) 'red' > Mong. \**hulayan*, T.-M. \**pula*, Kor. \**pírk* (EDAL 1109). PE reflects \**l*.

135) PE<sub>762</sub> \**pətyə-b* 'flea' > PYup. \**pətyə-b* 'sand flea, dandruff' (CED 257). Possible connections to \**mətyə-* ~ \**pətyə-* 'to jump, to leap up, to spring up' are secondary. Cf. Inup. SPI (KI) *pi uaq* 'louse, parasite' [Jen.].

Altaic \*pā

Altaic \**póúe* (~ *p'*) 'smoke' > Mong. \**huni-*, T.M. \**pu* -, Kor. \**p̃* àk (EDAL 1105).  
The PE reflex \**j*

Altaic *\*kãntV* to reach, attain' > Mong. *\*kan[t]u* T.-M. *\*k nta* (EDAL 644). For the PE forms with the affix *\*-li* cf.: Altaic *\*kalV* (~ *-l-*) near, to come near' > Mong. *\*kalu* T.-M. *\*kal* (EDAL 637, 638), provided the *-li* in Altaic goes back to a simplified consonant cluster.

149) PE<sub>637</sub> *\*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' (CED 274).

Altaic *\*kōri* hill; embankment, boundary' > Turk. *\*Korum*, Mong. *\*k ri*, T.-M. *\*xur*, Kor. *\*kōráŋ*, Jap. *\*k r a* ( *\*uâ*) (EDAL 843).

150) PE<sub>515</sub> *\*qaribu* bark, upper layer' > PYup. *\*qaribu* 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'.

Altaic *\*kēfā* bark' > Turk. *\*Ka*, *\*Ka ai*, Mong. *\*kajir(a)* T.-M. *\*xerekte*, Jap. *\*kārā* (EDAL 782). The Mong. word shows that the Altaic form could contain the intervocalic cluster *\*-jr-*

151) PE<sub>682</sub> *\*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. *\*kib r* Jap. *\*kajə* (EDAL 656, 657).

152) PE<sub>526</sub> *\*qavə-(ya-)* duck, eider, bird' > PYup. *\*qavə-(ya-)* bird' (CED 292, 276). PINup. *\*qavə(y)*, *\*qauya-* eider, duck' (CED 292).

Altaic *\*kiðpū* a k. of aquatic bird' > T.-M. *\*kiab* Jap. *\*k pinā*. A Tung.-Jap. isogloss. It is worth noting Yak. *kuba* swan' — usually derived from PT *\*Ku* *gu*, but with an inexplicable *-β-* it is, in fact, possible that some other Turkic forms — cf. Turkmen *Guv*, Noghay *quv* etc., also go back to PT *\*Kub(a)* — in most modern languages, naturally, the word has merged with *\*Kugu* (see under *\*k. gu*) (EDAL 699).

153) PE<sub>667</sub> *\*qavja(-)* sand, gravel' > PYup. *\*qavja-* sand; pebble' (CED 292, 276), PINup. *\*qavia* sand' (CED 292).

Altaic *\*kiažurV* sand, steppe, earth' > Turk. *\*K jir*, Mong. *\*kužir*, T.-M. *\*kužur* (EDAL 693).

154) PE<sub>750</sub> *\*qəci-β-* to spit' > PYup. *\*qəci-β-* to spit; spit', PINup. *\*qici-β-* to spit; spit' (CED 294). Cf. *\*qitə-* fog, drizzle, rain' (656).

Altaic *\*kūiso* to vomit' > Turk. *\*Kus* T.-M. *\*x se* (EDAL 830).

155) PE<sub>537</sub> *\*qənbə-* (~ *\*qiHənbə-*?) fox, polar fox, wolf' > PYup. *\*qənbə-β-* ~ *\*q[i]βna-β-* polar fox; wolf' (CED 166, 308, 307). PINup. *\*qianbə-β-*, *\*qibnə-βa-* fox; wolf' (CED 301, 308, 302).

Altaic *\*káŋV* dog' > Turk. *\*KAŋɣik*, T.-M. *\*ka. i k n*, Kor. *\*kàŋ-* (EDAL 645).

156) PE<sub>668</sub> *\*qənu* slush ice' > PYup. *\*qənu* frazil, slush; sand', PInup. *\*qə-nu* slush snow, ice; thin layer of new ice on water' (CED 298).

Altaic *\*kūŋgo* (~ -o-) to freeze, snow' > Mong. *\*kūŋgarɣɣk ŋgerɣ* T.-M. *\*xūŋdaɣ* Jap. *kankərɣ* (EDAL 854).

157) PE<sub>645</sub> *\*qəŋa-* nose' > PYup. *\*qəŋa-* nose', PInup. *\*qəŋa-* nose' (CED 298).

Altaic *\*kiöŋa* nose' > Turk. *\*K(i)anɣ(ır)ɣ* Mong. *\*ka[m]ar*, T.-M. *\*xoŋaɣ* Kor. *\*kóh*, Jap. *\*kanɣ* (EDAL 806).

158) PE<sub>559</sub> *\*qəpə-nəb* dog' > PYup. *\*qəpə-nəb* dog'.

Altaic *\*kəpI* dog' > Turk. *\*köpek*.

159) PE<sub>931</sub> *\*qəryə-* to gather' > PYup. *\*qəryə-* together; to gather, to assemble', PInup. *\*qIynə-* cache' (CED 298). In PInup. there has occurred a metathesis within the consonantal group *\*ɣŋɣ*

Altaic *\*kěro* to remunerate, repay' > Turk. *\*Ka ganɣ(ır)ɣ* to obtain, to gain', Mong. *\*kerig* miserly', T.-M. *\*xeriɣ* price, payment', Jap. *\*kàtəpəkɣ* to celebrate' (EDAL 783). The semantics in Altaic is typologically close to the situation with Russian *сбор* (ingathering, exaction)' vs. *собрание* (meeting)'.

160) PE<sub>558</sub> *\*qibnə-b-* black, dark' > PInup. *\*qibnəb-* black, dark' (CED 308).

Altaic *\*kiri* dirt, dirty' > Turk. *\*kir*, Mong. *\*kir*, T.-M. *\*(x)irɣ* Jap. *\*kità-nàɣ* (EDAL 791, 792).

161) PE<sub>551</sub> *\*qilaya-* palate, roof of mouth' > PYup. *\*qilaŋa-* palate, roof of mouth', PInup. *\*qilay(a)-* palate'. This stem is not connected to *\*qilay (-tuy)* sky, cloud' (CED 304).

Altaic *\*kiäli* tongue' > Turk. *\*keleɣ* Mong. *\*keleɣ* T.-M. *\*xilŋ*, Kor. *\*k róɣ* (EDAL 796, 797).

162) PE<sub>550</sub> *\*qilay (-tuy)* sky, cloud' > PYup. *\*qilay (-tuy)* sky; cloud', PInup. *\*qilay (-luy)* sky; cloud; roof, ceiling' (CED 304, 305).

Altaic *\*gälV* clear (of sky, weather)' > Turk. *\*K(i)aliɣ* sky; clear sky', T.-M. *\*galuɣ* (EDAL 528).

163) PE<sub>673</sub> *\*qinəb-* ~ *\*qənə-b-* to look in, to look through, to watch' > PYup. *\*qinəb-* ~ *\*qənə-b-* to look in, to look ahead; to look through sth.', PInup. *\*qinəb-* ~ *\*qənə-b-* to see, to look; to look at, to watch; to look through' (CED 306).

Altaic ? > Turk. *\*könɣ* to agree, trust'.

164) PE<sub>656</sub> *\*qitə-* fog, drizzle, rain' > PYup. *\*qitə-* mist, drizzle; rain', Chap. has the first vowel -ə- due the contamination with *qəciɣ-* to spit' (579). PInup. *\*qitə-b-*, (~ \*-c-) drizzle, fog' (CED 294). This root contaminates with

\**qəci-β-* to spit' in Inup. due the phonetic development \**ʃt* > \**ʃc* in some languages, so it has been included in that entry in CED.

Altaic \**kědò* wind, fog', Turk. \**Kad*, Mong. \**k den*, T.-M. \**xed n*, Jap. \**kəti* (↳ *ua*) (EDAL 771, 772).

165) PE<sub>568</sub> \**qumV-* to become dry, to stale' > PYup. \**qumV-* to become dry'.

Altaic \**kōmu* (~ -o, -a) drought, hunger' > Turk. \**Komik*, Mong. \**komu kai*, T.-M. \**xom*, Kor. \**ᄒᆞᆫ ᄒᆞᆫ* (EDAL 838).

166) PE<sub>643</sub> \**quɲər-(a-)* (\**quɲru-*) ~ \**quɲəv-* (\**quɲvu-*) neck, scruff of neck' > PYup. \**quɲHuβ-* scruff of neck, top of back; to hang one's head; hump-backed whale'. Cf. PYup \**qutɲuβ*, \**qutəɲa-* hump' (CED 317, 297). PINup. \**quɲəcci-*, \**quɲia-* neck' (CED 317).

Altaic \**kuɲfV* (~ -o-) rump, anus' > Turk. \**Koɲ*, Mong. \**koɲdu* > \**koɲʃi* > T.-M. \**kuɲdu* > Kor. \**kuɲtuɲ* (EDAL 742, 743).

167) PE<sub>746</sub> \**qupəlβu-* maggot, grub, worm' > PYup. \**qūpəlβu-* maggot, grub; worm', PINup. \**qupəlβu-* maggot, grub; worm' (CED 318). Cf. PCh \**qopalɣo* > butterfly'.

Altaic \**kjəpé* a k. of insect, butterfly' > Turk. \**kepelek*, Mong. \**kibe*, Jap. \**kəpəránki* (↳ *ua*) (EDAL 798).

168) PE<sub>731</sub> \**quq-juɣ-* ~ \**quβcuɫ-* yellow, green' > PINup. \**quqcuɫ-* yellow; green' (CED 319).

Altaic \**kṓke* (~ -i) blue, green' > Turk. \**gōk*, Mong. \**kōke*, T.-M. \**kuKu* (EDAL 714). PE rather reflects an older form like \**kṓke* (with consonantal metathesis).

169) PE<sub>985</sub> \**qura-* pinworms, eel' > PYup. \**qu[r]a-βta-*, \**qu[r]a-ɫut-na-* pinworms, anal itch; eel', PINup. \**quaqta*, \**qurrau'na-* (~ -r-) id. (CED 312). The meaning eel' has obvious semantic connections with worm', but comparison with the stem meaning to split with a wedge' (CED 312) is untenable.

Altaic \**kjṓro* worm' > Turk. \**K. rt*, Mong. \**koro kaj*, T.-M. \**xirga* (EDAL 807, 808).

170) PE<sub>574</sub> \**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 \**köpé* to bend; elevation, convexity' > Turk. \**göpe(ne)*, Mong. \**köb* > \**k b* > T.-M. \**kupe* > Kor. \**köp* > \**k p* > Jap. \**kəmpu* (EDAL 723).

171) PE<sub>555</sub> \**tayi-* to come, to visit' > PYup. \**tayi-* to come (here); to bring', PINup. \**tayi-β-* to go from place to place; to go visiting' (CED 325).

Altaic \**tōgà* (~ -u-) to see, beware' > Mong. \**toɣa* > T.-M. \**tuga* (↳ *β*) > Jap. \**tək* (↳ *β*) (EDAL 1450).

172) PE<sub>530</sub> \**tay(i)t-uy* 'fog, mist' > PYup. \**tayituy* 'fog, mist', PInup. \**tak-tuy* (~ \**tayituy-*), \**takci-b-* 'fog; to be foggy' (CED 324, 325).

Altaic \**fékù* 'to become thick (of liquids)' > T.-M. \**tekti*, Kor. \**t thà* ~~ㅈ~~ \**t i* Jap. \**t ka* (EDAL 1412). T.-M. \**tekti* and Kor. \**t thà* ~~ㅈ~~ suggest an earlier cluster like \*~~kt~~.

173) PE<sub>536</sub> \**taynə-* (~ -*ny-*) 'black' > PYup. \**taynə-* ~ \**tanyə-* 'black; dark, darkness; shadow', PInup. \**tayya-* 'total darkness' (CED 333). Not connected to \**tar-(r)u-* 'dark, black' and others (ibid.).

Altaic \**fāgo* 'dirt (dust, clay)' > Turk. \**Tog*, T.-M. \**t. ksa* (EDAL 1391).

174) PE<sub>739</sub> \**tabju-* (\**tabəRu-* ?) 'salt' > PYup. \**tabju-* 'salt', PInup. \**tab(ə)-ju* 'salt; salt water, sea' (CED 334).

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

175) PE<sub>618</sub> \**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. \**d. g*, Mong. \**dəyē* T.-M. \**deg* Kor. \**tə* Jap. \**tākà* (EDAL 1359).

176) PE<sub>674</sub> \**takuv-* 'to check out, to visit, to see' > PYup. \**taku-* (-*jab-*) 'guard, examination; to check out', PInup. \**taku* (-*cab-*), \**takku-* 'to check on; to visit; to see' (CED 327, 326). Cf. PE \**takviγ-*, \**tak(u)vi-γ* 'to see well, pupil of eye'.

Altaic \**tākù* 'to repair' > Turk. \**Tā ra-*, T.-M. \**taku-*, Jap. \**tūkùr-* (EDAL 1393).

177) PE<sub>509</sub> \**tama[η]-* 'all, whole' > PYup. \**tama[η]-* 'all, whole, every', PInup. \**tamaΓ-* 'all, both, whole' (CED 328, 329).

Altaic \**fāmu* 'to put into, gather' > Mong. \**tama* ~~ᠮᠠ~~ \**tem* T.-M. \**tama* Kor. \**t. m* Jap. \**t. m* (EDAL 1399).

178) PE<sub>672</sub> \**tayə-* 'to see, to look at, truth, evidence' > PYup. \**tayə-* 'to see; to watch out for; to look at, to watch', PInup. \**tayə-*, \**taynə-b-* 'truth, evidence' (CED 330).

Altaic \**fānyV* 'to count, recite' > Turk. \**t nu* Mong. \**tayna* T.-M. \**tay* Cf. also Kor. \**tā* 'to tell, indicate, confess' (SKE 249, EAS 120); MMong. \**ta'ul* (HY 40) 'to understand, distinguish' (< \**tayul*) (EDAL 1399, 1400).

179) PE<sub>631</sub> \**taRqi-* 'moon, bright' > PYup. \**tanqi-* 'moon; to be bright', PInup. \**tatqi* 'moon; to make the lamp shine brightly' (CED 330).

Altaic \**fīòlgu* 'moon' > Mong. \**tergel*, Kor. \**t r*, Jap. \**t k i* (EDAL 1435). The PE form reflects \*~~l~~ within a cluster.



180) PE<sub>531</sub> *\*tar-(r)u-* dark, black' > PYup. *\*tarru-* darkness, dusk; to become dark', PInup. *\*tau-ʘ- (-si-), \*taru-ʘa-* darkness; dark; black' (CED 333, 334). All the words with meanings like shadow, dark, black' are confused in close but different entries in CED on pp. 333, 334. Related PE stems include *\*tar-ʘa-ʘ* *\*tar-ʘa-ʘ* black, dark, shadow', *\*tar-ʘa-ʘnəʘ* shadow, darkness'; unrelated, but similar ones include *\*tab-ʘnəʘ* soul, life force' and *\*taɣŋəʘ-ʘ* *ɣŋ-ʘ* black'.

Altaic *\*felbu* dirt' > Turk. *\*TAlagu*, Mong. *\*tolbu*, T.-M. *\*telbe*, Kor. *\*tārəʘ-ʘ* The Kor. form is hard to distinguish from the one expected as a reflex of *\*fē u* (EDAL 1413, 1414). PE reflects *\*fē*

181) PE<sub>590</sub> *\*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-ʘ* T.-M. *\*tude-ʘ* cf. perhaps also Mong. *toʘsun* melted fat' (< *\*tod-ʘsu-ʘ*?) (EDAL 1376).

182) PE<sub>707</sub> *\*ta-u-*, *\*tam-ani* this, right here' > PYup. *\*ta-(v)u-na* (*\*ta(v)u-kura*, *-rumə*, *\*tam-ani*) this right here'. One of two main pronouns for 'this', with a specific paradigm that differs from other demonstrative pronouns but is 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 *\*fā* (*\*fē*) that' > Turk. *\*ti-ʘk* ), Mong. *\*te-ʘe*, T.-M. *\*ta-ʘ* Kor. *\*tjə*, Jap. *\*tə-ʘ* (EDAL 1389).

183) PE<sub>527</sub> *\*təʘmira-* bird, goose' > PYup. *\*təʘmi(r)a-* bird; goose', PInup. *\*təʘmi(r)a-* bird; small bird' (CED 343, 342).

Altaic *\*tūru* (~ *\*tūro*) 'crane' > Turk. *\*durunja*, Kor. *\*t r mi*, Jap. *\*t r* (EDAL 1388).

184) PE<sub>1089</sub> *\*təki-ja-* tern (arctic bird)' > PYup. *\*təki-ja-* tern (arctic bird)' (CED 339).

Altaic *\*fiakā* 'hen' > Turk. *\*tiakigu*, Mong. *\*takija*, T.-M. *\*tiaku* (EDAL 1431).

185) PE<sub>557</sub> *\*təkit-* to come, to arrive' > PYup. *\*təkit-* to come, to arrive' (different from the homonymous *\*təkit-* to hit, to knock'), PInup. *\*təkit-* to arrive at' (CED 338).

Altaic *\*tiokē* to touch, reach' > Turk. *\*d g-ʘ* Mong. *\*dök-ʘ* A Turk.-Mong. isogloss; not quite reliable, because in Turkic one has to suppose assimilative voicing (*\*d g-ʘ* < *\*d k-ʘ*) (EDAL 1372). The original meaning in Mong. and Turk. is 'to reach, to approach', as can be seen from the archaic gerund form *tegi* that eventually became an adverb with the meaning 'until, (right) down to', characterizing the route of movement.

186) PE<sub>583</sub> *\*təŋə-* to fly (up)' > PYup. *\*təŋə-* to fly', PInup. *\*təŋə-*, *\*təŋmi-(-lʘa-)* to fly (up); to be flying' (CED 341, 342).

One should consider comparison with the Turk. entry within the Altaic root *\*tangiri* 'oath, God' > Mong. *\*taŋgarag* 'oath', T.-M. *\*taŋgura* 'to bow while praying', Jap. *\*tinkir* 'to swear' (EDAL 1402). There are really two Turkic roots here, contaminated in some languages: one with front vowel vocalism and the meaning 'sky', the second with back vowel vocalism (with some variation) and the meaning 'God, spirit'. It is possible to delineate the two groups of forms:

1 E (with front vowel): Runic *teŋri* 'sky; gods', MK *teŋri* 'sky; Buddha' (in the meaning 'Buddha' there is no difference within the Arabic script), Saryg-Yughur *teŋer* 'sky', Hakas *tiġar* 'sky', Shor *teġri* 'sky', Oirot *teŋeri* 'God; sky', Tuva *d r* 'sky', Tofa *d re* 'sky', Kirgiz *teŋir* 'God; sky', K-Balqar *teġri* 'God; sky';

2 A (with back vowel): all the examples have the 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 *teŋre*, Kara-Kalpak *teŋir* etc., Jakut *taŋara*, Chuvash *tura*.

Thus, we can identify a separate Turk. root with the meaning 'sky' and compare it with Mong. *\*teŋeri* id., Jap. *\*tiàntaN* ('sun' in Ryukyuan), as well as with PE *\*taŋa* 'to fly (up)'.

187) PE<sub>1137</sub> *\*tulub-* 'to drowse' > PYup. *\*tulub-* 'to drowse'. This root is merged with *\*tulub-* 'sharp tusk, to hit wit tusks' in CED, although possible semantic associations are unknown.

Altaic *\*tūlke* (~ *-i*) 'dream, sleep, divination' > Turk. *\*dūl* (~~*\*dūl*~~), Mong. *\*tölge*, T.-M. *\*tolki* (EDAL 1473, 1474).

188) PE<sub>661</sub> *\*tumavja-* 'round, oval' > PInup. *\*tumavja-* (*\*tumavja-*) 'round, oval'. This root has no connection to *\*tumə* 'trail, road' despite (CED 349).

Altaic *\*tōmū* 'to spin, round' > Turk. *\*tom* > Mong. *\*tomu* > T.-M. *\*tomka* > Jap. *\*t m* (EDAL 1457, 1458)

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

Altaic *\*tōmi* 'trail, road' > Mong. *\*tom* 'trail of land animal', T.-M. *\*t. m<sup>se</sup>* > Evenki *t. mŋek* 'trail' ( ), Even *tōmRe* 'step', Udighe *tumihe* 'mountain trail, road' ( 2, 202–203 in the entry 'to press down, to step'), Jap. *\*timata* (*chimata*) 'crossroads, street', cf. also Turk. > Turkmen *\*t. m<sup>ajak</sup>* 'with naked legs, pedestrian', Oyroth *tomul ajak* 'on foot (without skis)' etc.

190) PE<sub>605</sub> *\*tunə-* 'to hear, to perceive' > PYup. *\*tunə-* 'to hear', PInup. *\*tunaabə-*, *\*tunaq-ci-* 'to have eyes fixed on; to rely on, to put trust in'. The wide scope of meanings for the stem *tunaq<sup>ci</sup>* can be traced back to 'obedient', i. e. 'one who obeys, listens' as in Russian ' (CED 350).

Altaic *\*tuye* 'to inform' > Turk. *\*T ɨ* Mong. *\*tuɨ* T.-M. *\*tuɨ* Jap. *\*tuanap* (EDAL 1477).

191) PE<sub>593</sub> *\*tun(i)-* 'to give' > PYup. *\*tunə-* 'to give; to spend', PInup. *\*tunə-*, *\*tuni-uqqab-* 'to give; to sell; to distribute' (CED 350).

Altaic *\*tūja* 'to give, give a feast' > Turk. *\*toj*, Mong. *\*tayu* T.-M. *\*tuju* (EDAL 1468). The origin of PE *\*t* is unknown.

192) PE<sub>558</sub> *\*tuqu- (-t-)* 'to die; to kill' > PYup. *\*tuqu- (-t-)* 'to die; death; to kill', PInup. *\*tuqu (-t-)* id. (CED 354).

Altaic *\*fuki* 'to come to an end, be exhausted' > Turk. *\*t ke* Mong. *\*tög s* Jap. *\*tuku* Also worth mentioning is Evk. dial. *t.ko* 'to die (of exhaustion), starve' — which may, however, be a derivative of *tik* 'to fall' (EDAL 1469).

193) PE<sub>1167</sub> *\*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 *-ɣ* in the auslaut position. Moreover, the *ɣ*-reflexation is not supported by forms in other languages.

Altaic *\*täpörV* 'earth, dust' > Turk. *\*topra*\*, Mong. *\*toyur* T.-M. *\*tap* (EDAL 1404).

194) PE<sub>1165</sub> *\*tu(v)ta-* 'labret, knar' > PYup. *\*tu(v)ta-θ* 'mushroom; labret (ornament around pierced lips)', PInup. *\*tuuta*, *\*tutta-* 'labret; jewel' (CED 356).

Altaic *\*čótakV* (~ *-ukV*) 'pulp, mushroom; lip' > Turk. *\*d tak*, T.-M. *\*žudak* *ta* *\*žedukte* (EDAL 404).

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

Altaic *\*ēgó* 'big, many' > Turk. *\*ēg-id* Mong. *\*ayu* T.-M. *\*egdi*, Kor. *\*ə'uí* Jap. *\*anki* (EDAL 495, 496).

196) PE<sub>689</sub> *\*ujaba-ɣ* 'stone, rock' > PYup. *\*uj(a)ba-ɣ*, *\*jəHa-ma-* 'stone 1, anchor 2'. For Alaskan languages cf. Chap. *juɣ. q* (*bət*) 'high or long stone resembling a man' (CED 386, 388). In some Yup. languages there is a metathesis *\*uja* > *\*jua*

Altaic *\*biüge* 'rock, hill' > Turk. *\*böğ r*, Mong. *\*böyer g*, T.-M. *\*bug* Kor. *\*pàhói*, Jap. *\*bə* (EDAL 357).

197) PE<sub>642</sub> *\*uja-(qu-)* 'neck' > PYup. *\*uja-qu-* (*-miɣ*) 'neck; sth. worn around neck; shoulder load', PInup. *\*uja-miɣ* 'necklace' (CED 385).

Cf. Altaic *\*gurgi* 'palate' (but Mong. 'front part of throat') (EDAL 573). Even better is the comparison with Altaic *\*ŋü*

198) PE<sub>708</sub> \**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*

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

206) PE<sub>716</sub> \**unabā-ci-* wood, driftwood, tree' > PYup. \**unabā-ci-* tree (lying, cut); wood, balk', PInup. \**unaqci-* driftwood; tree' (CED 371).

Altaic \**uɲfV* or \**uni-* pole in the house' > Mong. \*(*h*)*uni*↗T.-M. \**unde*(*ken*) (EDAL 1502).

207) PE<sub>644</sub> \**unur (-a)* night' > PYup. \**unuɣ (-a)* night, morning, tomorrow'. PInup. \**unnuy*, \**unnua-/unurra-* evening, night' (CED 373).

Altaic \**inE(r)* (instead of \**ina*) dawn, dusk' > Turk. \**inir*, T.-M. \**ine*↗Kor. \**ḍ irim* (EDAL 586, 587). It is necessary to distinguish two roots in the Turk. entry \**inir* dusk' in EDAL:

I \**inir* ~ \**enir* with an original meaning like evening, dusk' (marked as X below): Old Uighur *inir* X, MK *inir* X, Turkmen *inrek* X, Azeri *in. ira* X, Turkish dial. *inirik*, *inrik* X, Halaj *āng r*, *āngür* X, Karaim *enir* X, Balqar *inir* evening', Tat. *enjer*↗*menjer* X, Bashkir *enir* X, Kara-Kalpak, Kazakh *inir* X, Kirgiz *inir(t)* X, early evening', Oyrot *enir* evening', Hakas, Shor *r* evening', Saryg-Yughur *jenir* evening', Tuva *enir* last, some time ago', Chuvash *aner* yesterday', *anarak*, *and(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 *m r* fog, brume, evaporation', Turkish *me* fog', Uzbek *m' r*, *imir* X, Tatar *im i* X, Kara-Kalpak, Kazakh, Kirgiz *imirt* X (in the morning or evening) brume, thick fog, grey air', Oyrot *inir* X, Shor *inar* evaporation', Tuva *imir*, *imirtin* X, *imire* glimpse', *imistel*↗to dusk', Jakut, Dolgan *im* morning and evening dawn'.

The first of these roots should be compared with T.-M. \**ine*↗day is dawning' (\**ine*↗*ye* day, morning dawn', \**ine*↗*en* day that is dawning' etc. and Kor. \**ḍ irim* evening, dusk') and goes back to Altaic \**inE(r)* evening, dusk'. The second (with another T.-M. parallel) should be compared to PE \**umtu-* day, morning, star'.

208) PE<sub>607</sub> \**uɲ-uma-* alive, heart' > PYup. \**uɲuwa-* (-*nt*), \**uɲuɲ-si-* alive; heart; (land) animal' (CED 376). PInup. \**uuma-* (-*ru-*), \**uummant* alive; heart; animal' (CED 377). The word heart' is a deverbal noun with an instrumental suffix. The verb is formed with the perfective verbal affix \**(u)ma* (CED 144).

Altaic \**ini* to live, rest' > Mong. \**ün-ži-*, T.-M. \**in-*, Kor. \**n. i*, Jap. \**inð-ti*. In MKor. there is a frequently observed reduction of the initial vowel (EDAL 619).

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

Altaic *\*oki* to sing, recite' > Turk. *\*oki* Mong. *\*ge*, T.-M. *\*(x)og* *\*(x)ok* Kor. *\*o'i* Jap. *\*uka* Despite poor representation in T.-M., the root is well preserved elsewhere and appears to be well reconstructible for PA (EDAL 1045).

210) PE<sub>1252</sub> *\*uq(a)-* to sleep (with a negative aspect)' > PYup. *\*uqa-ma-(η)i-* neg. to sleep (with neg.)', PInup. *\*uq-uma-ηia-* to sleep (with neg.): to have a nightmare, to be half-asleep'. The verb stem has a perfective formant *\*(u)ma* before the negation (CED 379).

Altaic ? > Turk. *\*ujku* sleep (n.)' > Hakas *ujyč*, Chulym *ujyu*, Tofa *újgu*, Chuvash *ijy*.

211) PE<sub>577</sub> *\*uqru-* fat, blubber' > PYup. *\*uqru-*, *\*uqrilyu-* fat, grease; blubber', PInup. *\*uqru-*, *\*uqri-ηu-* fat, blubber; to feel sick from eating too much fat' (CED 378).

Altaic *\*iúrgi* (?) fat; brain' > Turk. *\*ü*, T.-M. *\*irg[ ]* (EDAL 622). The PE reflex *\*i* is the same as in *\*ciqi-məb* sun'.

212) PE<sub>1190</sub> *\*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 should be separated from the PInup. root *\*uu* *\*uu* to boil, to cook' for semantic reasons (it also has a different PYup. parallel) (CED 361, 362).

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

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

Altaic *\*ótê* old' > Turk. *\*öt* Mong. *\*öte* T.-M. *\*(x)ut* Jap. *\*átá* (EDAL 1067, 1068).

214) PE<sub>608</sub> *\*vi* sg., *\*va(η)-* pl. personal pronouns: 1 sg. «I», 1 pl. «we» > PYup. *\*vi (-ηa)*, *\*vaη-ku-ta* id., PInup. *\*uva-ηa*, *\*uva-η/γu-t* id. (CED 383). The Sir. forms with initial *m* may reflect either the oblique case stem *\*mVη-* or a secondary development *\*v- > m-* before a nasal resonant in the second syllable.

Altaic *\*bi* (*min-*) 1sg., *\*b(u)E* (*mjun-*) 1pl. I, we' > Turk. *\*b* (*\*men*), Mong. *\*bi*, *\*min* acc.; *\*ba*, *\*man* acc., T.-M. *\*bi*; *\*bue*, *\*m* Kor. *\*rí*, Jap. *\*bà* An alternation *\*bi / \*mi-ne* (sg.); *\*ba / \*mju* (pl.) should be reconstructed. Korean has undergone an irregular (dialectal) loss of *\*b* (*\*rí < \*b*) (EDAL 341, 342). The specific Altaic denasalisation in these pronouns is clearly seen from further Nostratic parallels. The exact same denasalisation is found in PE.

215) PE<sub>709</sub> *\*ət-vər* sg., *\*ət-vəci* pl. personal pronouns: 2sg. «thou», 2pl. «you» > PYup. *\*ət-vər*, *\*ət-vəci* id., PInup. *\*əl-vit/n*, *\*əl-əvci* id. (CED 106). The first part of these pronouns is the same as in the 3sg., 3pl. pronouns «he, she, they» (PE *\*ət-ηa*, *\*ət-ηi-r*), a pronominal stem with a deictic function,

presumably the same as Turk. \*~~ti~~<sup>l</sup> this, that'. The real interest lies in the second parts of these forms. Etymologically, they are of a compound origin, analyzable as \*-və- (< Nostratic 2<sup>nd</sup> p. pronoun, cf. PIE \*yo) and \*-r / -ci. Taking into account the well-known PE consonantal alternations, we may trace these suffixes back to early PE \*-t/ \*-ti. In this case, the corresponding Altaic forms are:

Altaic \*fi, \*fa thou' > Mong. \*i, \*ta (EDAL 1424).

#### Abbreviation signs

<i>Γ</i> (in PE) —	<i>γ</i> or <i>ʋ</i>		<i>N</i> (in PE) —	<i>n</i> or <i>ń</i>
<i>H</i> (in PE) —	<i>γ, ʋ, r, j, v</i> or <i>η</i>		<i>R</i> (in PE) —	<i>r</i> or <i>j</i>
<i>L</i> (in PE and PCh, PKCh) —	<i>l</i> or <i>t</i>		<i>R</i> (in PKCh) —	<i>r</i> or <i>š</i>

#### Abbreviations of language names

AY	American Yupic		PJ	Proto-Japanese
CAY	Central Alaskan Yupik		PK	Proto-Kamchadal
Chap.	Chaplinski		(P)KCh	(Proto-)Kamchukchean
Jap., Jpn.	Japanese		PT	Proto-Turkic
MK	<i>Maḡm. d El-Ḳ. . ar.</i>		PTM	Proto-Tungus-Manchu
(M)Kor.	(Middle) Korean		PY, PYup.	Proto-Yupik
Mong.	Mongolian, Mongolic		SK	Southern Kamchadal
Nauk.	Naukanski		SPI	Yupik of the Seward peninsula
Oyr.	Oyrot		SY	Siberian Yupik
PA	Proto-Altaic		Tung.	Tungusic
PCh	Proto-Chukchean		Turk.	Turkic
PE <sub>(or2)</sub>	Proto-Eskimo <sub>(DB entry N<sup>o</sup>)</sub> <sup>1</sup>		T.-M.	Tungus-Manchu
PI, PInup.	Proto-Inupik		WK	Western Kamchadal
(P)IE	(Proto-)Indo-European			

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<sup>1</sup>

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В статье вначале приводятся результаты применения глоттохронологического метода к языкам чукотско-камчатской и эскимосской семей; для первой устанавливается дата распада около 500 года до н. э., для второй — около 400 года до н. э.

Вторая, основная часть статьи посвящена обоснованию ностратического происхождения базисной лексики в эскимосских языках и, конкретнее, особой близости эскимосских языков к алтайским. Отмечен ряд специфических лексических и фонетических эскимосско-алтайских изоглосс, после чего приводится сравнительный лексический материал по более чем 200 праэскимосским корням, значения которых хотя бы в ряде языков-потомков принадлежат к инвентарю значений стословного списка Сводеша и для которых обнаруживаются параллели в алтайских языках.