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PRELIMINARY DATA ON THE RELATION OF CALIFORNIA PENUTIAN TO URALIC AND OTHER NOSTRATIC LANGUAGES

1. Already in 1903 H. Pedersen proposed that a group of language families in the Old World, e. g. Altaic, Indo-European, Uralic, etc. should be combined in a genetic unit which he called Nostratic. But only as late as 1965 (1967) V. Illič-Svityč convincingly enough demonstrated the genetic relationship between Altaic, Uralic, Dravidian, Indo-European, Kartvelic and Afroasiatic (V. Illič-Svityč called the last Semito-Hamitic although he also operated with Cushitic and Chadic data).¹ I believe also that S. E. Martin succeeded in demonstrating the relationship of Japanese to Korean (Korean is an Altaic language).² It is also possible that there are some more language families both in Asia and America that are related to Nostratic.

In the present article I will attempt to show the possibility of demonstrating the relationship of California Penutian to Uralic and other Nostratic languages.³

The California Penutian family (or stock) was proposed by R. B. Dixon and A. L. Kroeber in 1919 as being composed of five language groups (Wintun, Maidun, Miwok, Costanoan, Yokuts) and was then called simply Penutian. (At the present time this family is considered a well established one.) Later the genetic relationship of Dixon and Kroeber's Penutian to a number of language families in America was proposed and a highly hypothetical Penutian phylum was postulated.⁴ Although this postulation is correct at least in part the present article is limited to California Penutian.

It must be emphasized that it is possible to speak about the genetic relationship between language families only (and already) when their common protolanguage has been established. Any protolanguage is based on a more or less extensive set of such morphemes shared by the language families for which no sufficient arguments can be found to prove their borrowedness. In some cases such a protolanguage may, in a way, reflect

¹ В. М. Иллич-Свитыч, Материалы к сравнительному словарю ностратических языков (индоевропейский, алтайский, уральский, дравидский, картвельский, семитохамитский). — Этимология 1965. Материалы и исследования по индоевропейским и другим языкам, Москва 1967, pp. 321—373.

² S. E. Martin, Lexical Evidence Relating Korean to Japanese. — Language 42 1966, pp. 185—251. Cf. also R. A. Miller, Old Japanese Phonology and the Korean-Japanese Relationship. — Language 43 1967, pp. 278—302.

³ Otto J. Sadovszky in the U.S.A. has been engaged on a similar problem investigating the relation of Costanoan to Uralic.

⁴ Cf. W. Shipley, The Relation of Klamath to California Penutian. — Language 42 1966, pp. 489—498; M. Swadesh, Problems of Long-Range Comparison in Penutian. — Language 32 1956, pp. 17—41.

the existence of an actual common parent language but sometimes it reflects nothing more than indirect loans from or via unidentified languages.

2. The method adopted in the present article, with a few exceptions, is the same as used by Broadbent and Pitkin⁵ and by Illič-Svityč and consists in comparing the California Penutian protolanguages with the Uralic or Nostratic ones. (It is to be noted that the scantiness of the California Penutian material hinders us in reconstructing here the Proto-California Penutian.) Besides that some references are made to Gilyak or Nivh (an isolated language spoken in the Lower Amur basin and in Sachalin), Chukchi and Koryak (Chukotian languages spoken in the North-East of Siberia).

3. In this section a comparative vocabulary is presented. The word articles are ordered according to meanings. The meanings, when not different from that given in the beginning of the article, are not duplicated in the article. Besides that the meanings of words or stems of different languages inside a language group or of different post-Nostratic protolanguages are given only when the stem has not yet been reconstructed or when the correctness of the present reconstruction is dubious or when the reconstruction is that of the author.⁶ In the last case the reconstruction follows directly the abbreviation of the protolanguage while the data subject to reconstruction are presented without any surrounding parentheses; when such a reconstruction is based on an earlier comparison it precedes the reference to the sources.

The transcription used for California Penutian languages has been modified here. The reconstructions are given in the Fenno-Ugric transcription (e.g. p^c represents an aspirated p , p' a glottalized p , \bar{a} represents a long a); otherwise long vowels and consonants are written by means of two successive letters (e. g. aa), y represents a high central vowel [i], aspirated consonants are written by means of a postposed h (e. g. $ph = p^c$). The lateral affricate, however, is designated by λ , and the voiced and voiceless uvular stops and spirants in Gilyak, Chukchee and Koryak are written correspondingly as q and g , and x and z (there

⁵ Cf. S. M. Broadbent, H. Pitkin, A Comparison of Miwok and Wintun. — Studies in Californian Linguistics (= University of Californian Publications in Linguistics (= UCPL), Vol. 34), Berkeley and Los Angeles 1964, pp. 19—45.

⁶ The reconstructions, if not mine, are from the following sources: Nostratic, Proto-Indo-European, Proto-Altaic, Proto-Dravidian, Proto-Kartvelic, Proto-Afroasiatic and Proto-Uralic (when not indicated otherwise) from V. M. Иллич-Свитыч, *op. cit.* (= МСНЯ); В. М. Иллич-Свитыч, Соответствия смычных в ностратических языках. — Этимология 1966. Проблемы лингвогеографии и межъязыковых контактов, Москва 1968, pp. 304—355 (= ССНЯ); Proto-Uralic and Proto-Finno-Ugric from Bj. Collinder, Comparative Grammar of the Uralic Languages, Stockholm 1960 (= CGUL); it should be noted that CGUL is based on data presented in Bj. Collinder, Fenno-Ugric Vocabulary, Stockholm 1955 (= FUV); Proto-Turkic from M. Räsänen, Versuch eines etymologischen Wörterbuchs der Türk Sprachen (= Lexica Societatis Fenno-Ugricae XVII,1), Helsinki 1969 (= VEWT); Proto-Korean-Japanese from S. E. Martin, *op. cit.*; Proto-Maidun from R. Ulltan, Proto-Maidun Phonology. — International Journal of American Linguistics (= IJAL), Vol. 30, Bloomington, Indiana 1964, pp. 355—370; Proto-Maidu-Nisenan from W. Shipley, Maidu and Nisenan. — IJAL, Vol. 27, 1961, pp. 46—51; Proto-Miwok-Mutsun from C. A. Callaghan, Comparative Miwok-Mutsun. — IJAL, Vol. 26, 1962, pp. 97—107; Proto-Miwok-Wintun from S. M. Broadbent, H. Pitkin, *op. cit.*; Proto-Yokuts in V. K. Golla, Comparative Yokuts Phonology. — Studies in Californian Linguistics (= UCPL, Vol. 34), pp. 54—66. All the data on Proto-Miwok and Proto-Sierra Miwok presented originally in S. M. Broadbent, C. A. Callaghan, Comparative Miwok. — IJAL, Vol. 26, 1960, pp. 301—316 and not duplicated in C. A. Callaghan, *op. cit.* and in S. M. Broadbent, H. Pitkin, *op. cit.* have remained inaccessible to me.

are, by the way, no special symbols for these uvulars in the Fenno-Ugric transcription). In the case of Maidun ' and ^ represent correspondingly the primary, the secondary and the alternative (i. e. either the primary or the secondary) stress. Everywhere in reconstructions V designates an unidentified vowel, U — an unidentified labial vowel. Slant lines / / enclose an admissible but ambiguous reconstruction.

The order of language groups and families in a word article is as follows: Maidun // Miwok // Costanoan // Wintun // Yokuts × Uralic // Altaic +⁷ Nostratic (Uralic; Altaic; Indo-European; Afroasiatic; Kartvelic; Dravidian) // Proto-Korean-Japanese.⁸ When there is no sufficient basis for selecting the best item for a comparison the problematic comparisons are separated by means of //.

The word articles are numbered. When a California Penutian stem is compared with a Nostratic stem having no evidence in Uralic the number of the article is followed by a grade mark ° instead of a period.

1. ANT. PY *k'ēnic° × U PFU (CGUL 412, Fi *kusiainen*) *kuñčV.

2. ANTLER. Wphr č'ele 'horn', Wp č'ili × PU (CGUL 405, Lp čállâ- 'rub the antlers') *šele.

The comparison does not hold if the Wintun stem is related with PMi *killi- and the W stem-initial č'- < PMiW *k'. Cf. no. 3.

3. ANTLER. PMi *killi-, cf. Mil, Mics killi-, Miss killi- × N (MCCHЯ 348) */k/ir(Н) V 'crown' (PU *kīrV; PIE *kērn-; PAA *krrn*).

Cf. also Koryak *kilvej* 'holiday of horns'.

Broadbent and Pitkin connect the Miwok stem with Wphr č'ele, Wp č'ili and reconstruct for PMiW *čili 'horn' where *č- is unacceptable because of the assumption *č > *k for PMi. Cf. no. 2.

4. ARM. PMis *pāčan-, cf. Mics *paačany-* 'lower arm', Miss *paačan-* // PY *puč'oŋ 'hand, arm' × PU *pVδas- (FUV 51), cf. Fi *pudas* : *putaa-* 'arm, branch of a river'; Ma *pāsəl* 'lateral branch of a river'; Ha *pāsəl*, *pāseš*, *pāst* 'river arm which often dries in summer; lateral branch of a river'; Ne *paarod* 'lateral branch of a river', *paarad* ~ *paarat* 'arm; forearm' // PA *p'ālā- 'hand, palm' (VEWT 15) cf. Mo *alažan*, *aliža* 'inner side of a hand; handful', Middle Mongolian *halaqaŋ* id.; Manchu *jalangu* id.; cf. also Ewenki *hālāŋ* ~ *hālān* 'branching' + N */p/a/λ/V 'hand, arm' // PKJ *p(x)yǝld(x)yi (K *phal*; J *pidi*).

⁷ A plus mark indicates that the Uralic and/or Altaic stem is to be connected with the following Nostratic one established earlier.

⁸ Abbreviations: M — Maidun, PM — Proto-Maidun, Mk — Konkow, PMmn — Proto-Maidu-Nisenan, Mm — Maidu, Mn — Nisenan // Mi — Miwok, PMi — Proto-Miwok, Mib — Bodega Miwok, Mil — Lake Miwok, PMis — Proto-Sierra Miwok, Mics — Central Sierra Miwok, Miss — Southern Sierra Miwok // PMiMu — Proto-Miwok-Mutsun, Mu — Mutsun // W — Wintun, PMiW — Proto-Miwok-Wintun, Ww — Wintu, Wn — Nomlaki, Wp — Patwin, Wph — Hill Patwin, Wpr — River Patwin, Wphr — Hill and River Patwin, Ws — Suisun // PY — Proto-Yokuts, Yc — Chukchansi, Yd — Yawdanchi, Yi — Yawelmani, Yt — Tachi × N — Nostratic // U — Uralic, PU — Proto-Uralic, PFU — Proto-Fenno-Ugric, PBF — Proto-Baltic-Fennic, Est — Estonian, Li — Livonian, Fi — Finnish, Lp — Lappish, Md — Mordvinian, Mr — Mari (Cheremis), Ud — Udmurt (Votyak), Km — Komi (Ziryen), Ma Mansi (Vogul), Ha — Hanti (Ostyak), Hu — Hungarian, PSam — Proto-Samoyedic, Ne — Nenets (Yurak), En — Enets (Yenisei Samoyed), Ng — Nganasan (Tavgi), Ka — Kamassian // A — Altaic, PA — Proto-Altaic, PTK — Proto-Turkic, OTk — Old Turkish, Tk — Turkish, Tm — Turkoman, Tv — Tuva, Ku — Kumuk, Chu — Chuvash, Mo — Mongolian, Khl — Khalkha Mongolian, Ew — Ewenki (Tunguz), K — Korean // PIE — Proto-Indo-European // PAA — Proto-Afroasiatic // PD — Proto-Dravidian // PKJ — Proto-Korean-Japanese, J — Japanese.

There is metathesis in U Mansi and Hanti. The PKJ *-ld- (K -l- : J -d- < -t-) is rather PKJ *-δ- or *-λ-.

5. ARMPIT. PM *k'owō // ? Mics *kaapusu-*; ? Miss *katmyl-* × N (MCCHЯ 370) *k/o/ń/g/V (PU *kajηel-; PA *końV; PD *kaikV-).

6. BANK. PMiMu *čōk × U PFU (CGUL 414, Est *sünk* 'grassy hill') *šūηkā.

7. BARK. Mm *kapúmi* 'bark in thin sheets'; Mn *kapum* // Wph *kha-paala* × N (MCCHЯ 344) */q/opV (PU *kopa; PA */k^c/ob(V); ? PK *tqab- ~ *tqaw) // PKJ *kap(a).

Broadbent and Pitkin connect the Wph stem with Mics *semmila-* and reconstruct for PMiW *xa/ep²a/ila- where a/e, p², a/i are single phonemes, resp. aberrant correspondences.

8. BARK. Mil *k'éeliš-* 'to peel' (? < Wp) // Wph *kheri* 'to peel'; Wp *k'er-ta?* 'to peel' × N (MCCHЯ 344) */k^c/erV (PU *kere; PA *k^c/e/rä-; PAA *k^{rm}).

9. BLOW, TO. ? PM *b^yh // PMiMu *pūč- 'blow with the mouth' // PY *p^oš(o) × N (MCCHЯ 339) *pušV (PU *pušV-; PA *pusV-; PIE *peus-).

10. BOW. PMiMu *lāw (Miss *jawwe*) × PU (CGUL 406, Fi *jousi*) *jōηksō. // A PTK (VEWT 186) *jāń (cf. Chu *śu*).

The PMiMu stem, however, can be related with PY *t^ca/ap^c (Yd *tajaph*; Yl, Yt *řalaph*).

11. BOY. Mm *p^y*; Mn *pyjyty* 'children; small' × N (MCCHЯ 360) *pojV 'child' (PU *poj-; PA *pō- ~ *pi-).

12° BREATHE, TO. PM *hón // PY *hoη- × N (MCCHЯ 340) *VnhV⁹ (PIE *h^{en}h-; PAA *²nh).

13. BROTHER-IN-LAW. PM *k^edē × N (MCCHЯ 363) *kuda (PU *küδV; PA *küdü- ~ */k/uda).

Cf. also Koryak *qəlavol* 'husband', *gəlavolləqəl* 'bridegroom' if only *qəl-* is not connected with that in *qəlik*, *qəlikin* 'male'.

14. BURN, TO. PM *tōhó 'ignite' × N (MCCHЯ 337) */t/o/gV (? PU *tä/γ/V(t); PA *t^c/o/gV; PIE *dheg^h < *teg^h; PAA */t/k^h-) // PKJ *tāx ~ ? *təx.

Cf. Gilyak *t^u- : ru-* in *t^uyr : ryr* 'fire, flare', *t^uf* 'smoke', *ruvd* : *t^uvd* 'to ignite'.

15. BURN, TO. PY *t^ul(u) × N (MCCHЯ 341) *tülV- 'to burn, tr.' (PA *tülä-; PK *t^ur-) // N (MCCHЯ 352) *dulV- 'fire' (PU *tulō; PA *dulV-; PAA *dlk[;]? PD *tulV-).

16. CARRY, TO. Mil *wákut-* 'to take away' // PY *wak^c-aj- 'to give' × N (MCCHЯ 351) *wegV (PU pro PFU *wepe; ? PA */e/gä-; PIE *ueg^h-).

Cf. Gilyak *vigud* 'to remove, tr.', *vid* 'to remove, intr.'. CGUL p. 414 sets up for PFU *wiye-.

17. CENTER POLE. PM, cf. Mk *sýdok*², Mm *sudók*², Mn *sudok* × U PFU (CGUL 410, Lp *câzel* 'pole in the floor') *čyčV ~ *čučV // PU (CGUL 409, Lp *sossg* 'the middle pole') *čučō.

⁹ This reconstruction was proposed by A. B. Dolgopolskij.

18. CHARCOAL. Cmu *suw, sus* // PY **sāluw* × N (MCCHЯ 370) **śuλV* (PU **śūδ'e*; PIE **suēl-*; PD **cuŋV-*).

19. CLEAR. PY **sil(l)al* 'clear (water)' × N **silV*, cf. U Est *selge* 'clear', *sile* 'smooth even'; Fi *selvā* 'clear', *sileä* 'smooth, even'; Veps *selged* 'clear' // PA **sili-* (VEWT 421), cf. OTk *silik* 'clean'; Tk *silik* 'smooth', *silgi* 'duster, cloth'; Mo *sili-* 'to wipe, rub'.

20. COOK, TO. PY **hiš-* 'cook(ed)' × N (MCCHЯ 338) **pišV-* (PU **pišä-*; PA **biš(V)-* ~ **pi(šV)-*; PAA **pīš-* ~ **bš-*).

Cf. also Koryak *pičγan* 'food'.

21° COPULATE, TO. PMiW **šVrV-* × N (MCCHЯ 342) **h/u/rV* 'to fecundate' (PIE **H^uer-*; PAA **h(ω)r*).

22. DAUGHTER-IN-LAW. PY **on-mil* × N (MCCHЯ 363) **miñV* (PU **miñä*; ? PA **menV* ~ **benV*; PAA **m(j)n*; PD **miñV*).

23. DAY. Mil *hii*; Miss *haaja-* 'bright; daylight' // PY **hajal* × N (MCCHЯ 342) **gojV* 'dawn' (PU **kojō*; ? PA **giaba-*; PIE **g^hei-*).

Cf. also Gilyak *k'unu* 'dawn'.

24. DEER. PM **k'út'* 'animal' (Mn *k'ut'* 'deer') × PU (CGUL 406, Lp *god'de* 'wild reindeer') **kunta*.

25. DEER. PY **χoj* × N (MCCHЯ 330) **gojrV* 'antelope' (PU **kojra*; PA **görV*; PIE **ǵhuǝr*; PD **kura*).

Cf. also Chukchi *qora* 'reindeer' and Koryak *qojaŋa* 'domesticated reindeer'.

Note that Collinder views the PU **kojra* as a derivative of PU **kojō* (CGUL 406, Lp *gújj* 'husband'), cf. also FUV 13. Probably only a certain semantical influence of the PU **kojō* on PU **kojra* is the case.

26. DOWN. Mil *hella* 'under, underneath; bottom'; Mics ?*alla-* 'down, lower', ?*aala-* 'below'; Miss ?*alla-* 'underside' × N (MCCHЯ 351) **qalV* (PU **ala*; PA **ala*; ? PIE **hel-*; PAA **hl-*) // PKJ **šr-* 'down'.

Cf. also Koryak *qalellen* 'down, downwards', *qalilitak* 'to roll down'.

Callaghan compares the Mil *hella* with Western Wappo *hela* 'below',¹⁰ cf., however, no. 46 where Mil *hé-* = Mis ?*a-*.

27. FAECES. PM, cf. Mk *pít'*, Mm *pít'*, Mn *pic'i* // PY **pitik'* × U PFU (CGUL 410, Hu *fos* 'thin excrement') **pučka* ~ **pačka* // ? A Ew *hētēmi* 'excrement of a dog'.

28. FATHER. Mil ?*áppi*; Mics, Miss ?*yryu* // Ww *haapa* 'father (used for direct address)', Wphr ?*aapa* 'grandfather' × U PFU (CGUL 40, Fi *appi* 'father-in-law') **appō*.

Cf. also Koryak *appappo* 'grandfather'.

29. FEAR, TO. Mib *helá-*; Mil *hálík-*; Miss *helaaj-* 'to scare, tr.' × N (MCCHЯ 331) **pelV* (PU **pele-*; ? PA **p/e/l(V)-*; PIE **pel-*; PAA **pl-* ~ **bl-*).

30° FISH. PM, cf. Mk *páliik*, Mm *palík*, Mn *pala* × PA **paIV* ~ **balV*; PTK **balík*, cf. OTk *baliq, balaq*; Tk *balik*; Chu *pulā* and Manchu *falū* 'a kind of bream' (VEWT 61).

31. FLOOD. Mm *jō-* 'move through water'; Mn *joo* 'swim under water in order to catch something; flowing water' // Mics *jo-* in *jojja-* 'to melt', *jolle-* 'to spill, tr.; to pour out, tr.'; Miss *joo-* ~ *jo-* in *joomit-* 'to fall into

¹⁰ C. A. Callaghan, Lake Miwok Dictionary (= UCPL, Vol. 39), Berkeley and Los Angeles 1965, sub *hella*.

body of water', *joono-* 'to run (of water)', *jowwe* 'flood; to flood' × PU (CGUL 406, Fi *joki* 'river') **jōkV*.

32. FLOW, TO. PMiW **cu/olča* × PU (CGUL 405, Hu *ár* 'flood') **šurka* // ? A Tv *čurgī-* 'to drip; to flow'; ? Chu *šyrma* 'river'.

Note that PMiW **u/o* is an aberrant correspondence.

33. FOOT. Mm *pâj*; Mn *paj* 'foot; track (of animal or man)' // Mics *haŋte* 'foot', *hotš-* 'to hunt'; Miss *haŋte-* 'foot; tracks; twelve inches' // Ww *hajuu[qa]* 'to follow tracks; hunt'; Wn [*p'uqca*]*hajaa* 'to go shooting, hunt' × ? N (MCCHЯ 368) **paŋV* (PA **padak*; PIE **ped-*; PD **paŋV*).

Cf. also Koryak *pajakalŋən* 'calf of a leg'.

34. FOX. PM **ʔolē(l)* 'coyote' // Mil *ʔóle* 'coyote; wolf'; ? Miss *ʔoonup* 'wolf' × N (MCCHЯ 347) **loḱV* (PU **lo/kk/a*; PA **luka-* ~ **loka-*; PK **leḱw-*; PD **nakkV*).

Cf. also Gilyak *lips* 'wolf' and Koryak *loqejaŋol*.

There was probably metathesis in California Penutian, cf. no. 49.

35. FRONT. Mil *ʔedáak*, *ʔédak* 'far'; Mics *ʔečá-* 'outside', *ʔeeča-* 'behind'; Miss *ʔečča-* 'behind', *ʔeča-mm-* 'next', *ʔeča-ttv-* 'last (year, week, etc.); back' × N (MCCHЯ 354) **qaŋŋV* 'front' (PA **antV*; PIE **hent-*; PAA **hŋŋ/ŋ*).

Cf. also Gilyak *ətə* 'in front of', *ənk* 'before'.

36. GATHER, TO. PY **jo-low* × N (MCCHЯ 366) **loḱV* (PU **luke-*; PA **toga*; PIE **leg-*; PD **tok-*).

Cf. also Chukchi *ləŋək* 'to consider'; Koryak *ləŋək* : *ləŋkə* 'to consider', *jəlŋək* 'to count'.

37. GIVE, TO. Mics *ʔammy-*; Miss *ʔamm-* 'to give; to lend' × U PFU (CGUL 410, Fi *anta-* 'give') **amta-*.

Cf. also Gilyak *imɣd* : *k'imd* : *χimd* where *-d* is a suffix and Koryak *qam-* in *qametoak* 'to entertain'.

Broadbent and Pitkin connect the Mis stem with Ww *ʔaa-*, *ʔaama* and reconstruct for PMiW **ʔam-*. This reconstruction is incorrect even in Broadbent and Pitkin's system, notably **ʔ-* pro **tk-*.

38° GO, TO. ? Mm *ʔetáp* 'cease, stop', *ʔétu* 'wait!, stop!' // Mics *ʔetaal-* 'to go back, return'; Miss *ʔetaal-* 'to return, intr.' × A PTK (VEWT 31) **āt-* ~ **āt-* 'to stride, step' + N (MCCHЯ 343) **q/a/ŋV-* (PIE **het-*; PAA **hŋj*).

Cf. also Chukchi, Koryak *qət-* : *tqət-* in *qətək* 'to go away'.

39. GUT. Mics *puŋkaly-*; Miss *puŋkal-* × PU (CGUL 408, Ud *puč* 'inner') **pučḱV*.

Broadbent and Pitkin connect the Miss stem with Mics *poŋli-* 'navel', Miss *pootol-* 'rectum', Ww, Wn, Wp *pot* 'guts'. If Broadbent and Pitkin are right, the Mis stems presented above are derivatives of PMiW **pUŋ-*; the comparison, however, may hold even in the latter case.

40. HEAR, TO. Mil *ʔálu* 'to hear, to feel, to taste; to perceive by a sense other than sight', *ʔálok* 'ear'; Mics *ʔoolity-* 'inside of ear'; Miss *ʔal-* 'to hear; understand' × N (MCCHЯ 366) **q/iw/lV* (PU pro PFU **kulō*; PIE **kleu-*; PAA **kʷl*; PK **qur-*; PD **kēl*).

41. HIT, TO. PMiW *cep?- (Ww *cep*, Wph *thep*, Miss *čee?*-) × N (MCCHЯ 356) *t_{ap}V (PU *tappV-; PA *t_{apa}-; PIE *top-; PAA */t|p-; PD *tāpp-).

42. HOARSE. PMiMu *kešil- × U PFU *kVč-, cf. PBF *kähētä; *kähise- 'to sound hoarse'; Md *kižné-* 'to wheeze; grow hoarse'; Km *kičky-*, *kičšy-* 'to giggle; to chirr', *kičjav-* 'to giggle'; Ha *kačay-* 'to crackle', *kačkal-*, *kačkam-* 'to crunch'. Note that *käh- in PBF stems belongs to the *kVh-series in a rather complicated onomatopoeic system whose members are hardly translatable, cf. Est *kahise-* 'to rustle (of trees, of crowd of people)', *kihise-*, *kuhise-*, *kōhise-* 'to fizz, hiss, whizz', *kohise-* 'to rustle (of forest); to roar (of waves, waterfall', *kähise-* 'to sound hoarse'; cf. also such series as Est *sahise-* 'to rustle (of leaves, grass)', *sihise-*, *suhise-* 'to hiss'; *kare(da-)* 'rough, rugged; harsh, gruff; hard (of water)', *kirise-* 'to gnash, intr. (of teeth)', *kurise-* 'to gargle', *kōrise-* 'to rattle', *kārise-* 'to tear, rend, rip, intr.', *sirise-* 'to chirp, twitter', *surise-* 'to whirr, buzz, drone', *sōre(da-)* 'thin, not dense; coarse-grained', *sārise-* 'to sizzle, intr.'.

43. HOLD, TO. PMiMu *paŋi × N (MCCHЯ 339) */p|itV (PU pro PFU *pitä-; PD *piŋV-).

44. HOLE. PMiW *holoq?- // PY *kol in *šokol 'hole' (Yc *k'ol-woš*, Yd *šokhot*, Yl *šokol*) × U PFU (CGUL 411, Fi *kolo* 'cavity, hollow, hole') *kōlV-.

45. JAW. Mil *héwwe* 'chin'; Mics *ʔáwwo* 'mouth'; Miss *ʔawwo*, *ʔowwo* 'mouth' // PY *ʔawaš × N (MCCHЯ 371) *ongV (PU *oŋō; ? PA *ōŋä-, */ä|ŋä; PD *aŋkV-) // PKJ *agə, *agu.

Cf. also Gilyak *əŋg*.

46. JUMP, TO. PY *šilit' × N (MCCHЯ 358) */č|elV (PU *čelV-; PA č|elä-; PIE *škel-).

47. KNOT. PM *p'ún × N *punV ~ *puñV 'to tie' (CCHЯ 340), cf. PU *puña- ~ *puna-; PIE *(s)pen-; PAA *pn-; PD *puŋ ~ *poŋ-. Cf. also Chukchi *pənit-* ~ *lpənit-* 'to tie'.

48° LEFT. PMiW *tʔaw?- (Mics *čajja-*, Miss *čaja-*, Ww *thaw-*, Wn *thaw-*, *thawwa*, Wph *thaw*) // ? PY *t'āt'a? × ? N (MCCHЯ 346) *z/e|wV (PA *ž|e|bV; PIE *seuǵo-).

Cf. also Gilyak *t'air-* where *-r-* is probably a derivational suffix.

49. LEG. PY *k'alasa? × N (MCCHЯ 351) *lakV (PU *lakV; PIE *le|g/-; PAA *lkʔ-; PD *tāk-).

There was probably metathesis in PY, cf. no. 34.

50. LEG. PY *pok'- × PU (CGUL 408, Fi *pohje* 'calf of the leg') *poškV (cf. Fi *pohje* : *pohkee-*; Lp *boaske*; ? Md *pukšo*; Selkup *paktur*).

51. LICK, TO. Mil *létoj-* 'to lick, lap'; Miss *lakŋ-* // ? PY *ʔalat × N (MCCHЯ 346) *lakV (PU *lakkV-; PIE *lak-; PAA lk-; PK *loŋ- ~ *lak-; PD *nakk-).

52° LIVE, TO. PY *χo × N (MCCHЯ 341) *hujV (PA *ujV; PIE *heiǵ-; PAA *hǵw).

53. LOUSE. PM *dih × N (MCCHЯ 335) *tājV (PU *taje; PA *ti-; PK *til-).

Cf. also Gilyak *ter*, where *-r* is probably a suffix.

Note that G. A. Klimov reconstructs for PK **tizi-*.¹¹

54. MOON. Mil *kóme-*; Mics *komé-*; Miss *kome-* × PU (CGUL 407, Fi *kuu*) **kuṅō* // ? A PTK (VEWT 301) **kuñal* 'sun'.

Cf. also Gilyak *k'eṅ* : *xeṅ* 'sun'.

55. MOUTH. PM **sim* // ? Mil *šéwwe*, *šéew* 'jaw' // PY *sama?* × PU (CGUL 409, Fi *suu*) **šuwō*.

56° MOVE, TO. ? Mics *ʔutú-* 'to get out of the way'; Miss *ʔaṭii* 'to move' (cf. *ʔaṭii-h-* 'to move away, tr.', *ʔaṭṭiihh-* 'to move away, intr.; to avoid somebody' × N (MCCHЯ 338) **q/o/dV* (PA **odV-*; PAA **hd-*; PK **gad-* ~ **qed-*; PD **āṭṭ-* : **āṭV*).

57. NAIL. PY **k'ēsik* 'claw' × U PFU (CGUL 407, Fi *kynsi*) **kūnče*.

58. ONE. Mm *wyk*, Mn *wittee* ~ *wyk-* (*wyk-* occurs in *wykpaj* 'once') × U PFU (CGUL 415, Fi *yksi*) **ükte*.

59. PEEL OFF, TO. Mm *huléky* 'thick heavy bark, as from a pine-tree' // Mil *kótuk-* // ? PY **č'uluj* 'hide, skin' × N (MCCHЯ 345) PU **kōre* 'bark'; PA **|k'ār(V)* 'bark'.

Cf. also Koryak *ilqəlyəṅ* 'bark, birchbark; scale' where *il-* < *ilyə* 'white, clean'.

60° PLAIN. Mics *pýylajy-* 'a flat place', Miss *pyylaj-* 'valley' × N (MCCHЯ 372) **pilV* 'wide' (PA **pilä-*; PIE **pelH-*) // ? PKJ **par(a)*.

Cf. also Gilyak *pil-* in *pilē*, *pilđ* 'big'.

61° PUSH, TO. PMiW **t₁a|uk₁a|e* (Mics *kutṭe-*, Miss *túuk* 'to push or pull (as with a hoe)' // Ww *thak-*; Wn *thakca* × ? N (MCCHЯ 369) **tVlkV* (PIE **telk-*; PAA **tlk*; PD **tall-*).

Cf. also Gilyak *irləđ* : *tłəđ* : *xləđ* 'to pull, draw'.

62. SEE, TO. Mn *wə* : *wəə* : *wəək* 'look, see, examine' // Miss *wollu-čču-* 'to watch, to be looking on', *wol-ṅe-* 'to watch' × N **walV-*, cf. U PBF **val-* (cf. Est *vaata-* < **valatta-* 'to look at', *valva-* 'to watch, guard'; Fi *valvo-* 'to watch') // PIE **wel-* (IEW 1136).¹²

63° SEE, TO. PY **ʔek'a* × N (MCCHЯ 333) **|H|o|k|V* (? PA **uka-*; PIE **Hⁿekⁿ-*; PD **akV-*).

64. SEED. Mil *ʔéce-* // Mu *ittux* × U PBF **itā-* 'to sprout, germinate'; Lp **itā*.¹³ 'to sprout'.

Cf. also Koryak *-jto-* in *etok* ~ *jətok* 'to be born; take out'.

65. SNOW. PM **kō* × PU (CGUL 406, Hu *hó*) **kumō*.

66. SOUTH. Mics *čýmme-*; Miss *čymme-* // PY **χomōt'* × PU (CGUL 409, Fi *suvi* 'summer') **suṅō* // A Chu *śu* : *śáva* 'summer'; Tv *čaj* 'summer'.

67. SUCK, TO. Mm *jōm* ~ *jów* 'shaman, doctor; practice shamanism', *jómkit* 'treat shamanistically, suck'; Mn *jom-* 'suck out disease, treat;

¹¹ G. A. Климов, Этимологический словарь картвельских языков, Москва 1964, sub *tizi*.

¹² The PIE equivalent, cf. J. Pokorný, Indogermanisches etymologisches Wörterbuch, Bern 1949–1959, was proposed by A. B. Dolgopolskij.

¹³ Cf. Y. H. Toivonen, Suomen kielen etymologinen sanakirja I, Helsinki 1955, sub *itää*.

shaman' // ? Mil *jómta*, *jóm'ta* 'to doctor; doctor', ? *c'úm-* 'to suck'; Miss *jymoo-t-* 'to suck on; to suck for disease object' // Ww *jom-* 'shaman, magic poison'; Wn *jom* 'shaman; poison'; Wph *jomta* 'doctor' × U PU (CGUL 406, Fi *ime-* 'suckle') **imV-*; PBF **imeh* 'marvel, wonder; miracle' (cf. Est *ime*, Li *i'm*, Fi *ihme* ~ *imeh*); LpInari *ōmqs* 'wonder, miracle; queer'; Ha *uməs* 'wonder, marvel; miracle'; PFU **juma* 'god; ? sorcerer' (cf. PBF **juma-la* 'god'); Md *jon-* < **jomV* in *jondol* 'lightning' where *-dol* < *tol* 'fire'; Mr *jumo* 'god'; Km *joma* 'witch, sorceress' // A PTK (VEWT 41—42) **im-* ~ **ām-* 'to suck'; PTK **im-* ~ *(*j*)*ām-* 'remedy' (VEWT 41); Tk *jum* 'a bad omen'; Chu *šam* 'scarecrow; remedy'; ? Mo *dom* 'magic'.

68° TAIL. PY **k'ut* × N (MCCHЯ 371) **ḡudV* (PA **k'udV*; PK **ḡud-*).

69. TEAR. PMiMu **ʔin* (Mil *ʔinte*) × PU (CGUL 407, Fi *kyynel*) **kūñe*.

70. TESTICLES. Mm *p'ála*, Mn *p'el* × N **bul*, cf. U PSam **pulU* (Ne *puer*; En *furo* ~ *fulo*; Ng *furu*) // PA **böl* (Mo *böltegen*; Khl *bul'təgə*; K *pil* ~ *pir-al* ~ *pul* ~ *pur-al*).

The Ne, En and Ng stems were connected with the Mo, Khl and K ones by Ramstedt.¹⁴

71. THAT. PMiMu **no-* × U PBF **nō-* 'those'; Md *nona-* 'those'; Mr *nu-nā-* 'those'.

72. THAT. PY **tā* × N **tV* (MCCHЯ 315—316) cf. PU **tā* 'this'; PA **tā* ~ **t'e* 'this, that'; PIE **to* 'this'; PD **tā-* 'he, she, it'.

Cf. also Gilyak *təḏ* 'this'.

73. THINK, TO. Mics *tyntʔynn-y-*; Miss *tyntyn-n-* × PU (CGUL 409, Fi *tunte-* 'know') **tumtV-* // A PTK **tani-* 'to know, become acquainted with', cf. OTk *tani* 'to know, be acquainted with'; Kum, Tv *tanyš* 'acquaintance', *tanyžar* 'to become acquainted with'.

74. THIS. PMiMu **nē* × PU (CGUL 407, Pi *nāmā* 'this, pl.') **nā*.

75. THROAT. PMiMu **hVrV̄kVs* (Mil *heléeki* 'neck') × N (MCCHЯ 335) **gurV* (PU **kürke*; PA **gürä-*; PAA **g(ω)r-*; ? PK **qorq-*; PD **kurV*).

Cf. also Gilyak *qorqr* : *zorqr*.

76. TIE, TO. PMiW **čojyc* × N (MCCHЯ 364) **šidV* (PU **šyḡa-*; PA **šidä-*).

77. TOUCH, TO. Miss *hajje-* // PY **kij'(i)-* × U PFU (CGUL 411, Fi *kajoa-*) **kajV-*.

78. URINATE, TO. PM **c'úc'ū* // Mil *kúnuh* 'defecate'; Mics *kynáat* 'to defecate', *kynátta-* 'buttocks'; Miss *kynaa-t* 'to defecate' // Ww *c'uun*, *c'unus* 'urine', Wn *c'uuna* 'urine', Wph *ʔuunu*, Ws *tuunu* // ? PY **č'ujō-* × PU (CGUL 407, Fi *kuse-* 'make water') **kuñčō-*.

Cf. also Koryak *zəčəzəč* 'urine', *zəčək* 'to urinate'.

Broadbent and Pitkin reconstruct for PMiW **ču/yna/u-* where **č-* is unrealistic.

79. WARM. Mk *p'i-* in *p'it'up* 'burned up'; Mm *p'i-* in *p'ibú* 'be char-

¹⁴ G. J. Ramstedt, Studies in Korean Etymology (= MSFOu XCV), Helsinki 1949, sub *pil*.

'red, blackened, burnt', *p'idúsi* 'ashes', *p'ilis* 'hot (of things)', Mn *p'i* 'ripe, cooked; hot, burn' × N (МССНЯ 352) **piɣw*V (PU **piwe*; ? PA **p/eb/V*;-; PIE **penɥ*-; PAA **p'w*; PK **px(w)*-).

Cf. also Chukchi and Koryak *piŋpiŋ* 'ashes', Koryak *piŋinaŋ* 'candle, spill, splinter'.

80. WASH, TO. PY **moš* 'sweathouse' × N (МССНЯ 349) **m/o/ç*(*k*)V (PU **moškō*-; PAA **m(w)ç*-; PD **mac*-).

81° WATER. Mm *môm* 'water; stream'; Mn *tom* // Ww *teem* : *mem*-; Wn *mem*; Wp *teem*; Ws *mem* × N (МССНЯ 334) **mVwV* (PA **mō*; PIE **meu*(*h*)-; PAA **mw*).

Cf. also Chukchi and Koryak *miməl*.

82. WILLOW. ? Mn *halawaj* 'black willow' // PY **salam* × N (МССНЯ 343) **šalV* (PU **šalV*; PIE **sal*(*ik*)-).

83. WOLF. Mil *húun* 'panther?, wolf?' // PY **k'aj'iw* 'coyote' × N (МССНЯ 334) **kujnV* (PU **küjnä*; PIE **kũōn* ~ **kun*; ? PAA **k^(u)n*).

Cf. also Gilyak *qən* : *əən* : *gən* 'dog', Chukchi *kejŋ* : *kajŋ* 'bear'.

4. There is very little that can be said about the common morphological features of California Penutian and Nostratic as in this respect even such Nostratic families as Uralic and Afroasiatic or Altaic and Afroasiatic are hardly, if at all, comparable. Therefore only three comparisons are presented here.

1. Mics, Miss *-ŋ* 'possessive case suffix' × PU **-n* 'possessive (genitive) case suffix' (PBF **-n*; Mr *-n*; Ne, En *-?*; Ng *-ŋ*; Ka *-n*) // PA **-n* 'possessive case suffix' (Otk *-ŋ* < **-n*, K **-n*) // PD **-in* 'genitive case suffix'.

2. Mics, Miss *-n* 'temporal case suffix' (e.g. in Mics *mi-tā-n*, Miss *mitan* 'when') × PU **-na* ~ **-nā* 'essive case suffix'.

Here may belong also *-na*- in Mm *-nak* ~ *-na* 'allative case ending' and *-nan* 'ablative case ending'.

3. Mics, Miss *-jja*- 'pluralizer of personal nouns' (e.g. in Miss *miwɥy-jja*- 'people; Indians') × PU **-j* ~ **-jV* 'pluralizer'.

ТИИТ-РЕИН ВИИТСО (Тарту)

ПРЕДВАРИТЕЛЬНЫЕ ДАННЫЕ ОБ ОТНОШЕНИИ КАЛИФОРНИЙСКО-ПЕНУТИАНСКИХ ЯЗЫКОВ К УРАЛЬСКИМ И ДРУГИМ НОСТРАТИЧЕСКИМ ЯЗЫКАМ

Автор статьи предполагает, что калифорнийско-пенутианские языки могут оказаться родственными уральским и другим ностратическим языкам. В подтверждение этого предположения приводится 83 этимологии.