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Beringian Macro-Family

The Abstract

In the present talk we offer substantiation for the hypothesis of **Beringian macro-family (Beringian phylum)**, comprising a number of language families of North America and Northeastern Asia. By current knowledge, the Beringian phylum has the following structure and glottochronological separation dates:

Beringian phylum - around 7000 B.C.

I. Nivkh-Algic - around 5200 B.C.

Algic family - around 3000 B.C.

Algonqian - around 1000 B.C.

Ritwan (Wiyot-Yurok) - around 300 B.C.

Nivkh (Gilyak) - around 700 A.D.

II. Mosan - around 6000 B.C.

Salishan - around 3000 B.C.

Wakashan - around 4000 B.C.

Probable in our opinion (but requiring additional proof) is the hypothesis of including Chukchi-Kamchatkan languages into Beringian phylum:

III. Chukchi-Kamchatkan - around 300 B.C.

Chukchi-Koryak - around 1000 A.D.

Itelmen (Kamchadal) - around 1000 A.D.

To that phylum apparently belong also the languages of Chimakuan family (Chimakum и Quileute) and the language isolate Kutenai that were traditionally considered as related to Mosan and Algic languages.

The relationship between the Algic, Salishan, Wakashan languages, Chimakuan and Kutenai has been proposed by E. Sapir¹ with the following classification:

I. Algic (Algonkin-Ritwan)

A. Algonquian (Algonkin)

B. Beothuk

C. Wiyot-Yurok (Ritwan)

II. Kutenai (also known as Kootenay; a language isolate)

III. Mosan

A. Wakashan

B. Chimakuan

¹ Sapir, Edward. (1929). Central and North American languages. In *The encyclopædia britannica: A new survey of universal knowledge* (14 ed.) (Vol. 5, pp. 138-141). London: The Encyclopædia Britannica Company, Ltd.

C. Salishan

Sapir did not offer a convincing evidence proving the Algonquian-Wakashan relationship, however the existence of macro-family designated as Algonquian-Wakashan (also Almosan, Algonkian-Mosan, Algonkin-Wakashan) has not since been disproved by distant language relationship researchers. A quantis satis of Mosan cognates appeared in several publications since then².

² Joseph Greenberg renamed Sapir's proposal Almosan and grouped it in an even more inclusive Almosan-Keresiouan phylum with the Caddoan, Iroquoian, Keresan, and Siouan-Catawban families. This proposal has received little support among historical linguists.

What concerns the languages of NE Asia that we include into Beringian phylum, here the tradition for their external comparison is contradictory. Nivkh and Chukchi-Kamchatkan languages were included (together with Yukaghir and sometimes Ainu) into speculative "Paleo-Siberian" grouping. Nivkh, together with Chukchi-Kamchatkan, has been included by J. Greenberg into Eurasiatic phylum. The "Paleo-Siberian" relationship has not been materially substantiated, and the term itself is commonly used provisionally to group the languages of NE Asia with unclear external affinities. Numerous evident Nivkh-(Chukchi-)Kamchatkan lexical parallels lacking New World cognates belong in large to natural phenomena, business and trade and are explained by contacts in most cases. The evidence for relationship between Nivkh and Algonquian languages has been presented by the author of the present talk at 1989 Ann Arbor conference³, there were also offered some Nivkh-Salishan lexical similarities. "Nivkh-Mosan hypothesis" has not met with serious controversy and was later again offered by M. Fortescue⁴.

As far as external relationships of Chukchi-Kamchatkan languages, there exist two contrasting hypotheses. According to the first one, that family belongs to Eurasian (= Nostratic sensu stricto) phylum, within which it was closest to Eskimo-Aleut. That tradition, supported in particular by S.A. Starostin, stems from the article by A.B. Dolgopolsky in which he presented evidence for relationship of Chukchi-Kamchatkan languages with Nostratic sensu lato, i.e. one that includes Semito-Hamitic (Afrasian) phylum. M. Fortescue, who places Uralic, Yukaghir, Chukchi-Kamchatkan and Eskimo-Aleut into "Uralo-Siberian" phylum, was of similar opinion⁵. Within the framework of "Nostratic" comparison, Chukchi-Kamchatkan and Nivkh forms were most often placed together with the main corpus of comparisons without establishment of regular phonetic correspondences.

However, if inclusion of Eskimo-Aleut family (as well as Yukaghir) into Eurasian phylum appears almost uncontroversial, then the affinity of Chukchi-Kamchatkan languages to it gives rise to doubts. The "lexicostatistical weight" of personal pronouns is rather heavy, therefore the classification, obtained by the lexical statistics method, may fluctuate between the choices of Eurasian and Beringian as phylae for Chukchi-Kamchatkan to belong to, depending on etymological treatment of literally a pair of lexical sets compared. Comparison of 50-word (after G.S. Starostin) wordlists shows the existence of several Chukchi-(Kamchatkan)-Eskimo-Aleut isoglosses with Eurasian etymologies, and looking at them tips the "lexicostatistical scales" in favor of hypothesis of Eurasian affinity of Chukchi-Kamchatkan. In the first place, it is the "Eurasian" PChK *m- in the 1sg. (however, the Eskimo-Aleut correspondence *vi has the "Altaic" denasalisation), "Eurasian" (in particular, the main Altaic) and Eskimo-Aleut `nose`, that corresponds to PChu *xi□a, with an irregular Itelmen correspondence *qeqwə□. However, the irregular Chukchi-Kamchatkan root *xi□a/*qeqwə□ could have been a borrowing from Eskimo-Aleut, and *m- in the 1sg. is known also in Almosan languages: Kutenai ka-mi-n `I` (cf. PChK *γɔ-m-, *γə-mm-). A "global" root of the meaning `nail, claw`, represented in Eskimo-Aleut (by *kukəγ, *kukəkra- `nail, claw`) and in

³ Nikolaev, Sergei; Mudrak, Oleg "Gilyak and Chukchi-Kamchatkan as Almosan-Keresiouan Languages": Lexical Evidence (Preliminary Report) no Explorations in Language Macrofamilies. Universitaetsverlag Dr. Norbert Brockmeyer, Bochum, 1989, pp. 67-87

⁴ Fortescue, M. (1998). Language relations across Bering Strait: reappraising the archaeological and linguistic evidence.

⁵ *Language Relations Across Bering Strait* (1998)

other languages of Eurasian phylum, in Chukchi-Kamchatkan (PChK *k^wey^wə- 'claw, nail') and in Salishan (PS *q^wa□, *q^wa□^w 'claw, nail'), thus also has a Mosan correspondence.

An idea of borrowing of few "wordlist" roots from "Eurasian" (Eskimo-Aleut or Altaic) source by the Chukchi-Kamchatkan proto-language allows us to attach a greater weight to Chukchi-(Kamchatkan-)Mosan parallels and to once more endorse a hypothesis of Chukchi-(Kamchatkan-)Algic-Mosan relationship first proposed by O.A.Mudrak in his talk at Ann Arbor conference (1989, published with the joint talk cited above⁶). It is telling that there are practically no Eskimo-Aleut-Almosan parallels at "wordlist" lexics except a root *nu□eru- (*ni-) 'star': 'moon, star, light not bright' (cf. PA *ał-a:nkw- 'star', PNi *un'γer 'star', PChK *ʔe□er 'star') borrowed by Eskimos.

A serious obstacle for the proof of a Beringian (as, similarly, an Algic-Mosan) relationship is an insufficient development of historical phonology of families compared. In particular, in Mosan languages, rich in consonants, their laryngeal features are poorly reconstructed; the reconstruction of Algic (Algonqian-Ritwan) dental affricates and laterals is made difficult by meaning-adjusting alternations of type t/č/c/œ in the root morphemes, and so on. Several proto-languages lack adequate reconstruction for vocalism. For these reasons, the present talk is not a proof of the hypothesis, but merely one of the first steps towards resolution of genetic relationships in the Beringian area.

⁶ *"Gilyak and Chukchi-Kamchatkan as Almosan-Keresiouan Languages" (1989)*

Reconstructions: PW - Proto Wakashan (after Fortescue); PNW - Proto North Wakashan (my reconstruction); PS - Proto Salishan ; PIS - Proto Interior Salishan ; PCS - Proto Coast Salishan (all after Kuipers); PA - Proto Algonquian (traditional in my redaction), PAlg - Proto Algic (after Proulx); PN_i - Proto Nivkh, PChK - Proto Chukchi-Kamchatkan, PChu - Proto Chukchi-Koryak и Plt - Proto Itelmen after Mudrak, with some simplifications.

Beringian relationship could be shown with an example of personal pronouns and numerals.

For the 1sg. pronoun, 2 roots are present:

***n-**

PW *nu:- `l; we'

PS *nə-, *nə-ca `l'

PA *ni:-, *nə- 'l; we' ; *ni:la 'l'

PN_i *n'i `l'

***m-**

Kutenai ka-min 'l'

PChK *γɔ-m-, *γə-mm- 'l'

For the 2 sg., 3 roots are reconstructed:

***k-**

PS *ʔənkʷə `thou'

Kutenai nɪ́nko

PA *ki:-, *ke- `thou, you', *ki:la `thou'

PN_i *ci `thou' 1106; *ce□ `you'⁷

***n-**

PS *ʔən-kʷə и *nə-wi `thou'

Kutenai nɪ́nko

PChK *γə-nn- `thou' 520

***s-**

PW *su:(k)- `thou; you'

PChK *γə-s `thou' 520

⁷ The Nivkh affricates seemingly descend from *Ky-, *Kl-; this is suggested also for "three", see below.

For the 1 pl. pronoun, 1 root ***m-** is used:

PS *nim- `we' [n- `l']

PNI *mi-□ (excl.), *mi-rə□ (incl.) pron. 1 pl. `we'

PChK *muri, *muryə- `we'

In Algic and Kutenai for the pronoun 1 pl. the plural form of 1 sg. pronoun is used

Numerals 1-4

***nV- `one'**

PW *n'am- `one'

PS *nak', *nk'-u (IS *nk^wu?) `one, another'; *naqas `one'

Kutenai ok'^o- (apparently, = PS *nak', *nk'-u)

PA *ne- `one'

PNi *n'□n'-, *n'ē- `one'

PChK *ʔənje-n `one'

Also a peripheral root *pVš-:

PS *palaʔ `one'

PA *peʔ-ik- > *pe□-ik- `one'

***mV- `two'**

PW *m'aʔ(-aʔ), *maʔ(-aʔ) `two; second'

PNi *mi- `two'; *mi-nēr `eight = 2x4'

PChu *am-□ʔro- `eight = 2x4'⁸

***nV-ʔVs- `two'**

PS *ʔəsəl(i/a) `two'; *was, *nwas `two'

PA *nyi:□w- `two'

PChK *□ise- `two'

Kutenai -as- two

***(nV-)kVI- `three'**

PS *kaʔʔas three

Kutenai -qʔasa

PA *ne-kʔ- `three'

PNi *ʒi- `three' [½- < *gl-]

PChK *ʔo□ro-q `three' [if -ŋr- < -ngL-]

Numeral "three" in Wakashan is denoted by a separate root: *(wi:)yu(:)d-, *yuwi(d)-.

***nV- `four'**

PA *nye:w- `four'

⁸ Wakashan *m'aʔ(-aʔ), *maʔ(-aʔ) 'two; second', with -aš- corresponding to PS -al- in *ʔəs-al(i/a) `two', looks as *ma:š in N Wakashan and has an irregular reflex in S Wakashan without the initial nasal, *ʔaša. Thus, the PE *malə-□u- is seemingly a North Wakashan and Aleut *a:la-□ a South Wakashan borrowing. This parallel and a quantity of other Eskimo-Aleut-Wakashan parallels, unfortunately rejected by some scholars as unfeasible ones, makes us to reflect on the ways of Esquimo-Aleut migrations along the NW American coast.

PNi *ne^h-(r), *nu- 'four'

PChuK *ʔ^hra-q 'four' [it appears that -r- is secondary in analogy to *ʔ^hro-q "three"]

In Mosan, the other roots are used for "four":

PW *mu:, m'u:- 'four' and PS *mu-s 'four' (it is possible that there was a borrowing into one of the languages)

Kutenai ->a'áča- 'four'

Cf. also common roots with close meanings:

double, pair

PCS *k'əyuya `twins'

PNi *oqola- `double'

PChK *q(ʷ)atə `one (of a pair)'

second, other

PS *qʷut `(other) side, half, companion'

PA *kwet- `other'

PChK *kʷat□qə- `other, second'

In total we know of about 300 relatively reliable Beringian cognates (those that include both Almosan and, on the other hand, Nivkh and/or Chukchi-Kamchatkan roots). As an illustration, we list the cognates for M.Swadesh's 100-word list, which display an exact "wordlist" meaning reconstructed for at least two of proto-languages compared.

"50-word list" by G.S.Starostin:

ashes

PA *penkw- `ashes'

PNi *p`le□k `ashes'

PChK *pi□u `ashes'

blood

PNW *ʔəlkʷ- `blood'

PIS *mil'=, *mit'k'a'ya? (< *mil'k'=) `blood'

PA *melk- 'blood; red'

PChK *muʔ?-mə `blood'

blood

PCS *qʷil `blood'

PChu *kiwle `blood, grume'

bone

PS *q'awaʔ (red.) `bone'

PA *weʔk-an- 'bone'

PChK *ʔəʔəʔ □ *ʔəʔəʔə `bone'

breast

PA *peʔk-an-, *-a:-tpeʔk-an- `breast'

PNi *men'k `breast'

PChK *ma□(o)γ^oi `breast'

burn

PAIg : Wiyot tuw-, Yurok tyeʔw- `to burn'

PNi *tuv- `burn (tr., intr.)'

burn

PIS *tik^w, *tak^w `to burn, heat'

PNi *tuγər `fire'

PChK *tγət- `hot, burn (tr.)'

claw, nail

PS *q^wa□, *q^wa□^w `claw, nail'

PChK *k^weγ^wə- `claw, nail'

dry

PA *ka:hk- `dry'

PChK *kəγə- `dry'

dry

PS *□aw `dry' 545

PNi *qaw(□)- □ *k□w(□)- `dry, to dry'

PChu *kɔwwa-t- `dry, to dry' 1583

ear

PA *-al- 'ear'

PNi *məla `ear' (cf. *me- listen, hear)

PChK *wilu- `ear'

eye

Kutenai -q-šuš `eye'

PAIg *-li:n- `eye'

PChK *tuta- `eye'

head, hair

PA *-etkw- `head', *-a:n-etkw- `head hair'

PChK *ʔətkəl-mə `head hair, head'

head, hair

PS *q^wum `head, skull, hair on head'

PNi *□imi `temple'

PChK *qemi- (*ʔəqemi-) `head hair, crown of the head'

head

PW *t'u□^w-, *t'uq- 'head'

PA *-□tekwa:-n- 'head'

PNi *t□γ 'forehead'

louse

PW *Gi(:)xk- `louse'

PCS *məxkn, *məxk'n `(head) louse'

PA *ehkw- `louse'

PNi *hirk-ər 'nit, body louse'

night

PNW *nik^w- `night'

? PNi *urk `night' [this is doubtful, since there are no other cases of Nivkh r = n in other languages]

PChK *ʔunki `night'

notPNW *k'ə- *negative stem*Kutenai ko- *negative stem*PA *ka- *negative stem*

PNi *qaw- V.Aux. 'not to be'

PChK *qusmə 'not, no (explicit)' [word composition is unclear]

star

PA *aʔ-a:nkw- 'star'

PNi *un'γər 'star'

PChK *ʔe□er 'star'

(cf. PE *nu□əru- (*ni-) 'moon, star, light not bright')

In Asian part of the areal it is a contact word, but the source is unclear.

tail

PW *na:k-, *n'a:k- 'tail of fish/bird'

PS *-anak SUFF 'tail'

PNi *□□ki 'tail'

PChK *□oj□o 'tail'

tonguePA *-i:t- 'tongue' (Yurok *hipt *tongue* with unclear -p-)

PNi *-(h)ilγ 'tongue'

PChK *ʔjijlə - 'tongue'

(cf. Yup. *ulu 'tongue')

waterPS *q^wuʔ, *ʔuq^w 'water; to drink'

PA *akw- 'out of / in the water'; *kwa:p- 'out of water'

PChK *ʔix^w 'water'Some words from the rest of 100-word list:***belly, stomach***PS *k^wal 'stomach, belly'PChK *q^oaʔa- (*q-) 'stomach, belly'***belly, stomach***

PIS *wə□lan(k) 'stomach, belly'

PA wi:na:ʔtak- 'largest stomach of ruminant / paunch of a slaughtered animal'

PChK *nanqo 'stomach, belly'

cold

PS *□'əx^w `cold (object)'

PNi *I□krə- `make cold'

PChK *ləqlə- `cold'

earth

PS *-mix^w `earth'

PA *-a:-meHk(w)- `earth, soil'

PNi *miv `earth, soil'

PChK *məly^wəl `earth'

long

PNW *gəl-t- `long, tall'

PA *kenw- `long'

PNi *gel- `long'

PChK *ʔiy^wlə- `long'

In the following root, the non-trivial consonant correspondences are present.

root

PW *□'u:p'ak `root'

PS *c'apaʔ□ `cedar root'

PA *wetlye:pitk- `root'

PNi *vizləy `root'

(perhaps, here also PChK *tatqup `root')

NB Algic-Nivkh-ChK derivative root:

see

PW W *n'a:k- `look'

PA *ne:-, *-n- `see'; *nat(a)w- `seek, hunt'

PNi *ne:-, *-n- `see'; *n'əte- / *n'ər~e- `see, find'

PChK *ʔnis'i- `seek, hunt'; *□ərtə- `ask, hunt'

Two roots for "sleep" are fascinating for their phonetic non-trivialities

sleep

PNW *k'ał- `to sleep, to dream'

PA *-enkw `sleep', *wi:nkw- `be sleepy' < *-en-łkw- `sleep' (Yurok -itkw)

PNi *qo- `sleep'

PChK *ʔn'-ułqə- □ *ʔ□-uqłə- `sleep'

sleep

PS *ʔit `to sleep'

PA *nep-, *-p- 'sleep' < PAlg *(n-)etW- (Wi nitw- 'sleep')

PChK *ʔniwto 'dream, soul'