

CONTRIBUTION OF ALEUTIAN ORIGINAL AND BORROWED LEXICA TO THE NOSTRATIC THEORY

The purpose of our discourse is the summary of approach applied in etymologizing Aleutian isolates inside of Askaleutian family.

Concerning Nostratic reconstruction, we were brought so far to the following changings:

After S.STAROSTIN's suggestion to reconstruct the "fourth row" of Nostratic stops, i.e. of voiced labialized stops, A.DYBO's suggestion of labialized velar nasal (PN *jw-), and the both author's conjoint suggestion of a whole set of Nostratic labialized sibilants, we reconstruct the whole set of velar and dental, as well as labial and uvular, labialized stops. So far we describe them as sequences of almost any phonemes + labial *-w- both in initial and medial positions.

This brought us to simplify up to 5 the number of Nostratic vowels, abolishing umlautized vowels, i.e. PN *ä and *ü. Though we suspect the existence of the sixth PN vowel *ə, i.e. a back counterpart of *e.

Concerning Eskaleutian reconstruction, we advance following statements:

The coincidence of any PN initial labial and dental stops into respectively two PEAl stops, i.e. *p- and *t-. PN initial velar stops, as well as uvular *q'(w)-, split into two PEAl phonemes accordingly to the following former front or back vowel, i.e. PEAl *k- or *q-. In medial position PN labial stops split into PEAl *-p- ~ *-v-, PN dental stops, PEAl *-t- ~ (rarely) PE *-r-, PAI *-δ- (< PEAl *-t_l-?), PN velar and uvular stops, PEAl *-k- ~ *-γ- or *-q- ~ *-β- (accordingly to the following vowel). Furthermore, we support O.MUDRAK in his findings of sound etymologies pointing at PN initial voiced stops yielding a zero reflex in some indeterminate surcumstances. However, this is hardly the case of PN initial voiced fricative and affricate sibilants, i.e. *z(w)-, *́z(w)-, *ž(w)-, *́ž(w)- and *᷑ž(w)-, instead of which we surmise the deletion of PN initial labialized alveopalatal sibilants, i.e. *sw-, *́zw-, *cw-, *́c'w- and *᷑žw-.

As to PN glides, they are deleted initially (though there are few contradicting Aleute examples for PN *j-), and usually preserved medially, esp. intervocally. As to PN nasals, *m is preserved initially and intervocally, but yielding PEAl *w- in former monosyllabales, and PEAl *-m- (~ *-v-) in several medial contexts. Initial PN *n-, *́n- and *ŋ- coincide to PEAl *n- ~ (new) *́n- (before a former diphthongoids of *-Vj-type). They are

distinguished medially, though with a lot of confusion due to assimilative-dissimilative processes. PN *ŋw- yields PEAl *0-. Any PN vibrants, i.e. *-r-, *-ř- (and *-r₁-, if existed) split into PEAl *-r- or *-ř- (before the former shva). Obviously these did not exist in initial position, maybe nor in Nostratic. The opposition between the both PEAl (PE) laterals, i.e. *l and *ł (the latter being often secondary) coordinates with the analogic distribution between PN *l and *ł (in fact, also voiceless *ł̥) in most cases, but not always. Retroflexed PN *ł does not find any Eskaleutian support. PU voiced fricative *Ł usually corresponds to PEAl *-l-, except one case (where PN *-Łw- > PAI *-ju-).

The major problem of Nostratic cognation of Eskaleutian is not the source of specific correspondences between Eskimo and Aleutian, or between Aleut dialects, but the choice between multiple solutions offering a priori equally verisimilar etymologies, due to the extreme simplification of Eskaleutian (Eskimo) phonetic system. This is multiplied by a further simplification of Aleut phonemic system. PEAl initial *p- and *m- (in most cases) yield PAI *h-, itself being unstable. In the case of syncope of PEAl shva of the first syllable, this *h- is regularly preserved as an aspiration of the following nasal or sonorant (> *hn, *hŋ-, *hm-, *hl-, *hy-, *hw-), but disappears before other consonants. The only initial clusters permitted in

Aleut are *cð-, *cɣ-, *cβ-, *cm- *cŋ-, *kð-, *km-, *kn-, *qð-, *ql-, *qm-, *qy-, *sð-, *sy-, *sβ-, *sl-, *sm-, *sn-, *sŋ-, *tɣ-, *tβ-, *tm- and *tŋ-. Therefore, there were no homorganic clusters in Aleut, except of *sl- and *sn-, and their occurrence after the fall of the shva yielded an aspiration preserved in the case of following nasals or sonorants, and *0- in the other cases. This concerns also the former clusters of two nasals, the first disappearing leaving a trace as preaspiration of the second. There are also multiple cases of deletion of other initial consonants in indefinite circumstances. Intervocalic PEAl *-ɣ- (of the second syllable) may also be deleted in Aleut. On the other hand, Aleut preserves PN *l and *́l (> PA1 *l ~ PE *n) and the distinction between PEAl *c and *s.

Aleutian genuine lexica with no Eskimo parallels.

A.1. PN *p-, *p'-, *b-, *bw- (> PEAl *p-) > PA1 *h-.

A.1.1a. PA1 **halyi-* 'root (of a plant), of a tree' [AD: 52].

[] ?φ PK **berq-* 'foot; step', PFU **pälk3* 'Fuß / foot', PA **palga* 'foot' < PN **palqV* 'foot'.

A.1.1b. Al (E) *ālhŋāχ* (pl. *ālhŋāβi-s*), (Atk) *ālŋāβ-in* pl. '(fish's) gills' [AD: 55].

|| If < **hālŋāβ*.

[] PK **pir(s)tw-* 'lungs', PIE **plew-* (/ **kʷw-*) / **p[e]Jul-* 'lung(s)' < PN **pVlwV* (~-*l-*) 'belly, suet'.

A.1.1c. Al (E) *hama-χ*, *hāma-cīja-χ*, *ām-cīja-χ* (*-*cīja-*) 'nagoonberry *Rubus arcticus*', *āhmāða-n* pl. (*-*āða-*) 'salmonberries, cloudberries, raspberries, strawberries' [AD: 61].

[] PA **p̥imā* 'a k. of nut or berry' < PN **p̥VmV*'a k. of small fruity, berry'.

|| Cf. ? Lat *pōnum*, -*f*. 'fruit tree', *pōnum*, -*n*. 'fruit'.

A.1.1d. PA1 **hala-ja-* 'board; board on which one cleans auk skins for parkas; board for scraping; board of sewing stand; bottom board of fire drill, trough for fire; lower arm of halibut hook (yarus); writing table' [AD: 51].

|| b→ PYp **atayaq* 'cutting board' [CED: 21], [AD: 51]).

[] PGZ **p̥t̥q-el-* 'flat', PIE **pAII[a]-*, **plā-* (PIH **pAIH[a]-*) 'broad, flat; plain' (+ Hitt *palhi-* 'breit', *palhasti-* n./c. 'Breite', *palhatar* n. (r/n) id., *palhessar* n. (r/n) id.), PFU **päl3* 'Brett / board', PA **p̥āla* 'field, level ground', PD **pal-* 'plain, valley', PYk **polə-* (~-*aʷw-*) 'smooth, slippery; to slip', PNV **valaj-* 'to polish', PKCh *(*ə)p̥lh̥b̥-(pr̥b̥-*) 'flat, smooth, even' < PN **p̥alV(-x/q)V* 'flat; flat thing, plain'.

A.1.1e. PA1 **haju-* 'partition of sleeping place in a sod house; pole marking the bed' [AD: 121].

[] PSmd ***pəj-** 'to hit, to split', PA ***p'ajo (-t'V)** 'to rub off, wipe off, cut off', PD ***pāj-** '[to separate, part]; to comb', PYk ***paj-** 'to strike, to hit' < PN ***p'ajV** 'to rub off, peel off'.

A.1.1f. Al (Atk, Ber) *haθaði-l* 'to be pale' [AD: 36].

[] PD ***par-** 'to shine; dawn' < PN ***par(₁)V (～p'-)** 'to shine; to be pale'.

A.1.1g. Al (Atk) *hlaθiða-χ* 'ulna, bone of the forearm' [AD: 254].

[] PIE ***palam-**, ***palan-**; ***plām-** 'palm (of hand)', PFV ***piŋ3** 'flache Hand, hohle Hand' / ***pi/ŋi** 'hollow hand', PA ***p'ālga (～-e)** 'palm (of hand)' < PN ***p'algV** 'palm (of hand)'.

A.1.1h. Al (Atk) *c-iŋi-s* pl. 'pubic hair' [AD: 144].

|| If < ***həci-** < PEAl ***pəcV-**.

[] PGZ ***pečw-** 'hair (one)', PIE ***pAus-** 'to swell', PU ***puča** 'down, feathers', PA ***p'uču** 'wart, pimple, excrescence', PD ***boS-** 'wool, hair, down' (cf. PD ***boc-** 'wool; hair') < PN ***p'VčwV (～*bwecwV)** 'excrescence, body hair'.

A.1.1i. Al (Ber) *hilax* 'boredom', *hila-χsi-l* 'to be sad', *hila-χsi-χ* 'boredom', *hila-na-χ* 'depression; boring' [AD: 194].

|| If < *'to be overfilled, replete'.

[] ?σ K: Grg *u-pro* 'more', *pri-ad-* 'many', PIE ***pele-**, ***plē-** 'to fill; full', ***pel-u-**; ***pel[e]l-**, ***plē-** 'many', PU ***palj3** 'dicht, dick / thick' (→ FV) 'viel / many' (corr.: PNSam ***pəlti**), PA ***p'ule** (~-i) 'to be left; surplus', PD ***pal-** 'many', PKCh ***pəl-** ~ ***əplə-** 'good; big' < PN ***p'VIV** (~-ju, -WI?) 'many'.

A.1.1j. PA1 ***ibci-** 'worm (any kind)' [AD: 185].

|| Irregular (early) loss of PA1 ***h**-? PA1 *-ci- is a historical prefix, cf. [AD: 497].

[] PA ***p'iari** 'a k. of worm', PD ***pur-** 'worm, insect' < PN ***p'ari** 'worm'.

|| Cf. Russ *опарыш* 'a k. of big fly larvae (used in fishing)'.

A.1.1k. PA1 ***hiy(i)-** 'to burn; to be heated', ***[h]iy** 'fire' [AD: 174].

[] PK ***px-** 'warm', PIE ***pew[o]-**, ***pwō-** (-r/n-) (PIH ***peHwō-**) 'fire' (+ Hitt *pahhur* 'fire' [FRIEDRICH: 154]), PU ***pīwe** 'hot, warm', PFU ***pājwā** 'Feuer' / ***pājwā-** 'sun; fire' / PU ***pājwā** 'sun, warmth' (+ PSmd ***pejwā** 'fire') [HPUL: 540], PD ***pū-** 'spark, embers' < PN ***pajywV** (~-p'-) 'fire; hot'.

A.1.1l. PA1 ***hulma-** 'to melt' [AD: 436].

[] PIE ***plew-**, ***plōw-** 'to flow, swim', ***pleu-k-** 'to flow, to fly', PFU ***pilk3-** (***pūlk3-**) '(sich) baden' (+ Kms *po-* 'to bathe (os.)') / ***pi/ülwV** ~ ***piwlV**, PA ***p'ōle** 'wet, succulent; grass, plant',

PD ***pol-** 'field, rice-field' (+ Tam *pulamu*, Tel *polampuni* 'to clean, wash'), PYk ***palayə-** (~ *a^w*) 'to flow (on the surface); (sea) wave', PNv ***polə** (~ *b-*) 'whirlpool; to popple; to crowd', PKCh ***pəl(h)ə-** 'to flow, stream, rise (water)' < PN ***p'UV** 'to flow, bathe, pour, to melt'.

A.1.1m. PAI ***huyi-nyi-** 'confined air (in stomach, bladder, etc.), flatus, intestinal rumbling' [AD: 419], ***huy-lay-** 'to belch' [AD: 420].

[] ?φ PIE ***būk-** / ***bhūk-** 'sth. thick' (Arm ? *p:oč'* 'tail', PGrm ***būk-**, ***būg-**, ***puk-** 'thick', Lat *bucca* 'aufgeblasene, vollgestopfte Backe'), PA ***p'o[k]ju** 'to swell', PD ***pok-** 'blister, bubble, boil', PYk ***puki-** 'bladder', PNv ***poqi** 'fish-sound, swimming-bladder', PChk ***pəktə-** 'to swell up; to be replete', PKCh ***peklu** 'a swollen vessel; ball' < PN ***p'okV** (~ *-k'-*, *-q'-*) 'to swell; swollen'.

|| Cf. PKCh ***qaplə** ~ ***qaqlu** 'sphere, ball'.

A.1.1n. PAI ***hula-** 'red, rosy': (E) *(h)ul-aŋsa-χ* 'rosy, ruddy (of cheek), red-cheeked, blushing, red on occasion', *ul-aŋsa-* 'to be red in the face (from the heat)', (Atk) *huli-* (< ***hula-i-**) 'to get red in the face (from heat)', ***hulab** (pl. ***hulabi-**), ***hula-ðyi-** 'bearberry: *Arctostaphylos uva-ursi* (L.) Sprengel' [AD: 434], (Atk) *[iti-m] ulku-u* 'a k. of plant: salmonberry *Rubus stellatus*, and / or cornel *Cornus canadensis x suecica* L., cranberry

Vaccinium oxycoccus L.' [AD: 218]

|| b→ PYp ***ulabī(B)** 'apple berry (panet)' [ESQET 1202] / ***ulariq** 'apple berry' [CED: 365].

[] PIE ***palw-** 'yellowish, [pale]', PA ***puli** ($\sim p'$, -*I*, -*o-e*) 'red', PD ***Pul-** 'brown, yellowish' < PN ***pUIV** ($\sim p'$, -*I*) 'yellow, red'.

A.1.1o. Al (Att) *haji-* 'to warm, heat' [AD: 119].

[] PFU ***pājā** 'Feuer', PA ***pāja** ($\sim p'$) 'to shine, glitter', PYk ***pe-edə-** O 'to burn (intr.); to scorch; to set on fire; back-fire; burnt' (comp. with ***eðə-** O? 'to burn, be in fire') < PN ***pajV** ($\sim p'$) 'fire; to heat'.

A.1.1p. PA1 ***ci-t-** 'to stick, adhere, cleave; to beach (of wrecked ship); to stick together (e.g. two pieces of skin, paper); to get married; to be finished, put in order; to grab with its claws (as of an eagle)', (Att) *ci-ju-si-χ* 'wooden sewing stand', ***cit-a-** 'to stick; to be connected, live close; stuff stuck in bottom of pot after cooking (used to put in another's baidarka to change his good luck and drive animals away); to have drifted ashore (of wood, wrecked ship); to lie firmly, remain; to be intact; to come loose, be shaky', (E) *cit-u-ja-χ* 'ambergris' [AD: 146].

|| If < ***həci-** < PEAl ***pəci-**.

[] PFU ***p/iškā/** 'sticky liquid, pitch' / ***piška** 'Baumharz', PSD

**pič-pič-* 'moist, sticky' (+ Tel *pisa-pisa-l-* 'clammy, greasy', *pisunu* 'gum, resin') (cf. PD **pic-* 'rheum of the eye') < PN **pič* 'V(~p'-)'pitch'.

A.1.1q. PA1 **hilma-* 'wave (E small), whitecap, rough sea, swell' [AD: 195].

[] PIE **bhlew-*, **bhreu-d-*, -*gʷ-* 'to overflow, vomit', PA **bjūlo* 'to soak, gush forth', D: Br *bēl* 'large hill-torrent' (otherwise < PD **vel-* 'flood'), PKm **pil̥ya-* 'spring (of water)' < PN **bilU* 'to overflow'.

A.1.1r. PA1 **huly-*, **hulyi-* 'trunk, body (from shoulders to hips), abdomen, waist, center, central part, (Att) upper part, leg of mukluk' [AD: 435].

[] ?σ K: Sv *pil*, *bil* 'edge' (if not < **pir-* 'edge'), PIE **bholgh-* 'leather bag, pillow, mattress, paunch', PU **pēte* 'side' / **pexli* 'edge, side', PFV **pōlV* (～-I-) 'half, side, share' / **pula* 'halb; Hälfte, Seite, Teil' / PFP **polV* 'shoulder', PA **bēle* (～-i) (-ke/i) 'waist, lap', PD **bēl-* 'split pulse', PKCh **pely(w)xt* 'the reindeer's dorsal vein' < PN **belV* (-wV, -kl) 'waist, side (of body)'.

A.1.1s. A1 (E) *haðyu-lix*, *āðyu-lix* 'to pile, heap up', *haðyu-n* (/ *hāðyu-n*), *aðyu-n*, *āðyu-n* pl. 'pile of rocks heaped up by hunters

on their trail' [AD: 13], (E) *(h)aðyūsi-χ* '(bone) shovel, spoon made of reindeer antler, *pl.* container with covers (for food)' [ibid.].

[] PK ***brge** 'tall, sturdy', PIE ***bhergh-**, ***bhergh-** 'mountain; tall', PSmd ***pīr** 'high', PA ***biōr(1)o** (~ -r-) 'bank, rift', PSD ***pēr-** 'steep; cliff' (cf. PKK ***pri-[p-]'** big; tall') < PN ***ber(1)V** (~ -r-) (-gI) 'high, tall'.

A.1.1t. PA1 ***haba-** 'post, staff, rod' [AD: 35].

[] PIE ***bh^ēr[e]w-** / ***bhrēw-** 'wooden flooring, decking, bridge', PFU ***porwa** 'prop, board, ferry' / ***pora** 'Floß' / ***porawa**, ?φ PKCh ***pojy_b-n** 'spear, cutter, hatchet' < PN ***bVr(1)VwV** (~ -r-) 'board, post'.

|| Delabialization of PKCh ***-v^w-** > ***-v-**?

A.1.1u. PA1 ***ba-** 'front of belly part of fish, down to the anus' [AD: 166].

|| From PEAL ***həba-** < ***pəba-**.

[] PIE ***bhreus-** 'chest, belly', PD ***bōr-** 'chest, breast; upon the chest, upside down' < PN ***bUr(1)V** 'front part of body'.

A.1.1v. PA1 ***hiða-ti-** 'spring, fountain, water coming out from the ground' [AD: 172].

[] PIE ***bhrew-er/n-** 'spring (of water)', PF ***pur-** 'brook', PA ***biujri** 'well, spring', PSD ***pīr-** 'to flow, exude; milk', ***pīr-c-**

'to squirt, milk' < PN ***bujrI** 'to sprinkle; spring (of water)'.

|| Cf. PD ***por-** 'to pour', PSD ***pUr-ai** 'river'.

A.1.1w. PAI ***hib-ni-** 'to sprain', ***hib-ti-** 'to give way, collapse; to break, fall down (from pressure put on it); to sprain' [AD: 182].

[] PK ***bar-** / ***br-** 'to decrease, diminish', ? PIE ***bhrek-** 'to fall, get lost' [PIET 3256] / **bhre(n)k-** 'zu Falle kommen'?; PFP ***p8ra-** 'niederfallen / to fall (down)', PA ***biura** 'to abandon, lose' < PN ***bujrV** 'to lose, throw; to fall, fall down'.

A.1.1x. PAI ***huks-ðu-** 'to be soft (like a little bird), be downy, woolly (of young of fox)', Atk */hjuks-ðu-χ* 'young of sea otter' [AD: 424] and Atk *hus-lux-* 'to be soft (of wood)' [AD: 425], Atk, Ber *hūkuzūza-lix* 'to be soft, tender (of meat, bread, skin, sinew, ground, etc.)' [AD: 426].

|| Notwithstanding the autors of [CED: 203] and K.Bergsland [AD: 422], we prefer to take apart the item from PE ***maRu-** 'sink into soft ground ground or snow' [CED: 193-194] and ***muRðuy-** 'sink down (e.g. into soft snow or water)' [CED: 203], and see no linkage with PAI ***ub-ia-** 'to thaw (of ground), to melt (of snow), etc.' [AD: 424].

[] PGZ ***burdy-**, ***brdywn-** 'down', PK ***burtq-l-**, ***btrtqw-** 'down and feathers', PIE ***bhardh-** 'beard / Bart', PA ***bur(1)dV** 'beard' < PN ***bur(1)dV** 'down (of youngsters on face, little birds)'.

A.1.1y. Al (Atk) *hus-ðax-*, (Med) *hus-jaya-* 'to boil (of kettle, water)' [AD: 424].

[] PIE ***bherw-** / ***bhrew-** 'to boil, seethe', ***bhūr-** 'to move quickly, be excited etc.', PFU ***pura-** (\sim -o-) 'to be boiling, boil, popple', PTrk ***būrk-** 'to spurt, gush', PSD ***pur-uŋ-** 'to boil, be steamed' < PN ***bUrV** 'to boil (intr.), popple'.

A.1.1z. Al (E) *huχ-sχi-n* pl. 'dust', -χ sg. 'particle of dust' [AD: 425].

[] K: Sv (UB) *buryw-* 'to raise dust', (UB, Lch) *biryw* 'dust', PFU ***pora** 'dust, litter, mud, sand', PA ***bōr(1)u** (\sim -o, -a) 'dust; smoke, whirlwind', PD ***bur-ud-, -Vs-** 'dust, smoke', PNV ***bur** 'litter, sweepings; to litter' < PN ***bor(1)V(-gV)** 'dust'.

|| Altaic item contaminates with PN ***bU(j)rV** 'snowstorm' > PE ***pił-tu- (-i-ł-)** 'whirling snowstorm'.

A.1.1α. PAI ***hiy**, ***hiyi-** 'black oistercatcher *Haematopus bachmani*' [AD: 175].

[] PSmd ***wekana** 'sterlet', PA ***bek'u** 'a k. of fish', PSD ***vagg-** 'a k. of fish' (Tam *vakuli*, Kann *baggade*), PKCh ***y^weqq^wə** 'saffron [wachna] cod, Far Eastern navaga *Eleginus gracilis Til.*' < PN ***begwV** (\sim w-) 'a k. of fish'.

|| Exceptional preservation of initial PN ***b-** in Altaic?

A.1.1β. PAI ***hiyu-** "a k. of thin bug with many legs and a sharp bill that eats into wood and is found dead in driftwood", perh. 'shipworm' [AD: 181].

[] K: Grg (Psh) *bukuka* 'gnat', PIE ***bhoukʷ-** 'a k. of insect (bee, drone, gadfly)', PA ***piúk̥i** 'a k. of insect [gad-fly, mosquito, nit, k. of cicada]', PND ***pōk** 'ant [not white ant]', PYk ***pugucee** 'gnat', PNv ***pinger** 'fly; to buzz', PChk ***pig(k)e-** 'gnat; larve of the nose gad-fly' < PN ***buk̥I** 'a k. of insect'.

A.1.1γ. Al (E) *hūlŷtχ*, *ūlŷtχ* '[arctic] ground squirrel *Citellus parryii* Rich. (on Alaska peninsula and Unimak)' [AD: 436].

[] PIE ***bhēl-** 'squirrel, marten, polecat', PA ***balu** 'sable', PU ***poyE V** 'hermine', PD ***[b]il-** 'cat', PKCh ***pehlu-** 'beaver, beaver hide made cap' < PN ***bVjE V**'a k. of small fur-animal'.

A.1.1δ. PAI ***hjāya-** (< ***hja-Vya-**) 'wood (material), tree, log, stick, cane, (pl.) wood, forest, armor; (Att) to club, kill with a club' [AD: 462].

[] PIE ***bhū-** 'to grow' (contam. with PN ***biju** 'to be, become; to dwell'), PU ***p[ū]**'Baum, Holz' / ***pūy/we** / ***puwe** / ***pu/oxi** ~ ***päxi** 'tree' / ***pV-** 'tree; asp', PA ***p [iū]ju**'a k. of tree' (the old comp. ***p [iū]ju-gVša**), PNv ***bu-** 'to ripen, to grow (of plants)' < PN ***bwVjV**'tree (a k. of); to grow (of trees)' [OCHЯ 1: N°19].

A.1.2. PN *-p- (> PEAl) > PAI *-(h)m-.

A.1.2a. PA1 ***cum-nuy(-)** 'yellow, brown, red-brown, grey (of hair), whitish gray (like smoke or white clothes); to be yellow, etc.' [AD: 153].

[] PA ***č'upa** 'grey', ?φ PYk ***jaδi(v)-** O 'gray; sth. white', PNV ***cavrə-** 'gray (of the robe)', PChk ***cibaro-** 'gray' < PN ***cupV** (~č-, č-, č-, č-) 'grey or sim.'

A.1.2b. PA1 ***cahma-** 'dish, cup, couch, sth. to carry in, pot, pan, big vessel' [AD: 129].

|| From PEAl ***c/čapV-**.

[] K: Grg *čap-* 'large earthenware jug', PFU ***čapp3** 'Gefäß, Töpfchen (aus Birkenrinde)', PA ***č'jop'e** (-r₍₁₎V, -k'V) 'water container (artificial or natural), vessel', PD ***čip-** 'leaf-cup' < PN ***čVp** 'V'a k. of water container, vessel'.

A.2.1. PN ***w-** (> PEAl ***0-**) > PA1 ***0-**.

A.2.1a. PA1 ***aδi-** 'lip, esp. the lower lip, edge, blade' [AD: 13-14].

[] PFV ***wēre** 'Rand, Seite / edge, rim, side' (+ PSmd ***warə** 'edge, side'), PA ***jar₁e** 'lower jaw, chin', PD ***var-** 'side, boundary, ridge' < PN ***war₁e** 'edge, side, lower jaw, lower lip'.

A.2.1b. PA1 ***asba-** 'to die, faint, grow dark, stop shining (of the

sun), fade (of grass, flowers), decay, be ruined, waisted', ***asbā-** 'death' [AD: 99-100].

[] PFP ***wäsä-** 'müde, krank; müde, krank werden', PA ***ēč'ō** 'to be hungry, exhausted', PD ***as-** 'faint, weary' < PN ***wec** 'V (~ -s-) 'to be exhausted, ill, to faint'.

|| PU ***-s-** is somewhat irregular, ***-c-** would be expected: contamination of two roots? Cf. PA ***eso** 'unripe, sour'.

A.2.1c. Al (E) *ðašku-, ðaqu-* 'to turn around (the head only), turn back' [AD: 160].

|| From ***edaþ-ku-**.

[] PK (PGZ) *[*rgw-J]* 'to be round', PIE ***werg-** 'to twist', ***werk-, -g-, *wreik-** 'to twist, to weave, to tie together' (?? Hitt *hurki-* c. 'Rad') < PN ***wIr_(I)V (~ -r-) (-gV)** 'to turn, return'.

A.2.1d. Al (Atk) *ul̥si-* 'to enter, come into (bay, harbor)' [AD: 435].

[] PGZ ***wal-** / ***wl-** 'to go', PFU ***walka-** 'hinabsteigen, hinabgehen' / ***wilka-** 'descend' < PN ***walV (-k(')a)** 'to go swh.' [K.-E.NB] (GZ, FU, AI + AA).

A.2.1e. PAI ***utyi-** 'coal' (pl. **-n** 'ashes') [AD: 453], (E) *utmuulux-* 'for black smoke to come out; to burn with noise' [AD: 454].

[] PIE ***āt-r-, *wāt-r- (-th-)** '(open) fire' (+ Hitt *hat-* (II, I)

'vertrocknen'), PA ***ōt'a** (\sim -t-) 'fire; hot, warm', PND ***od** 'to kindle, burn (as fuel)' < PN ***Hot'V**, ***wot'V** 'to kindle; fire'.

A.2.2. PN *-w- (> PEAl *-v-) > PAI *-(h)m-.

A.2.2a. PAI ***kīma/iðay** 'fall (the season October and November)' [AD: 239].

|| < PEAl ***kīva/iray?**

[] PIE ***ker(V)d-** 'autumn': PIr ***carad-** 'autumn, year' (OInd *sarād-* id., LAv *sarəd-*, OPrs <*gṛd-*> 'year'), Tokh A *särmē* 'autumn' (< ***kerd-mēn-**?), PA ***küre** (\sim -i) 'autumn; rain, storm' < PN ***kwírV(-dV)** (\sim *qw-*) 'autumn, winter'.

A.2.2b. Al (Atk) *hmicu-l* 'to poke, jab' [AD: 276].

[] PIE ***awā-, (a)wa-n-** 'to wound', PA ***épo** 'to hunt, kill', ? PD ***vej-** 'to throw, to beat' < PN ***HewV** (\sim -p-) 'to wound, kill'.

A.3.1. PN *m- > (PEAl *m-) > PAI *m-.

A.3.1a. PAI ***maða-yna-** 'gall, bitter (of roots)', ***maða-lā-yna-** 'ocher' [AD: 270].

[] IE: Lat *mūria* 'brine', PFP ***om(p)ra** 'eine Art sauere Wiesenpflanze' / ***umra** 'sorrel' (otherwise to PN ***xamV** 'taste'??) < PN ***mVr(l)V(-r-)** 'bitter, sour'.

A.3.1b. PA1 **miða-* 'fat, blubber, on back of skin or hide (to be scraped off)' [AD: 276].

[] PIE **smerəw-* 'butter, marrow', PMng **marija-*, **marija-ži-* 'flesh, fat, corpulence', PD **merV-* 'to smear' < PN **mAjrV* 'to smear; fat'.

|| Cf. PSD **mūr-* 'strong, fat' [DEDR: N°4970], [SDRAVET 4159].

A.3.2. PN **m-* (> PEAl **m-*) > PA1 **h-* in neighbourhood of other nasals and laterals.

A.3.2a. Al (E) *hamjuýa-χ* 'hare' [AD: 69].

|| If < **h^majuya-* < PEAl **nəm-ju-*.

[] PU **noma(-I3)* 'hare' / **noxma* (PSmd **nåmå*) / **nomå*, PA **mionde (-IV)* 'hare', PD **mundj-al* 'hare', PYk **nema* 'hare' (Omok *nema* [*noma*]), PKCh **miplu* 'hare' < PN **nomV ~ *monV* 'hare'.

|| Metathesis of the nasals in Altaic and Kamchukchean or Uralic, Yukaghirc and Aleutian.

|| Yk (K) *melotə* 'hare' ← b Chukchee.

A.3.2b. PA1 **hini-* 'wick, grass wick of a stone lamp; candle; lamp' [AD: 202].

[] PIE **m^čn-i-* 'a k. of herbaceous plant', PA **mina (~-o, -u)* 'a k. of grass', PChk **maniy* 'sth. weaved' < PN **minV* 'a k. of grass (moss or sim.)'.

A.3.2c. Al (Atk) *hni-χ* 'wolf-eel *Anarrhichthys ocellatus*' [AD: 283].

[] PIE **manə(w)- / -e-* 'a k. of fish', U: Saa *mānni* 'a k. of fish', PA **manu(k'V)* 'a k. of fish', PD **mīn-* 'fish' < PN **manV* 'a k. of fish'.

A.3.2d. PA1 **hulgə-* 'herring *Clupea harengus* L., [rather 'Pacific herring *Clupea pallasi pallasi* Val.]' [AD: 436].

[] PA [**mulapi* ~ **malupij*] 'a k. of fish' (PMng **melekei* (~ **mekelei*) 'frog', PJap **muna(n)ki* 'eel'), PD **malay-* 'eel' < PN **mVIV(-g)V* 'a k. of aquatic animal (eel, snake?)'.

|| Following the authors of [EDAL], Mongolic item contaminates with PA **miäk'o* 'frog', and Japanese, with PA **manu(k'V)* 'a k. of fish'. Cf. also PA **melo* 'a k. of fish'.

// The linkage is also possible to PA **pali* 'a k. of fish', PD **val-* 'a k. of fish', PNv **vil* 'chum salmon, keta *Onchorhynchus keta* Walbaum' [NIVGET 1515] (cf. **bila* 'sturgeon', **pəlegər* 'herring iwashi'), if < PN **p(w)alV* 'a k. of fish'.

A.3.3. PN *-m- (> PEAl *-m-) > PA1 *-m-.

A.3.3a. PA1 **tum-sa-* 'to put away, store; take away, remove (killed enemies), clear up, tidy up; gather, collect; stop up, shut up; strengthen; piece of skin of whale (baleen whale) tongue cut round and tied up as a sack, for making train oil' [AD: 406].

[] ? A: Kor *təmi* 'heap, pile, stack', PSD **tumb-* 'full; to fill' (+

Krg *tumdi* 'to fill'), PNv ***tama-** (***d-**) 'lazy, immobile; low (of sound), quiet; to stop doing sth.' < PN ***tumV** (~*t'*-) 'to store, fill up; all'.

A.3.3b. Al (Att) *kimaku-χ* 'tail (any kind)' [AD: 239].

[] PIE ***kamar-** / ***kemer-** 'hellebore *Bauhinia variegata*', PA ***k'jomo(IV)** 'a k. of fragrant and edible plant' < ? PN ***k'imo** (~*k'we-*) 'a k. of plant'.

// Otherwise, through PEAl ****kiva-**; cf. PIE ***kip-** (**-ph-**) 'twig' < ? PN ***k'IpV** (~*q'*-, *-p'*-) 'twig'.

A.3.3c. PA1 ***qimuy-** 'to cover (barabara with grass, roof of house with top paper)' [AD: 325].

[] ?σ PIE ***komto-** 'hand' (PGrm ***xandu-**, in comp. ***de-km-** 'ten' (< *'two hands')), PFU ***küime(-ne)** 'die flache Hand, die hohle Hand, Handteller / palm, handfull' (+ En *xammara* 'hand'), PFV ***küime(-ne)** 'zehn / ten', PYk ***kumnə-** (~*q-*) 'ten', PKCh ***kume(l)-**, ***əkmi-** 'flathand, palm' < PN ***k'weme** (-*ne*, -*le*, -*t'V*) (~*q'w-*) 'hand'.

A.3.3d. Al (Att) *ama-χ* 'fish roe; vulva' [AD: 61].

[] PFU ***m8m3** (***mÿm3**) 'Fischrogen' (redupl.), PA ***ūmu** 'to bear, give birth', der. ***ūmu-tki** 'egg', PYk ***ome-** O 'nation; clan, kin' < PN ***H[o]mu** (-*tV*) 'to bear, give birth; egg;

genitalia'.

A.4.1. PN *t-, *t'-, *d-, *dw- (> PEAl *t-) > PAI *t-.

A.4.1a. PAI **tayi-* 'bundle of grass', **tayi-t-* 'to tie around' [AD: 381], Al (E) *taxči-χ* 'binding cord around the hatch of baidarka' [AD: 381], *tayðu-χ* 'dried grass', -n pl. 'tall grass used for the second layer of a barabara roof', *tayðu-lıx* 'to tie (grass) in bundles (for making roof)' [AD: 381].

[] PA **tagu (-n V)* 'root, grass root' < PN **tagV* 'a k. of grass'.

|| Any link to ?σ PAI **tayu-* 'to tie, bind; to tie around (several times, as with a thread or rope), to wrap around; to swaddle (a child)', **tayu-* 'string, lace, wrapping; bundle (as of wild rye cut for making basket)' [AD: 382]; cf. ?σ PSD **taga-* 'to stop, impede; to bind'.

A.4.1b. Al (Atk) *taxt-* 'to silence, put to silence' [AD: 382].

[] PIE **tak- (~ -k-)* 'to keep silence', PTrk **[d]ek* 'silent, quiet' < PN **tVk'I (~ -q'-)* 'silent, quiet'.

A.4.1c. PAI **tuyla-* 'to feel, touch, palpate' [AD: 403].

[] PIE **dēg-* 'to touch' (cf. **deḱ-* 'to acquire, gain, respect, thank'), PU **takka-* 'hängen, haften, stecken bleiben', PA **tiok'e* 'to touch, reach', PD **taK-* 'to touch' < PN **tok'I (~ -q'-)* 'to touch'.

|| Cf. PIE **tag- (~ -g-)* 'to touch' / *tag-* (oder *teg-* : *tog-* : *tɔg-*) 'berühren, angreifen'.

A.4.1d. PAI **tula-* 'upper arm, humerus, wing bone' [AD: 405],

Al (E) *tuluk-i-*χ 'elbow' [AD: 405].

[] PU **tulka* 'Feder, Flügel' / **tuxk̥i* 'feather', PKCh **g̥iylo* 'wing (without feathers?)' (metath.?) < PN **tulV* (~ *t'-, d-*) (-KV) 'wing'.

A.4.1e. Al (E) *tumka-* 'to shut the mouth' [AD: 406].

[] PK **dum-* 'to be silent', IE: PGrm **dumba-* 'dumb' (cf. Ltv *ding-t* 'to be silent'), PA **tiūm(k)u* 'silent, calm', PNv **dom-* 'to sit silent', PChk **təmy[e]* " 'good weather' < PN *[dw]imV (-KV) 'to keep silent'.

|| Unclear is PA **t-* instead of expected **t'-*.

|| The suffixal character of the velar (*-KV) is obvious from Altaic match (Mongolic and Tungus-Mandchuric), Latvian, Aleut and Chukchean.

A.4.2. PN **tw-* ~ **dw-* (> PEAl *č-) > PAI *c-.

A.4.2a. PAI **cuty-* 'point (of knife, needle, pencil); tip', **cutyi-* 'whetstone, small stone for sharpening; front man in two-hatch baidarka' [AD: 15].

[] PK **dud-* 'tip', PA **čdu* 'elevation', PD **tud-* 'point, edge' (cf. PD **čiud-* 'to pierce, penetrate'), PYk **toč-* B 'tooth; to bite (of dog)', PNv **tatəm* 'top, summit, mountain peak', PKCh *(*tətnəm* 'stock, stump; stub of horn' < PN **twidV* 'tip, point'.

|| Voicing assimilation in Kartvelian?

A.4.3. PN *-t'-, *-d- (> PEAl *-t-) > PAI *-t-.

A.4.3a. PA1 ***hat-** 'outside, outward, opening, entrance; loc. outside of, at the opening of', ***hati-** 'lip(s), outward lip(s)', ***hat-** 'to sigh' [AD: 105-106].

[] PIE ***peta- (-th-)** 'to stretch out', PA ***p̥at̥a** 'uncultivated land, field', PD ***pāT-** 'field, garden bed' (cf. ***pat-** 'flat; place') < PN ***p̥at̥V** 'open; to be open, to stretch'.

A.4.3b. PA1 ***utub-** 'steaming seal meat; cooking in a pit (in sand) on hot rocks, covered with wet moss or grass; stove, oven', ***utub-** 'to steam; to foment, to treat (in aching, painful part of body) with a hot piece of rock or hot compresses; to stay in hot springs to relieve rheumatism' [AD: 455].

[] PD ***ud-** 'to boil; hot' < PN ***HudV** 'to boil, cook'.

|| Cf. PD ***vand-** 'to cook', ***at-** 'to cook, boil'.

A.4.3c. PA1 ***sat-** 'to pierce, wound (e.g. a game with a shot)' [AD: 343].

|| Despite K.Bergsland, hardly linkable to ***sa-** 'blade (edge) of knife, face'.

[] PD ***Sad-** 'to tear' < PN ***SAdV** 'to tear, pierce'.

A.4.4. PN ***-t̥-, *-d-** (> PEAL ***-t₁-**) > PA1 ***-ð-**.

A.4.4a. PA1 ***-qaða- / *-kaða-** 'to stop V-ing, cease V-ing; to finish V-ing; to no more V, to not V anymore' (phasal marker of

accomplished action) [AD: 540].

[] ?φ PK ***kwe(s)t-** 'to cut off', PIE ***kʷēd-** 'sharp' (cf. ***oket-** 'harrow'), PA ***k'jōt'e** 'a k. of knife or arrow', PD ***kot-** 'to peck' < PN ***k'ot'V**'to cut'.

|| Cf. PA ***kiātu**'sharp tool; notch'.

A.4.4b. PA1 ***qiðkī-**: (Atk) *qiðkī-* '(arrow's) butt', (Att) *qitqi-*χ 'tail (of whale, fish)' [AD: 317].

|| < PEAl ***qiðə-ðI-**?

[] PK ***kwad-** / ***kud-** 'tail', PIE ***kaud-** 'tail, tuft', PU ***kuðj3** 'Decke, Umschlag' (+ Ngan *kaulə-* 'to cover, to close'), PA ***k'jūdo(rg)V**'tail' < PN ***k'ujdV(-rgV)**'tail'.

|| Note the same suffix in Altaic.

A.4.4c. PA1 ***aðalu-** 'to lie, tell a lie, deceive, be deceitful' [AD: 12].

[] Hitt *idalu-*, Luv *adduwa(l)-* 'evil, bad' (< PAn ***edalaw-** ~ ***edawal-** id., hardly related to PIE ***oit-** 'oath'), PA ***ēda** 'silly, evil', PD ***edd-** 'fool, stupid' < PN ***pe(j)dV**'silly, evil'.

|| V.Ivanov [Иванов 2000: №2], suggesting the linkage of Aleut and Anatolian items, incorrectly traces the latter to PIE ***od-** (PIH ***H-**) 'to hate' [WP I: 174-175], [IEW: 773], [PIET 1354] (+ Hitt *hatuka/i-* 'terrible, horrible' [Tischler: 227-229]). Ultimately Aleut item might be related also to the latter.

A.5.1. PN ***n-** (> PEAl ***n-**) > PA1 ***t-**.

A.5.1a. Al (E) *tuyðuka-* '(fish's) kidney (the blood mass inside along the backbone)' [AD: 402].

[] PIE **negwh-r-* 'kidney', ?φ PFU **narma* 'Leiste / groin, the bottom of trunk' / **nirma* 'groin, hip', PA **nVjVrV* (~-g-, -r-) 'gland', PSD **ner-* 'vital orgal, bosom, anus' (+ PKG **ner-nžal* 'spleen'), PYk **n̄el* 'gland' < PN *[n]UgerI (~*[n]egUrI) (?) 'spleen, kidney'.

|| Secondary palatalization of the nasal before *-j- in Fennno-Ugric and Altaic?

A.5.1b. PA1 **tuqi-* 'to bow, bend the head, look down, lean' [AD: 410].

[] Sv *nekw-*, *nkw-* 'to bend', PFP **nokke* 'krumm, schief; Biegung, Krümmung / curved, wry; curve', PND **m̄q* 'to bow, droop' (altern. < PN **lukV* 'to bend, bow'), PNV **dong* (~-mq) 'elbow', PYp **nuye-* / **nugke-* 'to bind, to wrap' < PN **nUk'V* 'to bow, bend'.

|| Unclear secondary palatalization in Fennno-Permic and Yukaghirc.

// Otherwise the item might be linked to PK **nqw-* (~m-) 'to fall, fall over', PIE **newə-* 'to incline, nod' < PN **nVqwV* 'to fall, incline'.

A.6.1. PN **n-* (> PEAL **n-*) > PA1 *0-.

A.6.1a. Al (E) *iðyaju-n* pl. 'k. of ocean fish' [AD: 172], PA1 **aðgaju-* 'pink salmon, humpback *Oncorhynchus gorbuscha*'

[AD: 12].

- [] PA ***níro** ($\sim \hat{r}$) 'a k. of big fish', PKG ***nār-** 'a k. of fish'
(Naikri *nāri* "the bām fish")
< PN ***n̥VrV** ($\sim \hat{r}$) (-gV) 'a k. of fish'.

A.6.1b. PA1 ***iqə-** 'old woman; to be old (of woman)' [AD: 209].

|| If < PEAL ***niqV-**.

- [] PA ***ník'ē** ($\sim \hat{jār}$) 'servant' < PN ***[nej]k'V** 'old woman, female servant'.

A.6.2. PN *-n̥- (> PEAL *-n-) > PA1 *-n-.

A.6.2a. Al (E) *kinu-māx* 'volcano ashes' [AD: 240], ? (Atk) *kinu-la-s* pl. 'grassless spots in between the grass' [ibid.].

- [] PIE ***ken-** ($\sim k$ -) 'ashes' / sub **ken-**, **kenə-**, **keni-**, **kenu-** 'kratzen, schaben, reiben': **kenis** : **konis** 'Asche', PFP ***kon3 ~ *kun3** 'Asche, Lauge' / ***kuuni** 'ashes', PA ***k'ogi** ($\sim -e$) 'dirt', PYk ***kʷeidi-3ə** O 'smoke; to fill with smoke', PNV ***himər̥** 'ashes', PKCh ***keṇire-** 'to burn, to inflame' < PN ***k'weʃníI** ($\sim k'o-$) 'ashes, alcali'.

|| Some Altaic (e.g. Japanese) forms suggest that velar nasal would be secondary and due to older suffixation with PA ***-gV** (< PN ***-yV ~ *-gV**).

A.6.2b. PA1 ***ni-** 'paternal aunt, a sister of one's father' [AD:

|| < PEAl *ənV- (~ -n̄-).

[] PU *ana 'Frau eines älteren Verwandten (des Bruders, des Onkels); ? Mutter / elder female relative' / PFU *āna 'sister-in-law', PA *ēna 'mother, elder sister', PD *an- 'elder brother', PYk *enee- 'mother', PNV *anāš 'female; female' < PN *panV, *penV 'elder female relative'.

|| Cf. PKCh *ənine- 'elder brother (sister)'. Are there three roots here: *panV 'older female in family', *panV 'elder brother', and *penV 'elder sister'?

A.7.1. PN *l-, *l̄- (> PEAl *l-, *l̄-) > PA1 *l-.

A.7.1a. Al (Atk) *lam-sa-χ* 'a k. of big-leaved kelp' [AD: 254].

[] PFP *lemeš3 (*leme-š3) '(junge) Linde', PKCh *hjomča (~ l-) 'willow, poplar'

< PN *le(j)m V-šV 'broad-leaved tree'.

// Also might be linked to PIE *labug- 'a k. of creepers' (cf. PSI *lebedā, *lobodā 'a plant *Atriplex*'), PA *labo 'a k. of plant', PYk *leveidii ~ *leviedii (~ la-) 'berry', PNV *däm 'cranberry; crimson' < PN *labU (-k/qV, -dV) 'a k. of plant [wild onion et sim.]'.

A.7.1b. PA1 *lalu- 'yellow cedar wood' [AD: 253].

[] PFP *lel3 'Erle' / *lälV 'alder', PKM *küŋ-lěl 'seed' < PN *laiV 'a k. of foliage tree'.

A.7.1c. Al (Att) *ləyu-* 'to gather, put together' [AD: 253].

// In view of external data, the linkage to PAI ***lə-** 'to gather: to pick, pluck, dig out (berries, eggs, limpets, grass, roots); to catch (fish, game, in large number)' [AD: 252] looks secondary, cf. NºA.7.3b.

[] PIE ***leg-** 'to gather', PU ***luke(-)** 'Zahl, Anzahl; zählen, rechnen / count; to count' / PFU ***luki-** 'count', ?φ PKCh ***lego-** (***n-**) 'to read; to count' < PN ***lAkwi** (~ **-gw-**) 'to gather; to count'.

A.7.1d. PAI ***lina-** 'mat, old sealskin used as mat in baidarka and for building tent, or on floor' [AD: 255].

[] ?σ PIE ***lēn-** 'soft, lazy', PFU ***lejnā** 'weak, lax' < PN ***lAjnV** 'weak, lax'.

A.7.1e. Al (Att) *lisi-* 'to break in pieces, smash' [AD: 255].

[] PIE ***(s)lei[g]J-** 'to strike, cut' (+ PSI ***lēzā/o/b**, ***lēzvo** 'blade'), PU ***le(j)kka-** (~ **I-**) 'Lücke, Riß, Spalte; schneiden, spalten / gap, crack, crevice' < PN ***lejkV** 'to cut, split, break in pieces'.

// Otherwise the item might be linked to PIE ***hūg-** (PIIr **-g-**) 'to break', PFU ***lewe-** 'werfen; schießen / to throw; to defecate' / ***lexi-** 'hit, shoot' (+ Slk **čū-**) / ***lHūyje-** 'to strike, chop', PA ***lok'o** (~ **-u-**) 'a cutting instrument' < PN ***IVgwV** 'to break, strike'.

A.7.1f. Al (E) *Iūx* 'grass mat (to sit on, to make bed on), grass rug (to lie on)' [AD 257].

[] PK **lag-* / **lg-* 'to put, lay down', PIE **legh-* 'to lie', POU **h₂y-* 'to fall off', PA **niugu* (~*I-*) 'to put in, (Tng) [put out, take out]' < PN **I[u]gV*'to put down, lay, lie'.

A.7.1g. Al (Atk) *lux-lu-* 'to tickle (to make laugh, as when petting or making love)' [AD: 257-258].

[] ? PFU **hikkä-* 'to thrust, push, pierce' / **likkä-* (*hikkä-*) 'stoßen, schieben' / **hükka-* 'shove', PA **luk'i* (~*-o-*) 'to break through', PYk **lewki-I*, **lukə-I* 'arrow (without the head)', PNv **lēk-u-* 'to pin; to stick into' (cf. ?σ **luk-u-* 'to roast on spit'), PChk **lukmə-* 'to gouge; chisel' < PN **luk'V* (~*-q-*) 'to break through, pierce'.

A.7.1h. Al (E) *lukaši-x* du. 'loins' [AD: 258].

|| b→ AAY (Kod) *luqaq* 'pelvis bone of seal'.

[] PIE *(θ)*lak-* 'leg, the main muscle of the arm / leg' (cf. **lekʷs-*, **leuks-* 'thigh, groin'), PU **takV* 'leg, step' (PUG **Vy̥tV* ~ **VktV* 'leg': Ost *tayət* 'paw', Vog *layjl* 'leg'; Smd: Slk *lāka* 'step'), PA **lak'V* (~*-e-*) 'fur clothes', PChk **layo-* 'man's boots up to the knees' < PN **lak'wV* (~*-q'w-*) 'leg'.

A.7.2. Exceptional case of PN *n- (> PEAl *l-) > PEAl *l-.

A.7.2a. PA1 ***luy-luy-** (E *luy-lux-*, E, Atk *uy-lux-*) 'to shake (his head; person, as when waking him up)' [AD: 257].

[] PIE ***jeug-** 'to be agitated, excited', PU ***ník3-** ~ ***nük3-** 'reißen, rupfen / to tear, tear off' (+ POU ***nóy-** / ***núy-** 'to tremble, shake'), PD ***nük-** 'to push, shove' (+ PND ***nuk** 'to shake, cause to oscillate, esp. up and down'), ?φ PNv ***lēk-** 'to shiver, tremble' < PN ***nukI** 'to shake, push'.

A.7.3. PN *-l-, *l- (> PEAl *-l-) > PA1 *-l-.

A.7.3a. PA1 ***kilbi-** ~ ***qilbi-** 'ribs: the lower traversal ribs of a baidarka' [AD: 238].

[] PIE ***kal-**, ***kal-** / **-e-** 'pointed stick' (cf. PIE ***kol-** / **-e-** 'thorn, awn, a k. of thorny plant'), PFV ***kalke** 'Haar; Halm, Achel / hair; stalk', PA ***k'ila** 'hair', PA ***k'ilo** 'stalk, stem', PD ***kel-** 'feather' < PN ***k'ila (-gV, -wV) (~q'-)** 'stalk, rib'.

|| If there are two roots here, they are hardly distinguishable outside of Altaic.

A.7.3b. PA1 ***la-** 'to gather: to pick, pluck, dig out (berries, eggs, limpets, grass, roots); to catch (fish, game, in large number)' [AD: 252].

|| Notwithstanding K.Bergslund [AD: 252], hardly identical to omonymous 'to kill (people)' and 'to string (pearls)'. In view of external data, the linkage to PA1 ***lay-** 'to gather' [AD: 253], cf. **NºA.7.1c**, seems secondary.

[] PK **qel-* 'hand', PA **al(a)* 'to take, receive', PD **ēl-* 'to receive, to bestow' (or PSD **al-* 'handful') < PN **qAlV*'to take, receive'.

A.7.3c. PA1 **al(a)-* 'whale (in general)': **al-āða-* '[common] harbor porpoise *Phocaena phocaena L.*', **ala-may* 'humpback whale *Megaptera novaeangliae Bor.*' [AD: 48].

[] K: Sv (Lsh) *ilw*, (UB) (*h*)*il* 'roe', PIE **el[a]n-*, **lān-* (PIE **e-*) 'deer' / sub *el-*, *ol-*, *el-* Farbwurzel mit der Bedeutung 'rot, braun', bildet Tier- und Baumnamen (+ Hitt *alija(n)-* 'roebuck'), PFV **ält3* 'weibliches Tier: Rentierkuh, Stute', PA **ēlV(-k'V)* 'deer', D: Mlt *ilaru* 'the mouse deer', PYk **ilvə-* O 'deer; to graze deers; elk', PNV **olvarak* 'sika [Japanese] deer *Cervus nippon Temminck*', PKCh **əlh wę* '(wild) deer' (car. in PChk **e-əlye-k* 'heifer' (= Rus 'не-тель') < PN **?elV(-gV, -k'V, -wV)* 'deer, antelope'.

|| Chk b→ Yk (T) *əluo-/jørkə/* 'farrow heifer' [Kurilov: 595].

A.7.3d. A1 (E) *alaya-điya-* 'to be pale' [AD: 49].

[] PIE **Aləw-* (PIH **H-*) 'tin; light-yellow', PA **ālV (~ ē-)* 'variegated', ?σ PNV **alər̥* 'berry', PKCh **əhl̥lu-* 'to pick (berries)' (PChk **elu-*, PKm **ahli-* 'to harvest') [ЭСЧКЯ: 28] (**e'lū-*), [KAMET 580] < PN **HAIV* 'yellow'.

|| Nv b→ PTng **ali(r)-sun* 'berry' > Mnch *alisun* 'berry'.

A.7.3e. PA1 ***aliy-** 'to vomit' [AD: 53-54].

[] PIE ***leg-** (~-g-) 'to leak' / **leg-** 'tröpfeln, sickern, zergehen', PA ***algi** 'net, sieve', ? PD ***al-** 'to sprinkle, bail out' < PN ***HalVgI** (~-k-) 'to sift, leak'.

A.7.3f. PA1 ***la-** (E) 'to kill (people)', (Atk) 'to beat, defeat' [AD: 252].

|| From PEAL ***əIV-**?

|| Despite K. Bergslund, hardly linked to the omonymous 'to gather: to pick, pluck, dig out (berries, eggs, limpets, grass, roots); to catch (fish, game, in large number)' and 'to string (pearls)', rather contaminated, cf. sub [ibid.].

[] PA ***alV** 'to destroy, kill' < PN ***HAIV** 'to kill'.

A.7.3g. PA1 ***alya-** 'animal, mammal; to catch sea mammals' [AD: 51-52].

[] ?σ PIE ***alk-** / ***elk-** 'elk' / sub **el-1, ol-, el-** Farbwurzel mit der Bedeutung 'rot, braun', bildet Tier- und Baumnamen), PA ***alikV** 'a k. of small animal' (PTrk ***Ālanīr** 'a k. of rat, jerboa', PMng ***(h)alag-** 'jerboa', PTng ***(x)algi-n** 'otter (male)', PJap ***iruka** 'dolphin') [EDAL: 289], [ALTET 28], PD ***el-** 'rat' [DEDR: №833], [DRAVET 319], PYk ***awlyya-** B '[fish], sea animal' [JUKAET 365] / ***ol'oya** 'fish' [ΠΥΙΟΓС: 295], [HDY: №1627], PNV ***ale** '[бычок: ? Amur goby *Rhinogobius similis* Gill]; common [bay, earless, Eastern Atlantic, European sand, fresh-water, hair, harbour, larga, ranger, river, spotted] seal *Phoca vitulina L.*' < PN ***pali (-k(')V)** 'a k. of animal'.

|| Contamination of two roots in Yukagiric and Nivkh + PKCh **yihaqi* 'gudgeon, goby (a k. of *Gobio gen.*)' with PN **?AIHV*'a k. of fish', cf. [K.-E. 2008: №7.7].

A.7.3h. PAI *-Vlu- / -ilu- suff. of coll. and distr. num. (differently or diff. suff. in some others) [AD: 483].

[] K: Sv -äi / -är (< *-al-i) noun pl. marker, marker of plurality of objects of the tr. vb, PZ *-I- remnant pl. suff. of some nouns, IE: Hitt ^{NUM}*li* suff. of distr. num. (e.g. 'containing N size or weight units'), U: Mari -la suff. of coll. nouns, Slk (Tym, Ket') -la suff. of pl. (of nouns), PA *-la suff. of distr. num., PD *-I suff. of pl., PKCh *-’al suff. of coll. num. < PN *-l[ə]coll. suff.

A.7.3i. PAI *ukala- 'bark (of tree)' [AD: 428].

[] PK *qwel- 'to peel, skin', PIE *koil- 'naked; stripped skin' / koi-lo- 'kümmelich, nackt', PF *kol3 'to peel' (cf. PFU *kalēpV 'film' / *kalw3 'Häutchen, Membran, Schuppe'), PA *k'ula 'bark, scales; scab', PKCh *yelye- 'skin' (cf. PChk *k'ylka-k "shell of mollusc") < PN *k'wełV(-t'V) 'bark, skin; to peel'.

|| In Altaic one might expect **k'jola.

|| Cf. PFU *koθ3- 'abhäuten, abs-chälen / to peel, strip away' and PFU *keθ'e 'Haut, Fell, Leder, Schale / skin, hide, film'.

A.7.3j. Al (E) alaxta-χ 'birch wood, alder wood (used for pegs and cross-beams of baidarka)' [AD: 50].

[] PIE *alis-, *elus- (PIH *a-) 'alder' (+ Hitt ^{GIS}*alanzan-* c. 'a k. of tree and its wood'), PYk *aʷl-vyδ 'a young tree (a k. of), a

dried tree; shavings, chips', PYk **a wəwla(n)* 'the thin-layer hard and compact part of larch wood; a larch, having a thin-layer hard part; larch tree; the hard part of larch wood', PNv **halq-i* 'dead-wood; creeping moss', PChk **olq̥-n* 'grove, birch grove, birch grove rim' < PN **?alV(~-l-)* 'alder'.

A.7.3k. PA1 **ilb-ilbi-* 'Brant goose, Emperor goose' [AD: 195].

[] PIE **alk-* / **alk-* 'a k. of waterfowl, kingfisher', ?φ PNv **laub-la* (Nv (Am) *lauk* 'crane', (Sakh) *lawk* 'lark'), PKCh **at̥hiqa* 'a k. of aquatic bird' < PN **HAlk'V(~ -l-, -q'-)* 'a k. of waterfowl'.

A.8.1. PN *-Lw- > PA1 *-j-.

A.8.1a. Al (Atk) *taju-χ* 'spleen (the organ)' [AD: 396].

[] PGZ **tqirp-* 'spleen', ?σ PIE **talw-* 'thick', PU **δ̥äδ'wā* (= **Lätwā*) 'spleen', PA **tiōle (-gV)* 'spleen'
< PN *[t'JVŁwV(-gV)] 'spleen'.

|| PGZ **tqirp-* 'spleen' due to metathesis and assimilation from **tipq-*?

|| The initial PU **Ł-* might be secondary by assimilation, the other languages preserving the original stop. Cf. however PSC **HqälV* 'liver, belly'.

A.9.1. PN *-r₍₁₎-, *-r̥- (> PEAl *-r-) > PA1 *-ð-.

A.9.1a. PA1 **aði-* 'lip, esp. the lower lip, edge, blade' [AD:

13-14].

[] PFV **wēre* 'Rand, Seite / edge, rim, side' (+ PSmd **warə* 'edge, side'), PA **jar̥iē* 'lower jaw, chin', PD **var-* 'side, boundary, ridge' < PN **warjē* 'edge, side, lower jaw, lower lip'.

A.9.1b. PA1 **ād̥yab*, **ād̥yabi-* 'vertebra, (pl.) backbone' [AD: 12].

|| Al (E) *ačasi-* 'the shoulder blades of a humpback whale; the neck meat of (seal), the chest part of sea lion' [AD: 37].

[] PIE **ors-* (PIH **o-*) 'buttock, anus' / *ers-* : *orsos* 'Hinterer, Schwanz' (+ Hitt *arra-* c. 'After, Gesäß'), PA **ar̥ia (-k'a)* 'back, behind', PSD **ar-ai* 'waist, loins', PYk **ar-qθ-* 'near, close to', PNv *(*h*)*äri* 'behind; to be behind sb., to follow sb.' < PN **pari*V (-k'V) 'back, backbone'.

A.9.1c. PA1 **ðāju-* 'to be springly, limber, tough (bends but does not break)' [AD: 160].

|| PA1 **ð-āju-* < PEAl **ərV-*.

[] PU [**wēre* (**wōre*) 'Berg'] / PFU **wōre* 'forest, hill' / **woori* 'forest, hill' (cf. PFU **wara* 'hill; forest' [FUV: 121] / **wåra* [HPUL: 551]) < PN **wVi(j)V* 'wood'.

A.9.1d. PA1 **ačyilay(-)*, **ačyi-l(a)yi-* 'earthquake; to tremble by earthquake (the ground)' [AD: 12-13], Al (E) *ački-jāx-* (< PA1

*(h)aðbi-jāy-) 'to shake, vibrate (*e.g.* house in strong wind or by earthquake; also of person)' [AD: 13].

[] PK *rex- / *tx- 'to beat, rock, shake', PIE *ergh- 'to shake, move, anger, be angry' (cf. esp. Gr ὁρχέω 'make danse', ὁρχέομαι 'danse') < PN *HVi₍₁₎xV (~ -r-, -g-) 'to shake, tremble' [K-ENB] (K, IE, AI).

A.9.1e. PAI *iðyri- 'to be pulled down; to slip, loss its grasp' [AD: 172-173].

[] PIE *werk-, *wrak- 'to cut, peel', PKCh *jirkī- 'to rip off, eradicate' < PN *wIr₍₁₎k'I (~ -r-) 'to peel, rip off'.

A.9.1f. PAI *ðaja- 'late evening, nght' [AD: 160] and (E) ðīmyu-χ 'dusk, twilight' [AD:160].

|| Otherwise, PYpS *ibīvya-, *ibjāy- 'evening' (Sir išəvŷəx, Chpl išīvyaq (t), Kon išjaxto-, išjaxto- 'hazy', išjaq, išjak 'haze, light wispy cloud cover', CAY išjaxto- 'smoky from a distant fire') [ESQET 583].

[] PK *ar-d- 'early', ?σ PU *är3 'Jahr / year', PA *ēre (~ -i) (-t'V, -kV) 'early' < PN *Her₍₁₎V 'early'.

A.9.1g. Al (E) ðaq- 'to remember', ðaqa-n 'senses, wits', etc. [AD: 158-159].

[] PD *ārāj- 'to think, observe, search for' < PN *Har₍₁₎V 'to think, remember' [K.-E.NB].

A.9.2. PN *-r₍₁₎-, *-r̥- (> PEAl *-**ts**-) > PA1 *-**ts**-.

A.9.2a. PA1 ***hab-**: ***habcikna-** 'splinter; fodder, husks; crumb; pl. rubbish', ***hablikna-**, ***habliyna-** 'crumb(s); dust, rubbish', ***habsyi-** pl. (E) 'crumbs', (Atk) 'dust; husks' [AD: 33-34].

[] PIE ***pers-** 'snowy; speck of dust; drop' / **pers-** 'sprühen, stieben, spritzen (bespritzt = gesprenkelt), prusten; Staubm Asche' (+ Hitt *pappars-* (I/II) 'spritzen, sprengen'), PND ***por-s-** 'sweepings' < PN ***pVr₍₁₎V(~p')** (-s/z/s̥sV) 'dust, sweepings'.

A.9.2b. PA1 ***cibāni-** 'microgranular andesitic lava, tool for softening skins' [AD: 140].

|| PA1 ***cibu-** + pb. ***-Vni-** [AD: 484].

[] ? PGZ ***crec-** / ***cric-** 'to rub, rub out, wear out', PA ***čiūr₍₁₎u** (~ -a) 'to scratch', PD ***Cir-** 'to scratch' (+ Kann *cīraṇa* 'small chizel'), PNV ***crov-** 'to nail; nail', PChk ***cəRRe-** (~ -a-, -cc-) 'scratch, line' < PN ***cir₍₁₎V** 'to scratch'.

|| Cf. PGZ ***čxer-** / ***čxir-** 'to pick (the ground, etc.)'.

A.9.2c. Al (E) *avíx, avíy-i-χ ~ ayíχ, ayiyíχ, áyíχ* 'round stone', *ákvjáða-* (< **ákvjy-áða-*) 'to juggle 2-4 balls' [AD: 38].

|| The connection to Al (Atk) *ayix-s, ayíχ-s* 'to rub, be rubbed' looks secondary and folk-etymological.

[] PU ***wāřā** 'mountain' / ***wēre** (***wōre**) 'Berg', PSD ***var-ai** 'mountain', PYk ***i:re:** 'rock', PChk ***erte-n** (~ a) 'undersea cliff;

big rock' < PN ***war₍₁₎V**'mountain; rock'.

|| Cf. PSD ***ar-**'pebble' (< PN ***HAr₍₁₎V**'round stone, pebble').

A.9.2d. Al (E) *tusulku-χ*, *tuzulku-χ* 'wet mud' [AD: 403].

[] PK ***m-twe[r]-**'dust, speckle of dust', PIE ***ter-es-** 'earth', PA ***t'ore**'soil, dust', PD ***tur-**'rust, verdigris' < PN ***t'UrV**'earth'.

A.9.2e. PAl ***nubV=**'to row': ***nubaða-** 'to row (in baidar or in wooden boat)' (***-Vða-** / ***-aða-** pb. (2) 'to V a little, slowly, barely' [AD: 470] or pb. (3) 'to V recurrently, intermittently' [AD: 498-499]), ***nubasi-** 'oar (for baidar or wooden boat); to row (in baidar or in wooden boat)' [AD: 284].

[] PIE ***ner(ə)-**'lower, bottom; to sink, shrivel' (also ***nurV-** in PS1 ***nūrjāt̄**, ***nērjāt̄** 'to sink, dive'), ? Tng: Evk *nirū* 'small hollow, pit', PD ***nūr-(ug-)**'to hide' < PN ***nūrV**'to penetrate'.

A.9.2f. Al (Ber) *qaṣu-*: *alaṣum qaṣuu* 'crab, crayfish' (litt. "of-sea/ocean crab-its") [AD: 299].

[] PIE ***kark-**'crab', D: Tam *kurat̄u* 'pincers, forceps, crab' < PN ***k'ar₍₁₎V(-r-)**'crab, crayfish'.

A.9.2g. Al (Atk) *qaṣu-* 'to hit exactly; to guess' [AD: 300].

[] PGZ ***kar-** / ***kr-**'to strike; beat' < PN ***k'ar₍₁₎V(-r-)**'to strike'.

A.10.1. PN *c-, *3-, *s-, *sw- (> PEAl *s-) > PA1 *s-.

A.10.1a. Al (E) *sāða-χ* 'long bones (e.g. humerus, femur, metatarsals, phalanges); hair pick of bird bone; ornament (tube) attached to the nose bone', *sāða-lix* 'to dress (comb) hair with a hair pick' [AD: 344].

|| Unexpected looks the deletion of the expected *-b-.

[] PGZ **cmart-* 'calf (of leg)', PIE **srēin-* 'hip-bone' / *srēno-*, -*ā* Körperteilbenennung, etwa 'Oberschenkel, Lenden', PA **sigra* 'double bone (of animals)' < PN **cīg(V)r(1)V*'a k. of bone'.

|| Kartvelian item might be alternatively linked to PA **sigV*'bone, shin bone'.

A.10.1b. PA1 **siy-* (E) 'to go up to the bed', (Atk, Att) 'to go up from the shore', (Att) 'to go inland; to rise (tidally, of the sea)' [AD: 357].

[] PK **skin-* 'to jump, leap', PIE **skek-* 'to run, spring' / (*s)kek-*, *skeg-* 'springen; lebhafte Bewegung', PFP **cäkōe-* 'springen, hüpfen', PA **sāki* 'to jump, shake' < PN **caki* (~-*k-*) 'to jump, spring'.

A.10.1c. PA1 **saku-* 'flea' [AD: 348].

[] PA **sak'u(-rV)* 'a k. of stinging insect' < PN **cak'V* (~*s-*, *č-*, *s-*, *š-*, *-q-*) 'a k. of stinging insect'.

A.10.1d. PA1 **salu-* 'cover, sth. to hide behind (for hunter),

buckler, shield' [AD: 349].

[] IE: PGm **stila-* 'to steal', PU **sala* 'verstecken, verhehlen, stehlen; Dieb / to stay hidden; to steal; thief' / **sålā-* 'steal', PA **þela* 'to deceive', PYk **eþlənV-* 'to steal; thief' < PN **þVIV* 'secret; to deceive'.

A.10.1e. Al (E) *sniχ* (perh. *sni-χ* or *snīχ*) 'a species of grass' [AD: 370].

[] K: Grg *zna* 'sheaf of corn', PIE **songh-* 'sheaf of corn/straw', PD **sern-* (? **sen-r-*) < PN **þVgV* 'sheaf, ear of corn'.

A.10.1f. Al (E) *simsila-χ* 'mouse (house-mouse, whitish; small, with a sort tail, smaller than *asχukidax*)' [AD: 361].

|| Partial reduplication?

[] PGZ **zaml-* 'mountain mouse' < PN **þVmV-IV* (~-I-) 'a k. of mouse'.

A.10.1g. Al (Atk) *susxi-s* pl. 'bush' [AD: 378].

[] PK **þesa* 'firewood' (if Sv *zek* hereto; cf. Grg (d.) *šiša*), PU **cas/skV* 'bush, brushwood' < PN *[*þ*]V*sV* (-*kV*) 'wood, firewood'.

|| PU **c-* is quite irregular: **s-* would be expected.

A.10.1h. PAI **sþi-la-* 'k. of acid "putchki" (wild celery *Angelica lucida*)' [AD: 356].

[] PIE **sAk-* 'a k. of marsh plant (sedge)', PA **sik'ē* (~*š-*, **sek'i*) 'a plant with specific smell or taste' ("may be identical to **sik'ē* 'detail of the house' as an old name of some umbellate plant?") < PN **sVk'V* (~*c-*, *s-*, *c^w*, *s^w*, *z^w*, *š-*, *-q-*) 'k. of plant'.

|| Cf. PA **č'alg̥e* 'a k. of plant (reed) and its bast' and PA **sugū* (~*-o-*) 'a k. of weed'.

A.10.1i. Al (E) *siðāna-χ* 'graphite, shiny black paint' [AD: 357].

[] PIE **sōd-* 'soot' / sub *sed-* 'sitzen', PFP **s8t3* 'Ruß', PA **šiat'i* (-*k'V*) 'to set fire, burn' < PN **swVdwV* 'soot; to burn'.

A.10.2. PN **c'-*, **s-* (> PEAl **c-*) > PA1 **c-*.

A.10.2a. PA1 **cimiy-nu-* 'hallux, big toe' [AD: 143].

[] PA **č'im̥u* 'to pinch, pluck (with fingers)', PSD **čim-* 'to tickle, pinch', PYk **ce^we^wn* 'together' (in T *əl+...+cōn* carit.), PNv **cam-* 'to hold in hands, seize; to take out, pull out', PKm *-*čom* 'together' (comit.) < PN **c'imV* 'to pinch, pluck'.

|| PE **ətuma-* 'palm of hand' [ESQET 1360] / **ətemay* 'palm of hand' [CED: 118].

[] ? IE: PGm **pūmēn*, **pumēn* 'thumb', **pumala-* m., **pumila-* m. 'thimble', PNv **dāmk* 'hand / arm', PKm **tə^wmk-əč*, *-*tbjwuk* 'thumb' < ? PN **dwVmV* 'thumb'.

A.10.2b. PA1 **cila-* 'to become loose, be loosened (harpoon

line, thread, cloth)', ***cila-** 'crack (as in a wall that needs puttying)', ***cili-** 'to untie (rope, line, knot), unlace, untangle, unroll (packet), tear, rip up' [AD: 141].

[] PIE ***selg-** 'to throw away, pour out, send away, free' / **selg-** 'loslassen, entsenden, werfen, ausgießen', PIE ***(s)lēg-** '(to be) soft, weak, compliant' / **(s)lēg-** : **(s)ləg-** und **(s)leg-** 'schlaff, matt sein' (aus 'loslassen'), aus 'schlaff' über 'weichlich' auch 'wollüstig', ***slap-** (~ **-b-**) 'weak, flabby' / sub **lēb-**, **lōb-**, **lāb-**, **lēb-** 'schlaff herabhängen', auch 'Lippe' (?), z. T. mit anlaut. **s-**, PU ***selke-** 'to be loose', PA ***sal(b)i** 'loose', PSD ***Sal-i-** 'weary, tired' < PN ***sAÍV(-kI, -WV)** 'to be loose'.

A.10.2c. PA1 ***cīqi-** 'dry mud, earth, ground; to put mud (on plant)' [AD: 145].

[] PGZ ***mcíku-** 'dirty; to befoul' < PN ***c'ik'U** 'dry mud'.

A.10.3. PN ***-c- ~ *-c'- (> PEAL ***-c-)** > PA1 ***-c-.****

A.10.3a. PA1 ***umcu-** '(E) to kiss; to suck (breast of baby; water, etc.); to strain at (a gnat); sucking ("wart")' [AD: 439].

[] K: Grg *muç-* 'zusammenkneifen, zusammenpressen (Lippen)'; (< Zan?) *muč-* 'ballen (Faust), muča 'hollow of hand, handful', PFP ***mUčV** 'squeeze; fist' < PN ***mUc'V** 'to squeeze'.

|| The root contaminates with PGZ ***mžiy-** 'fist, fistful' / ***mžiý-**, PIE ***must-** 'fist', PFP ***mučk3**

'Faust' / **mukšV*'fist' < PN **mužyV*'fist'.

A.10.3b. Al (E) *qicax-six* 'to be frost', *qicax* 'frost' [AD: 315].

[] PFP **käč3-* 'kalt werden, sich erkälten / to cool down' / **käšV-* 'freeze' < PN **KajcV* (~ *q'-*, *-c'-*, *-č-*) 'cold; to cool down'.

A.10.4. PN *-c'- (> PEAl *-s-) > PA1 *-s-.

A.10.4a. PA1 **sa-* 'blade (edge) of knife, face, scarp, steep promontory (in place names)', **sa-bi-* 'edge, blade (of a tool); having a sharp edge' [AD: 342-343].

|| If < ***hesa-* < PEAl **mesV-*.

[] ? K: OGrg *miča-j*, Grg *miča* 'land, earth', PFU **mecä* 'Rand, Seite von etwas / edge, brink, side (of sth.)' < PN **mec*'V'edge, side (of sth.)'.

A.10.5. PN *-s- (> PEAl *-s-) > PA1 *-s-.

A.10.5a. Al (E) *isa-* 'to stand firmly, not fall' [AD: 211], PA1 **is-ya-* 'place where one lives, stays, sits, or sleeps, or sth. is; bed; (E, Atk) nest' [AD: 212].

[] PK **es-* 'to be' (Sv *-äsw* (impf.), *-esw* (conj.)), PIE **es-* (PIH **e-*) 'to be' / *es-* 'sein' (+ Hitt *as-/es-* (II) 'sein', Pal *as-*, Luv *as-*, HLuv *as-*, Lyc *es-*), **ēs-* (PIH **ē-*) 'to sit' / *ēs-* (nur medial)

'sitzen' (+ Hitt *as-* (I) 'bleiben, übrig bleiben' *as-/es-* (I) 'sitzen, sich setzen' [TISCHLER: 75, 77, 110], *ases-*, (*asas-*) (I) 'setzen; besiedeln' [TISCHLER: 79], *ses-* (I) 'ruhen, schlafen, bleiben'), PU ***āse-** 'stellen, setzen, legen; ein Zelt errichten / to put, set, lay; to dress a tent', PKCh ***iš-** 'to be' < PN ***PVsV** 'to be, sit, settle down, dwell'.

// Otherwise, with PFV ***is3-** 'sitzen, sich setzen / to sit, be sitted' / PU ***esA(-)** 'to settle down, dwell, be; place, stand', PA ***šiabu (-ri)** 'to sit; to be seated, implanted' (cf. Jap *isu* 'seat'), PYk ***raya- (~ *ra^wvə-)**O 'to sit, to be sitted', PNV ***tīv-** 'to sit, to be sitted on tr.; bench, chair', PKCh ***šva-** 'to sit (stat.), dwell', PKCh ***šva-yāl-** 'to sit down' < PN ***(H)saywV** 'to sit, dwell'.

A.11.1. PN ***3-**, ? ***c-**, ? ***3w-** (> PEAL ***c-**) > PA1 ***c-**.

A.11.1a. PA1 ***cila-** 'to become loose, be loosened (harpoon line, thread, cloth); crack (as in a wall that needs puttying)', ***cila-ma-** 'groove (of spear thrower; bore (of rifle); cornice, ledge, litt. groove with ridge; pl. screws', ***cila-na-** 'thread, line made of sinews; cord braided of four or more strands, binding string (along shaft of dart)', ***cili-** 'to untie (rope, line, knot), unlace; to untangle, unroll (packet); to tear, rip up; to loose (person)' [AD: 141].

[] PK **ʒal*- 'string', PSD **cel*- 'to draw, pull' < PN **ʒAIV* 'to draw, pull'.

A.11.1b. Al (E) *cikanagi-χ* 'a k. of auklet, prob. Cassin's auklet *Ptychoramphus aleuticus P.*' [AD: 140].

[] ?φ PIE **kōn-*, **k Vkōn-*, **k Vku-* 'a k. of yelling bird' / sub *kan-* 'sing'en, klingen, auch von anderen Geräuschen', PA **siuga* 'a k. of bird' < PN **[c]ugV(-nV)* 'a k. of big aquatic bird'.

|| If Indo-European < ***sk VkVn-*.

A.11.1c. PA1 **ciy-*: **ciy-it-* 'to attach, stick, glue; to put on, put in, put in place; to join, unite; marry, unite in wedlock', (Atk) *ciyis-xa-χ* 'marriage', (E) *cixi-ja-χ* 'fish glue', **ciy-t-* 'to stick, adhere, cleave; to unite, be united; to get married; to seize with its claws (of eagle)', **ciyti-* 'marriage, wedding', **ciyu-* 'resin, pitch, tar' [AD: 136-137].

[] PFV **sik3* 'dicht, fest / thick, firm', PD **žik-* 'thick, sticky, viscid, gum' < PN **žikV(~-k'-, -q'-)* 'thick, sticky'.

A.11.1d. Al (E) *ucu-lix* 'to suck, drink down (as through a straw or a tube); strain, filter', (E) *ucu-ka-χ* 'bill, beak (of birds); du. lips' [AD: 413-414].

[] ?φ PK **ʒow*- 'to graze', PA **ʒVbV* 'to bite, grit teeth', PSD **Suv-* 'to taste' < PN **ʒwVwV* 'to bite, to suck'.

A.11.2. PN *č̄-, *ž̄-, *š̄-, *z̄- (> PEAl *s-) > PA1 *s-.

A.11.2a. Al (E) *saðyu-ni-χ* 'dolly varden trout *Salvelinus malma spectabilis*' [AD: 344].

[] PA *sāro(-gV) 'a k. of big fish' < PN *carV(-gI) (~s-, č̄-, š̄-, ž̄-) 'a k. of fish'.

// Also possible the linkage to PIE *sorbh- 'a k. of fish (with red fins)', PFU *sur3 'Hecht / pike', PA *č̄'orV 'pike', PSD *čar- 'a k. of fish' < PN *č̄'Vi(j)V (~č̄-) 'a k. of fish'.

A.11.2b. Al (E) *sāyla-χ* 'dog', *sāylāða-χ* 'puppy' [AD: 345]

(PA1 *-Vða-/ *-aða-, *-Vza-/ *-aza- 'minor, etc.' [AD: 470]).

[] PK *žayl- 'dog', PIE *(s)kol- 'puppy' / (s)k^hel- sub *kel-*, *k(e)lē-*, *k(e)lā-* oder *kł*-? 'rufen, schreien, lärmeln, klingen', PA *solukV (~z-, -ł-, -a-, -k'-) 'a k. of small fur animal', PD *ža[v]il- 'dog', PYk *salvi- 'mouse', ?φ PNV *olvilak 'flying squirrel', PKCh *šaywäl(hə) 'squirrel; mouse' < PN *žayulV (~-x-) 'a k. of small fur animal'.

|| Metathesis and voicing assimilation in Altaic (or Kartvelian?).

|| Cf. PA *sialo(-kv) 'a k. of small fur animal' (< PN *čAIV (~-č̄-, š̄-)).

A.11.2c. PA1 *sityi- pl. 'excrement, feces; to defecate, empty the bowels' [AD: 365-366].

[] K: Grg *zitx-* 'dirt', PIE *skeit-, -d- (~-k-) 'vomere, cacare', PU *sitta 'Dreck, Scheiße, Kot, Mist; seine Notdurft verrichten,

scheißen / excrement, dirt; to defecate, shit' / PFP ***sittā** 'dirt' (+ PSmd ***uit-** 'to defecate'), ?σ PD ***šint-** (?) 'to stick to; gum' < PN ***ʒitxV(~-t'~)** 'excrements'.

|| PIE *sk- ~ *sk- looks irregular.

A.11.2d. PAI ***sus-a-** 'to tangle, become tangled (of fish line)' [AD: 378].

[] PGZ ***čec-** 'to get entangled, to comb the wool' < PN ***č'ec'U** 'to tangle, get tangled'.

A.11.2e. Al (Atk) *zuzyi-s* pl. 'bilberries *Vaccinium myrtillus*' [AD: 378].

|| Metathesis and voicing assimilation < PAI ***suysi->** ***suzyi-**.

[] PFU ***c8kč3 (-kk3)** 'black currant / schwarze Johannisbeere *Ribes nigrum*' (+ PFV ***c3kč3-t3r3** 'black currant / Johannisbeere *Ribes sp.*'), PA ***žiutke** 'a k. of berry', PSD ***Sikat-i** 'field-bean' < PN ***žukCV** 'a k. of berry'.

A.11.2e. Al (E) *sminu-χ* 'dusk, twilight', (Atk) *simnut-ikuχ* 'the dusk falls, it is getting dark (not as dark as *takχ-t-ikuχ*)' [AD: 370].

[] PFP ***sim3** 'schwarz; Rost; rosten, rostig werden / black; roasted; to get roasted', PA ***siumi** 'dark, obscure' < PN ***sumi** 'dark; to get dark'.

|| Cf. PA ***šamu** 'tar, soot, fumigation'.

A.11.2f. PA1 ***sity-** 'space under or below, underside; under, underneath, below; while' [AD: 365].

[] PFU ***siδV** (~ -I-) 'low', PA ***sioti** (~ z-) (-gV) 'behind, bottom', PSD ***Sūt-** 'anus' < PN ***sotV(-gV)** 'behind; buttocks'.

A.11.2g. Al (E) *sīya-* 'to stretch out the arms; to measure by fathoms', (Atk) *sīya-* 'fathom (the length of the outstretched arms, between the tips of the middle fingers)' [AD: 357].

[] PFU ***seka** 'Zwischenraum, Mitte >< Innere / space between' < PN ***sikV** (~ z-, ȝ-) 'to stretch the arms; fathom, space between'.

A.11.2h. PA1 ***susu-** 'pus (in wound, in eye); to suppurate, get infected (of eyes)' [AD: 378].

|| Reduplication or suffixation?

[] PU ***säje** 'Eiter, Fäulniss; eitern, verfaulen / pus, rot; to rot' / ***sexji** 'matter', PA ***suji** (~ z-, ȝiju) 'sour' < PN ***sujV** (~ z-) 'pus, rot'.

A.11.3. PN ***-C-, *-s-, *-z-** (> PEAL ***-s-**) > PA1 ***-s-**.

A.11.3a. Al (E) *sa-qu-cikða-χ* 'fly (in general), housefly, gnat' (some anc. dialect > AAY *saqumkaq*, *sayəkaq* 'deer fly') [AD:

342], (Atk) *sa-χu-likaðyi-s* pl. 'a k. of brown flies'.

|| If < ***həsa-* < PEAl **məsV-*.

[] PGZ **mcer-* 'insect, fly', PIE **mūs-* 'fly, stinging fly, gnat' / *mū-, mus-* schallnachahmend für 'Mücke, Fliege', PU **omča* 'eine Art Insect, Käfer / a k. of insect, bug', PA **m[a]bči* 'worm, insect', PSD **mūsir-* 'red ant' (cf. PKK **muc?i-ri* 'a k. of ant'), PKCh **məðe* 'insect [mosquito, fly]'
< PN **mVwČV* 'k. of insect'.

A.11.3b. PAI **sōa-* 'star' (< **siða-*) 'star' [AD: 255-256], (Att) *sijk-ābī-χ* 'star' (< **siðb-ābī-*), (Atk) *siðbī-sax-, siðbī-sxi-* 'to shine' [AD: 357].

|| < **əsəða-*.

[] PIE **aster-* (PIH **a-*, **Ha-*) 'star' / *stēr-* 'Stern' (+ Hitt *astira-* c. 'Stern?', *haster-* c.), PA **zēra (-g/yV)* 'light, moon, moon cycle (year)', PD **sār-i* 'time, turn' < PN **HVzer, a* 'cold luminary (moon or star), nightly sky'.

A.11.3c. PAI **usyi-* 'willow bush (grows on Unalaska); alder; bush; tree (growing)' [AD: 378].

[] PIE **ōs-* 'ash-tree' / *ōs, ūs-i-s, ūs-en-, os-k-* 'Esche', PU **oksa* 'Ast, Zweig / branch, twig' / PFP **oksa* 'twig' < PN **HosV(-KI)* 'a k. of tree'.

A.11.3d. PAI **a-* 'to be bright, shine brightly', **a-ðiya-t-* 'to

make (lamp) brighter', ***a-ni-** 'to light (fire, lamp, stove); to set fire to (wood, etc.)', ***a-ni-isi-** 'lighter (for cigarettes), match' (***-usi-**), ***a-ni-ja-** 'to try to light', ***a-t-** 'to start to burn (of fire), to catch fire', ***a-t-a-** 'to have caught fire, to burn (of fire, lamp, wood, house; of sun)' (***-t-(B)ta-**) [AD: 5].

|| PA1 ***asV-** or ***sV-** would be expected.

[] ? K: Sv *-V:šw-* 'to ignite', PIE ***Has-** 'to burn, dry' hearth, ashes' / **ăs-**, davon **azd-, azg(h)-** 'brennen, glühen' (+ Hitt *hassac* 'hearth, fireplace', Luv *hassaniti* 'hearth'), PFU ***ăs3-** 'heizen; sehr heiß, sehr warm sein / to heat, to be very hot, very warm', PA ***ase (p'-)** 'to catch fire; hot', PD ***es-** 'to shine' (cf. PD ***is-** 'fire; to glow': PKG ***isr-** 'glow-worm', PPM ***isk-e** 'fire'), ?φ PYk ***eƿeƿ-** 'to burn, roast' (Tnd *ō̄-m (ō̄l)*, inch. *ō̄-na-m*) < PN ***HasV** 'to burn, take fire, be hot'.

A.12.1. PN ***sw-**, ***cw-** (> PEAl ***0-**) > PA1 ***0-**.

A.12.1a. PA1 ***anya-** 'line, rope, (E) esp. sinew rope for big harpoons; (Atk) bowstring' [AD: 73].

[ESQET 1432] / ***iguyar** 'finger or toe' [CED: 138].

[] PIE ***senew-**, ***snēw-** (PIH ***sH-**) 'tendon' / **snēu-** : **smū-** und **snēu-** etwa 'drehen', bes. 'Fäden zusammendrehen, knüpfen'; andererseits 'sich drehen, schnelle Bewegung' (+ ? Hitt *ishunau* n. 'tendon? upper-arm?', that is a "paarweise auftrender Körperteil" is actually no objection against 'sinew' or 'vein'), PU ***sēne** /

sōne* 'Ader, Sehne / vein, sinew' / **šini* 'vein', PA **siɔŋr(1)e* 'vertebra, spine ramification', PYk **ronə-* B 'to string', PChk **Ranъyžo-* (Ra-n-ъyžo* ?) 'through out' < PN **swęgV (-r(1)V)* 'sinew, tendon'.

A.12.1b. PA1 **any(i)-* '(sg., du.) mind; (du.) opinion, idea; (pl.) thoughts' [AD: 72], **anuya-* 'to be wanted, be needed', **anuy-ta-* 'to have in mind, think, suppose, want, desire, wish (sth.), want (sth. to happen), intend, decide, need' [AD: 79-80].

|| We can not accept the author's suggestion of the identity with the item meaning 'intestines, guts'.

[] PGZ **čan-* / **čn-* 'to know, recognize', PU *[*čuŋ*]V 'to look' (PUG **šunšV-* 'to look, glance', PSmd **segə* 'to see, look'), PA **čiŋV (~t-)* 'to listen, consider', PYk **cug-ðə-* B 'to think; to consider; mind; thought, opinion; clever; to get clever', PNv **dawęg-* 'to get accustomed; to teach; to learn', PChk **cimpu- (~i)* 'mind, reason, intellect; soul, spirit, mood; humour, temper, character; to cogitate, to think; to remember' < PN **čwVnV (-KV)* 'to look, know'.

A.12.1c. PA1 **ayal(i)-* 'rear, hind part; space behind, subsequent time; behind, after', **ayali-itä-* 'to follow up', **ayali-ku-* 'to be too late; to be delayed, overdue; late', **ayali-la-* 'the one after the other, one by one', **ayali-t-i-* 'to miss behind (shooting); to

reproach; aim, goal', ***ayal-muðaþ** 'to move backward (as of a boat); to go to the rear (in a boat); backward, back', ***ayalu-uyib-** 'back, being or coming behind; the hind part; later, last; the latter part; to be last' [AD: 19-20].

[] ?σ PIE ***sekʷe-**, ***skʷe-** 'to follow', PA ***ček'á** 'to repeat; again, always' < PN ***cwek'V** (~cw-, čw-, -q-) 'to follow'.

A.12.1d. PE ***alu** 'sole of boot' (PYp ***alu-** 'sole of foot; blade, palm of paddle', PIn ***ály** 'sole') [ESQET 1622] / ***alu(r)** 'sole' [CED: 20], PE ***ala** 'animal's paw, mitten' (PYp ***ala-** 'mittens made from caribou leg skins' (+ Nauk *alíxtəq* 'fur made socks'), PIn ***ala (-lo-, -ro-)** 'sole of animal's paw; mitten') [ESQET 1623] / PIn ***alaq** 'sole' (+ Yp) [CED: 16].

[] PIE ***swol-** 'sole' / (**suel-**), **suol-**, **sul-** 'Fußsohle, auch Grundlage, Unterstes' < PN ***swalV** (~cw-, sw-, čw-or žw-, -l-) 'foot, sole'.

// Also likely the linkage to PA ***álcá** 'knucklebone, foot' < PN ***HaÍV** 'foot; sole'.

A.12.1d. PAI ***iyaci-** 'sinew, tendon, stringy muscle; (Atk) sinew thread' [AD: 176].

[] PA ***siogdu** (~z-) 'tendon, sinew', ?σ PYk ***coyi-l** ~ ***cayi-l** 'leg; hip; heel; paw' [JUKAET 1260] / ***coyul** 'spinal cord, marrow', PNV ***gäcøy** 'leg', PKM ***[t̥əhl̥əw]čhə-čhj'** 'hind dorsal

fish pin' < PN **cwegV* (~ *c-*, *s-*, *c-*, *s-*, *š-* or *z-*, *z-*, *zw-*, *ž-*) 'tendon, sinew'.

A.13.1. PN *č-, *čw-, *č'-, *č'w- (> PEAl *c-) > PAI *c-.

A.13.1a. AI (E) *cūx-siX* 'to sizzle (e.g. meat thrown into a frying pan), to hiss (to fry)' [AD: 150], PAI **cūyi-lakan* 'to be silent, quiet', (Atk) *čuyi-χ (tutalakan)* '(not hear) a sound' [AD: 151] (*-lakan neg. conjunctive [AD: 518]).

[] K: Grg *čqav-il-* 'heulen, jaulen, schreien', PIE **steu-* 'to commend, to affirm' (+ Hitt *isduwa-* 'kund werden, offenbar werden'), PA *č'ābu 'sound; fame' < PN *č'aw(g)V ~ *č'aywV 'to make a sound'.

A.13.1b. PAI **cīyujaka-* 'song sparrow *Melospiza melodia* [= *Zonotrichia m. Wilson*], water pipit *Anthus spinolella rubescens* [= buff-bellied pipit *A. rubescens Tunstall*], rosy finch *Leucosticte tephrocotis*, dipper *Cinclus mexicanus*' [AD: 138], (Att) *cuyucīja-χ* 'song sparrow *Melospiza melodia*' [AD: 152] (contam. with **cuyu-* 'sand, mud' [AD: 151-152]).

[] PGZ *čxīkw- 'jaybird', PFP *s8kc3 'Auerhahn / capercailye, wood-grouse *Tetrao urogallus L.*', PA *sjuš[k]ji (~ š-) 'a k. of bird' < PN *čwixk 'a k. of large wood bird'.

A.13.1c. Al (E) *cuðu-y-asi-* 'long spear with a barbless point (for killing people or animals; slides down on the water)' [AD: 149], PAI ***cuðb(i)-** 'edge, sharp ridge (of mountain); narrow side (of box)', ***cuðu-** 'line, lineal ornament; groove (as in a board)' [AD: 149].

[] ? PK ***čur-** 'to cut, castrate' < ? PN ***č'ur(l)V(~ -r-)** 'spear; to cut'.

A.13.1d. PAI ***cuya-** 'to be all there, be complete; to be enough, sufficient; to have enough, to have all that is coming to one (of person)' [AD: 150].

[] PFU ***čukk3 (*čokk3)** 'dicht, dick', PA ***č'ako** 'many; be full, enough' < PN ***č'wak'V(~ -q -)** 'thick, sufficient; to be enough'.

A.13.1e. Al (E) *ciciy-* 'bud' [AD: 134].

[] K: Grg *čoč-* 'sharp point, corner, sprout (of a jug)', PFU ***cuča** 'Spitze, Gipfel / tip, peak, summit', PA ***č'[i]č'V** 'sprout, prick, penis' < PN ***č'wič'u** 'sharp point, tip, sprout'.

|| Cf. also PA ***č'ec'u** 'flower'.

A.13.1f. Al (E) *cil(h)mija-* 'wet snow falling' [AD: 360].

|| Cf. Al (Attu) *hlaavituqija-χ* 'flake of wet snow', *hlaavituqija-I* 'to sleet' (< ***hla-myti-ti-qða-**) [AD: 254].

[] PIE ***slōt-** (~ -ā-), ***sIAut-** 'drizzle, sleet' / ***(s)leu-** 'schlaff herabhängend, schlaff', PA ***čiolū (~ t-)** 'ice, hail' < PN ***čojlu**

(~č'-) (~čwi-) 'hail, drizzle'.

A.13.2. PN *-č'-, *-č'w- (> PEAl *-c-) > PAI *-c-.

A.13.2a. PAI ***kuci-** 'boulder, big rock', (E) pl. 'dam', ***kuci-** 'to fish among boulders (standing on a rock) with rod and line for' [AD: 245].

|| Cf. PE ***kica-** 'stone, anchor' (PYpS ***kica-** (-unt), PIn ***kica-**) [ESQET 118] / ***kicaR** 'anchor' [CED: 177].

[] K: Grg *kviša* 'sand' (b→ Sv *kviše* id.), PIE ***g̚eis-** 'gravel', PFU ***k&č3** 'Sand; sandige Stelle', PSD ***kIsar-** 'mud, mire' < PN ***kuč'wI** (~ ***kwisV**) 'gravel, pebble'.

A.13.2b. PAI ***qaci-ma-** 'thigh, haunch (of caribou), thighbone, femur' [AD: 292].

[] K: Grg *koč-* 'ankle', PFP ***kask3** 'Kreuz (des Körpers), Mitte des Körpers' (if not < ***keske** 'middle'), PND ***qōcl** 'bone' (< PD ***kōc-**), PYk ***aqca-** 'shin, shinbone' < PN ***k'ac'V** 'shin, thigh'.

|| Notice **m**-suffix in Aleut and Korean.

A.13.3. PN *-nC- (with indeterminate sibilant affricate) > PAI *-c-.

A.13.3a. Al (E) *umcu-χ* 'breast of sea lion (the heavy texture blubber in the chest under the arms of sea lion)' [AD: 439].

[] K: Grg *muc-cl-* 'stomach, belly', ?σ PIE ****musk-*** 'vulva, genitalia', PFV ****muča*** 'Hodensack', ?φ,σ PGnd ****mēnč*** 'egg; testicle' < PN ****mu(n)CV*** 'front part of body'.

A.14.1. PN *š- (> PEAl *s-) > PA1 *s-.

A.14.1a. PA1 *-***su-*** pb. 'to be good at V-ing, to V good, ably, easily' (also in comp. *-***su-đa-***, *-***su-na-***, etc.) [AD: 550].

[] PK ****šw-*** 'to resemble', PIE ****swā-*** (~-***ō-***) / ****sū-*** 'good, strong, healthy', PFU ****šejač-*** 'gut, gesund; ? gerade / good, healthy; strait' / ****sūwā-*** 'good', PA ****sū*** 'well, very, extremely', ? PChk ****etu*** 'yet, more, (no) more; better' < PN ****šu(wV)*** 'good; very'.

A.14.2. PN *-š- (> PEAl *-s-) > PA1 *s-.

A.14.2a. PA1 ****smał,*** ****smałi-*** 'sulfer (from volcano), pl. sparks' [AD: 369].

// If < PEAl ****əsV-mV-***.

[] ? PFV ****ešā-*** 'warm, heiß; wärmen; erhitzen / warm, hot; to warm, heat', ? A: Tng: Neg *isket* 'to suffer of heat', ?σ PD ****esar-*** 'water for boiling', PKCh ****iži-*** 'to boil (intr., tr.); broth' (cf. PKm ****is-*** 'to scald os.' < PKCh ****iti-?***) < PN ****HesV*** (~-***č-***) 'to warm, heat'.

// Also likely the linkage to K: Sv -V:***šw-*** 'to ignite', PIE ****as-***

(PIH ***Has-**) 'to burn, dry' hearth, ashes' / **ās-**, davon **azd-**, **azg(h)-** 'brennen, glühen' (+ Hitt *hassa-* c. 'hearth, fireplace', Luv *hassaniti* 'hearth'), PFU ***ḁ̈s3-** 'heizen; sehr heiß, sehr warm sein / to heat, to be very hot, very warm', PA ***ase (p'-)** 'to catch fire; hot', PD ***es-** 'to shine' (cf. PD ***is-** 'fire; to glow': PKG ***isr-** 'glow-worm', PPM ***isk-e** 'fire'), ?φ PYk ***eʷeʷ-** 'to burn, roast' < PN ***HasV** 'to burn, take fire, be hot'.

A.15.1. PN *j- (> PEAl *0-) > PAI *0-.

A.15.1a. PAI ***aīya-** 'leg (human, animal), pl. limbs (arms and legs)' (< ***ala-īya-**) [AD: 54].

[] PU ***jäl3-** 'to go', ***jälke** 'Spur, Fleck' (+ PSmd ***je**, ***je-nṭā-tə(-)**, ***je-kəl-**) / ***jelkä** 'trace', PFU ***jalka** 'Fuß, Bein / foot, leg' / ***jílkå** 'foot, leg', PA ***älak'u** 'to walk, step', ?φ PYk ***sisqa-** 'finger', PNv ***ṣirq** 'inner part of knuckle', PKCh ***č̥elywbt-** {***l̥čywbt-**} 'finger' < PN ***jala (-k'q'V)** 'foot, leg; to walk, step'.

A.15.1b. Al (Atk) *iku-na(-)χ* 'cold, coldness' [AD: 190].

|| Notwithstanding K. Bergslund, hardly < PAI ***iku-** 'to turn in a different direction, turn around, turn back' [AD: 189-190].

|| b→ PChk ***iy(u)-** 'cool; to cool down'.

[] PIE ***eig-** (PIH ***ei-**) / ***jeg-** 'ice-floe, icicle' / **ieg-** 'Eis' (+ Hitt *eka-* 'ice?', *ekuna-*, *ikuna-* 'cold'), PFU ***jäks3** 'kühl, kalt;

kühl, kalt werden / cool, cold; to get cool, cold', PFV ***jakša** 'kühl, kalt; kühl, kalt werden', PND ***ēq** 'to cool down', PKCh ***[t'vktv]-jyv-** 'wind' (litt. "strong wind") < PN ***jekI** 'ice'.

A.15.2. Unexpected preservation of PN *j- > PA1 *j-.

A.15.2a. Al (Atk) *jaⱩi-χ* 'skin thong for sewing the skin to the baidarka frame', *jaⱩi-I* 'to sew (the skin) to the baidarka frame' [AD: 463].

[] PIE ***jōs-** 'to gird' / *jō[u]s-* : *jūs-* 'gürten', PU ***jäje** 'Gurt, Gürtel / girdle, belt', PSD ***jā-** 'to tie, bind', PYk ***jeʷeʷ-** O 'streak, girdle, belt' < PN ***ja[γ]V** 'to tie, bind; strap, belt'.

A.15.3. PN *-j- (> PEAl *-j-) > PA1 *-j-.

A.15.3a. Al (Atk) *huju-s* perh. some k. of fish' [AD: 457].

[] PU ***paj3** 'eine Art Fish', PSD ***paj-** 'a k. of fish' < PN ***p(w)ajV** (~*p*'-) 'a k. of fish'.

A.15.3b. PA1 ***maj-qu-** 'to be healthy, vigorous; vigorous, strong, agile, dexterous, skillful' [AD: 276].

[] PA ***majV** 'fat' < PN ***majV** 'fat; to be health'.

A.15.3c. Al (Att) *taju-la-* 'to keep silent, be boared, lonesome'

[AD: 396].

[] PIE ***(s)tāj-** 'to steal, do secretly' / **(s)tāi-** 'heimlich um etwas bringen, hehlen, stehlen', PFU ***tiwā(-ne)** 'still, ruhig' (> FV 'tief') / ***tiwā** 'calm, deep', PA ***t'ēja (-bV)** 'calm, quiet' < PN ***t'ejV (-wV)** 'silent, calm, quiet'.

A.15.3d. PA1 ***kaj(-uy)** 'also, too, (not) either; further; (but) still; and also, and; again' [AD: 236].

[] K: Grg *ki* 'yes, so', PIE ***kaj** 'and, also' (conj.) < PN ***k'Aj(V)** 'and, also'.

A.16.1. PN ***k-**, ***kw-**, ***k'-**, ***k'w-** and, under some unknown conditions, ***g-**, ***gw-** (> PEAL ***k-**) > PA1 ***k-** before the former front vowels.

A.16.1a. PA1 ***kulu-** 'deep place in the sea, deep and calm pool in a river' [AD: 247].

[] ?φ IE: PBlt ***gil-** 'deep', PSD ***kol-** 'a deep place, deep pit' < PN ***kw̥l̥V** 'deep place, deep valley'.

A.16.1b. PA1 ***katyi-** 'flea' [AD: 234].

[] PFP ***kutke** 'ant' / ***kutki** 'ant', PA ***k'jōt'ekV** 'a k. of stinging insect' < PN ***k'wet'ekI (~q'(w)-, -ä-)** 'a k. of stinging insect'.

A.16.1c. PA1 ***kula-may'** Pacific right whale *Balaena glacialis* = ? [Atlantic, black] right whale *Eubalaena glacialis* Müller, and/or bowhead whale *Balaena mysticetus L.*' [AD: 247] (***-may-** 'big N, real N; to V greatly' [AD: 528-529]).

[] K: Sv *kal-max-* 'fish', PIE **(s)kʷal-** '(a k. of) big fish, whale' (cf. PIE ***klūp-** (~*k-*) 'a k. of fish'), PFP ***kʷl̥cV** 'eine Fischart', PA ***k'ula** 'a k. of big fish', PSD ***kol-** '(a k. of) fish' (cf. PSD ***kōl-** 'a k. of fish'), PNv ***qalem** 'whale, small whale' < PN ***k'ulV** 'a k. of big fish, whale'.

|| Remark the same ***-m-**suff. in Svanic, Mongolian, Nivkh and Chukchean.

|| Unexpected PA1 ***k-**, maybe from confusion with PN ***kalu** 'a k. of fish'.

A.16.1d. A1 (E Atun, Att) *kn̥x* 'whiskered auklet *Aethia pygmaea*' [AD: 243], (E) *kð̥x*, *kð̥yi-*χ id. [AD: 237].

|| The former form (*kn̥x*) should be most archaic, being attested on the opposite side of the Aleut territory.

[] PD ***kēy-** 'magpie, snipe', PKCh ***kip̥hyut** 'capercaillie *Tetrao urogallus L.*' < PN ***kInyV** (~*k-*, *q-*) 'a k. of middle-size bird'.

A.16.1e. PA1 ***akalu&bi-** 'road, path (of fox, etc.), way, route (at sea)' [AD: 43].

|| Cf. also PEAl ***AyIV-*k-*** 'to walk; to travel' [K-EEA]: PE ***øylo-*k-*** 'to walk, to move, to travel' (PYp ***øylob-** 'to walk, to move; to travel (by boat or car)', Pln ***øylob-**, ***øyluə-** 'to move, to travel; sledge track') [ESQET 1288] / ***øyler-** ~ ***øyilər-**

'move or travel' [CED: 100] (+ Car *iyliniq* 'beaten track', Grn *ihtiniq** (old orth.) *iglineq* 'sledge track' [CED: 111]), PlIn ***iyliq-** 'move aside', ***iyluaq-** 'go or hit to one side' [CED: 123]; PA1 ***aylub-t-** 'to move from one place to another, to be removed, to change position, leave the place' [AD: 27].

[] PK ***gwal-** 'go' (imper.), IE: PSl ***gūljātī** 'to walk', PU ***kulke-** 'sich bewegen, gehen (zu Lande und zu Wasser)' / PFU ***kulki-** 'run', PA ***gele** (***geł** ?) 'to come, go', PYk ***keʷl-** 'to come; arrival', PNv ***ge(l)-** 'to go around, turn back', ***ge-** 'to fall (of rain, snow, etc.)', PChk ***-yal-** / **-yel-** suff. (in Kry *kəmhá-tva-yal-la* 'to squirm'), PChk ***ščl-yal-** suff. (besides ***ščl'b-**) 'to lie (of animals)', PChk ***əR-yel-** 'to enter, to come in, to penetrate; to bring in' < PN ***gel(w)V** 'to go, walk; road'.

|| No trace of labialization in Altaic.

|| Cf. PKCh ***r-kəta-** 'to run along, run away', PKCh ***'erkežə-** 'to hasten, hurry up; to leave (from), part', and PKm ***k'ɔł-**, ***k'wɔł'i-** 'to come, to appear' (< PKCh ***r-kɔł-**).

A.16.1f. PA1 ***kaðyi-** 'stick, post (E for tying boat); (Atk) peg; (Ber) penis' [AD: 223].

[] PIE ***ghrān-** 'edge, end' / **gher-**, **ghrē-** : **ghrō-** : **ghrə-** 'hervorstechen', von Pflanzentrieben oder -stacheln, Borsten, von Erderhebungen, Kanten usw., PF ***kara** 'thorn, branch', PA ***gar[ə] (-KV)** 'sharp edge', PD ***gar-** 'stick' < PN ***gara** 'sharp edge'.

A.16.1g. PA1 ***kilma-** ~ ***kimla-** 'stomach; belly; (E, Atk) bladder' (E *kilma-χ*, Atk, Ber *kimla-χ*, Att, Med *kivla-χ*) [AD: 238].

[] PK ***gul-** 'heart', PIE ***gʷelbh-** 'foetus, womb' / **gʷelbh-** 'Gebärmutter; Tierjunges', PND ***kul̥ / *kōl̥** 'belly, abdomen', PKCh ***'ek̥aime** 'kidney' < PN ***gwil̥V (-mV, -bV)** 'internal organs (heart, kidneys, etc.)'.

A.16.1h. Al (Atk) *k̥jux*, *k̥juyi-χ* 'jaeger *Stercorarius spp.* (two species, probably Parasitic jaeger *St. parasiticus L.*, and long-tailed jaeger *St. longicaudus Vieillot*)' [AD: 242].

[] PA ***g[io]jk'u** 'bird of prey' < PN ***gejk'u (~ -q'-)** 'a k. of bird of prey'.

A.16.1i. Al (Att) *kulku-* 'bent finger, pl. 'knuckles' [AD: 247].

[] PIE ***ghwelə-** 'to wind, shift, lie (tell lies)' / **ghuel-** 'sich krümmen, von der geraden Richtung abbiegen (auch geistig und sittlich) u. dgl.', PA ***gilu (~ -o, -a)** 'curved object' < PN ***g(w)ilV** 'to curve'.

A.16.2. PN ***-k(w)-**, ***-k'(w)-**, ***-g(w)-**, ***-q(w)-**, ***-q'(w)-** (> PEAl ***-k-**) > PA1 ***-k-** before the former front vowels.

A.16.2a. PA1 ***tuk-u-** 'black bass (dusky rockfish) *Sebastodes*

ciliatus Tilesius' [AD: 404].

|| Cf. Al (E) *tukūja-* 'globefish, eel-like fish' [AD: 403].

|| Cf. also PEAl ***taqV-** 'arctic cod or sim.' [AD: 393]: PYp ***taqib'** 'arctic cod' [YUPET 1825]; Al *tāqa-χ* 'silverhake or walleye (Alaska) pollack, *Theragra chalcogramma*' [AD: 393] b→ PYpS ***taaqaq** 'cod-like fish' [CED: 322].

[] ? PIE ***dghu-** 'fish' / **għoġi**- (oder **għiġi**-?) 'Fisch', ?φ PU

***totke** 'Schleie *Cyprinus tinca* = tench *Tinca tinca L.*' (if metath. < ***tok-te**) / PFU ***totki** '[tench] *Tinca* [gen. *Cuvier*]', PA ***diāgi** (~*zi-o*-) (~*jg-*?) 'fish', PChk ***tužke** (= ***tujke**) '(nothern) pike *Esox lucius L.*' < PN ***do[j]gI** 'fish'.

|| Cf. IE: Lat *tinca* 'tench'.

|| Note the same suffixal PAI *-u- as in Indo-European.

|| This etymology contradicts O.Mudrak's linkage of PE ***eqatuy** (~*i*-) 'fish' [ESQET 582] to the same Nostratic root.

A.16.2b. PA1 ***sāku-** 'king eider *Somateria spectabilis*', ***sāku-na-** 'to be skinny, lean, meager; skinny, lean, meager (of person, seal)' [AD: 348].

[] PA ***sakosako** 'magpie' < PN ***SakV** 'a k. of middle-sized bird'.

A.16.3a. PN *-k(w)-, *-k'(w)-, *-g(w)-, *-q(w)-, *-q'(w)- (> PEAl *-y-) > PA1 *-y- before the former front vowels.

A.16.3a. PA1 ***tuy-āði-** 'urine, urinary bladder; to urinate, pour out, pour forth (as of water from a cliff)' [AD: 402] (> AAY (AP) *tuyāriq*, (Kod) *tuyaʔ?iq* 'bladder').

[] PK ***tkor-** / ***tkr-** 'to flow, splash', PIE ***dgʷher-** 'to flow, flood' / **gʷhōer-** 'rinnen, fließen; zerrinnen, verschwinden', PA ***t̥uke** 'to pour' < PN ***tuki(-r₍₁₎/rV)** 'to flow, pour'.

// Otherwise to PIE ***tekʷ-** 'to flow, run' / **tek^₂-** 'laufen, fließen' (contamination of two original roots, 'to flow' and 'to run'), and further to PK ***t̥lik-** (***t̥lik-** ?) 'to run away quickly', PA ***t̥ogsu** 'to run; hare', PD ***t̥ak-** 'to walk', ?φ PKCh ***xikūr-** 'to go; trace' < PN ***t̥oKV** 'to run'.

A.16.3b. A1 (E) *ilyu-l ix*, *ilxu-l ix* 'to stay, remain, stop', PA1 ***ilyu-t-** '(E) to retain; to stop (so. who is trying to go out); (Atk) to receive, get (object; command); to welcome (person); to take (wife); to take into one's head, to learn' [AD: 195].

[] PIE ***leikʷ-** 'to leave' / **leik^₂-** 'lassen, zurück-, übriglassen', PU ***likke-** 'sich bewegen' (cf. PSmd ***lek3-**), PA ***lejk'a-** 'to intend, demand' < PN ***lejk'wI** 'to follow, send, leave'.

A.16.3c. PA1 ***quyu-lu-k̥d̥a-** 'ankle, knob of ankle', ***quyu-tu-** 'knob, bony protuberance: knob of the ankle, malleolus; knob of wrist, ulnar eminence' [AD: 333] (*quxu-* ~ *qixi-*).

[] PA ***kukata** (~-k'-) 'carpal joint' < PN ***kukV** (~-k'-, -q'-) 'a k. of small bone' [K-ENB] (A, AI).

A.16.3d. A1 (Atk) *aynu-* 'to copulate', *aynūsi-χ* (< *aynu-usi-*)

'penis' [AD: 27].

- [] PA ***ok'**V 'coire', ?σ PSD ***ō-** 'to be glad, to love' < PN ***Hok'**V(~wV-, -q-, -gw-, -x-) 'to copulate' [K-ENB] (A, Al).

A.16.3e. Al (Atk, Ber) *xaðax-six* 'to move (esp. walk) fast' [AD: 162].

// If < PEAl ***oyati(V)-**. Restricted as often in case of corresponding Altaic diphthongues.

- [] PA ***kiod[o]** 'to go, walk', PD ***kad-a-** 'to cross' < PN ***kwedV**'to move, to walk fast'.

// Phonetically weaker looks an attempt to link the item to PGZ ***qad-** / ***qed-** / ***qd-** 'to move, go, arrive', PA ***ōti**(~-t-) 'to move, change place', PD ***ād-** 'to play; to dance, move', ***ōd-** 'to run, escape' < PN ***godwV**'to move'.

A.16.3f. PA1 ***(h)iysi-** '(du.) hips; loins, bony structure of the pelvis felt across the back; (sg.) sacrum' [AD: 180].

// From ***iys-yi-** with petrified du. marker.

- [] PIE ***iKs-** 'groin', PA ***k'āsa** 'place between limbs' < ? PN ***(Hi)k'VsV**(~-s-, -c-) 'loins, groin'.

// Cf. PIE ***kokṣ-** 'bosom, armpit'.

A.17.1. PN ***k-**, ***kw-**, ***k'-** ~ ***q'-**, ***k'w-** ~ ***q'w-** and, under some unknown conditions, PN ***g-**, ***gw-** (> PEAl ***q-**) > PA1 ***q-** before the former back vowels.

A.17.1a. PA1 ***qān-ku-** pl. 'three' [AD: 309] (< ***qamt-ku-**), ***qamci-** du. 'eight' [AD: 306].

[] PIE ***gAm-** / **-e-** 'to hold (in hand)', ?σ PA ***kāmV** 'be weak, oppress', PD ***kam-** 'grasp' (basically Tel) < PN ***kamV** 'to hold in hand, pinch'.

A.17.1b. A1 (Att) *qali-* 'grass matting' [AD: 301-302].

[] PIE ***kalam-** 'straw', PA ***k'alo** 'reed, a k. of grass', PYk ***qal'ar-** 'plain tundra; pr. n. (a place)' < PN ***k'ałV** (~ *q'-*) 'straw, a k. of grass, reed'.

|| Unclear Indo-European palatalized ***k-**.

A.17.1c. PA1 ***qaluy(-)** 'to pass across (a stretch of water); crossing' [AD: 305].

[] K: Mgr (*n*)*kill-* 'to roam', PIE ***kel-** 'road; to roam' / **keleu-** 'wandern; Weg', PU ***kälä-** 'waten' / ***kälä-** 'to wade; ford' (+ Slk *qäl-* 'to run, walk') / ***kälä-** 'rise', PA ***kalV** (~ *-ł-*) 'near; to come near', ? PND ***käl-** 'to go, lead' (not deriv. from PD ***kā-** 'to go'), PYk ***qal-** B 'to escape, run away; to run', PNV ***kole** (~ *g-*) 'street' (cf. Niv *kelma-* 'walk'), PKCh ***ətqəł** (~ ***'u-**) 'to wade, to cross by bridge' < PN ***kalV** 'to wade, roam, ford'.

|| Maybe two roots, 'to wade, ford, pass across' and 'to come, to run'.

A.17.1d. A1 (E) *qalqa-ka-ja-χ* 'raven, magpie', *qalqa-ka-jāda-χ* 'magpie, crow (prob. magpie)' [AD: 304], PA1 ***qalqāb** 'raven *Corvus corax*' [AD: 304].

|| b→ PYp ***qalqa-** 'magpie' [YUPET 2279] / ***qalqaRayaq** 'magpie' [CED: 279] ("loanword either way" [AD: 304]).

|| b→ AAY (Kod) *qalyāq* 'raven'.

[] PIE ***kolomb-** (*kh-*) 'pigeon', PU ***kul3(-k3)** 'Rabe' / ***kula** 'crow', PA ***k'ūla** (~-o, -u) 'a k. of big bird [duck, duck-hawk; raven, crow]', PYk ***köl-** 'snipe', PNV ***qaleb'** goose', PKCh ***qwēlhwə-** 'raven' < PN ***k'olV** (~q'-) 'a k. of big bird (raven, crow?)'.

A.17.1e. Al (E) *qaðyajax* 'a kind of land bird' [AD: 293].

[] PIE ***grāk-**, -g- 'rook, jackdaw, crow', PU ***k8m3** 'Rabe / raven', PA ***kīaro** (-gV) 'crow, raven' < PN ***k(w)ajrV** (-KV, -nV) 'crow, raven'.

// Probably, several different roots, cf. PIE ***koro-**, ***kworo-** (-k-, -n-) 'magpie, crow' / sub **ker-**, **kor-**, **kr-** 'Schallnachahmung für heisere, rauhe Töne, solche Tierstimmen und die sie ausstoßenden Tiere'), ***korw-** 'a k. of bird', PSl ***gāvriānъ**, ***gāvronъ** 'raven', and PTrk ***Kurgun** 'raven'.

A.17.1f. Al (E) *qalqa-ka-ja-χ* 'raven, magpie', *qalqa-ka-jāda-χ* 'magpie, crow (prob. magpie)' [AD: 304], PA1 ***qalqāb'** raven *Corvus corax* [AD: 304].

|| b→ PYp ***qalqa-** 'magpie' [YUPET 2279] / ***qalqaRayaq** 'magpie' [CED: 279] ("loanword either way" [AD: 304]).

|| b→ AAY (Kod) *qalyāq* 'raven'.

[] PIE ***kolomb-** (*kh-*) 'pigeon', PU ***kul3(-k3)** 'Rabe / raven' / ***kula** 'crow', PA ***k'ūla** (~-o, -u) 'a k. of big bird [duck, duck-hawk; raven, crow]', PYk ***köl-** 'snipe', PNV ***qaleb'**

'goose', PKCh **qʷelhʷθ-* 'raven' < PN **k'olV(~q'-)* 'a k. of big bird (raven, crow?)'.

A.17.1g. Al (Att) *qiðu-χ* 'rope, line' [AD: 318], (E) *qið-max* 'rope, string; thong, seal thong, line (of sealskin, formerly of kelp)' [AD: 317].

[] PK ***kar-** / ***kr-** 'to bind', PIE ***kar-** 'rope, cord; [to plait]' / **ker-** 'Schnur, Gewebefaden; flechten, knüpfen', PFU ***kär3-** 'binden, schnüren, fädeln', PFU ***kerä-** 'Bündel, Knäuel' / ***ke/áriä-** 'bunch', PA ***kera (~ -r-)** 'to bind, wind around', PSD ***kar-** 'bundle, sheaf' (Tam and Mal *karra-*, PKT ***kar-əv-** 'tight (rope)') < PN ***k'erV(~k-)** 'to bind, bundle, tie up'.

A.17.1h. PAI ***qiðuy-** 'to scrape the blubber off with a scraper (from a skin or hide, for baidarka, boots or dress)', ***qiðuy-asi-** 'scraper, knife for scraping the blubber off' [AD: 318].

[] PIE ***kera-** 'to damage, delete' / **ker-** und **kerə-** : **kiē-** 'versehren'; intr. 'zerfallen, vermorschen' (cf. ***kerə-** 'to comb; hair?'), PA ***k'irkā** (or **-g-**?) 'to scrape, file', PD ***ker- ~ *kir-** 'to scratch' < PN ***k'IrV(~q'-, -aj-)** 'to scrape'.

A.17.1i. PAI ***qiðbu-** pl. 'back of hand' [AD: 317].

[] PIE ***ger-** 'drehen,winden / to weave' (cf. ***ger-** 'to turn, wind': OEng *carran*, PWGerm ***kēran** 'to turn', PGerm ***kēr-ja-** 'to

wind', Arm *cir* 'circle', Oss *zīlin*, *zelun* 'to turn, turn over') / sub *geis-*), PA **ker₁o* 'back; to return', PND **kir* 'to return', PChk **qorъ-y* 'hereto; backwards' < PN **ker₁V* 'to revolve, turn, return'.

|| Cf. PSD **gar-* 'to whirl' and Kan *kor-i*, *kor-e* 'to whirl'.

A.17.1j. PA1 **qīqi-* 'Leech's storm petrel *Oceanodroma leucorhoa* Vieillot, (E) fork-tailed storm petrel *Oceanodroma furcata* Gmelin' [AD: 326]; cf. Atk *kīkitiknu-χ*, *kīkitikna-χ* (**kīki-t-iknV-*) 'fork-tailed storm petrel, Leech's storm petrel' [AD: 238], that might been reshaped under pression of onomatopoeia.

|| Cf. Al (E) *qīχ*, pl. *qīsin* 'kind of brownish freshwater duck, smaller than a mallard, prob. gadwall *Anas strepera*, or perh. pintail *Anas acuta* (baldpate = American widgeon *Anas americana*; golden eye *Bucephala clangula*) [AD: 321], **qīcīda-* '(E) mallard *Anas platyrhynchos*; (E, Atk, Ber) green-winged teal *Anas crecca*' [AD: 321].

|| Cf. PA1 **qiyu*, **qiyu-i-* 'common loon *Gavia immer*; (E) slit in bow of baidarka; joint by heel in baidarka; hole drawstring (comes out of gunwhale)' [AD: 321].

[] PIE **keik-* 'jay *Garrulus glandarius L.*' / *kik-* 'Häher' (cf. **keigh-* 'a k. of motley bird' and Lat *gaius*, -īm. 'jay'), PD **kēy-* 'magpie, snipe', PNV **gey-gey* 'swan' < PN **k'ajgV(~q')* 'a k. of bird (jay or sim.)'.

A.17.1k. PA1 **qiyla-* 'snag, place where fishline sticks; coral', **qiyla-* 'to snag, stick in the bottom (of fishline)' [AD: 320].

[] PIE **kak- (-kh-)* 'boar-spear, fork', PNV **qaš* 'spear; to harpoon with a spear', PKCh **ħaħħa-1* 'axe' < PN **k'a(j)KV(~*

q’o ’twig, snag’.

A.17.11. PA1 ***qiylu-** ’knot, hitch; (E) a figure in cat’s craddle; twist (on rope); knot (nautical measure)’, ’to knot, to make a knot in, to tie with a knot; to knit; to crochet; to twine, braid (crown, wreath)’ [AD: 320].

[] PA ***k’oki (-IV)** ’to bind, wrap’ < PN ***k’o(j)ki** ($\sim q’-$) (-IV) ’to bind, knot’.

A.17.1m. PA1 ***qiy-ða-** ’hook (single hook of fish spear or gaff); to hook, gaff (fish); to pull out with a hook (fox)’ [AD: 319].

|| Cf. PYp ***kækja-** ’spike, nail; ice creeper on sole of boot to prevent slipping’ [YUPET 1970] / PE ***kækay~*kækyaR** ’nail’ [CED: 167].

[] PA ***k’oki** ’hindge, hook’ < PN ***k’Vo(j)kI** ($\sim q’-$) ’hook, thorn’.

A.17.1n. PA1 ***qula-** ’to be choked (on food), to swallow food the wrong way’ [AD: 334].

[] PIE ***gʷele-**, ***gʷelu-** ’to swallow’ / **gel-** und **gʷel-** ’verschlingen’ (cf. Hitt *kwenan-*), ***gʷel-** ’neck, throat’ < PN ***kulV** ($\sim -l-$) ’gullet’.

A.17.1o. Al (E) *qulāluχ*, pl. *qulāluβin* ’sedge *Carex sp.* and similar kinds of grass such as brome *Bromus aleutensis* and reed *Calamagrostis langsdorffii*, used for weaving and for bath whisks’

[AD: 334] (< **qula-alub-*), (E) *qūlyjχ* 'unidentified kind of grass' [AD: 335].

[] PA **k’ul(g)o* 'reed, rush', PD **kul-* 'stalk, stem' < PN **k’ulV* (~*q-*) 'a k. of reed, rush'.

A.17.1p. Al (E) *quðkāχ* (pl. *quðkāχin*), *quðkāχi-χ*, *quðyāχ* 'sandhill crane *Grus canadensis L.*' [AD: 330].

|| b→ CAY (LI) *qutkāq*, *qutkauk* 'sandhill crane *Grus canadensis L.*'.

[] PIE **gera-n-, -w-* 'crane' / sub *ger-* in Schallworten, bes. für 'heiser schreien', PU **karke* (/ -*u-*) 'Kranich *Grus grus L.* / crane', PA **kār(1)V* 'crane', PD **kor-g-, -k-* 'crane, heron', PYk **kurcən-* O 'Siberian [great] white crane *Grus leucogeranus Pallas*', PNv **kir* 'crane' < PN **kar(1)V* (~ -*u-*) (-*ke*, -*gV*) 'crane'.

A.17.1q. PA1 **quðu-* 'valley, cleft, gorge, gulch, deep ravin, torrent, waterfall, cascade' [AD: 331], **quðuy-* 'to be narrow' [AD: 331].

|| Notwithstanding the authors of [CED: 311], [AD: 331], hardly linked to PE **quve-* 'to become narrower' (PYp **quve-*, **quve-qu-* 'to become narrower, tighten; ravine', Pln **quu-t-*, **quu-nəb*, **quu-ki* 'to become, make narrower, to have small opening') [ESQET 981] / **quðu-* 'to close in', **quðumiy-* 'to squeeze together', **quruquR* 'valley', Pln **quunRuq* 'narrow place' (conf. of several roots) [CED: 311], that, following O.Mudrak, presents a loan from PChk **əqbe-* 'narrow, tight' (with PKm **k(w)un-* < PKCh **əqve-* 'narrow, tight' [ЭСЧКЯ: 198] (only Chk), [KAMET 802]).

[] PIE *(s)*k(w)Ar-t-*, -*d-* 'short', **k(w)Ar-t-*, -*n-*, -*l-* 'short-horned, short-eared, one-eyed' / B. (s)*ker-d-*, (s)*ker-t-*,

(*s*)*kre-t-* sub (*s*)*ker-*, (*s*)*kerə-*, (*s*)*krē-* 'schneiden', PA **k'or(1)u* 'short; diminish, grow less', PD **kur-* (~ -*d*-) 'small' (cf. **kur-* 'to shrink, wither') < PN **k'or(1)V* (~ *q*'-) 'short'.

A.17.1r. PA1 **qu(y)la-* 'clavicle, collar-bone, (du.) fathom' [AD: 334].

|| The following etymology is valuable if Att *quylaqana-χ* 'clavicle, collar-bone' is phonetically more archaic than E and Atk *qula-χ*.

[] PA **koglu* (~ -*o*, -*a*) 'pipe, [throat], chimney', PKCh **kuk-le-* 'pit; throat' < PN **kUgīV* 'pipe, throat'.

|| Kamchukchean item contaminates with PKCh **ququ-* 'pit'.

A.17.1s. Al (E) *qi(h)ŋi-χ*, pl. -*n* 'kind of tall grass (any grass); dead wilfd rye; grass (when dried) used for making carpets and rugs for sleeping and sitting on banks and in the skin-boats' tall grass used for top layer of barabara roof (*Bromus aleytensis* or *Calamagrostis langsdorffii*; crab grass; verdure, blade' [AD: 326].

[] PA **giagu (-gV)* 'wild onion' < PN **gajgV* 'a k. of grass'.

A.17.1t. PA1 **quni-* 'to bow, stoop' [AD: 337].

[] PD **gūn-* 'to bend; hump' < PN **gunV* 'to bow, bend'.

A.17.2. Under some unknown conditions PN **g-* (> PEAl **0-*) > PA1 **0-*.

A.17.2a. PAI ***ula-** 'house, dwelling; room; (Att) den (of animal)' [AD: 433].

[] PFU ***kilä** (***külä**) 'Wohnung / house, village', PA ***gūli** 'dwelling, cottage', PSD ***gūl-** 'group of people' < PN ***gulV** 'group of houses, village'.

A.17.4. PN ***-k(w)**, ***-k'(w)-** ~ ***-q'(w)-**, ***-g(w)-** (> PEAI ***-b-**) > PAI ***-b-** before the former back vowels.

A.17.4a. PAI ***ābi-** 'mallard duck *Anas platyrhynchos*' [AD: 38].

[] Cf. PAI ***āyajuł** 'cormorant (any kind), esp. pelagic cormorant *Phalacrocorax pelagicus*, red-faced cormorant *Ph. urile*' [AD: 22] b→ AAY *ayajūq, ayasūq*.

[] PA ***ak'a-** 'a k. of aquatic bird', PYk ***ooqaa-dee-** 'a k. of duck (савка) *Oxyura dominica L.* (?), PNv ***afəŋk** (~**ä-**) 'duck', PChk ***bybъnko** 'white-winged [velvet] scoter (турпан) *Melanitta fusca L.*; eider (rara) *Somateria Stelleri* = *Polysticta Stelleri Pall.*' < PN ***wak'a** (~**-q'-**) 'a k. of aquatic bird'.

A.18.1. PN ***q-**, ***qw-**, ***x-**, ***xw-** (> PEAI ***0-**) > PAI ***0-**.

A.18.1a. PAI ***alu-** 'side (of human body: from hip to head; of

fish, boat, cave, etc.), (pl.) ribs' [AD: 56].

[] PK ***xal-** / ***xI-** 'to be near, among' (+ Grg *xling-* 'edge'), PU ***alka** '(vorderes od. hinteres) Ende, Anfang; anfangen, beginnen / to begin, begin to, set to work upon; head, before' [FUV: 71], [JANHUNEN: 29] (+ PSmd ***olə** 'head; before'), PYk ***e̚li** 'firstly, at first; for the present', PA ***āla (~ē-)** 'front side', PNV ***alyə-** 'to move forward' < PN ***xala (-KV)** 'front side, side (of body)'.

A.18.1b. PAL ***ābī-** 'liver' [AD: 38] (> AAY (Kon) *ābiq* 'liver').

[] PIE ***ar-** (PIH ***HāHr-**) 'kidney, lung' (Hitt *hahri-* c./n. 'lung') < PN ***XaXRV** '(a k. of) internal organ(s)'.

// The alternative etymology goes to PIE ***orəw-** 'stomach, guts' / **aryā** 'Darm'? , PA ***ōri** 'middle, inside', PSD ***īr-** 'liver' < PN ***HorV** 'guts; inside'.

A.18.1c. PAL ***abulīy**, ***abulīyi-** 'peregrine falcon *Falco peregrinus* Tunstall, "chicken hawk", perh. *Falco columbarius* L.' [AD: 41].

[] PIE ***or-** (PIH ***H-**) 'a k. of big bird, eagle' (+ Hitt *hara(n)-* c. 'eagle'), PSD ***eruva-** 'kite, eagle' < PN ***Xeru** 'a k. of rapacious bird, eagle'.

// The item might be equally linked to IE: Lat *aquila* 'eagle', though the external links of the latter are unknown.

A.18.1d. PA1 ***um-** 'to smell, get the scent of', ***um-ta-** 'to smell, have gotten the scent of' [AD: 437-438].

[] K: Grg *xemv-* / *xmi-* 'to taste, drink', PIE ***am- (-r-, -l-)** 'sour, tasting sharp', ? PFP ***om(p)ra** 'eine Art sauere Wiesenpflanze' / ***umra** 'sorrel', PA ***āmo (-t'a, -sa)** 'mouth; to taste', PNv ***amrag** 'taste; to taste', KCh: Kory *metha-tken* ~ *mačθ-tken* 'aroma', It *amčaka* 'smell (n.)' < PN ***qwamV (-RV, -LV-) (~xw-)** 'to taste; to be sour, bitter'.

A.18.1e. PA1 ***uja-** 'to fetch, bring, get; to call, send for' [AD: 455].

[] PIE ***Hweje-** 'to drive' (+ Hitt *huwai-/huja-* 'to run, flee', Pal *huja-* 'to let run', *huwat-* 'running', HLuw *hu(i)yanta* 'they run', Hitt *hwitar* c. 'animal world, animals'), etc.) < PN ***XwVjV** 'to drive, chase (animals)'.

A.19.1. PN ***q'-** (> PEAl ***q-**) > PA1 ***q-**.

A.19.1a. Al (E) *qis-mix* 'hair from reindeer's hoof', *qis-ma-n* pl. 'feathers atop puffin head (used for clothing decoration)', (doubtful) 'eyelashes' [AD: 327].

[] K: Laz *qaz-* 'to trim, plane wood', PIE ***kes-** 'to comb, scratch' / **kes-** 'kratzen, kämmen' (+ Hitt *kisai-* (I) 'kämmen' [TISCHLER: 587], *kisri-* c. 'etw. aus Wolle'), ***kAs-** 'plait, woman's

hair', PFU ***kes̪3-** 'reißen' (or PUG ***kEsV** 'to whet' < PFU ***kVsV-**), PFU ***kisk3-** 'reißen' / PFP ***kiska-** 'rip' (cf. PFU ***kesk3-** (***keks3-**) 'schleifen, wetzen, schärfen / to whet, sharpen'), PA ***k'joše** 'to scrape, shave', PSD ***kīs-** 'to scrape' < PN ***q'lwV** 'to comb, scratch'.

A.19.1b. PA1 ***qīja-** 'cold (n.)' [AD: 325].

[] PK ***qin-** 'to freeze, congeal', U: PSmd ***k[ʃ]nV** 'cold', PA ***k'ojijo** 'cold', D: PKG ***kin-** 'cold', PGon ***kin-** id., PNv ***gen-** 'to freeze; cold, frozen' < PN ***q'oijV** 'cold, frost; to freeze'.

A.19.1c. Al (E) *qumilyi-χ* 'edible root (any kind)' [AD: 336].

|| Cf. Al (E) *quq-lux*, *quqlu-χ* 'root (of any plant)' [AD: 338].

[] PGZ ***qamal-** 'wild cherry-plum (алыча)', PA ***k'ema** 'a k. of reed or leek' < PN ***q'VmV(-̄IV)** 'a k. of plant'.

A.19.1d. PA1 ***quðay**, ***quðayi-** 'big fire, bonfire' [AD: 330].

[] PGZ ***qwebr-** 'fireplace', PIE ***kurə-** '(weak) fire' / **kur(ə)-** 'brennen, glühen, heizen', PU ***korpe-** 'brennen, verbrannt werden, versengt werden', PA ***k'ürkV** 'glowing coals', PD ***kur-** 'brilliancy; silver', PKCh ***qīryъ (~ -šy-)** 'light; steel' (PChk ***qīRyъ** " 'light; light (adj.); to flash (fire), to glance (lightning)', PKm ***qas(x)elKe- (~ *k-)** 'steel; flint') < PN ***q'urV** 'bonfire, hearth'.

|| Great confusion with PIE ***gʷerə-** 'to burn, to flame' / **guer-**, **guerə-** 'leuchten und heiß sein',

PA **kiāgru* (~-*br-*) 'to bake, boil' < PN **kewrV* 'to burn; to bake'.

A.20.1. PN *-k(w)- ~ *-q(w)-, *-k'(w)- ~ *-q'(w), *-g(w)- (> PEAL *-k-) > PA1 *-k- before the former front vowels.

A.20.1a. PA1 **kuka-* 'grandmother (father's or mother's mother)' [AD: 247].

|| Reduplication.

[] PIE **aw-* (PIH **HauHo-s*) 'maternal grandfather, maternal uncle' / *auo-s* 'Großvater mütterlicherseits' (+ Hitt *huhha-* c. etc. 'Großvater'), PA **ujo* 'relation', PD **av-ai* 'mother, woman' < PN **Xa/ywJV* 'relation'.

|| PA *-j- is difficult to explain - *-g- would be expected.

A.20.1. PN *-x-, *-y- (> PEAL *-b-) PA1 *-b- before the former back vowels.

A.20.1a. PA1 **asbā-* 'to die; to have a mortal combat' [AD: 99].

[] PK **zisxl-* 'blood', PIE **as-er/n-*, **es-er/n-* < PIH **esH-er/n-* 'blood' (+ Hitt *cshar, ishar* gen. *e/ishanas, cshanija-* 'red') / *ēs-ř(gw)*, Gen. *es-n-ēs* 'Blut', alter *r/n*-Stamm, ?φ? POUg **čokəs* 'bear's blood', PA **sēgu* 'healthy; blood' < PN **?IseyV* 'blood'.

A.20.1b. Al (E) *sibi-na-* 'plaited, curled' [AD: 359].

[] OGrG, GrG *jax-* 'to spin' (< PK **jax-* (~*ʒ-*)), PIE **sej-* (PIH

**sH-*) 'to tie together, tie to' / *sē(i)-*, *-səi-* : *sī-* und *sei-* : *si-* 'binden (auch durch Zauber), Strick, Riemen' (+ Hitt *ishija-* (I), Luv *hishija-* 'binden, fesseln', Hitt *ishima-*, *ishiman(a)-* 'Schnur, Seil', ? Hitt *ismeri-* n. 'Zaum, Zügel' < PN **3AjxV* (~*3-*) 'to spin, plait'.

|| Cf. PK **skw-* 'to tie (lace, etc.)', PFU **säkt3-* 'flechten, flicken (z.B. Netz) / to plait; to mend, darn (e.g. a net)' / PFP **sakti-* 'mend, PA **zakt'i* 'cushion, mat' < PN **zak'(w)V* (~*3-*) (-*t'V*) 'to plait; sth. plaited'.

A.21.1. PN *-**g-** (> PEAL *-**g-**) > PA1 *-**g-**.

A.21.1a. PA1 **aga-* 'longitudinal half; half of a number or of time; side, lateral part; side, space beside, alongside; match, the one of a pare; adversary, enemy', **aga-ða-* 'side, broadside, opposite side; (Att) riverside; over against, opposite, facing; in front of, before, toward, against; on a level with, beside' [AD: 81-82].

[] PIE **An-* '(an)other', PA **agV* 'separate, different', D: Tam *ēnai* 'other; the rest', ?φ PKCh **'əqtə-* 'to detach, separate; part' < PN **?AgV* '(an)other, different; to separate'.

A.21.1b. PA1 **spay(i)-* 'to dream; dream' [AD: 371].

[] PK **zm-* 'to dream', PFU **som3-r3* 'Kummer, Trauer; (?) traurig sein' / **somā-i-* 'worry', PA **xiōyē* 'dream, echo', PD **zōmb-* 'drowsy, lazy, idle; swoon' < PN **zwegV* 'to dream;

dream'.

|| Labial assimilation in Kartvelian and Fennno-Ugric?

A.21.1. PN ***gw**- (> PEAl *0-) > PA1 *0-.

A.21.1a. Al (Atk) *azgu-χ* "snow-bird", 'mountain bird that comes down to the beach in winter' [AD: 103].

[] ? PFU **wajce* 'eine Art Ente', PTng **giāča-ki* 'heron', PNV **vazab* 'heron, crane' < PN **gwAjce* 'a k. of aquatic bird'.

A.21.1b. Al (E) *ayna-χ* 'tongue' [AD: 27].

|| If metathesized < **anya-*.

[] ? PK **nēn-* 'tongue', PIE **i(n)gh-u-* 'tongue' / **dl-ighu-*, **inghu-* / *dng hū*, *dng hūā* 'Zunga', PU **nEnV* 'palate, nose', PD **vajnder-* 'tongue, palate', PYk **wa^wgər-* (~ -n-) O 'tongue; to lie (tell lies); to ask for', PNV **galpər* 'palate', PChk **yaznab* (~ a) 'word' < PN **gwenV* (~ **negwV*) 'tongue, palate'.

A.21.1c. Al (E) *ulki-iķa-điya-χ* 'rainbow' [AD: 435].

[] K: Mgr, Laz *val-* 'to lighten', PIE **wlek-* 'to lighten; fiery', PFU **walk3* 'weiß, hell, leuchtend; leuchten' / **wilki-* 'light' (cf. PFU **wal3* 'Glanz; glänzen / shining; to shine'), PA **niōle* 'red, pink; yellow', ? PD **vel-* 'white' (otherwise to PN **belV*), PNV **hil-u-* 'red; to blush', PKCh **’ęgle-* 'to burn; dawn' < PN **gwelV* 'light (of colour)'.

|| Cf. PD ***mūl-** 'to catch fire' (caus. ***māt-** 'to kindle') and PKCh ***ŋy̥lu**, ***ŋy̥l-vaj** 'smoke'.

A.21.1d. Al (E) *juxjax* 'goose barnacle' [AD: 465].

|| If metathized < PEAl ***ujt-jV** < PN ***ŋwAjk-sV**.

[] PFU ***jɔŋkce** (~ ***jokce**) 'Schwan *Cygnus cygnus L.*' / PFP ***noksí** 'swan', PD ***va(y)k-** 'stork, crane' (-y- in Tam *vaykā* 'a bird') < PN ***ŋwAjk-sV** 'swan (a k. of)'.

A.22. Simplification of PEAl sequences with second sonorant.

A.22.1. PEAl *puw- > PA1 *hw-.

A.22.1a. PA1 ***[hw]ajuy-** 'to whittle, make shavings of (firewood); shavings for making fire' [AD: 461].

|| Form PEAl ***puəwa-j.**

[] PK ***pu-** 'to cut, hack', PIE ***pewə-** 'to beat, hew' / **pēu-**: **pəu-** : **pū-** 'schlagen; scharf, schneidend hauen', PSmd ***pəj-** (~ -**å-**) 'chop, split / stone, flintstone', PA ***p'jōpo** (~ ***p'ōjpo**) 'to cut through, grind' < PN ***p'ojwU** 'to hack, to chop'.

A.22.2. PEAl *nəp/w- ~ ***nəp/w-** > PA1 *h-.

A.22.2a. PA1 ***hiya-** 'to freeze, get frozen, be frozen (of fish, lake, creek, snow); frost, low tempretusre' [AD: 170].

|| From PEAl ***nəp/v(ə)yV-**

[] ? PGZ ***nepxw-** 'frost, cold, spring water', PYk ***napyol-mə**

'winter', PNV ***napə-** 'early; always; still, so far', PChk ***əppə-** 'old; to grow old; elder; old man' < PN ***nV Px(w)V** (~ **n-**, **y-**) 'frost; to freeze'.

A.22.3. PN *n--m- (> PEAL *nəm-) > PAI *hm-.

A.22.3a. Al (Atk) *hmicu-l'* 'to poke, jab' [AD: 276].

[] PA ***nēme** 'to patch' < PN ***nemV** 'to poke; to patch'.

A.23.1. PN *t'--l- (> PEAL *təl-) > PAI *hl-.

A.23.1a. PAI ***hla-** 'son, boy, young of animals' [AD: 252-253].

[] PGZ ***tel-** 'pigling' (←b IE?), PIE ***tālV-** 'sprout, young one' (+ PBS1 ***tel-** 'calf'), PF ***tall-** 'young pig, lamb', PA ***t'ēlV** 'young lamb, calf', PD ***tal-** 'to bloom, sprout' < PN ***t'el(H)V** 'young plant or animal'.

A.24.1. PN *-n3- > PAI *-mj-.

A.24.1a. Al (E) *amajaχ* 'deep-sea fish similar to the burbot' [AD: 64].

[] If < PEAL ***amaja-** < ***amsā-**, though labial ***-m-** is not clear.

[] ?φ IE: PS1 ***esetrъ** 'Sturio', Lit *ašētras* id. [Širvid], OLit *esketres* 'whale', PU ***onč3** 'Njelma-Lachs *Coregonus njelma* [*Stenodus leucichthys Güldenstadii*] / ***anč3** id. / ***unča** 'нельма /

sheefish', PYk **onučə*. (Tun) *onuče* 'quillback fish *Cyprinus labeo*', PNV **čo* 'fish', PKCh **’ən’jə* 'fish' < PN **Hanžo* (/ -m-, ~-**ž**, -**ž**) 'a k. of fish'.

|| Cf. PYk **anuu* 'fish (boiled)'. Chk b→ Yk (Kol) *anja* 'omul *Coregonus omul* (= *Coregonus autumnalis* Pall.)' [Joch.] (**anjo*?); for the possibility of reconstruction of PChk medial cluster *-**nʒ**, cf. O.Mudrak's comment.

A.24.2. PN *-jw- > PAI *-j-.

A.24.2a. PAI **naju-* 'float consisting of an inflated sealskin, used in stormy weather, one on each side of the baidarka' [AD: 283].

[] PIE **nāw-* '(sea) boat, ship' / *nāus-* 'Schiff' (ausgehöhlter Einbaum), PA **ṇjōbu* 'to pour' < PN **gajwu* 'to pour, float, row'.

A.24.2b. PAI **qaja-* 'to be high, tall; high, tall, long (as clothing); hill, mountain, (E) big mountain, like volcano' [AD: 313].

[] PGZ **kwa-* 'stone', PFU **kiwe* 'Stein / stone' / **kiwi* 'stone', PD **kō(v)-* 'up, high; mountain', PYk **qäjil* (~*k-*) O 'stone' (cf. PYk **kii-bac* (~*v-*) B 'plummet'), PNV **qavlag* 'mountain lava', PKCh **y̥v(-y̥v-)*, *-*z̥yvz̥-* 'stone' < PN **kajwV* 'stone'.

A.24.2c. PAI **qju-* ~ **kju-* 'horse mussel *Modiola modiolus*'

[AD: 340].

- [] PA **gebō* 'shell, husk', PD **gavisen-* 'a case, cover' < PN **gejwU*'shell'.

|| Cf. PA **k'jabu* 'to peel, skin' (< PN **k'ajwV* (~q'-, -b-)).

|| Cf. PIE **skeda-* (-kh-) 'to split' / *(s)k(h)ed-*, *(s)k(h)e-n-d-* 'zerspalten, zerstreuen', PA **k'et/oj* 'to tear apart, rip', PD **ked-* 'to perish' < PN **k'etV* (~q'-) 'to tear, split'.

A.25.1. PN *-nt(')- > PA1 *-n-.

A.25.1a. Al (Atk, Ber, Med) *snu-lix* 'to send an errand, commission person with a message to a person; to order; to hire (person to work)', *snu-gi-l* 'to tell, order' [AD: 370].

- [] PIE **s(w)ent-* 'to walk, to travel' < PN **cwVnt'V* (~*ʒw-*, *sw-*, *św-*, [*św-J*]) 'to walk, wander; to send'.

A.25.2. PN *-mt(')- > PA1 *-mt-.

A.25.2a. Al (E) *tumtux(-)* 'to beat (of heart); beating (of heart, pulse)' [AD: 407].

- [] PIE **(s)tAud-* 'to hit, butt', PA **t'ut'i* 'to beat, strike', PYk **tuuto-* 'to stuff, insert, shove' < PN **t'umtV* (~ -t'-) 'to hit, beat'.

A.25.3. Under some circumstances, PN **-nc-* > PA1 **-c-*.

A.25.3a. PA1 **qica/iš-* 'to be sharp', (E) *qicax* 'sharp instrument, knife', *qicxi-χ* 'sharp instrument, instrument for hunting (arrows, knives, pickets), weapon (for war)' [AD: 315].

|| The linkage to PE **qəc(c)uy-* 'to scratch, dig claws into' [CED: 294], suggested in [CED: 294] and [AD: 315], looks semantically dubious.

[] PGZ **kwencx-* 'to split', PIE **g(w)hazdh-* 'pointed stick' (**ghazdh-* + PSl **gvozdь* 'nail'), **ghast-* (~*gh-*) 'stick' / *ghasto-, ghazdho-* 'Rute, Stange', PU **kinče* ~ **künče* (? **kiče* ~ **küče*) 'Nagel, Klaue' / PFU **künči* 'nail' / PU **künči-* ~ **küči-* 'claw' (PSmd **kətā*), PA **k'iuču* 'to scrape; claw, sharp stick', PD **kažž-* 'scab, itch; to scratch' < PN **k'wInČV* 'to scrape; scrape'.

A.25.4. Under some circumstances, PN *-nc(w)- ~ *-ncw- ~ *-nčw- > PA1 *-t-.

A.25.4a. PA1 **hityi-* 'tail (of fox; of bird; of horse; (E) also of seal, fur sea, sea lion)' [AD: 217].

[] ?φ PIE **peisk-* 'feather (a k. of)', PFU **panč3* ~ **pač3* (**ponč3* ~ **poč3*) 'Schwanz' / **ponci* 'tail', PD **pinc-* 'peakock's tail' < PN **p'VncwV* (~-c'w-, -čw-, -ž-) 'bird's tail'.

A.25.5. PN *-nzw- > PA1 *-s-.

A.25.5a. PA1 **asaya-* 'cousin, cross-cousin (father's sister or

mother's brother's son or daughter)' [AD: 97], ***asanaqa-** 'daughter-in-law, a woman's sister-in-law, husband's sister, (her) brother's wife; wife's brother, sister's husband' [AD: 98], ***asyinu-** 'daughter, girl' [AD: 98-99], ***asbū-øyi-** 'girl (about 8-17 years old; caressing term; used in a song)' [AD: 100].

[] K: Grg *nezv-* 'female animal', PFV ***nis3** 'Weib, Frau', PKCh ***'ыпъь-** 'woman from a brother moiety' < PN ***?VnzvV ~ *nIzwV (~ *gwezV)** 'a k. of female relative'.

A.25.6. PN ***-nk-, ?-(n)g-** > PA1 ***-ŋ-**.

A.25.6a. Al (Att) *tugaju-χ* 'mound, knoll' [AD: 409].

[] PIE ***tungʷ-** 'hillock', PFU ***top̥3-** (***tag3-**) '(auf/an)schwellen', PA ***t'ɔŋke** 'round' < PN ***t'UnkV** 'to swell; round; hillock'.

A.25.6b. PA1 ***hayuy(-)** 'ditch, pit; to dig, dig a ditch or hole in, gnaw, gnaw through' [AD: 91].

[] ?φ PA ***p'ago** (~ -e-, -a ~ ***p'uga**) 'to dig; cave' < PN ***p'a(n)gV** 'to dig'.

|| No trace of nasalization in Altaic so the comparison is phonetically somewhat dubious.

A.25.7. PN ***-nq(‘)-** > PA1 ***-k-**.

A.25.7a. Al (E) *cikātu-n* pl. 'kind of berries (uva ursi; long red

berries)', (Atk) *cikajāsi-χ* 'fireweed *Epilobium angustifolium*' [AD: 140].

[] PK **cinqwa-* 'wild strawberry, cowberry', PA **šaqku* 'a k. of berry' < PN *c'wVnqV(~-q~-)(?) 'a k. of berry'.

B. Aleutian lexica borrowed from Kamchukchean.

B.a. PA1 **alibī-*, **alibgi-* 'wolf (on Alaska Peninsula and Unimak Island)' [AD: 54].

←b from PChk **lbryne*, contaminating with PA1 **alič* 'old man (over sixty years old); pl. elders', 'to be old (of man)', 'adult male of animal or bird; pl. crew; king in chess' [AD: 54].

[] Further PIE **w^ǵlk-o-* 'wolf' / *ulk^os* 'Wolf', PYk **laamə-* O 'dog; to unleash (a dog), to hound', ? PNv **liyər̥* 'wolf', PKCh **lhiyunə* 'wolf' < PN **wllk'U(~-q~-)* 'wolf'.

B.b. Nevertheless PA1 **ki(h)mītu-* 'to pinch' [AD: 239].

|| Suffixed with PA1 *-tu- 'to have a big N, to have much N; to have much N on/in/to it.

←b from Chukchean or Kamchatkan, v. PKCh **kume(l)-*, **əkmī-* 'flathand, palm' (PChk **kume(l)-*, **əkmīgci-*= 'all flathand, palm; come to the arms!', PKm **k'umna-*(-aq) 'five').

[] PIE **komto-* 'hand' (Grm), PFU **küme(-ne)* 'die flache Hand, die hohle Hand, Handteller / palm, handfull' (+ En *xammara* 'hand', PFV **küme(-ne)* 'zehn', PYk **kumna-*(~q-) 'ten', PA1 **qānku-* (< **qamt-ku-*) 'three', **qamci-* 'eight' < PN

**kʷwIme* (-ne, -le, -t 'V) (~q 'w-) 'hand'.

B.c. PA1 **qimyitV-* 'crab (any kind)' [AD: 324].

←b PChk **qe[f]Vŋqu*= (~g) 'crab', which, together with PKm
**qewin-* 'craw-fish, crab' < PKCh **qeyʷeg-* 'crab, craw-fish'

[] PGZ **kibo* 'crayfish', PIE **gʷebh₂w-*, **gʷeubh-* 'toad,
tadpole' / *gʷeb(h)-* 'schleimig, schwabbelig, Quappe, Kröte', PA
**kiapa* 'turtle, crayfish', PD **kap-* 'frog' < PN **kʷwajbV* 'toad;
turtle'.

|| Cf. **kap-* 'caterpillar'.