Comparative Chukotko-Kamchatkan Dictionary

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Acknowledgements

Abbreviations

abl.	ablative	instr.	instrumental
abs.	absolutive	intr.	intransitive
acc.	according to	lit.	literally
adj.	adjective	loc.	locative
all.	allative	metath.	metathesis
adv.	adverbial	neg.	negative
antipass.	antipassive	nom.	nominal
applic.	applicative	opt.	optative
assim.	assimilation	p.	person
attrib.	attributive	pal.	palatalizing
aux.	auxiliary	pass.	passive
caus.	causative	part.	participle
circumf.	circumfix	pers.	personal
comit.	comitative	pl.	plural
conj.	conjunction	poss.	possessive
cons.	consonant	postpos.	postposition
contam.	contamination	pred.	predicate
dat.	dative	rec.	recessive
dem.	domonstrative	redup.	reduplicated
deriv.	derivational	ref.	referential
dimin.	diminutive	rel.	relative
dissim.	dissimilation	relat.	relationship
dom.	dominant	sg.	singular
du.	dual	subj.	subject
emot.	emotional	tr.	transitive
erg.	ergative	vial.	vialis
esp.	especially		
incorp.	incorporated		
indef.	indefinite		
inf.	infinitive		
infl.	inflection		
influ.	influenced		

Individual languages and dialects

A = Alutor (incl. Pal. and Kar.)

Al. = Alutor (proper)

Ap. = Apuka (K)

C = Chukchi (northeastern dialect – NE; note that Dunn's "Telqep" is my S, Kurebito et al. 2001 is NW, and SE is the eastern variety around Providenija)

Chukot. = Chukotian

Čav. = Čavčuven (K)

Enm. = Enmyl'yn (C)

I = (western) Itelmen (W, E & S = the western, eastern and southern languages respectively)

Itk. = Itkan (K)

K = (Čav.) Koryak

Kam. = Kamen (K)

Kar. = Karaga (A) (when the source is Krašeninnikov or Klaproth this refers to the extinct island variety, much influenced by I)

Ke = Kerek (Majngapilgino dialect)

Khaj. = Khajruzovo (the southern W dialect of I, virtually identical to Volodin's "Napana")

Khat. = Khatyrka (dialect of C - not to be confused with the little known southern dialect of Kerek of the same name)

Kol. = Kolyma headwaters (K – acc. Steller)

Pal. = Palana (A)

Par. = Paren (K)

PC = Proto-Chukotian

PCK = Proto-Chukotko-Kamchatkan

PI = Proto-Itelmen

Sed. = Sedanka (I)

Uka = Uka (northern variety of eastern I)

Non-CK languages referred to: CAY = Central Alaskan Yupik, CSY = Central Siberian Yupik, NSY = Naukanski Siberian Eskimo, Esk. = Eskimo, Rus. = Russian., Sam. = Samoyed (as specified), Sir. = Sirenikski Eskimo, and Yuk. = Yukagir.

Abbreviations of authors used in text

Asin.	Asinovsky	Les.	Lesseps
Bob.	Bobaljik	Mur.	Muravyova
Bog.	Bogoraz	Nag.	Nagayama
Erm.	Erman	Rad.	Radliński
Geo.	Georg	Rf.	Radloff
In.	Inenlikej	Sar.	Sarychev
Joch.	Jochelsen	Skor.	Skorik
Kib.	Kibrik	Steb.	Stebnitsky
Klap.	Klaproth	Tju.	Tjušov
Kr.	Krašeninnikov	Vdov.	Vdovin
Kur.	Kurebito	Vol.	Volodin
Leont.	Leontjev	Žuk	Žukova

Note that Worth 1969 is based principally on Jochelson 1961 (and ms. material) – this is the source of items marked 'Joch.' in this dictionary; the wordlists attached to Saryčev 1802 are actually compiled by the Billings expedition surgeon Rohbeck; Klaproth 1823 and Radloff 1861 bring together materials from various early sources (the latter including Steller's ms. material for K).

Map 1: Chukotko-Kamchatkan Languages

(maximal extent acc. Dolgix 1967)

Yukagir

Even

Eskimo

1

2

3

4

10

11

12

5

13

8b

6

8a

7

9

Ainu

Chukchi

Koryak

Chukotian

Alutor

Kerek
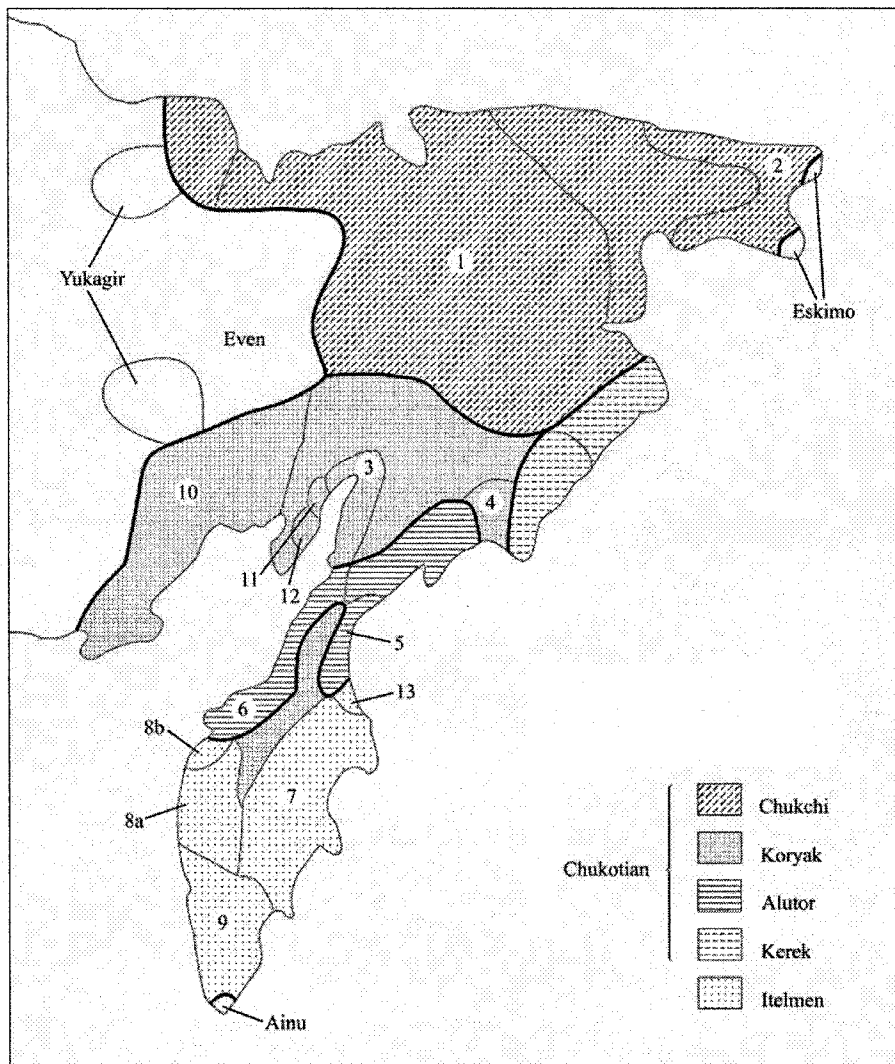
Itelmen

1. Occupied by Yukagir in 17th century
2. Occupied by Eskimo in 17th century
3. Kamen dialect
4. Apuka dialect
5. Karaga dialect
6. Palana dialect (southern part ealier Itelmen)
7. Eastern language (Russian-speaking today)

8. Western language (Khajruzovo a, Sedanka b)
9. Southern language (Russian-speaking today)
10. Russian and Even speaking today (as also some 8 and 1)
11. Paren dialect
12. Itkan dialect
13. Uka dialect (of E Itelmen, Russian-speaking today)

Map 2: Chukchi (Sub-)Dialects

III

Pevek

Cape Smith

I

Uelen

Iultin

Lavrentija

8

1

2

4

9

3

Providenija

II

Omolon

Anadyr

Markovo

5

6

Beringovski

7

Khatyrka

Okrug border

Rajon border
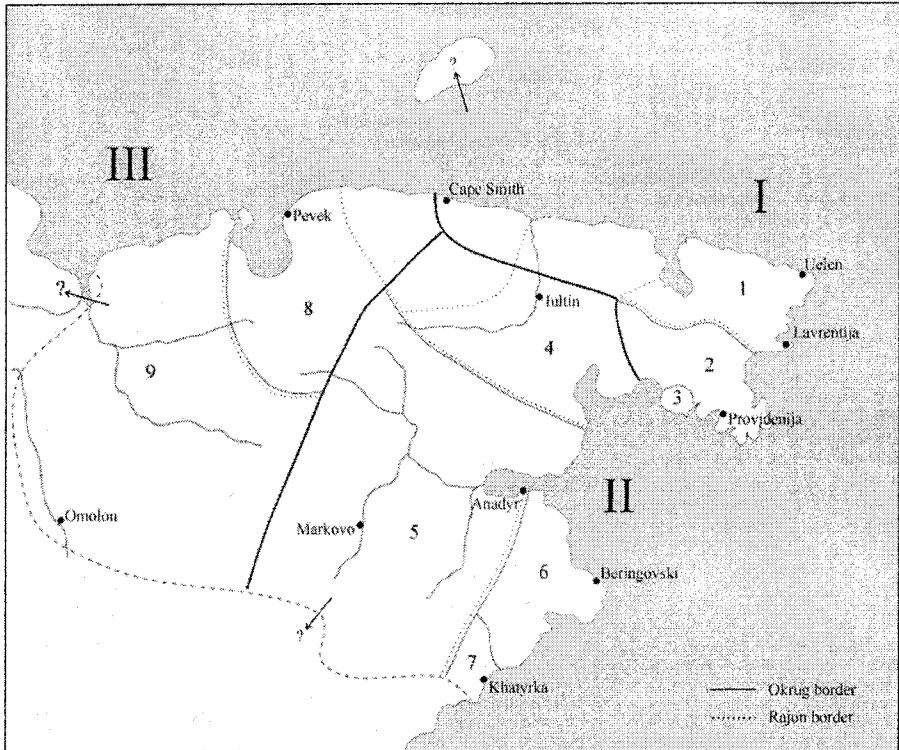
I Eastern
  1 Chukotski - Cape
    Smith
  2 Providenski
  3 Enmylenski

II Southern
  4 Iultinski
  5 Anadyrski
  6 Beringovski
  7 Khatyrski

III North-Western
  8 Chaunski
  9 Bilibinski

Introduction

The Chukotko-Kamchatkan language family (CK) is divided into two branches. The first, the northern or Chukotian one (sometimes called "Luorevetlan" after the Chukchi ethnonym *ləɣʔorawetlʔan*), is a rather close-knit group consisting of Chukchi, Koryak, Alutor and recently extinct Kerek. See Skorik (1986) for a characterization of the relationship between the four languages and note that Kerek is (inflectionally at least) somewhat closer to Koryak than to Chukchi. Alutor covers the southern "t dialects" (Alutor proper plus those of Palana and coastal Karaga) of what used to be called as a whole "Koryak" (i.e. as part of "coastal Koryak", which also covered Kerek). In the present work the term Koryak, following the usage of Žukova (1978), refers unless otherwise specified to the main Čavčuven "j dialect" of the nomadic or "reindeer" Koryaks (the other dialects are poorly documented). Note that there is no single self-designation used by all Koryaks (though the Chukchis call them *(ləyi)tanŋət* (lit. '(real) enemies', a term reciprocated by the Koryaks about the Chukchis). Chukchi, less dialectally differentiated, is represented by the standard written language of the northeast as in Skorik (1961/77) unless otherwise specified. The relatedness of this group of languages has been tacitly recognized since their earliest documentation, starting, as regards Koryak, with Krašeninnikov, who participated in Bering's Second Kamchatkan Expedition in the late 1730s (and as presented synoptically in Klaproth 1823, which, following Billings' expedition, now included Chukchi). The regularity of correspondences between them was put on a scientific basis in the last century, starting with the seminal work of Bogoraz (esp. 1922) and leading up to the comparative root reconstructions of Muravyova (1979).

The second branch, Itelmen (or "Kamchadal"), is today constituted by a single remaining language, Western Itelmen, with two dialects, Khajrjuzovo in the south and Sedanka in the north (the latter containing many Chukotian loans already in Krašeninnikov's day). At least two others, Eastern (sometimes called Northern or Northeastern) Itelmen, which includes a related variety on the Uka river influenced to some degree by Alutor (and mistakenly regarded as Koryak by Krašeninnikov), and Southern Itelmen, became extinct

by the end of the 19th century before they could be more than sketchily documented (there are no texts). From the earliest word lists assembled for these languages in the eighteenth century (first by Krašeninnikov and later by Saryčev, Sauer, Lesseps, Erman and other explorers), it was clear that there was much in common among these languages and between them and Koryak and Chukchi. This was confirmed by Dybowski's extensive (but orthographically unsystematic) vocabularies collected in the 1870s and published as Radliński (1892-1894). Dybowski's contribution to our knowledge of Itelmen in all its three major varieties cannot be over-estimated. Also Bogoraz (1922) took for granted a genealogical unity between Itelmen and Chukotian, although he recognized that the relationship was remote. For a long time they were loosely associated in the minds of both linguists and anthropologists with other Siberian isolates under the rubric "Paleosiberian" (or in Russian "Paleoaziatskij"), which included Yukagir, Ket, Nivkh (Gilyak), Ainu and even Eskimo-Aleut according to the mid-nineteenth century hypothesis of L.I. Schrenck. This larger grouping has never been shown to constitute anything like a true genealogical entity, however.

The considerable lexical and phonological divergence between Itelmen and Chukotian – exacerbated by the confusing variety of forms in the early sources – has led some researchers (notably Worth 1959 and Volodin 1976) to doubt the genetic unity of even the Chukotko-Kamchatkan family on its own. More sanguine views have been expressed by Comrie (1980a) and Fortescue (2003) however. In Fortescue (1998) it is argued that Itelmen may reflect in part some earlier Kamchatkan substratum population that shifted to CK, and evidence for the possible relationship of CK to other language families is also presented. In the present work, for the first time, all available early word lists have been integrated with the newer lexical sources. This is important since these lists – especially those for southern and eastern Itelmen – reflect forms of Itelmen largely free of the massive lexical influence to which the modern western language has been subjected.

The cultural and technological difference between the sedentary Itelmen (self-designation: *itənmən*), inland-orientated fishermen of Kamchatka, and both the nomadic, reindeer-herding Chukotians (self-designation: *čawču*) and their coastal, sea-mammal-hunting counterparts (Chukchi *aŋqalʔən*, Koryak *nəməlʀən*) is striking, although they also share numerous cultural elements, such as belief in the raven trickster creator (cf. Proto-CK *k(əʀ)uðkəl*). While

the matrilinearly organized Itelmens fished salmon on the forest-flanked rivers from dug-outs, used sleds pulled by dogs, and lived in large semi-subterranean houses in the winter (entered through the roof) and on elevated tent-like platforms in the summer, the patrilineal Chukotians hunted land mammals on the tundra using reindeer-drawn sleds and lived all year round in skin tents or "yarangas" with interior sleeping compartments. The coastal Chukotians, by contrast, had kayaks and harpoons like the Eskimos and lived like them in family-sized semi-subterranean dwellings. Such differences are reflected in the lexicon, with Itelmen, for example, abounding in words for the special fauna and flora of their natural environment, while the dialects of the nomadic Chukotians abound in reindeer-related terms.

The linguistic "centre of gravity" – suggesting the original CK "homeland" – lies around the Kamchatkan isthmus (see Map 1), an area presumably reached from the west along the coast of the Okhotsk Sea long before the introduction of reindeer-herding from further west within the last thousand years or so (extensive herding is much more recent than that). The time at which proto-CK may have been spoken in this general area by hunters of wild caribou has been estimated as somewhere around four thousand years ago (cf. Fortescue 1998: 40); this coincides with the beginnings of the Neolithic cultures of Tarya on Kamchatka and (a little later) Ust-Belaya on Chukotka. The much later, vigorous expansion of the Chukchis at the expense of Yukagirs and Koryaks (after their accumulation of huge reindeer herds) is reflected on Map 2, along with the approximate extent of the modern dialects. Note that Ackerman (1984: 115) places the original expansion of the Chukchi into the Anadyr lowlands from further south around the fourth or fifth century AD (which could represent the beginning of the Chukchi-Koryak split). Others – notably Dikov (1979) – see the ancestors of the Chukotians being involved in the Old Bering Sea Culture, side by side with purely Eskimo Okvik, over 2000 years ago. Intense contact and assimilation has at all events existed between Chukchis and Eskimos on the Chukotkan Peninsula for at least three or four hundred years (see de Reuse 1994 concerning linguistic borrowings back and forth between them). This may also have been true of the Kereks and Eskimos. More recent contact with Evens (encroaching onto Kamchatka as late as 150 years ago), Yukagirs (who had entered the Anadyr region around the 14th century, separating Koryaks fom Chukchis for a while), and Kurile Ainus at the tip of Kamchatka, appears to have had very little linguistic

consequence.

Today, following the era of collectivization and its chaotic aftermath, all these languages are endangered, with very few children learning them (if any) and almost no native literature being produced, although orthographies exist for all except Kerek. Elementary school texts and monolingual collections of folk tales (other than those in academic publications) have been published, notably in Chukchi, which in theory at least may still be used in the first grades of school instruction. But even in Chukchi the local newspaper that was still published in that language in the 90s is no longer being produced. In the official census of 1989 (see Vaxtin 1992) there were reported to be 15,184 Chukchis, 9,242 Koryaks (including a minority of Alutors), and 2,481 Itelmens (though this must include Russian-speaking Kamchadals of mixed origin). Everywhere in the Russian Far East the native peoples are far outnumbered by Russians today (reaching at least 90 % of the total population, although that figure has recently dropped as Russians have been returning westwards). In the volume on northern languages prepared for Unesco (Collis 1990: 24) it is stated that in 1970 82.6 % of the Chukchis considered Chukchi as their native language, 81.1 % of Koryaks, and 35.7 % of Itelmens. Today these figures are already considerably lower, with only a few hundred speakers of Itelmen left, for example (J. Bobaljik, pers. com.).

The data marshalled in the present work will, it is hoped, clearly establish once and for all that CK truly represents a unitary family, albeit one with great differences between its two branches, and one in which there has been considerable family-internal borrowing (mainly from Alutor to western Itelmen and Uka) obscuring the clear lines. Note in particular the sections on derivational and inflectional morphemes, where it can be seen that not only a large number of individual affixes but also whole paradigmatic systems are shared by the two branches. Since the late 1950s a succession of accurate but not very extensive dictionaries (into and/or from Russian) have appeared for the major languages (Chukchi, Koryak, and Western Itelmen), and the stage has now been reached where a fully-fledged comparative dictionary – albeit still limited in extent – can be presented. The reconstruction of proto-forms for the whole family (not just Chukotian), covering much of the basic vocabulary of both branches, has been undertaken along normal comparative lines, although many uncertainties of detail remain. These may in part reflect the elimination and/or merging of previous internal variety within Itelmen, but

in many cases it is simply difficult to distinguish cognates from early loans in the one remaining Itelmen language, which has undergone considerable lexical influence from Chukotian speakers encroaching into their previous territory from the north.

Proto-Itelmen sets without clear Chukotian cognates are gathered separately in this dictionary, without reconstructions attempted – this is due to the uncertainties in the material available (for example the absence of a distinction between /q/ and /k/ or /n/ and /ŋ/ in the older sources). Bidirectional 'cf.'s between a Proto-Chukotian (PC) and a Proto-Itelmen (PI) set indicates a probable cognate relationship that is simply too obscured by irregularities of form and/or meaning to be accepted as Proto-CK for the time being. The main criterion for setting up a reconstructed PC set is that cognates should be attested in at least two of the four languages (thus those of Muravyova's reconstructed roots that are attested in only in one language are not included – this fact should not be forgotten in future comparative work). Similarly, a Proto-CK set is only posited if there are clear cognates in both branches. The grouping of all Itelmen material together in the CK sets under one heading does not imply that this group is no more divergent than the individual Chukotian ones are – it reflects rather the limited quantity and quality of material for the non-western languages.

Unless otherwise indicated the sources are: for Chukchi Inenlikej 1982 (with additional forms from Moll & Inenlikej 1957); for Koryak Žukova 1990 (but also Žukova 1967, and with additional forms from Moll 1960a and Bogoraz 1917 for Kam.); and for Itelmen Volodin & Xalojmova 1989 (for the southern variety of the western language; northern forms are added mainly from Stebnitsky 1934). Note that the Bogoraz 1937 dictionary for Chukchi contains lexical material from both the Kolyma (NW) dialect and the Bering Sea coast (S) dialect, not always differentiated. The Alutor data is principally from Muravyova 1979, the Palana is from Žukova 1980, and the Kerek data is principally from Asinovsky's files (note that Asinovsky's informant was the last speaker, Ekaterina Khatqanga, whose idiolect showed evidence of some phonological influence from Chukchi). More precise (sub)dialect indications for starred Chukchi forms in Moll & Inenlikej – which contains forms from several dialects, unspecified – are my own, based on field work in 1995.

The Proto-Chukotko-Kamchatkan sound system

p	t	c	k	q		i		u
v	ð		ɣ	ʀ		e	ə	o
m	n		ŋ			æ	a	
	l							
	r							
w		j						

These symbols, supplemented by other IPA symbols as necessary, are also used for the modern languages. /ʀ/ is a voiced uvular (in K pharyngeal) fricative. An apostrophe following k, q, t, c or p indicates an ejective stop in Itelmen. Russian hard 'ы' is used for I /i/ in Volodin & Xalojmova after (in Russian) palatalizable consonants only as an orthographic convention, so is not reflected here.

There may have been a full palatal series in PCK (*/tʲ/, */nʲ/ and */lʲ/) – perhaps reflected in some of the "palatalizing" suffixes of K and A – but this is not reconstructable from the modern languages: palatalized consonants in K, A, Ke and I (mostly loans) appear to be secondary/affective, though the /l/ ~ /c/ alternation, of a similar nature, is common Chukotian. Lexical items with /c/ are "marked" as in some sense exceptional correlates of those with original /l/ (see also the c- vs. l-initial suffixes under Derivational affixes). Bogoraz 1922:834 describes the /c/ variants as "special" or (with verbs) as referring to shorter, momentary actions, whereas the /l/ terms are "generalized". /l/ often goes to /c/ when there is another /c/ in a word, just as one palatal sound in a word often triggers all alveolars in it to change to palatals in K and A. Also, less commonly, /t/ is palatalized to /c/ in K under such processes (and compare under */t/ below for I). A palatalized /t/ in Al. becomes /s/. /lʲ/ is regular after /i/ in Ke. Voiceless /ɬ/ is always palatalized in I (and this effects a preceding /n/ too).

Sound changes in the individual languages

A. Stops and affricates

*/**q**/ goes to /ʔ/ in C before another consonant, which metathesizes with the preceding vowel (/ə/ becoming /e/), and */**k**/ goes to /ɣ/ (or /j/) before another cons. (except /w/); /q/ goes to /X/ in Ke following another consonant; in older reduplicated forms and some other stems or prefixes (when there is another uvular/velar later in the word?) initial */q/ and */k/ (in PCK) go via PC */ʁ/ and /ɣ/ respectively to C /ʔ/ (pharyngeal /ʀ/ in K, /X/ in Ke) and C and K /ɣ/ (/h/ in Ke); /q/ goes to /k/ before /k/ in Al.; /k/ goes to /x/ before another /k/ (or sometimes /q/) in I.

*/**t**/ goes to /s/ (/c/ acc. Skorik 1968) before /i/ in Ke; in I */t/ often goes to /s/ before a voiceless cons., but next to a sonorant to /ɬ/ (e.g. when an intermediate vowel is dropped or verb stem-finally – */t(ə)k/ may go to /sx/ or /ɬx/), though initially in some common words voiced to /l/ (esp. Sed. – cf. təmət-); sometimes however it corresponds to /c/ or /c'/ in I, esp. when there is another alveolar in the word, as sporadically also in K and A (compare the variants under tæŋti-, also the conditions for palatalization in Chukot., though this could reflect an original */tʲ/) – cf. terŋat-, təʁæt-, taɣar(e), təni- and the W forms under PI 'evening'; initial */t/ sometimes weakened to /ð/ in Chukot. (cf. under ðiwlə-, ðiŋæ- and təmlu-).

*/**p**/ initial */p/ sometimes weakened to /v/ in Chukot. (cf. vəlɣə- and valom-), and to /f/ in some clusters with alveolars in I.

*/**c**/ to /s/ in Al., Kar. and (variably) Pal.; in C /c/ is generally a sibilant in the east and south ([s] or [š]) but an affricate [č] still in the west (there may be variation elsewhere), and is generally [s] before /q/; it is pronounced as an apical affricate [tˢ] in women's speech (as amongst older Al. speakers too); final /c/ varies with /t/ in C (and sometimes with /t/ or /j/ in K); /c/ to /t/ before /q/ in K and Ke.

Ejectives in I derive from several sources generally reflecting syncope – principally initial stop plus continuant (after loss of intervening vowel and

sometimes involving metathesis) or nasal plus stop after the dropping of a medial vowel (and certain consonantal prefixes – where a following schwa at least has been syncopated – are ejective before a vowel). The glottal stop in I may partly serve a demarcating function (Volodin sees it as "prosodic", functioning so as to break up disallowed vowel sequences, closing open syllables and marking off certain suffixes), however it can be meaning-distinguishing and historically may reflect a syncopated syllable when flanked by continuants rather than stops, thus parallel with (and complementing) ejectives from a similar source. The glottal stop is apparently somewhat less frequent in Sed. than in Khaj. (J. Bobaljik, pers. com.)

B. Continuants

*/w/ and */v/ merged as /w/ in C (though labio-dental in NW) and Ke; syllable-final */v/ to /w/ in K (and Pal.) and */aw/ to /oˉ/ in Al. (and /əw/ to /u/ or /oˉ/); in NE C */wu/ or /vu/ to /ɣu/, in line with the preservation of */ɣu/ there, and Ke */wə/ to /u/; in western I */w/ (written here 'v' as in Volodin & Xalojmova 1989) goes to /f/ or /x/ (but remains as a voiced bilabial in Sed.), and */v/ often drops (esp. intervocalically, but also word-initially, as */w/ sometimes too) – Dürr et al. distinguish bilabial /w/ from labio-velar /v/, whereas Georg & Volodin see them as in free variation (in Khaj.); in Kar. both apparently to /f/.

*/ʀ/ goes to /ʔ/ in C and Pal. and sometimes (non-initially, e.g. after cons. or /ə/) in Al. (otherwise kept as /ʀ/ - a pharyngealized glottal stop acc. Muravyova); in C /ʔ/ is always syllable-initial (sometimes by metath.) and is lost in final open syllable of noun stems (and also in second parts of reduplicated forms that begin with a cons.); in Ke to a uvular/pharyngeal /X/ initially at least (varying with /ʀ/ and /ʔ/ elsewhere in Asinovsky's data) – Stebn. has 'h' for Kar. too (probably for /X/); in I */ʀ/ initially and finally may go to /X/ (initially esp. in loans), otherwise dropped.

*/ɣ/ in Ke usually dropped intervocalically or after another consonant (though it may be preserved next to a schwa at least), but initially to glottal/pharyngeal /h/ and dropped before /u/ initially; next to voiced cons. to (labio-velar) /v/ in newer western I (Khaj. at least, where it varies with bilabial /w/, also spelled with 'v'), further to /f/ next to voiceless cons.

(apparently = E, S and older W /x/ – but sometimes /v/ in S), and in Khaj. */ɣ/ goes finally to /x/ – also initially in loans at least (not in Sed.); /ɣ/ may drop (or go to /w/) after another cons. in C, and goes to /w/ syllable-finally in K and A (labiovelar in Ke when not going to /w/, written 'u' by Asinovsky); in all Chukot. except NE C initial */ɣ/ may go to /w/ (or Ø in Ke) before /u/ or /o/; Kar. has /x/ (and sometimes /f/) acc. Krašeninnikov and Stebnitsky (but not Bogoraz 1917).

*/l/ is mostly voiceless in C; in I next to a voiceless (sometimes also voiced) cons. */l/ often goes to to /ɬ/, and /ɬ/ (from whatever source) is dropped before /s/ of the present tense; /l/ alternates lexically with /c/ in Chukot. as mentioned; initial */l/ to (orthographic) 'd' in E I, and to /n/ in S (where unvoiced /ɬ/ apparently goes to /s/ – but Rad. also has some forms written with 's' for this in W) .

*/ð/ and */r/ neutralized as /r/ in C (but in women's speech mostly to affricate /tˢ/), in Ke to /j/ (after cons.) or (between vowels or initially before /i/ or /ə/) Ø, to /j/ in K (/c/ before a continuant in Čav.), but Kam. has /z/ acc. Stebnitsky (also from /j/) – Bogoraz 1917 sometimes has /s/ before another cons. but otherwise /j/ – i.e. [ʒ]? – (as also Par. & Itk. acc. Muravyova), whereas Žukova also has /s/ initially for Kam. – there are apparently varying degrees of affrication, assibilation and voicing for this sound in coastal K dialects (apart from Ap.); A has preserved */r/ and has /t/ from */ð/ and in Kar. acc. Krašenninikov (but not Bogoraz 1917 for coastal Kar.) /r/ became voiceless /š/ – as also from */j/; in C initial /r/ often to /j/ if there is another /r/ (from */r/ or */ð/) later in the same word, and /r/ (from */ð/) varies with /t/ word-finally; in I */ð/ goes to /s/ or /z/, but initially may be dropped before an alveolar cons., and */r/ either to /s/ or (esp. Sed.) /z/ – where /r/ occurs in W it is generally a loan, but it appears often to have been preserved in E (distinct from */ð/), though it may sometimes stand for /l/; */ð/ (or */r/) sometimes corresponds to /c/ in I, esp. when there is an alveolar elsewhere in word, as sporadically in K (cf. ðəra-) – see under kəððel, ðəɣæl-, ræɣæ(l)-, ðaðjol(a), also ðəɣ(ðəɣ) – and in certain clusters to /t/ (cf. eðɣə-, miðɣən, and əð(ði)).

*/j/ to /ɣ/ before coronal cons. in C (and to [ʤ] generally for western speakers, as also in some K); In I */j/ goes initially at least to /z/ (or /s/ in Khaj. and Uka – compare Kam. and Kar. under */ð/ above) but apparently sometimes also to /c/, as with */r/ and */ð/ (esp. when there is a following

alveolar elsewhere in word as under jil(ə)jil?); in C initial */uj(i)/ to /uw(i)/ and initial */jə/ sometimes to /e/ in K; */aj/ to /eˉ/ in Al. (and /əj/ to /i/ or /eˉ/), and initial /jə/ (also when from */ðə/ and */rə/) to /i / in Ke; initial /j/ + vowel alternates with vowel + /j/ in a number of stems (e.g. jət(av)- vs. ajt(at)- – and compare also the all. and abl. case allomorphs after cons. under Nominal inflection).

*/m/ to /b/ and */n/ to /d/ in E I (initially and often medially too), as sometimes also in S, and */ŋ/ to /ɣ/ in C following /l/ or /c/ and before another nasal, but to /n/ before an alveolar cons. and finally often lost; in western I /ŋ/ often dropped intervocalically (also initially) and in E generally went to /ɣ/ it would seem (as sporadically also in K and A initially), though this may in part be just an orthographical matter.

In W I single voiced continuants are geminated following a stressed vowel (this is not consistently indicated in forms cited). The Sed. dialect of W sometimes has initial voiced fricatives and sibilants where standard Khaj. has voiceless ones - in both dialects voiceless continuants (other than initial /x/ and /X/) may also be from contact with stops.

Intervocalic continuants often drop in C (esp. western and excluding Khat., and less among women than men acc. Bogoraz1913), leaving geminate of second vowel (also /t/ and /n/ are thus dropped before or in some inflectional endings in NW – at least among older men); also Ke (and as reported by Stebnitsky for Kam. as regards /j/).

C. Clusters

It is assumed that all manner of medial clusters consisting of two consecutive consonants (including geminates) were possible in PCK (as in modern C and K), i.e. stop + fric., fric. + stop, fric. + fric., stop + stop, nasal + stop, stop + nasal, nasal + fric., and fric. + nasal. In Pal., Al. and Ke /ə/ between consonants is apparently somewhat more often dropped in rapid speech to produce consonant clusters than elsewhere (notably word-initially, as also in some combinations in C).

In **C** */ll/ and */cl/ to /tl/ and */rr/ or */ðð/ (also */lr/ and */cr/) to /tr/ (but to /rr/ in S and /tt/ in NW); */rt/, */ct/ and */pt/ to /tt/, */cc/ to /tc/, and */rj/ (or */ðj/) to /tj/; */ww/, */ɣw/ and */wɣ/ to /kw/, and */kt/ to /ɣt/; */rn/ to /nn/ and */km/ (or */ɣm/) to /wm/ or /jm/ (stop + nasal otherwise to nasal + nasal in all Chukot.); */kp/ (or */ɣp/) sometimes to /wp/, */kj/ to /ɣj/ (and */ɣɣ/ to /kɣ/); and */rk/, */rɣ/, */cɣ/, */tr/ and */tc/ all to affricate /ttˢ/ in C women's speech.

In **Ke** */lŋ/ (or */lɣ/), */tl/ to /ll/, and */cŋ/ to /tt/, */tk/ to /tt/ and */tj/ (also */ðj/ or */rj/) to /cc/, */ðð/ to /tt/, */ɣw/ and */ww/ to /kk/, and */km/ apparently to /mŋ/.

In **K** */tl/ to /ll/, */jl/ and */lɣ/ to /ll/ and */lʲn/ to /lʲlʲ/; */tj/ and */jj/ (also */ðr/, */tr/, */ðð/, */tc/ and */rr/) to /cc/ (Kam. /ss/); */jw/ metathesized to /wj/; */cq/ to /tq/; */ɣw/ or */ww/ (or */ɣv/) to /ww/; stop + nasal to nasal + nasal; acc. Bogoraz */tk/ to /cc/ in Par.

In **A** */ɣw/ and */ɣv/ to /ww/ (though not productively), */ɣr/ to /vr/, */tl/ to /ll/, */nl/ to /ll/, */rl/ to /rr/, and */ɣn/ to /wn/; */cq/ to /sq/ in Pal. and */cŋ/ to /nʲŋ/ in Al.

In **I** initial */l(ə)ʁ/ apparently to /X/ (or /x/ – as also from initial /l(ə)ɣ/); /l/ plus /ɬ/ goes to /nʲɬ/. There is considerable variability in clusters in I, involving metathesis and the dropping of consonants in complex initial clusters (the first part of reduplicated forms in particular often appear to have been simplified); many have resulted (with syncope) in ejectives, as stated above – initial /c'/ often comes specifically from clusters containing /r/ or /ð/ (cf. jərrə- and ðəɣæl-).

D. Vowels

The vowel harmonic relationship between dominant */a/, /o/ and /e/ and recessive */æ/, /u/ and /i/ has collapsed in Ke and Al. (and Ap. acc. Stebnitsky), but not in Pal. or Kar.; in Ke the only full vowels are /a/, /i/ and /u/ (there is no vowel harmony). In I it is only preserved intact (amongst older Khaj. speakers at least) in nominal and adjectival declension and derivations (in verbs only more or less regularly in connection with i/e and u/o in suffix -qzu-/ -qzo- and in stems before infinitive affixes -s or -kas, which are dominant). In K - and in Enm. within C - it is disturbed by */æ/

and */a/ at least partially merging as /a/ (fully so in Kam. and Ap., as also in Ke and Al., but not Pal. – cf. under rəRæv); otherwise */æ/ and */e/ merge as /e/, as in standard C (though Bogoraz distinguished the two orthographically); if any */æ/ goes to /a/ within a word in K then they all do.

Following a cons. */a/ goes to /ə/ before /R/ in Al., and /e/ and /o/ are generally long and arise from combinations with /j/ and /w/ as described above, but they may occur short, especially in position following stressed syllables or in unstressed exclamations and the like; a lengthened /a/ may also occur, from */ əʔ/ or final */aʔ/. Length is not consistently marked in the sources (apart from Muravyova 1979).

In western I */u/ and */i/ may go to /o/ and /e/ (except before a labial or alveolar respectively) and */e/, */æ/ may go to /a/ (by generalization of original dominant harmony forms).

Loss of vowels - especially */ə/ but also many full vowels - produces complex strings of successive consonants in I; in Volodin 1976 I has an intermediate stage of reduced full vowels (/ã/, /õ/ and /ũ/), but this simply reflects allomorphy of /ə/ acc. Georg & Volodin1999;*/ə/ sometimes goes to /i/ (or /e/) in I (esp. before alveolars), but in some environments also to /a/ (cf. under -lRən).

Vowel clusters arising at morpheme boundary (after single cons. or Ø) are simplified by eliminating the weaker vowel (on a scale u/o > i/e > e/a). Final full vowels of nominal stems in absolute final position go to /ə/ (< */e/ ~ /a/) in C (and otherwise often completely lost in all Chukotian).

In Al. there appears to be lengthening of full vowels in a number of disyllabic stems with /ə/ in the second syllable, also when undergoing partial reduplication; these long vowels could be due in large part to loss of an intervocalic fricative or nasal, with syncope following elsewhere in Chukot. – cf. under PCK meməl, for example. When a stem with final stress is followed by suffixes consisting of a single cons. the latter is geminated and followed by /ə/ in Al. (cf. the infinitive variant -kkə in K); also monosyllabic stems ending in a consonant are treated this way (thus ŋajjə from *ŋæj).

E. Prosodic features

The syllable structure of PC - and probably also PCK - was (C)V(C), with

single vowels only. Lexical and epenthetic schwa are not consistently distinguished in reconstructed forms, which are presented in maximally expanded surface forms that assume similar restrictions on consonant clusters as in contemporary C and K (by convention a schwa is also added after verbal stems ending in two consonants). Epenthesis of most but by no means all schwas is assumed to be a consequence of syllabification restrictions.

Primary word stress was probably on the penultimate syllable of the stem (or stem plus single syllabic suffix), as predominantly still so in the Chukot. languages today although this is complicated by sequences of syllables with /ə/ (and stress retraction in C and Al. at least) and by secondary stress in compounded/ incorporated structures. (Dunn suggests primary stress on the first full vowel following a consonant for the S dialect of C, however, with alternating secondary stress thereafter.) Final syllables and initial syllables with schwa were probably not stressed. Stress was not distinctive but was probably maintained upon the stem (including the first part of reduplicated forms - also of partial reduplications of disyllabic stems). This must have been disrupted in I, where stress is generally upon the first syllable (apart from inflectional prefixes), by the reduction and dropping of full vowels. Stressed open syllables are normally lengthened in Al. In Ke there is alternating rhythmical stress starting after the first syllable (or on any inherent long vowel) which causes lengthening of short full vowels in open syllables, apparently reflecting Siberian Yupik influence (there is also some lengthening of initial syllable full open vowels – note that long vowels in Ke may also arise through loss of voiced fricatives). In doubtful – or partial – cases of lengthening in Ke in this dictionary the second vowel is put in parentheses.

There was probably also an automatic glottal onset to stem-initial vowels as in K and A today (in Ke acc. Asinovsky it is only found when the initial syllable is closed), also separating adjacent vowels in reduplicated forms.

A raised ° before a word in I indicates what Volodin & Xalojmova 1989 call "labialization", but which may rather represent pharyngealization as sporadic compensation for the collapse of vowel harmony (Bobaljik, pers. com.), i.e. reflect earlier dominant harmony, as in °am under əm-, °kasf under katɣa, and °kəɬf under kətɣə (compare eastern Even words with pharyngealized "hard" vowels).

Proto-Chukotian and Proto-Chukotko-Kamchatkan stems

Chukchi forms cited from Bogoraz have been normalized to the orthographical conventions adopted here, as have forms from Muravyova 1986 (though those few that are only attested there have been left as bare roots). Itelmen and other forms that are clearly cognate but phonologically or semantically problematical are put in square brackets (along with variant or derived forms). Forms from non-default sources (and all Ke) are generally left as found (transliterated into Roman orthography as necessary), e.g. with 'y' for schwa (or Radloff's 'i̯'), but with some simplification of diacritics and with 'c' for 'k̓' in Radloff. (and note that Bogoraz' 'j' is usually represented by 'ž'). Forms with no vowels other than schwa can be taken to be recessive in both C and K as regards vowel harmony unless marked "dom.." (or if there are dominant derivatives given that contain only inherently recessive affixes) and a form marked as dom. in one of them can be taken as dominant in both (the few exceptions are indicated). Derived forms from reliable (newer) sources with obvious morpheme boundaries are broken up by hyphens (though not for case/number suffixes or reduplicated stems), and western I infinitive markers -s and -kas in modern forms are also separated by a hyphen from the verb stem. Recessive PC stems combining with dominant singulative -lŋən in all attested forms are given as dominant (i.e. treated as whole words). In general, singulative endings (including reduplications) have not been separated by hyphens on reconstructed nominal proto-forms (though they often appear in parentheses). Consonants and final vowels in parentheses in proto-forms are in most cases probably original but lost in many modern reflexes, whereas whole morphemes in parentheses are optional (neither count as regards alphabeticization). An entry consisting solely of '–' means that a cognate has not (yet) been identified (in C or K). Lack of a translation on a main entry line means that the meaning is the same as on the preceding main entry above. Alphabetically, 'æ' comes after 'a', 'ɣ' after 'e', 'ð' after 'c', 'ŋ' after 'n', 'ʀ' after 'r', and 'ə' last.

PC accat- 'tumble' [or atcat-; cf. PI 'fall'?]
C: atcat- 'tumble, turn over, fall' [tr. r-atcat- 'overturn']
K: cəcat- 'tumble, turn over' [Moll also accat-; tr. jə-ccat- 'overturn' in Žuk.]

PCK? acceqla- 'sneeze' [or atceqla-]
C: atcʔela- 'sneeze'
Ke: acciXla-
K: acceqla- 'sneeze' [Žuk.]
A: Pal. accaqla- 'sneeze' [Nag. has assiqla- for Al.]
I [Kur. et al. have aʔqˈsx 'sneeze' for Sed.; Sar. has E ekšgaisscyc and W ekšxalc 'sneeze', and Rad. has E ekšoxsic, S acxakus 'sneeze'; for askɬ-kas 'cough' see PI 'sputum']

PC acce- 'hide' [or atcə-; cf. amecat-?]
C: atcə- 'hide (intr.)' [atcə-cet-ɣərɣən 'hide-and-seek'; r-atcə-ŋat- 'hide (tr.)' in Bog. - atco ləŋ- in Kur. et al.]
Ke: accəcii- 'play hide-and-seek' [also acci- 'hide' in place names acc. Leont. & Nov.]
K –
I [note sŋaceʔɬ-kas 'play hide-and-seek' – cf. PI 'hide' for the first part?; Rad. has W acagskaz 'hide (tr.)']

PC acce(nɣeŋ) '(special kind of) fish trap' [or atcə(nɣeŋ); cf. (nə)ɣiŋ(nəɣiŋ) for the second part and perhaps PI 'catch fish in net' for the first]
C: Khat. atcənjeŋ 'fish trap'
K: acənɣeŋ 'net' [Moll; Mur. has accə(nɣeŋ)]
A: assə(nⁱɣiŋ) 'net, fish trap'
I [note cˈvucˈ 'fish trap']

PC accəʀat- 'lie down' [or atcəʀat-; cf. arəcŋ(at)-, though the relat. is obscure]
C: atcʔat- 'lie down (to sleep)'
Ke [note cʀija- 'sleep', mal-icʀija- 'sleep soundly', cʀija-ttu- 'doze, feel sleepy']
K: accəʀat- 'lie, lie down (human)'

PC acŋəta 'alongside' [cf. arəcŋ(at)-; instr. case converb?]

C: acɣəta, 'alongside, next to' [and acɣət 'row'; Kur. et al. also r-acɣət-at-'line up']

Ke: attəta 'alongside, next to'

K: anʲŋəta 'alongside, next to' [and anʲŋe-cʀən 'inside/double parka'; Moll has anʲŋət- 'stand in line']

A: Pal. asŋta, acŋta 'alongside, next to' [Mur. has Al. anʲŋət 'row' and Kib. et al. anʲŋəta 'alongside'; note also Pal. annetʔən 'inside/double parka' in Žuk.1980]

I [note E icsin 'next to?' in cixeguc icsin xliki 'sleep with one's wife' in Rad.]

PC acəŋ 'debt' [borrowed into Siberian Esk. as asəŋa; from *arəcəŋ?; there may be a link to inæccə- and/or acŋəta]

C: acəŋ 'debt' [acəŋ- 'put s.o. into one's debt, entice, induce s.o. to do s.th. with one'; note also ena(r)acə-tko- 'put blame on s.o. else, complain about s.o.' acc. Moll. & In. (but in Bog. = 'be sickly, ill', going with arəcŋ(at)-), also enaac 'cause, reason', enaaco ləŋ- 'accuse, refer to' (cf. inæ-)]

Ke: a(a)ciŋ 'debt' [and aciŋ-akmijt- 'borrow']

K: acəŋ 'debt'

A: aasəŋ 'debt'

PC ajɣəve 'yesterday (evening)' [cf. ajŋon]

C: ajwe 'yesterday' [ajwecɣan 'evening' – Moll & In. have ajwecɣa 'late'; Rf. has aiwo 'yesterday', Klap. aigomkje 'evening']

Ke: ajuŋ 'yesterday' [note also aikku 'evening (party)']

K: ajɣəve 'yesterday, not long ago', ajɣve, ajɣəv 'not long ago' [Moll also has ajɣove 'not long ago, a few days ago'; ajɣəvənʲŋən 'evening'; Kr. has angevinge, Avaca River aibyngyt 'evening'; Rf. has Kol. aigawicen 'late']

A: e⁻ɣəv 'not long ago' [in Kib. et al. 'yesterday' – they also have eɣo⁻v-inʲŋa 'then (long ago)' (cf. iɣənŋin); Pal. ajɣ(ə)ves 'evening'; Rad. has ajgaveroen 'evening']

I [Sar. has W ajnelxat 'evening' – from Chukot.?]

PC ajkol(a) 'skin mattress'

C: ajkol, 'skins to sleep on, bed' [ajkol-at- 'spread mattress']

Ke: ajkul 'bed' ['skins to sleep on' acc. Skor.]

K: ajkol(a), 'bed, mattress' [ajkol-at- 'spread mattress']

A: e⁻kul(a) 'bed, mattress'

I [Kr. has E aikul 'bed' – from the Chukot.?]

PC ajmak 'bundle?' [borrowed into CSY as ajmaakə 'limbless carcass' acc. de Reuse, but NSY ajmaq 'bag made of old skin used for carrying meat on back')]

C: ajmak 'carcass of killed animal'

Ke: ajmak 'carcass'

K: ajmak, 'dead animal, bundle, packet' [ajmak- 'wrap   up']

A: e⁻mak 'dead animal, bundle'

PC ajmalqəl 'shoulder or thigh bone of animal' [cf. ajmak and   -lqəl; borrowed into CSY as ajmaalqə acc. de Reuse (NSY ajmalqə)]

C: ajmalqəl 'animal shoulder or thigh bone'

K: ajmalqəl [Mur.]

A: e⁻malqəl 'animal thigh bone'

PCK? ajmə- 'fetch water' [or 'scoop up water'?; cf. ajmənvə; the relat. – if any – with (m)iməl is obscure]

C: ajmə- 'fetch water' [ajmə-jocɣən 'pail']

Ke: ajmə- 'fetch water' [and note mimlənkajmə- 'scoop up water']

K: ajmə- 'fetch water' [but also emə- 'scoop up water' – contam. with ðə(n)mæ-?]

A: e⁻mə- 'fetch water' [and em-iŋaŋ 'water ladle' and in-emə- 'scoop up (water)', tr. or intr. – Kib. et al.]

I [Rad. has E ažimx, azamx (Kr. ažam) 'water' (also Uka) – kixin azamx 'sea water'; Klap. has Uka asamuh, S asamx; for eʔ-joɬxen 'pail' see PI 'water' and for W šmym 'juice' see under (m)iməl]

PC ajmənvə 'hole in ice' [cf. ajmə- and -nv(ə)]

C: ajmən 'hole in ice' [stem ajmənwə-; also 'well' in Kur. et al.]

Ke: ajmənna 'hole in ice'

K: ajmənə 'hole in ice, well'

A: emənə 'well' [Kur. et al.; Nag. has emənvən 'place for getting water']

PC ajŋon 'long ago' [or ajŋəvŋun? – cf. ajɣəve and ŋun]
C: ajɣoon 'long ago (within same month)' [also ajwoon]
K: ajŋon 'long ago, before' [and Kur. et al. have wocenʲ-ajŋon 'last year']

PC ajran 'winter compartment?' [cf. ajval and ra(ra)?; borrowed into Sib.
  Yup. as a(a)ɣra 'winter sleeping compartment, main room of trad. house']
C: aɣran 'winter chamber (family compartment within winter yaranga)'
K: –
A: Pal. ajr(an) 'hut'

PC ajtat- 'drive (herd)' [cf. (ðən)jət(av)- and suffix -æt-]
C: aɣtat- 'drive animals from place to place' [aɣta- 'drive into compound,
  surround, screen', aɣtatwan 'compound']
Ke: ajtaat- 'chase, drive' [Asin. also has 'pull (by sledge)']
K: ajtat- 'drive herd of animals'
A: Pal. ajtat-
I [ajtate-s 'drive or chase out' (acc. Kur. et al. only Sed.) - from Chukot.?]

PCK? ajval 'lee side' [cf. perhaps javal(a); compare under æjɣə; Bog.
  comments that the bitterest winds along the Arctic coast of Chuktoka are
  from the west (as opposed to from the north on the Pacific coast) so the
  entrance of the yaranga faces towards the east there]
C: ajwal 'lee side, wind break', ajwac 'wind break' [and ajwalə-ŋqac(ken)
  'south' – from a Pacific coast perspective acc. Bog., who also has ajwacə-
  ŋqac 'east' from the Arctic coast and ajwatlan 'reindeer Chukchi living to
  the east of the upper Anadyr (lit. "easterner")'; Moll & In. also have ajwat-
  ron/ajwat-lon 'left side of sleeping compartment (seen from entrance)' – i.e.
  side nearest entrance of yaranga? (cf. ro(ro)]
Ke [for ajwana(a)ŋa 'south' see ajvan(a)]
K –
I [Rad. has S acvaspil 'east (wind)' - cf. PI 'wind'; for ajvaŋ 'north' see æjɣə]

PC? ajvan(a) 'Eskimo or coastal Chukchi' [cf. ajval (as Bog. suggests) and/or
  æjɣə if not a loan word from Eskimo (CSY ajwaanəŋ 'from the north', stem
  ajɣuq) – perhaps a blend prompted by a fortuitous similarity; Bog. notes

that the mainland Chaplino Eskimos also call the St. Lawrence Islanders ajvanat]

C: ajwan(a), ajwana-l?ən 'Eskimo, coastal Chukchi' [pl. ajwante or ajwanat in Bog., who has the first sense of ajwan mostly of Chaplino Eskimos and the second of 'coastal Chukchi from the point of view of the reindeer Chukchi' (more often cecat-ajwan, the first element apparently meaning 'along' as in aŋqa-cece 'along the coast') – he also has in his texts eiwhuelit 'St. Lawrence Islanders' (though this may be fore æjɣə-lʀət with æjɣə rather); Leont. & Nov. 1989:177 have ajwana-l?ət for the mainland CSY Eskimos]

Ke: ajwanakku 'Koryaks', ajwanatal?an 'southerner (from south of Majngapilgino)' [and ajwana(a)ŋa 'south' – compare ajval; note that the Kerek for 'Eskimo' is uŋiilʀan rather, which could reflect CSY Uŋaziq 'Chaplino' (< *uŋaliq?)]

K [Vdov. 1961:44 has ajvan 'Eskimo']

A [Vdov. has Al. jevan 'Eskimo', presumably for e van]

I [for ajvaŋ 'north' see æjɣə]

PCK? ajwa 'brain'

C: ajo 'brain' [Bog. has all. ajwajpə]

Ke: aju 'brain'

K: awi 'brain' [adj. awja-kin]

A: e wa 'brain' [Kur. et al. have ewajiw]

I [ajuvaj, a?jva 'brain' acc. Dürr et al., with labio-velar v; Vol. & Xal. have a?juv?aj 'brain', pl. a?juva?n, Vol. 1976 ajuv?aj and Geo. & Vol. 1999 stem ajwa- (Kur. et al. aajwa, ajwaj), from the Chukot.? – but Rad. has W jajsujajsu 'brain']

PC akerkəlʀən 'naked' [cf. æ- -kæ and kerker and -lʀən; there could, however, have been reinterpretation in C, so from akekkəlʀən rather]

C: akerkəl?en 'naked'

Ke: akəkəl?an

K: akekkəlʀən

A: akikkəl?ən 'naked'

PC alantat- 'be scattered'
C: alantat- 'be scattered'
Ke: alʲanta(a)t-
K –
A [note Kr. has alanktata 'down' for Kar. (acc. Stebn.)]

PC alpə(nəŋ) 'flounder' [cf. alpənŋ(ən) - contam. in C?]
C: alpənŋəlɣən 'flounder (flat fish)'
Ke: alʲpijʔal
K: alʲpealʲ 'flounder' [Žuk. has ʀalʲpeʀalʲ but Mur. alpənəŋ]
A: alʲpi 'flounder'

PC alpənŋ(ən) 'patch on footwear' [cf. alpə(nəŋ)]
C: alpənŋəlɣən 'patch on sole or boot' [Skor. has pl. alpənŋət 'soles'; Bog.
  has sg. alpənŋən; alpənŋ-at- 'put patch on sole']
K: alʲpənŋən 'patch on sole or boot'
A: alʲpənŋən 'patch on sole' [alpənŋ-at- 'put patch on sole']
I [atɬemk'a-nŏŋ 'patch on boot', atɬemk'a-s 'put patch on boot' – from
  Chukot.?]

PC alʀeqat- 'float or swim'
C: alʔeqat- 'float, swim'
Ke: alʀi(i)ʀat-
K: alʀiqat- 'float, swim' [but Moll has alʀeqat-]
A: alʀiqat- 'float, swim'

PC aləm(əŋ) 'although?' [cf. ləm and-(ə)ŋ?; borrowed into NSY as aləməŋ
  'although, even']
C: aləməŋ 'suppose, you know, although'
Ke: aləməŋ 'you know, but'
K: alməŋ 'all right, let him' [Žuk.; Bog. has Kam. aləmə(ŋ) 'I wish it were,
  oh well']
A: Pal. aləm 'although'

PC amamðəʀal(oŋ) 'in vain?' [cf. prefix æm- but also perhaps ana(m)]
C –

K: amamjəralʲoŋ, amamjəʀacoŋ 'in vain'
A: amamsəʔas 'at random'

PC amðo- 'extended' [or amro-]
C: amroɣtə, amrowtə 'spacious, expansive'
K: amjo-ɣəjŋən 'expanse'
I [Rad. has W inamczetez 'extend' (with ðən-)]

PC amecat- 'disappear' [cf. accə-, though the relat. – if any – is obscure]
C: amecat- 'disappear, hide'
Ke [Asin. has amicɣən 'disappear, hide (?)', but also pəəlʀa amejŋatək (for
   amiŋatək?) 'after sunset' (cf. pəəlʀan undet pəɣ(at)-)]
K –
A: Pal. amecat- 'disappear, hide' [and Nag. has am- 'close up, heal']
I [ameɬat-kas 'disappear, hide' and ameɬaŋ 'secretly' – from Chukot.?; Rad.
   has W amelan 'hidden', but note also E adimtsin 'hide (intr.)']

PC ana(m) 'then?' [or anəʀam – cf. ʀam]
C: anə 'emphatic particle, hey, there, then, well', anə-qun 'well now, look!'
   [Moll & In.; for am-am 'well now' see ʀam(to)]
Ke: anam 'probably, for sure'
K: anam 'probably, evidently, however' [Moll, also for anam–ʀat 'however,
   probably' (cf. wəʀat); Bog. has anam, anaqu 'then, and so']
A: ana 'probably' [Kib. et al.]

PC anŋen(a) 'soul or inner self' [cf. anəŋ-]
C: anŋen 'anger', anŋen-ajpə- 'get angry' [the former in Bog., the latter with
   jəp-; and note anŋelon 'wave' - as verb 'get rough (sea)']
Ke: anŋinaŋa 'anger' [anŋiin-ajpə- 'get angry']
K: anʲŋen(a), 'soul, character' [Mur.; Bog. 1917 has anŋen 'mind, common
   sense', anŋena-ipe- be angry' for Kam.]
A: anŋin(a) 'soul, character'
I [Rad. has W ankin 'furious']

PC ano 'spring?'
C: anon 'early summer' [but acc. Bog. 1900 'second part of summer (from

mid-June)']

Ke [anulʀac-jaaŋa 'summer yaranga']

K: anoan 'spring' [anok 'in spring']

A: anu 'spring'

I [anok 'in spring' (loc.) - from Chukot.]

PC anəŋ- 'inside'

C: anŋə-lʔən 'not full', anŋa-twə- 'become less (liquid in container)' [and anŋ-at- 'sink down in water' - in Bog. 'dive down into underworld (shaman)'; Bog. also has anŋelqə 'clitoris' (cf. qəlqæ)]

Ke [anəŋku-ŋauqij 'inner woman's combination suit']

K: anəŋko(cəko) 'inside'

A: anəŋku 'inside' [loc. -ku; and note Pal. anŋ-metɣən 'greatgrandfather']

PC aŋja- 'praise'

C: anja- 'praise'

Ke: aŋja-

K: aŋja- 'praise' [in Žuk. also 'answer, reply']

A: Pal. aŋja-tko- 'praise' [Kur. et al. have aŋja- 'answer' for Al., also nom. aŋja-n 'answer' (Nag. has both senses)]

I [aŋja-s 'praise', k'-aŋja-ʔan 'braggart' – from Chukot.?]

PCK? aŋqa 'sea' [cf. anəŋ-?]

C: aŋqə 'sea' [and aŋqa-lʔən 'coastal Chukchi']

Ke: aŋqaaŋa 'sea' [aŋqajən 'southern']

K: aŋqan 'sea'

A: aŋqan

I [anXsX 'mouth of river' – Rad. has E ags, S ausxad; Klap. has W ösuk, Uka ähsûka 'sea']

PC apaqallə- 'crawl (face down)' [cf. qalelle(ŋ) for second part?]

C: apaqatlə 'face down'

Ke: apa(a)Xa-lʀija(a)- 'crawl' [apaaXacciŋ 'face down']

K: apaqalləjata 'crawling', apaqa-lʀat- 'crawl (baby)' [and Bog.1922 has Kam. apaqaci 'face downwards']

A [note apinanaŋ- 'lie on stomach' in Nag.]

PC are 'groin'
C: arelɣən 'groin' [Moll & In.]
K: ajeaj 'groin' [Žuk.; note Kam. assalŋən 'thigh' in Bog. 1917]
A: ari 'groin'

PC arkar(a) 'container for weapon' [or aðkað(a); borrowed into NSY as ašqari 'quiver']
C: arkar 'container for carrying bow in' [Bog.]
K: ajkaj(a) 'holster (for gun)' [Žuk.]
I [Rad. has W šxaztnom 'leather container for axe']

PC arkəc(at)- 'tilt'
C: arkəcat- 'tilt, slope, lean to side' [and arkəcetə 'sloping, tilting', arkəcə-tko- 'rock (boat)']
K [Bog.1922 has Kam. ajkəca 'aslant'; for ajkat 'shore, bank of river' see æjkæt]
A [for arəsəkə(ŋ) 'on one's side' see arəcŋ(at)-]

PC arojvə- 'strong or healthy' [or aðojvə-; the relat. to ærəm(æ) is obscure]
C: n-arojwə-qen 'powerful, manly', arojw-aw- 'grow stronger' [borrowed into NSY as arojɣaɣi- 'recover after illness', become animated (whale)']
Ke: n-aruwjuu-Xi 'healthy' [from the C?]
K –

PC arəcŋ(at)- 'lie down on side?' [or ʀarəcŋ(at)-?; cf. perhaps acŋəta and -cŋat-, but also accəʀat- and arkəc(at)- – there may be some entanglement here]
C: arəcɣat- 'lie down (on side)', arəcɣə-twa- 'be lying down' [arəcŋa 'lying on side'; arəcɣat- is especially used of reindeer acc. Bog.; note also arə-tko-, ar-at- 'be ill', ar-ɣərɣən 'illness' in Bog.]
Ke [ajtət- 'lie down (on stomach?)', ajtə-twa- 'be lying down', and aitta 'on one's side']
K: (ʀ)ajəcŋ-əŋ, n-ajəcŋə-qen 'sloping' [Žuk.; Mur. has stem ajəcŋ-; Bog. 1917 has ajicŋa 'lying on side' for Kam.]
A: arənʲŋat- 'lean on side' [Nag., who also has arəsəkə(ŋ) 'on one's side';

Mur. has stem ar- 'be ill', like the C above in Bog., but Kib. et al. only have ra- 'make ill', for which see ræ-]

PC arətɣər 'ravine' [cf. æræt- and-ɣərŋən]
C: aatɣər 'ravine with stream in it' [Bog. has aatɣər, aatir 'stream']
Ke: aatəjn 'ravine'
K –
A: Pal. arətɣər 'ravine'

PC atarɣo ləŋ- 'laugh at' [or ataðɣo ləŋ-; cf. ləŋ-]
C [Bog. has atarɣo nʔel- 'make a racket']
Ke: ataju ləŋ- 'laugh at' [and nə-tajɣa-u- 'make laugh']
K: acacɣo ləŋ- 'laugh at' [Moll & In.; also acacɣ-at- (Kur. et al. acacɣənce-) 'laugh', acacɣən 'laughter']
A [note sissəŋ-at-, sissəŋu ləŋ- 'laugh at' in Kib. et al.]
 I [Rad. has S askazyk 'laugh']

PCK? atq(at)- 'limp' [cf. atənvə and -æt-]
C: atqat- 'limp', atqə-lʔən 'lame'
Ke: atXaat- 'limp'
K: atq-av- 'limp', atqə-lʀən 'lame' [and atqat- 'wound']
A: atq-av- 'limp' [and atqat- 'wound' – Kib. et al.]
I [atqave-kas 'limp' – from Chukot. – but also atqusa- 'lame'; Kur. et al. have atqusa, Sed. atq kɬawaknin, atqɬawoc 'cripple'; Rad. has W atkavkaz, E taktxuresik 'limp' but also E baktxoc 'lame']

PC atənvə 'wound' [cf. -nv(ə), also atq(at)-]
C: atən, pl. atənwət 'wound' [and verbal atənw-at- 'wound']
Ke: atnuuŋa 'wound' [verbal atnw-aat-]
K –

PC avalomkəlʀə(n) 'disobedient' [cf. æ- -kæ and valom- and -lʀə(n)]
C: aalomkəlʔən 'disobedient'
Ke: awalumkəlʀan
K: avalomkəlʀən

PC awaŋ(kat)- '(be) open' [cf. wæŋ- and wæŋtə-, also suffix -æt-, and perhaps æv- for the first part]

C: aaŋkat- (intr.), tr. r-aaŋk-aw- 'open (e.g. mouth)' [and aaŋkə 'open, not shut' with the old dom. harmony all. ending -kə(ŋ)? (compare ajpetə under æjpə- with the new all.)]

Ke: awaŋtn it- 'be open'

K [note ewen-et- 'become wider']

PC awəlpal(ŋən) 'fish tail' [or 'tail fin']

C –

K: awəlpalŋən 'fish tail'

A: aw(ə)lpal 'fish tail' [Žuk. – 'tail fin' acc. Nag.]

PCK awət(a) 'flint scraper'

C –

Ke [ukku autaaŋa 'shaft of stone scraper']

K: awət 'flint scraper' [stem awta- in Žuk.]

A: awət 'flint scraper'

I: avut 'scraper', axte-s 'cut up fish' [the first from Chukot.?; Dürr et al. have avŭt 'handle of scraper'; Moll has awet 'scraper for preparing skins' for Sed.; Rad. has W xtkaz, E vtokoz, S vtukus 'clean/prepare fish for cooking']

PC æcɣi '(just) now' [borrowed into NSY as esɣi 'when, as soon as']

C: ecɣi 'before, earlier (than), as soon as' [and note ecenur, ecenut (with ŋut?) 'if only, better' (borrowed into NSY as esur 'enough, if only'), ecenci 'moreover, better'; Rf. has etcigi 'now']

Ke [note acaanut 'only', also acci 'also' in Leont.]

K: ecɣi 'now, today'

A: asɣi, Pal. esɣi 'now, today'

PC æcʀən 'fat' [or 'reindeer tallow'?]

C: ec?ən 'reindeer tallow' [ec?ə-l?ən 'fatty, fat']

K: acʀən 'fat' [ɣ-acʀə-lin 'fatty, fat'; Bog. has Kam. ɣ-aca-lin 'fat']

A: as?ən, Pal. ec?ən 'fat'

PC æcəqmæl 'as if' [cf. mæl-]

C –

K: ecəqme 'as if, too'

A: asəqmal, asiqmal 'all the same', Pal. ecaqmel 'as if, too'

PC æðæqvərrəkæ 'in vain' [cf. æ- -kæ, ðæq and vərræt-]

C –

K: ejekvəjəke 'in vain' [Moll]

A: ataqvərrəka 'in vain' [Kib. et al.]

PC æɣælmiq 'tinder'

C: eɣelmiq 'tinder' [Bog.]

K: awalmən 'wick (of moss)' [Žuk.]

A: awalmiq 'wick'

PC æjæjvæq 'however' [cf. ŋævæq, also A -vaq under -q?]

C –

Ke [Leont. has ajʔat 'but, if']

K: ejejvek 'however, but' [Moll – Mur. has ejejvaq; Moll also has ejejwecke 'pitifully, a shame']

A: ajevaq 'however, but', Pal. ajajvaq 'however, unfortunately' [also 'suddenly' acc. Kib. et al. for Al.

I [Kur. et al. have jaq 'however' for Sed. – from the Chukot.?; cf. also under naqam]

PC æjæk(æ) 'lamp'

C: eek 'lamp' [stem eeke-; eek-et- 'light (lamp)']

Ke: aakaŋa 'oil lamp' [ta-aka-ŋ- 'adjust lamp']

K: ejek(e), Al. ajak 'lamp' [ejek-et- 'light' (lamp)]

A: ajak 'lamp'

I [note E akanom 'fire, hearth' in Rad.]

PC æjæʀu(tku)- 'fish (with line)' [cf. -tku-]

C: eejʔutku- 'fish (with line)'

Ke [ajʀuupaɣlijtə- 'bite (fish)' and ajʀuu-naŋ 'spoon bait', but also ajʀuttu-
'catch with hands' acc. Asin.]

K: ejeʀutku- 'fish with line'

A: ajaʔu-, Pal. ejaʔu- 'fish with line'

I [Kur. et al. have Sed. ejexo-kes 'fish' – from Chukot.?; Rad. has W
oelxcokaz, S kagaziskik 'fish with hook']

PC æjɣə 'wind side' [cf. æjɣəcqə(n), also perhaps jəɣ(ə)- (compare under
ajval)]

C [Bog. has abl. (old vialis?) ejɣepə (but 1917 all. ajɣetə) 'against the wind'
and ejɣəcqə-ron 'right side of sleeping compartment (seen from entrance)'
– i.e. side furthest from entrance of the yaranga?; note also ejɣir- 'catch
scent of s.th., move towards smell' (with ir-?)]

Ke: ajɣəjpəŋ 'towards, to meet' [fossilized vial. form?; and ajɣəi- 'catch scent
of s.th.'; note also aajəjn 'gale', aajəjtə- 'blow a gale']

K [Bog. 1917 has aiɣaai 'odour coming with the wind' and ajɣetə 'crossing (?)
the wind' in all. case]

A: e⁻ɣə-, e⁻ɣir- 'go against wind' [Mur.; Kib. et al. have n-e⁻ɣə-qin 'piercing
(wind)', e⁻ɣir-ruʔə- 'begin to blow', e⁻ɣər-ʀita- 'go against wind', e⁻ɣə-jan
'windy place']

PC æjɣəcqə(n) 'north' [cf. æjɣə and -lq(ən); the link that has been suggested
to Proto-Eskimo *aðɣuʀ- 'go against wind', CSY ajɣuq 'north' (see de
Reuse 1994:410, citing Vdovin) may be fortuitous (if not reflecting an
ancient cognate) – the CSY meaning may have been influenced by the
Chukchi, from which Sir. ajɣəsqəX, NSY ajɣəsqə 'north' certainly come;
compare under ajvan(a)]

C: ejɣəcqən 'north' [i.e. 'wind side' (with?) - north on Pacific (Bering Sea)
coast, west on Arctic coast acc. Bog.; ejɣəcqə-kin, ajɣəcqə-ŋqac-ken
'northern']

Ke: ajɣəcXə-lʀan 'northerner'

K: ajɣətqən 'north' [but Moll has ejɣətqən 'north'; ajɣətqə-ken 'northern']

A: ejɣəsqə(ŋqal), Pal. ejɣəsqən 'north' [Vdov. has Al. ajɣəsqa (Kur. et al.
eɣəsqən)]

I [ajvaŋ 'north'; Kur. et al. also Sed. ejen – from the Chukot.?]

PC æjiləki 'dumb' [cf. æ- -kæ and jilə(jil)]

C: ejiləki 'dumb'

K: ejiliki 'dumb' [Žuk.]

A [Kib. et al. have a-ji(i)lə-kəl?in 'without a tongue']

I [note E xi azulgokan 'dumb' but also azulgokan 'garrulous' in Rad.]

PC æjjiv- 'string together' [or ætjiv-]

C: etjiw- 'string (e.g. beads)' [Bog.]

Ke: acciu- 'thread (needle)'

K: ejivə-jvə- 'string' [Žuk.]

A: ajjiv- 'gather, tie together' [Nag.]

PC æjkæt 'bank' [cf. PI 'ravine']

C –

K: ajkat 'bank (of river)' [also 'ice frozen to bank']

A: e⁻kat, Pal. ejket 'steep bank' ['bank of river' in Nag.]

PC (c)æjmə- 'near' [cf. cəmcæ- and possibly also cæ(ɣ)æ(kæj) – there may
 be contam. here]

C: ejm-ew- 'approach' [with suffix -æv-; tr. r-ejm-ew-/-n-ejm-ew- (cf. ðən-);
 Bog. has ajmə-ŋ wa-l?ən 'nearby']

Ke: ajm-au- 'approach' [ja(a)jmək 'nearby' and kətɣənt-?ajm-au- 'run up', n-
 ajm-au- 'move nearer']

K: cejmək 'nearby', cejm-ev- 'approach' [tr. jə-cejm-ev-; adj. cejmə-kin; Bog.
 1917 has Kam caimək, Par. ceimək 'near']

A: se⁻mək 'nearby', se⁻m-av- 'approach' [and n-se⁻m-qin 'near'; Kib. et al.
 also have tr. tə-sem-av- 'approach'; Pal. cejm-kin 'near' and cajməŋ
 'nearer']

PCK? æjməq 'floating layer of fat on rendered oil?'

C: ejməq 'floating layer of fat on rendered fish oil' [Bog.]

K: ajməq 'sauce' [Žuk.]

A: eməq [Nag.]

I: emk' 'broth' [from Chukot.? – but note also E ax 'soup, broth' in Rad.]

PCK? æjpə- 'close or cover' [cf. jəp- but also PI 'close']

C: ejpə- 'cover, close off' [ejpəcyən 'cover, stopper', ajpə-jo '(s.th.) closed off', ajpetə '(it is) closed off'; and Skor. has ajpə-n 'dam', loc. ajpə-nw-ək]

Ke [inuu-ajpat- 'close window'; Asin. also has ainpitn 'lid']

K: ajpə- 'close, dam' [and ajpə-nⁱŋən 'lid, stopper', ajpəaj 'dam, fence']

A: e⁻pə- 'close'

I [ejpe-s 'close, cover' – in Kur. et al. also 'bury'; ejpet-kas 'be closed or covered (from time to time)'; Rad. has W ajplelatez 'dig, bury'; from the Chukot.?]

PCK? æju- 'revive'

C: eju- 'come to, revive (tr. or intr.)' [and eju-l?et- 'be alive', eju-l?ə-l?ən 'alive']

K: eju- 'revive (intr.)', j-eju-v- 'revive (tr.)' [Žuk.; ɣ-eju-lin 'revived'; for k(ə)ju-lʀə-lʀən 'lively' see kəjulʀæt-]

A: aju- 'revive (intr.)'

I [ezle-kas 'revive' – with suffix -lʀæt-?; Vol. 1976 has intr. izli-, tr. ənt-ezli-?ɬe-; Kib. et al. have ezle-s 'mind, feeling' for Sed.; Rad. has E izulezic 'alive']

PC æjulqə(n) 'wet place?' [cf. -lq(ən); there is some entanglement with əju-]

C: ejulqən 'swampy place'

K [for ajolɣən 'polynya' see əju-]

A: ajusqən 'puddle' [Kib. et al.]

PC æjup- 'prick oneself' [cf. jup-]

C: ejup- 'prick oneself' [ejupə-tku-c?ən 'thorn bush', ejupə-tku-l?ən 'prickly']

Ke: aju(u)p- 'prick oneself' [and n-ajuu-Xi 'prickly']

K: ajup- 'prick oneself', ajup 'splinter' [Žuk.]

A: ajup- 'prick oneself'

PC æjv(æt)- 'share out' [cf. -æt-]

C: ejwet- 'share out (e.g. share of catch)' [and Bog. has ?ejweej, ?ejwi?irən 'part of meat given to neighbours, alms'; t-ejwə-ŋ- 'share out – as noun

'share, part']

Ke: ajwat-, t-ajuu-ŋ(əttu)- 'share out'

K: j-ejvet-et-, j-ejvet-ev- 'share out' [with prefix ðən-; Bog. 1922 has aivaai 'part of meat given to neighbours'; Moll has ejvet 'share, gift']

A: evat-, t-evat- 'share out' [Kur. et al.]

PC æjəcɣin 'wave'

C: ejəcɣin 'wave, breakers' [Sar. has eici]

Ke: a(a)jəj 'wave, breakers'

K [Klap. has eicɣyn 'wave' – Sar. ejtci 'waves']

I [note W ekcpin 'hill, waves' in Rad.]

PC æjərʀəkəlʀin(æ) 'empty' [cf. æ- -kæ and jərʀ(æt)-]

C: ejər?əkəl?in 'empty'

K: ejəcʀəkəlʀin 'empty' [Žuk.]

A: ajərʀəkəl?in 'empty' [Kib. et al.]

PC ækin 'at last'

C –

K: ekinʀat 'at last, now' [note also ekilʀat 'if' – in Kur. et al. = 'just']

A: akin 'at last, now' [Nag. has akin?at 'already, soon, just']

PCK? ækmit- 'take'

C: ejmit- 'take, receive, catch, kill reindeer (to eat), seize'

Ke: akmijtə- 'catch, receive, take' [for akmiit-?; Asin. also has j?-amŋin-ŋə- (cf. jəq-) and in-akmijtə- 'grasp']

K: ekmit- 'take'

A: akmit- 'take, catch, buy' [Kib. et al.]

I [Sar. has S emgatyž 'I take' and Sauer kommogata 'take']

PC ækmə(cqæt)- 'stick' [cf. PI 'glue' and -æt-?]

C: ejməcqet- 'stick (intr.)' [r-ejməcq-ew- 'glue, stick to s.th.']

Ke: amŋətXat- stick' [n-əmŋətX-au- 'glue, stick']

K: ekmətqet- 'stick (intr.)' [and j-ekmətq-ev- 'glue, stick to s.th.' – Žuk.]

A: n-akmə-qin 'sticky', akməsqat- 'stick (intr.) [Mur. has Pal. ekm-ev-; t-akməsq-av- 'stick, glue']

PC ækək(æ) 'son' [cf. ŋævækək(æ)]

C: ekək 'son' [ekke-lqəl 'stepson']

Ke: akka(a)ŋa 'son' [and qaj-akkaŋa 'boy' – for qajŋawak 'girl' see ŋævækək(æ); akka-lXəl 'stepson']

K: akək 'son' [Žuk. has stem akka-; akkatγilaŋ 'stepson']

A: akək, Pal. ekək 'son' [Kur. et al. for the former; Skor. has Al. akka, and Kib. et al. also akka-lʲʔaju 'men'; Kar. ek acc. Žuk. – Kr. has ikuku; Nag. also has akkatγillaŋ 'stepson']

I [note E akak, akxr, akoak 'grandfather', akxra, akrxon 'grandmother' in Rad. – compare under æpæ (esp. epeqej 'grandmother' with dimin. -qej)]

PCK? æl(læ) 'not'

C: etlə 'not' [and Bog. has elo 'no!']

Ke: ala 'not'

K [elvelʀin 'not' – but Bog. 1922:883 has elo 'no', ele 'not' (esp. for Par.)]

A: alla, Pal. el(le) 'not' [Kur. et al. have allə for the former; Nag. also al, allo]

I [Rad. has S ilpuvakax 'don't threaten!' and cf. il-masys 'don't hinder' under PI 'hinder']

PCK ælæ 'summer'

C: eleel 'summer' [In. has ele-ŋit with suffix -ŋit- 'spend the -'; elek 'in the summer']

Ke: ala- 'summer' [Skor.]

K: alaal 'summer' [alak 'in the summer']

A: ala 'summer' [Mur. – Kur. et al. have alaʔan; Žuk. also has Kar. elek 'in the summer']

I [lamɬ 'in the summer', laʔmst-kas 'spend the summer' – Sar. has 'summer' for the former, also S adamatac, E adamštaš; Rad. has S aduistazix 'becomes summer' and E adymtxaz summer', adamot 'in the summer', and Klap. has W adömplis, Uka addamahl 'summer'; there may be entanglement with mælmæl under mæl- in the W forms]

PC ælæjvir(i) 'chip or shaving' [or ælæjvið(i); cf. ællə- and -jəv-?]

C: elejwir(i), SE elewrir 'chip, shaving'

K: elejvəj 'chip, shaving' [Moll]

PC ælæjti- 'not know how to do' [cf. æl(læ)?]
C: eleɣti- 'not know how to do s.th.' [n-eleɣti-qin 'not (very) clever']
Ke: n-alʲajsi(i)-Xi 'not clever'
K: elejtə- 'not know how to do s.th.' [n-elejtə-qin 'not (very) clever'; and Žuk. has n-elejti-ʀev 'awkwardly']
A: Pal. eleɣtən 'lack of ability' [and Kib. et al. have Al. n-aloti-qin 'inexpert, ignorant', and Nag. aloti- 'not be able']

PC ælkəl- 'recognize' [cf. ləɣæl-?]
C: elkəl- 'recognize' [a-lkəl-keɣtə 'unrecognisable']
Ke: alklə- 'recognize'
K: alkəl-
A. alkəl-
I [note W alkolkkaz 'be amazed, admire' in Rad.]

PC ællæɣ- 'sweet' [or ætlæɣ-]
C: n-etleɣ-qin 'sweet'
Ke: n-alʲlʲaɣə-Xi
K: n-allʲaw-qin 'sweet' [Moll, who also has n-allʲaɣ-qin; Mur. has alʲlʲaɣ-]
A: n-alʲlʲo-qin, Pal. n-elʲlʲey-qen 'sweet' [Mur. has stem alʲlʲaɣ- for Al.]

PC ællə- 'scrape (clean)' [or ætlə-]
C: etlə- 'scrape (clean)' [etleel 'scraper']
Ke: allə-
K: alli-tku- 'scrape' [alli-tku-naŋ 'scraper']
A: alʲlʲə-tku-naŋ 'scrape'

PC ælu- 'gather berries'
C –
Ke: aluu-lXiju- 'gather berries' [cf. -lqiv-]
K: elu- 'gather berries'
A: alu-

PCK ælvæ- 'other or different' [cf. PI 'back(wards)', also -(ə)ŋ for the adverbial forms; compare under manaŋ]

C: alwa-ŋ, alwaɣtə 'otherwise, in another way' [also 'wrongly' in Bog.1922; elwe-lʔin 'other, not that one' - Bog. has elwə-lʔən, ecwə-cʔən 'stranger'; alwaŋ nʔel- 'change (intr.)', alwa-ŋ rətcə- 'change (tr.)', alwa 'go away!', and ʔor-alwaɣtə 'against, opposite' (compare ʔore-ŋunri under ʀuʀ(æv)-)]

Ke: alwa-ŋ 'otherwise', alwalʀan, alwaki, am-alwa-ŋ 'other, different' [alwa-ŋ illa- (for illi-?) 'remove', alwajtəŋ 'not true, wrong', acwa-cʀan 'foreign' (Asin. also has allaʀan)]

K: alva-ŋ 'otherwise, not right' [alva-ŋ nʀel- 'change', alva-ŋ et-ɣəjŋən 'mistake'; Žuk. has elve-lʀən 'stranger' - also ecve-cʀən acc. Mur.; Bog.1922 has alvalən 'other'; note also ecve-jv-əŋ 'opposite, against']

A: alva-ŋ 'otherwise, not right' [and alvaŋ it- 'make a mistake' in Kur. et al.; Kib. et al. have alva-ŋ li- 'change (intr.)' – cf. li-]

I: ɬva-ɬʔan 'another, different' [and ɬvaɬ-k'el- 'otherwise, not in the usual way' (cf. k'ele- under kəvlə(tku)-); Rad. has E lava 'separate, strange', lavalan 'different', lavak 'separately', also W lvalan 'mean, lowly, nasty'; note also xe-ɬvaɬ 'wrong' (with ləɣi-) and Sed. eɬaq 'as if' in Moll]

PCK ælvə- 'flense'
C: elwə- 'flense (carcass)'
K –
A: alv(ə)- 'flense'
I: əlfɬe-s 'flense' [with -æt-?]

PCK? ælwæti(ŋæt)- 'crawl'
C: elwetiŋet- 'crawl'
K –
A: alwatiŋat-
I [ɬalxte-kas 'crawl']

PCK æləlæki 'blind' [cf. æ- -kæ and ləlæ]
C [Bog. 1922 has elileki 'eyeless']
Ke: allakəlʀan 'blind'
K: aləlʲaki
A: alʲlʲaki 'blind' [Kur. et al.]
I [Rad. has S aninik, E lekin 'blind' – also W kamilkin (for kam ilkin – compare qa'm ɬcku-kinkin 'blind' in Vol. & Xal., from PI 'look or see')]

PC æmkumʀə- 'careful'

C: Khat. amkum?ə-l?ən 'careful' [from K?]

Ke: n-amku(u)mʀa-Xi 'careful, possessive (about things)'

K: amkumʀə- 'careful' [Mur.]

A: n-amkumʀə-qin 'careful, possessive' [Kib. et al.]

PC æmmæc 'already?' [cf. prefix æm- and mæl-?; compare cæmæc; borrowed into CSY as ənmis/ənmit 'already (how time flies!)' acc. de Reuse, NSY enmet/enmeɬ 'already']

C: enmec 'already' [with dissim.; note also enmen 'that (conj.), it is said']

K: emec 'already, even, still, but, only' [Moll and Žuk.; also emecu 'while', eminec 'in so far', and note imjeq 'for' (contam. with jæqqə(j)?); Bog. 1917 has kenam 'already']

A [note Pal. imc 'even' and Al. imjaq 'already' acc. Mur. (Kur. et al. imjak for the latter) – (contam. with im- and jæqqə(j) respectively?)]

PC æmnuŋ 'tundra' [cf. perhaps pref. æm- and nutæ]

C: emnuŋ, emnuŋin 'tundra, dry land' [emnuŋkə 'on the tundra']

Ke: amnuŋ 'tundra, dry land' [Skor.; Asin. has amnuŋ 'north' but amnuuŋquj 'tundra']

K: emnuŋ(in) 'tundra, dry land'

A: amnuŋ

PC æmŋut 'all the time?' [cf. pref. æm- and ŋut?]

C –

K: emŋut, 'many times, all the time' [Mur. also has emŋu-qun 'all right, therefore, rather'; Kur. et al. have em-emŋut 'often'; Bog. 1922 has Kam. amŋuc, awun amŋut 'always']

A: amŋut 'many times, all the time'

PC æmtənæv- 'sleep well' [cf. pref. æm-?]

C: emtənew- 'have a good sleep'

K: emtənev- 'have a good sleep' [Žuk.]

PCK ænqiv- 'strong' [cf. ʀiv-]
C: n-enqiw-qin 'strong' [and Bog. has enqiw-et- 'grow strong']
K: n-enqiw-qin 'strong' [Žuk.]
A: anqiv-
I: q'ev-laX 'strong' [q'efq'ef 'power', ən-q'efse-ʔɬe-s 'strengthen']

PC ænənnəki 'ring finger' [cf. æ- -kæ and nənnə - calque of Russian "bezymjanny paljets", lit. 'nameless finger']
C: enənnəki 'ring finger, nameless'
K: enənnəki
A: anənniki-təlɣəlŋən [Nag.]

PCK æŋæŋ 'spirit'
C: eŋeŋ 'spirit, god', NW 'medicine', Khat. 'festival' [the former in Bog., who also has eŋeŋə-lʔən 'shaman'; Moll & In. eŋeŋə-tku-n 'festival']
Ke: aŋaaŋə-lʀan 'shaman' [and aŋaaŋə-ttu- 'celebrate']
K: aŋaŋ 'god' [Žuk., who also has aŋaŋə-lʀən 'shaman'; Kur. et al. have aŋaŋ 'festival', referring also to a kind of mushroom; note also aŋaŋja- 'sing' in Moll]
A: aŋaŋ 'god' [Kib. et al., also for aŋaŋta- 'sing' aŋaŋə-lʔən 'shaman'; Kur. et al. have Pal. eŋeŋ 'god, kind of mushroom'; note also Al. anɣət 'festival', anɣə-tku- 'celebrate']
I [Rad. has W anansakaz 'invocate spirits, sing (shaman)', eʔŋuŋiʔ- in Geo. & Vol. 1999:114; Rad. has E enic, pl. egisizud 'song'; Klap. has W angesonnim 'sing']

PCK æŋær 'star'
C: aŋatləŋən 'star' [Bog. has eŋer; note unp-eŋer 'Pole Star' from unpən 'pole, stake', which Bog. relates to ut(tə) and rəp- under əp- – he also has alqep-eŋer ('nail star') from ʀəlqæp and iluk-eŋer ('immovable star') from ilu- for the same star]
K: Kam. aŋaj, Par. eŋej 'star' [and alqap-aŋaj 'polar (= pole) star' (and Bog. has Paren ackap-aŋaj)]
A: aŋar, Pal. eŋer 'star' [Kr. has Kar. engyš; Bog. has Kar. əlkep-eŋer, Pal. əlkap-eŋer 'polar star']

I: eŋezecX, ŋez(z)ecX 'star' [Kr. has W agažin, E ežengyn (Rad. ezegid, ezenic), Uka eženic (Klap. asenggic), S ašangyt (Rad. azanid); Sar. has E ežengyc, S ažangyd, W ngnešin]

PC æŋi- 'tell something (secret?)'
C: eŋi- 'tell s.th. (secret)' [Moll & In. - also for eŋin 'secret, dream' and eŋinmən 'word, thought' (cf. -nv(ə)?); S aŋenmetəken 'sacred'; Bog. has eŋi- 'tell tale about times past', also teŋ-eŋi- 'praise']
Ke: aŋinmə-ɣəjŋən 'interest(ing)'
K: eŋinʲməke 'interesting', eŋinʲmu jəccə- 'interest', eŋinʲmu ləŋ- 'cheer up' [and Moll has eŋinʲmən 'happiness, joke'; Rf. has eginmine 'word, speech'; note interjection of surprise eŋi-ŋi!]
A: aŋinʲma-tku- 'talk, chat', aŋinmən, aŋinmə-ɣərŋən 'conversation' [Kib. et al.]

PC æŋʀæl- 'worry?'
C: eŋʔel- 'worry, get tired, overstrain' [Moll & In.]
Ke: aŋʀaal-a(a)t- 'get tired'
K: eŋʀelu ləŋ- 'worry about' [and c-eŋʀec-eŋ- 'be worried', c-aŋʀaca-ŋ-ɣəjŋən 'worry' (with tæ- -ŋ(ə)-)]
A: aŋʔal-at- 'be afraid' [Kib. et al.]

PC æŋəlɣə- 'groan' [cf. PI 'pain']
C: Khat. eŋəlɣə- 'groan'
K: eŋilɣ-et-, eŋəlʲʀ–et- 'groan' [Moll, who also has eŋilɣəke 'pitifully'; Mur. has eŋəlʲɣ-]
A: aŋəlʲɣ- 'groan'

PCK æpæ 'grandfather?' [or any older male relative?]
C: epə, apajŋən, S epe, epapə 'grandpa' [children's word in Bog.; epe-qej 'grandmother']
Ke: apappij 'grandfather' [also appa 'daddy', appakku 'parents'; Asin. also has apʔa 'grandmother' – influ. by C?]
K: apappo 'uncle', appa 'daddy (children's word)'
A: apapa 'daddy' [also apa, used to address uncle, acc. Nag.; Kib. et al. also

have ava 'grandmother'; Kr. has Kar. papa 'father']

I [Rad. has S apac (also Kr.), E epep, Kr. E ipip (but acc. Stebn. apin), Uka. ep 'father' - Sed. epc, epe in Joch.; Klap. has W ipix, Uka äph 'father'; Rad. has W epec 'girl' – compare under ækək(æ)]

PC æpæ(j)æpæj 'spider' [cf. æpæ and compare K anʲapel 'spider' from anʲa 'old woman' – note the old 'spider woman' figure of C myths, but there could be influ. from apaqallə-; this has been borrowed into CSY as apajəpajuq, NSY apaayapak 'spider']

C: apaapayləŋən, apaapalyən, epcepej 'spider' [the latter in Moll & Inen.]

K [Rf. has epaiel 'spider'; Vdov. 1961:57 has epeepej, as for C]

PCK? æqənæt- 'envy' [cf. -æt-; there may be a link to PI 'other']

C –

K: eqənet- 'envy' [Moll; Žuk. has aqen-yəjŋən 'envy (noun)']

A [Kib. et al. have ʀaqanʲŋə-sʔat- 'not want to part with s.th.', but this probably goes with ʀæqæ-]

I [Joch. has eqen(u)- 'envy (verb)'; Rad. has W ekangergen 'envy (noun)' from Chukot., but also E xanxtlezic 'envy (verb)']

PCK? ær- 'flow out?' [cf. æryiŋ but also perhaps PI 'low']

C: er-yəryən 'mouth of river' [Bog.; for sense 'wounded part or place' see ir-]

Ke [accʀun 'low tide, ebb tide']

K: aj-yəjŋən 'low tide' [and Žuk. has ej- 'approach (low tide)', and Moll ejej 'low tide']

A: ar- 'flow out (of river, to sea)' [and ar-yərŋən 'low tide']

I [Rad. has W erizin 'low tide' – from the Chukot.? – but also E kig azozak 'water level going down in river', S izxuuzik 'become low tide']

PCK æræt- 'fall' [cf. ær-, also arətyər]

C: eret- 'fall (from height)' [r-eret- 'drop'; eml-arat-yəryən 'waterfall']

Ke: n-aat- 'drop' [with *ðən-]

K: ajat- 'fall' [j-ajat- 'drop'; and Stebn. has eml-ajat-yəjŋən 'waterfall']

A: arat-, Pal. eret- 'fall' [and t-arat- 'drop' and perhaps arŋin(a) 'rain(drop)'; Stebn. has iml-arat-yərŋən 'waterfall']

I [Rad. has E erenezic, erenekšezic 'falls', kirulezik 'fall']

PCK? æryiŋ 'shore' [cf. ær- and -yiŋ?]

C [Rf. has (ka) ańee iryin 'bay']

Ke [note Asin. has aʀaʀyəyʀən 'bank of river']

K [Žuk. 1980:12 has eryin 'shore' but this is surely the Pal. form; Bog. 1917 has Kam. achin, ashin 'seashore']

A: aryiŋ, Pal. eryiŋ, eryin 'shore (of sea)' [acc. Bog. 1917 'sand-spit'; Pal. eryiŋ-et- 'go along gathering molluscs or seaweed'; Rf. has engwyn 'bay']

I: erven 'coast, spit, sandbank exposed at low tide' [Joch. has eryan 'promontory' but eryiŋ 'sea coast' – from Chukot.?; but Rad. also has S ijaic 'shore', pl. ijaid 'banks', W erin 'shoal exposed at low tide', and Sar. S eagajuc 'shore'; note also S izikik 'come to shore' in Rad. and Uka ižulgan 'hill' in Kr.]

PC ær(ə)ʀæ 'boiled meat or fish' [cf. ð(ən)ær-]

C: erʔə, erən 'boiled meat' [pl. erʔet; erʔew- 'boil meat']

Ke [ʔənn-ajʀ-u- 'eat boiled fish']

K: acʀa 'boiled fish' [Mur.; Bog. 1917 has aᴿsaᴿn for Kam.]

A: arʔa 'boiled fish'

PCK ærəm(æ) 'leader'

C: erəm(e) 'leader', n-erme-qin 'strong' [for n-arojwə-qen 'powerful, manly' see arojvə-]

Ke: ajm 'leader'

K: ajəm(a)

A: arm(a)

I [Rad. has E armagnan, erm 'officer', erm klec 'king, emperor', ermein 'Russian', but also alano 'boss, leader', and Kr. has S arm 'master' (Sauer has S annanum in this sense)]

ætæl 'Yukagir' [from (Kolyma) Yukagir odul 'Yukagir'; note that the easternmost Chuvan Yukagir were linguistically absorbed by Chukchis and Koryaks in the 19th century]

C: etel 'Chuvan (Yukagir)' [Bog., who also has it as 'syphilis' and etelilʔən as 'syphilitic' – this disease apparently contributed to decimating the

Chuvans]

K: etel(əlʀu) 'Yukagir' [Moll, who gives the plural form]

I [Joch. has Atelide 'Yukagirs']

PC ætænmən 'back of neck' [cf. PI 'temple'?]

C: etenmən 'back of neck'

Ke: atanmən

K –

PC ætʀu 'still?' [cf. PI 'evening'?]

C [etʔo-qaa-qən, etʔo-qajə-qən 'a little later'; and note etʔo-pel 'better thus' (borrowed into NSY as etopeɬ 'better'), etʔ-əm 'apparently', and in Moll & In. also etə-əm 'that is']

Ke: atʀu 'still (-er)' [and atʀuu-pilʲ 'it is necessary', atʀu illa- 'continue']

K: etʀu 'still' [and Bog. 1922 has Kam. ituʀ-pil 'after a while']

A: atʔu 'still' [and note Pal. -et(ən) in indef. expressions like taqu-et 'something']

PC æv- 'get a hole'

C: ew- 'get a hole' [and tr. r-ew- 'make a hole in, pierce', ak-wəryən, rak-wəryən 'hole, opening']

Ke: n-au- 'make a hole (in)' [and nak-kujŋən 'opening']

K: aw- 'get a hole' [and awaaw 'wound']

A: av- 'get a hole' [and t-av- 'make hole(s) in', n-av-qin 'full of holes' – Kib. et al.]

I [note Rad. W avalaxen 'staggering, weak, ill']

PC ævic(u) 'bag' [or æwic(u)]

C: ewic 'bag' [Bog. ewicu]

Ke: auic 'skin bag'

K –

PC æviðʀən 'clothes' [cf. iðʀən and probably æv-]

C: ewirʔən 'cothes, furs' [ewirʔə-twə- 'undress, get undressed']

Ke: aujʀan 'clothes' [aujʀa-twa- 'get undressed']

Ke [Skor. has eviсʀen 'clothing']
A [Skor. has avit?en 'clothing']

PCK? æviluki 'deaf' [cf. æ- -kæ and vilu]
C: ewiluki 'deaf' [Kur. et al.]
Ke: awiluukə-lʀan 'deaf'
K: eviᶨuki 'deaf' [Kur. et al.]
A: aviᶨuki 'deaf' [Kur. et al.]
I [qa'm ilfskənkin 'deaf' – cf. qəðəm]

PC ævəlqə- 'blunt'
C: n-ewəlqə-qin 'blunt' [ewəlq-et- 'get blunt']
Ke: n-awəlXə-Xi, n-awəlXa-lli 'blunt'
K: n-avəlᶨqə-qin 'blunt' [Kur. et al.; Žuk. has nə-javəlqə-qin, also javəlqav-
  'get blunt']
A: avəlᶨqə- 'blunt'

PCK æwæc(u) 'salmon (*Oncorhynchus tschawytscha*)' ["čavyča" in Russian,
  from the I; perhaps from æwən plus æcu in Chukot., in which case this set
  could be from *æcu – cf. also qævæcu; note CSY Eskimo awisu 'king
  salmon', a loan from C?; there may be metath. in I; compare qæ(wæ)cu]
C: ewec 'kind of fish ("sig" – a kind of trout)' [In. & Moll]
Ke: awəəc 'kind of salmon ("čavyča")'
K: ewec(u)
A: awas, Pal. ewec, ewesᶨ
I [c'uvaj (with augmentative -aj), c'uc'u, pl. c'u?n 'kind of salmon, čavyča';
  acc. Dürr et al. 'chinook'; Bob. also c'ufc'uf; Rad. has E cevicev, S cuid
  'čavyča, *Salmo orientalis Pall*']

PC æwji- 'graze'
C: ewii- 'graze' [awee-n 'pasture', and Moll & In. have r-ewii-w- 'allow to
  graze']
Ke: akkui- 'eat' [and inanəkkujcatn 'reindeer's drinking place', also awəəi-
  nna 'pasture']
K: ewji- 'graze, eat' [awjene 'pasture'; Žuk. has ewji-ɣili- 'graze', awje-jan

'dining room', j-ewje-t- 'feed'; Kam. awji- 'eat' in Bog. 1917 – but Stebn.
has awuzi-; Žuk. in Skor. 1968 has Kam. s-ewje-t- 'feed']
A: awji- 'graze, eat' [Kur. et al. have oji-; Pal. t-ewje-t- 'feed']

PCK æwʀik(æ) 'edible root ("sarana")'
C [eekelɣən, pl. iikət 'root of *Polygonum viviparum*']
K: awʀek(a) 'sarana' [Bog. 1917 has awaek 'root of *Polygonum viviparum*']
A: awwik, Pal. ewʔik 'sarana'
I: efk 'sarana, black lily root' [Rad. has W evk, E euk, evk '*Lilium kamtschaticum*', also vyevkec 'kind of lilly']

PC æww(æt)- 'go away' [or æɣw(æt)-?; cf. -æt-]
C: ekwet- 'go away'
K –
A: aww-av-, Pal. eww-ev- 'go away' [with -æv-]

PC æwwæv 'left-hand (draft reindeer in team)?' [cf. æww(æt)-?]
C: ekwew 'left-hand reindeer in team' [Moll & In; Bog. has ekwew-qor 'tame reindeer' and n-ekwew-qin 'easily trained (reindeer)'; Rf. has awwaw 'left hand']
Ke: awwaw 'left-hand reindeer in sledge team'
K: awwavetəŋ '(to the) left' [and Žuk. has ewwew 'left-hand reindeer in team', also n-awwəŋotaw-qen 'fiery, irrascible' with ŋotaw- 'get angry'; Rf. has awwaw mingik 'left hand']
A: awwav 'left-hand reindeer' [Nag.]

PCK? æwən 'really?' [borrowed into CSY as iiwən 'once again, subsequently, also, still', NSY ewun 'then' (but de Reuse aawən 'usually')]
C: ewən 'it appears so, already', ewən qejwe 'without fail' [and ewən wa-lʔən 'natural, real, permanent', awən-ra-l ʔən 'host' in Moll & In. (the latter borrowed into NSY as aɣunraala); ewi-ʔəm 'really', ew(i) 'is that so?'; and Bog. has eunəpe, eɣnəpe 'otherwise' but in Bog. 1922:855 the former is glossed 'evidently' (borrowed into NSY as awnəpa 'probably'); note also ewər, ewət 'if, and' (borrowed into NSY as ewərŋa), and ewət-ləm 'or']
Ke [awən-nʲa-lʀan 'host, boss' (cf. etən(və)), awən-(n)əmnəm 'main town';