

## Ainu and Austric: Evidence of Genetic Relationship<sup>1</sup>

There have been several attempts to solve the question of the genetic affiliation of the Ainu language of Hokkaido, formerly spoken also in Sakhalin and the Kuril islands. Apart from some inadequate or unlikely proposals there are two principal serious hypotheses: (1) **Altaic**, or more inclusively '**Euroasiatic**' (**Nostratic**), as advocated for instance by Ramstedt, Koppekmann, Street, Patrie, Krippes, and Greenberg (with Ruhlen); and (2) **Austronesian** and **Austroasiatic** (plus Thai-Kadai and Miao-Yao, together **Austric**): e.g., Gjerdmann, Sternberg, Murayama, and Vovin. Physical anthropology has been ambiguous on this question, in some aspects favoring a Northeast Asian, in others a Southeast Asian origin of the Ainu. The authors of the present article prefer (2), the **Austric** hypothesis, assuming an internal structure of the Austric macro-phylum consisting of Austro-Thai (Austronesian + Kadai), Miao-Austroasiatic (Hmong-Mien + Austroasiatic), and the peripheral remnants Nihali (in India) and Ainu. This article contains eighty-eight etymologies that the authors believe are strong evidence for the Austric affinity of the Ainu language. The lexical material includes personal pronouns, lower numerals, and other core basic vocabulary. Most importantly, this article is intended to stimulate discussion of the position of Ainu in genetic classification.

*Keywords:* Historical classification, Linguistic reconstruction, Lexical comparison, Ainu, Austric

The Ainu language is known from Hokkaido, Sakhalin and the Kuril islands (where it is now extinct). According to toponymy, Ainu was also formerly spoken on Honshu (Hudson 1994, 242–44), and apparently on other islands of the Japanese archipelago, probably even as far as the Ryukyu Islands, where, for example, place-names of the type *Pira* correlate with Ainu *pira* "rock" (Kagami 1962; Beleňkaja 1964). There are surprising biological similarities between Ainu and the Ryukyans, especially visible on new-born children (Levin 1971, 197; Hudson 1994, 247), supported by evidence of molecular genetics (Cavalli-Sforza et al. 1994, 232).

There have been several attempts to solve the question of the genetic affiliation of the Ainu language. Aside from some attempts at comparison which are rather romantic (with Hebrew [!] by Batchelor), or give quite unsystematic results, e.g. with **Indo-European** by Naert (1958, 1961), Lindquist (1960) or Van Windekens (1961) — see critical reviews of Benveniste (1960), Dolgopolsky (1963), TAILLEUR (1961), Refsing [ed.] (1998); or with '**Palaeo-Eurasian**', i.e. 'Caucasian', Basque, Yenisseian, Burushaski, plus some Amerindian languages, by TAILLEUR (1963, 1968), there are two main competing hypotheses:

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(1) **Altaic**: first mentioned by Ramstedt; further defended e.g. by Street, *Language* 38 [1962], 92–99; Patrie 1982 (critically reviewed e.g. by Helimski 1984); and more extensively in the ‘**Euroasiatic**’ concept including Altaic, Nivkh, Uralic, Indo-European etc.: Koppelman 1928, 1933; Ruhlen 1987, 131–32 and 1994, 16–20; Krippes, *Ural-Altäische Jahrbücher* 61 [1989], 149–51; Greenberg 2000–2002;

(2) **Austronesian** and **Austroasiatic** (plus Thai-Kadai and Miao-Yao, together **Austric**): Gjerdman 1926, 1960; Sternberg 1929, 1933; Murayama 1992a, 1992b, 1993; Vovin 1993 (cf. the review of Sidwell 1996).

Our research supports the Austric hypothesis. The internal structure of the Austric macro-phylum postulated by Schmidt (1906) is not yet definitively established (for a historical overview see Ruhlen 1987, 148–60). Recently Peiros (1992, 362) has proposed the following macro-classification of the Austric language phylum:

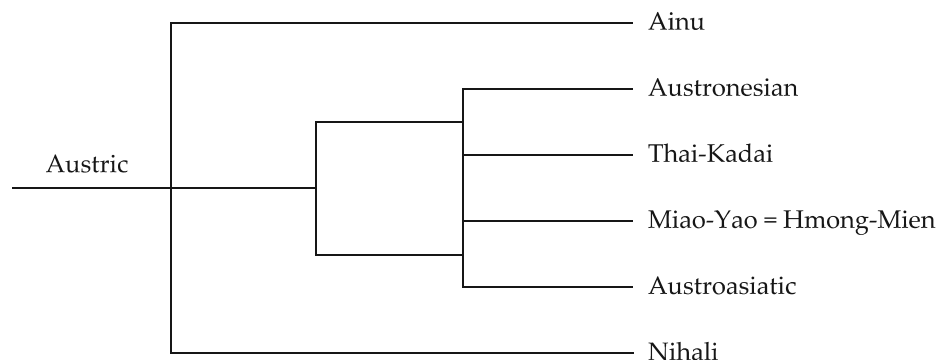
**I. Austro-Thai**

- 1) Austronesian
- 2) Kadai (= Thai-Kadai)

**II. Miao-Austroasiatic**

- 1) Miao -Yao (= Hmong-Mien)
- 2) Austroasiatic (= Munda – Mon-Khmer)

Ainu (and Nihali, in India) may represent peripheral remnants of this Austric macro-phylum (see Bengtson 1996, Blažek 1996). The following scheme depicts their mutual relations:



In physical anthropology the Ainu type has generally been included in the Mongoloid subspecies. On the basis of DNA evidence, the genetic taxonomy of Cavalli-Sforza et al. (1988, 6003; 1992, 5621; 1994, 231–32) postulates a ‘Northeast Asian’ branch, comprising the Ainu, Japanese, and Koreans, along with Tibetans, North Chinese, and others. Similar results were obtained by classical methods of physical anthropology (Alekseev & Trubnikova 1984, 88). On the other hand, some undoubtedly very archaic features, such as the Ainus’ profuse body hair, and characteristic Sundadont dentition, point to relations with Southeast Asia (Alekseev & Trubnikova 1984, 94–96; Turner 1989). We might also mention the remarkable closeness of gene frequencies between the Ainu people and the aborigines of Taiwan, for example IGKC, KM (1&1,2), P1(1) or RH, haplotype cDE (Cavalli-Sforza et al. 1994, 385–86, 425–26). The connection of the ancestors of the Ainu people with Southeast Asia was thoroughly argued by Sternberg (1929).

The earliest known presence of modern man in the Japanese archipelago is estimated at 30.000 years BP (e.g., Utanobori on Hokkaido, or Osinovka on Sakhalin: see Golubev & Lavrov 1988, 206, 220). At 11.000 years BP the first ceramic artifacts appear (Cavalli-Sforza et al. 1994,

202, have this as early as 12.700 BP; in any case, it is the world's first appearance of ceramics). The style of pottery changed *ca.* 10.000 BP, which is thought to indicate the advent of the Jōmon culture (remarkably, on Sakhalin this technology was delayed by 2.000 years, compared with Hokkaido — see Golubev & Lavrov 1988, 225). The contemporary Ainu people are very probably the descendants of the creators of the Jōmon culture (cf. Hudson 1994, 244; Cavalli-Sforza et al. 1994, 203, 232). About 400 BC a new population came to Kyushu from the Korean peninsula, the bearers of the culture called Yayoi. They brought a developed rice agriculture and an Altaic language (Proto-Japanese). The closest relative of Old Japanese was the language of the old Korean kingdom, Koguryō (cf. Hudson 1994, 246–47).

### Comparative word-list

The following word-list consists of comparisons put together by the authors, as well as expanded comparisons by our predecessors (Gjerdman, Vovin) and colleagues (Hayes, Sidwell). The originally larger collection of raw material has been restricted to the most semantically basic. Onomatopoeic words, *Lallwörter*, and other parts of the lexicon not suitable for genetic comparison have been excluded. Austronesian reconstructions differentiated by their authors are borrowed from (Wurm & Wilson 1975).

#### Pronouns:

##### 1. “I”

PAi \**ku* (V 106; H 308)

AN \*(*u-*)*aku* / \*(*i-*)*aku* (Benedict);

TK: T \**kuu* / \**kaw*; Laqua *khau*; Gelao *yah*;

MY: Biao *kau*, Chiengrai *yia* < \**yakou* < \*(*i-*)*aku*; EMiao \**k[ō]*, Še *vɔŋ* < \**wa[ŋ]k[on]* < \*(*u-*)*aŋkən* (AT 203, AJ 214–15);

MK: VM \**kwa* “we, I” (Sokolovskaja 1978, 167); Katuic \**həŋa* / \**həgi*: > Katu *ku* “I”, Pacoh *ki*; Bru *nka* (Peyros 1994, #280); ? Nicobar: Central *cü-ə*, *cuu-ö* (Pinnow, OLZ 61 [1966], p. 495 compares it with Nahali *j(u)oo* “I”, Stieng *ju* “we”); Khasi *ŋa* “I” (Hayes 1992, 161; Hayes 1996 adds North Bahnaric Jeh *’aw* “I” < \**a’u*).

Lit.: Gjerman 1926, 64: Ai + AN.

##### 2. “I” / “me”

PAi \**an* “me” (V 79), *en id.* (B); *in-* “1st person objective prefix” (Sato 1985, 157)

Munda \**iŋ* / \**iŋ* “I” (P 186–87);

MK: Khmer *anh*, Mon *ai*; SBahnar \**aŋ* id. (Efimov 1990, 146) < PBahnar \**aŋ* ~ \**aŋ* (Sidwell 1998, #196); Asli: Semai I *iŋ*, Semai II *eñ*, Mah Meri *’əŋ*, Semelai *’əñ* “I” (Benjamin 1976, 109).

##### 3. “we”

PAi \**ti* “we” (V 144; H 308) > B *chi*

TK: Mak *di* (excl.) / *da* (incl.), Lakkia *ta* / *tau*, T \**tu* (excl.)

AN \*(*k-*)*ita* (inc.) “we” (AT 204–07);

MK: VN (arrogant) *ta* “I”, *chúng ta* “we” (Gregerson 1991, 91), Muong *tan’ha* “we” (Thompson); ? Nicobar: Car *cin* “I” (Das; V 172: Ai + MK);

?Nihali *t’(y)e:-kul/-ko* “we” (dual), cf. *na:-ko* “you” (dual) (cf. Bengtson 1996, 54).

## 4. “we” / “us”

Ai *i* “us” (B 161)

MK *\*i/\*hi* & *\*y[ee]* “we” (MKC ##1, 150): Waic *\*yi* “we” (excl.) (Diffloth; Sidwell 1998, #260 compares it with NBahnar *\*ji*: id.); SBahnar *\*he* “we; I” (Efimov 1990, 87); Riang *ai* “we” du. (Shafer 1966, p. 67); Asli: Mintil *yε'*, Semaq Beri *yε:h*, Semnan *'ε'*, Lanob Yir, Temiar *'ε:* “we (incl.) (Benjamin 1976, 121). Hayes (1996) adds Khmu (North MK) *'i* “we”, Mendriq (Asli) *hi*; maybe Khasi *ngii* id.

## 5. “we” / “us”

Ai *un* “us”, e.g. in *un kore* “give it to us”, *un ahaigekara nisa* “he slandered us” (B 476; cf. also Sato 1985, 165)

Munda *\*bi(n)* “we” (incl.) (P 368; Pinnow 1966, 167);

MK *\*bə(ə)n* “we” (incl.) (MKC #1172): SBahnar *\*bɔ<sub>1</sub>n* “we” (incl.), NBahnar *\*<sup>o</sup>bèn* (Efimov 1990, 108) < PBahnar *\*bə(:)n* “we” (incl.) (Sidwell 1998, #679; he also quotes parallels with deviant semantics: Loven *ba:n* “other people”, Nhaheun *bə:n* “people” and outside Bahnaric: PKatuic *\*(k/g)ə'ben* “thick”);

? MY *\*(m)pua* “we” (AT 206).

## 6. “thou”

PAi *\*E* (V 84; H 308)

MK *\*əy[h]/\*aay[]* (MKC #1436): SBahnar *\*áy* “thou” (to woman) (Efimov 1990, 42; cf. also Shafer 1966, 68); Sidwell (p.c.) reconstructs PBahnar *\*ih* “thou”. Hayes (1996) adds Thavung (VM) *'ə*;

? AN: Tagalog *\*iyu* < *\*iXu* “thy / thee” (AT 207).

## 7. “he” / “that” / “this”

Ai *nei* “that, he, she, it” (B 277)

MK *\*ni/h* & *\*nə/h* “this” / “that”: (MKC ##91, 92): Bahnar *'ney* “that” : *'nəh* “this, here”, Kuy *nì* “this”; Central Nicobarese *əne* “that”; VM *\*əni* “this” (Thompson 1976, 1190);

MY: Chiengrai Yao *nai* “that, these” (AT 408);

TK *\*ni* ~ *\*nay* “this”;

AN *\*ini* “this / that” (Blust), cf. Pol *\*nei* “here [near speaker]”.

Lit.: Gjerdmann 1926, 65: Ai + Pol.

## 8. “that, he” / “those, they”

PAi *\*ta* “this”, *tO* “that” (V 142, 146; H 309–10)

MK *\*tə* “that; there” (MKC #66a): Katuic: Pacoh *do* “he, she, it”; VM: VN *đó* “that, those” (Hayes 1996);

AN *\*itu(h)* “this / that” (Dyen; AT 406);

TK: Lakkia *tu* “they”, Laqua *to* id., Lati: Ban-Phung *a-to* “this” (AT 406);

MY: Miao *to* “that” (Reid 1984–85, 27).

Lit.: Gjerdmann 1926, 65: Ai + AN; Hayes 1996: Ai + AT + MK.

**Numerals:****9. “one”**

PAi \**si-ne* “1” (V 136) with suf. *-ne* as in (B) *i-ne* “4”, *tak-ne* “short”, *kun-ne* “black”, cf. *išine* “conjunctly, together”, *ašiu* / *ašui* / *arašui* “once”; (la Perouse) *tchiné* (Naert 1961, 348), (de Angelis) *xine-ppú* (Naert 1962, 126); Kamčatka *syhnäp*, Sakhalin *šnepf*, Hokkaido *senezb*, *zinezf* “1” (Klaproth 1823, 314)

? Munda \**seŋ* “first, before” (P 102); cf. Nihali *cayni*, *ceyni* “first” (Bengtson 1996, 51–52);

MK: Khasi *ši* “1”; Palaung *se* “one” in compounds (Gjerdman 1926, 79); Asli: Besis Malacca *ciaŋ* “first, in front”, Semang Paya *ka'-seŋ* “first, formerly” (SB, B 145);

AN: \**its<sub>1a</sub>* / \**atsa* “1” (Tsuchida);

TK: Kadai \**tsia* < \**[]itsa* > Li \**tsi*; Laqua *tiə*, Pupeo *cya*, Gelao *si*, Thü *tsi* “1” (AJ 225).

Lit.: Gjerdman 1926, 63, 65: Ai + AN, 79: Ai + MK + AN.

**10. “two”**

PAi \**tuu* “2” (V 147–48), cf. (B) *tup* “two things”, *?ru* “half, partly”; (de Angelis) *tzu-ppù* (Naert 1962, 126), *tou* [*tu*] (la Perouse, see Naert 1961, 348); Kamčatka *dūpk*, Sakhalin *tup*, Hokkaido *zuzb*, *zuzf* “2” (Klaproth 1823, 314)

AN \**duva'* (Dempwolff) = \**DəwS<sub>3a</sub>* (Dyen & McFarland), cf. Tsouic \**[dr]usa* etc. “2”;

TK: Li \**draw* (AT 213) = \**lau* (Theraphan 1992, p. 86); Laqua *de*; NKelao *so*, SKelao *δi*; Lati *su* / *fu* “2”; ? T \**dra:w* “20” (AT 213).

MK \**[n[d]ah* / \**[n[d]aah* / \**[n[d]a'* “one of two sides” (MKC #2015): Stieng *dah* “one of a pair”, Sre, Biat *dāh*, Jeh *nah* “side; one of two sides”; Muong, VN *nú'a* “half”; Bahnar *mə'nah* “part, some ... others..”; Kuy *na*: “side; direction”.

Lit.: Gjerdman 1926, 63: Ai + AN.

**11. “two” / “pair” / “twin”**

Ai *ara* “one of the pair, side”, *arake* / *arage* “half”, *oara* “one of a pair, one of two”, var. *oa(t)*, *a(t)*; *uren* “both”

MK: Khasi *a:r*; Lemet *ar*, Riang *kǎ'ar*, Waic \**l'ar*, Palaung *a(r)*, Nicobar: Car *hěng-hör* (*hěng* = “1”), Shon-Pen *àu*, Teresa *o*, *aeh*, Nancowry *a*, Chowra *an* etc. It is not clear, how these forms are connected with other Austric forms with initial *b* or *w* (in Ainu one could perhaps to reconstruct \**oar-* < \**uar-*, cf. Ai *un* “us” — see # 5):

MK \**bi'aar* “2” (MKC #1562): Khmer *bir*, Mon *'ba*, Samre *paar*, PBahnar \**ba:r* (Sidwell 1998, # 93), PKatuic \**bə:r* (Peyros), SKhmu, Lawen *baar* “2”; VN *bay* “pair” (against VM \**hal* “2” — see P 75; Efimov 1990, 104); Asli: Besis (Sepang Ayer Itam) *hmbaar*, *mar*, Serau *maar* & *naar* etc. “2” (SB, T 271–2), Che' Wong *ber* (Benjamin 1976, 120);

Munda \**[u]bar* “2” (P 75);

MY \*(*a*)*war* / \*(*a*)*wə* “2”;

AN \**ke(m)bar* “twins” (Lopez);

TK: Kadai: Mak *wa*, Ong-Be *vən* “twin” (AT 415).

Lit.: Gjerdman 1926, 76–78: Ai + AU + AN.

**12. “three”**

PAi \**dE* “3” (V 83), cf. Kuril (Ryuzo) *re-nich* “three persons”, *ri-bich* “three things”, (de Angelis) *le-ppù* (Naert 1962, 126), *tche* (la Perouse; Naert 1961, 348), Kamčatka *rāph*, Sakhalin *repf*, Hokkaido *rezb* (Klaproth 1823, 314)

?Nihali *tala:ri(re)* “3rd”, perhaps with the same (ordinal?) prefix as *ʔalpono* “4th”, besides the cardinal *ira:(r)* of Dravidian origin (Mundlay 1996, 45);

?Munda *\*tɪwru* / *\*tɪdru* “6” (P 97);

?MK *\*tɪpraw* “6” (MKC #1851): NBahnar *\*tadraw*, SBahnar *\*praw* (< PBahnar *\*tə[d/p]raw* after Sidwell 1996; later he has reconstructed *\*tənrəw* — see 1998, #253), Kua *kadrôu*, Mon *tarao*, Palaung *to:r*; VM *\*p/traw* etc., all “6” (Efimov 1990, 103); ?Asli: Pangan (Ulu Patani) *diu* “3” (SB, T 98: doubtful);

TK: Li *\*tru*; Laqua *təu*, NKelao *ta*, Lati *ti* / *si(e)* “3”;

AN *\*təlu* (Dempwolff) = *\*t<sub>1</sub>əluH<sub>2</sub>* (Tsuchida), cf. Atayalic, Tsouic *\*təlu* “3” (AT 211).

Lit.: Gjerdman 1926, 79: Ai + AU + AN.

### 13. “four” / “quarter”

PAi *\*pOqOn* > Saru *po’ón émkó*, Asahigawa *pón émkó* “quarter” (*\*EmkO* “half, part” — see V 85), lit. “four parts” (V 127; H 267)

AA *\*pu* [ *lan* “four”:

Munda *\*[u]pɔn* “four” (P 180); Nihali uses the Dravidian borrowing *na:lo*, *na:lku* “4”, but the native form can be preserved in the ordinal *ʔalpono*, perhaps with the same prefix as *tala:ri(re)* “3rd” (Mundlay 1996, p. 45);

MK *\*pun* / *\*puən* [ ] / *\*pan* [ ] “4” (MKC #1166): Khmer *\*puən*, Mon *pon*, SBahnar *\*puəɪn*, NBahnar *\*pu:n* < PBahnar *\*puən* (Sidwell 1998, #648), Waic *\*pon*, Katuic *\*puɔn* (Peyros), VM *\*pon*; Nicobar: Central *fo:ən*, Car *fɛən*, South *fɔ:ət*, Shon Pe *fuət* etc. (Efimov 1990, 102); Asli: Serting *həmpu<sup>d</sup>n*, Sakai (Tembeling) *əm-pun* etc. (SB, F 250).

Lit.: V 168: Ai + Munda + MK.

## Lexical entries:

### 14. “ashes” / “fire”

PAi *\*uu[y]na* “ashes”, *\*unti* “fire” (V 153, 151)

MK *\*u(u)n* “fire” (MKC #885): Alak, Stieng *uiñ*, Phnong *uñ*, Boloven *hũñ* “fire” (Shafer 1966, 61), cf. SBahnar = PBahnar *\*uŋ* (Efimov 1990, 135 & Sidwell 1998, #610), PKatuic *\*u:jh* (Peyros 1994, #1220), Khmer *’uh* “firewood”;

TK: T *\*vïñ* “firewood” (Li 1977, 80);

Lit.: V 173: Ai + MK; Bengtson 1996, 54: Ai + MK + T (+ Nihali *ú* “to kindle”).

### 15. “bear”

Ai Hokkaido *kuma* > or < Jp *kuma* (Klaproth 1823, 304), cf. Kor *kom* id.

MK *\*[k]mum* “bear” (MKC #1380): PMon *\*kmum*; but Khmer *khlaa ghmum* “sun bear” means lit. “tiger of bees” (Diffloth 1984, 65; cf. Shorto 1971, 58);

TK: S-CT *\*hmii* < *\*hmwii* < *\*[ku]muy*; Sui *’mi*, Maonan *moi*, Kam *me* < *\*’miay*; Lakkia *ku:[i]* < *\*kmuuy* (AJ 164–65) or *\*k-Nui* (Theraphan 1992, 82);

AN: SForm *\*Cumai*; Atayal: Sediq: Iboko *kumai*, Hogo *summai* (AJ 164–65: Form *\*krumai*, compared with MY *\*krop* id.).

### 16. “below” / “sole”

Ai *pan(a)* “below, lower” (B)

AN *\*D<sub>3</sub>apaN* “sole, footprint” > Paiwan *japal* “thigh”, Siraya *sapal* “foot”, Puyuma *dapal* “sole” vs. Ilokano etc. *dapan* id. (Dyen 1990, 226);

?MK: Katuic: Kuy (*t*)*pɛ:l* “buttocks” (MKC #1769: \**d6al* “cheek”)

?Munda: Kharia *capal* “buttocks, anus” (Hayes 1996).

### 17. “bone”

PAi \**ponE* (V 127) = Kamčatka *pöñh*, Sakhalin *poné* (Klaproth 1823, 308), (la Perouse) *pauni* “arête on colonne épinière des poissons” (Naert 1961, 346) > or < Jp *Fone* “bone” AN \**bani* > Atayal C’uli’ *bani* id. (AJ 170) and / or Pol \**pona* “joint” (Bruce, Walsh & Waqa).

### 18. “bow”

Ai *ak* “to shoot with an arrow”, *akbe* “trap”, orig. “spring bow” (B)

Munda \**ak* “bow” (P 70);

MK \**aik* “bow” (MKC #266): Alak *ak* “cross-bow”, Danaw *ak* “bow”, SBahnar \**a*; Waic \**ak* “bow” (Diffloth; cf. Efimov 1990, 134); Asli: Sömañ *ak*, Semang (Plus) *e:g*, (Kuala Kenering) *a:g* “bow”, (Ijoh) *ig* “bow” (SB, B 353).

Hayes (1996) analyzes AN \**panaq* “to shoot arrow” (Lopez) as a causative derivation from a hypothetical \**aq*; cf. also T \**piin* “arrow” (AT 221).

### 19. “breast”

PAi \**tOO* “breast of woman” (V 146), cf. Kamčatka *do* (Klaproth 1823, 304) and / or PAi \**tuy* “belly, intestines” (V 150)

Munda: Santali *toa* “(female) breast”;

MK \**t1ɔh* “breast” (MKC #1999): Khmer *toḥ*, Mon *tah*, Bahnar *tâh*, Stieng *toh*; SNicobar *toāh* (Schmidt 1906, 84, 99); Asli: Mah Meri, Semaq Beri, Semelai, Temoq *tuh* “breast” (SB, B 387; Benjamin 1976, 103);

TK: T \**tu* “breast”; Lakkia *nam-tu* “stomach”, Ong-Be *dau dɔn* “the pit (*dɔn*) of the stomach” (AT 231);

AN \**t’ut’u<sup>c</sup>* “breast” (Dempwolff).

### 20. “child”

Ai *teinep* / *tennep* “a very young child” (B)

MY \**tɔn* “son” (AT 251);

Munda: Parengi *tonan* “younger sister”, Bonda *tuna* id. etc. (Bhattacharya, *Anthropos* 65 [1970], 456; Hayes 1996).

### 21. “coldness” / “snow”

Ai *oroa* “coldness” (Dobrotvorskij — see Rahder, *Orbis* 12 [1963], 66) = (la Perouse) *oroa* “le froid” (Naert 1961, 342)

Munda: Gutob, Remo *ruoñ* “cold”, Sora *raŋa:-n* id. (Hayes 1996);

?MK \**[r]ŋar*, \**rŋa[ar]* “cold” (MKC #1598a);

AN: Tsouic \**uruNa* / \**ürüNa* “snow” (Li).

### 22. “come” / “go”

PAi \**arki* “to come” (pl.) (V 80), cf. (B) *arapa larupa* “to go”

AN \**ari* “come; let’s go!”, cf. Karo Batak *ari ko* “come here!” (Blust, *Oceanic Linguistics* 19 [1980], 41, #17).

### 23. “day”

Ai *ko*, cf. *tut ko* “2 days”, *rere ko* “3 days”, but *šine to* “1 day” (B)

AN \*ka “day” (AJ 179; Benedict compared it with Jp -ka in *itu-ka* “5 days”), *yo oka* < \*ya uka “8 days”;

?MK: Waic \*N-ko’ “yesterday” (Diffloth).

#### 24. “die”

PAi \*day > Yakumo, Saru etc. *ray*, Nairo *tay* id., Kuril (Krašennikov) *rai* “to kill” (V 83)

TK: T \*traai vs. Sek *praay* / *trail* / *t'trai*; Kam-Sui \**tay*; Lakkia \**plei*; Be *dai* id. (Li 1977, p. 119; AT 269; Therasphan 1992, 83);

AN \**maCey* & \**paCey* (Dyen, *Lingua* 14 [1965], 291) with stative \**ma-* vs. causative \**pa-* prefixes;

MY \**day* “to die” vs. \**tay* “to kill” (AT 269; AJ 180–1).

Lit.: V 173: Ai + MY + AN.

#### 25. “dog”

Ai *seta*, *sita* = Kamčatka *stāhpū* = *seta* + *po* “child”, Sakhalin *šeda* (Klaproth 1823, 307); V 88 reconstructs PAi \**gita* on the basis of “Moshiogusa” *hida*, *heta* id.

Munda: Ho, Mundari, Santali *seta*, Birhor *setta*, Mowasi *sita*, Kurku *siṭa* (Bhattachariya 1966, 34, #47 compares it with Asli: Semang Kedah *āt*, Plus *ᶜod* / *ᶜot* id. — see SB, D 139);

AN: Form: Favorlang *zito* “puppy”.

Lit.: Gjerdman 1926, 71: Ai + Munda + Favorlang.

#### 26. “ear”

PAi \**kisAr* (V 104), cf. Kamčatka *gsāhr*, Sakhalin *kišara* (Klaproth 1823, p. 310), (la Perouse) *qs-chara* (sic; see Naert 1961, 328)

?MK \**kt<sub>2</sub>uur* / \**kt<sub>2</sub>uər* “ear” (MKC #1624): Khasi (standard) *kaško:r*; Riang (Palaung-Khmu group) *cor* id. (Hayes 1996) or to # 29?

Munda \**luktur* “ear” (P 97) or to #29?;

TK: T \**xruu* (Li 1977, 233, 268); Kam-Sui \**qhya* (Benedict) = \**khra* (Theraphan), Ong-Be *sa*; Li \**thyay*; Lakkja \**ja*; Laqua *rə* etc. (AT 277: + AN \**taliṇa*). All the TK forms can be derived from \**ksra* or sim.

#### 27. “earth”

PAi \**tOy* “garden, soil, land, clay, earth” (V 147), cf. Sakhalin *toi*, *tui* (Klaproth 1823, p. 305)

AA \**tāih* “earth, soil” (V 172) or \**t[e](q)* (Hayes 1996)

MK \**t<sub>1</sub>i* / \**t<sub>1</sub>ih* / \**t<sub>1</sub>iəh* “earth, ground” (MKC #64): PMon \**tii* (Diffloth) “soil, earth, ground”, OKhmer *ti*, Waic \**kte*’ (Diffloth) “earth”; Bahnar *teh*, Sre *tiah*, Bo Luang *te:i*; Nicobar: Central *mattai*, Coastal *pattai* “earth” (Shafer 1966, 8–10); Khasi *ktioh* “Schlamm”; Asli: Semang Perak *teh*, Pangan Ulu Patani *tei*, Sakai Krau *tai*\* etc. “earth” (SB, E 12);

Munda: Kurku *ote*, *wate*, Mundari *ote* etc. “earth, ground” (P 187–8; Luce, *Lingua* 14 [1965], 125).

Lit.: V 172: Ai + AA.

#### 28. “earth”

Ai (la Perouse) *tanina* “... autre nom quils donnent cette terre” (Naert 1961, 333: \**ta(a)ni na* “here”)



MK: SBahnar \**tne:h* “earth”, NBahnar \**ta'nɛh* “earth, dirt” (Sidwell 1998, #718 reconstructs PBahnar \**taneh* ~ \**təh* with possible -*ən*-infix; in this case it would belong to the preceding entry); ?Mon *tanah* “surface” (Efimov 1990, p. 75; or borrowed from Cham *tanŭ'h* < PChamic \**tanāh* ?);

MY \**ntaa(n)* “earth”;

AN \**tanah* “land” (Dempwolff) = *taneq* (Dyen & McFarland);

TK: T \**din* “earth”; Mak *da:i*, Lakkia *nai* (AT 277–8; AJ 183).

### 29. “earwax”

PAi \**tur* “filth, dirt” (V 149), cf. (B) *kisara-turu* “earwax”

AN \**tuli* “ear-ache, deaf” (Dempwolff) = \**tulí[h]* “earwax, deaf” (Dyen & McFarland);

MK: PBahnar \**to:r* “ear” (Efimov 1990, p. 70; Sidwell 1998, # 508); Kuoi *khtor*; Mon *k(Δ)tow* (*w* < \**r*) or to # 27?;

Munda \**luktur* “ear” (P 97).

Lit.: Gjerdman 1926, 58–59: Ai + AN.

### 30. “egg” / “bird”

PAi \**nOk* “egg; testicles” (V 115) = Kamčatka *nôhk* = Sakhalin *nuku* (Klaproth 1823, 305) = Kuril *noki* “egg”, *n'ok* “bird’s egg” (Naert 1962a, p. 218: Ai > Nivx *ŋóik* “egg” or Nivkh > Ai after V 161–62)

Asli: Semang (Juru) *maku*, (Ulu Selama) *makau* etc. “egg” (SB, E 34);

AN \**manuk* “fowl, bird” (Dempwolff);

TK: Thai \**nok*, but Divi *rək*; Sui Mak *nok*, Kam *mok*; Lakkia *mlok*; Ong-Be *nok*, *noak*, Laqua *nuk* “bird”;

MY: Yao \**nɔ́*, but Pateng *hmu* (AT 234); Miao \**noŋ* > Hmong *nong* id. (Haudricourt).

### 31. “evening”

Ai *onuman* (B) = Kamčatka *ōhnūmă*, Sakhalin *unumani* (Klaproth 1823, 304); V 118 reconstructs \**nuuman* “yesterday” vs. \**onuuman* “evening”

TK: Kam-Sui \**ńam* id. (Li, *Lingua* 14 [1965], 170–71; AT 265: < \**ŋam*, cf. T \**γam* “evening, night” — see Li 1977, 214, 216);

?MY \**hm[a:]ŋ* “night” (Peiros);

?MK \**ma(a)ŋ* “night, evening” (MKC #638): PBahnar \**maŋ* id. (Efimov 1990, 116 & Sidwell 1998, # 212).

### 32. “eye”

PAi \**sik* (V 137), cf. Kamčatka *sik*, Sakhalin *šigi* (Klaproth 1823, 304), (la Perouse) *chy* [ših] Nihali *jiki*: (Shafer 1940, 355), cf. *jiki-kapri* “eye-brow” vs. Ainu *sik-kap* “eyelid”;

?Munda: Santali *jhiki miki* “splendid, glitter” (Pinnow, *OLZ* 61 [1966], 493);

MK \*[c][uə] “to see” (MKC #45): ?SBahnar \**shΔ*: “to see” (Efimov 1990, 126).

### 33. “eye” / “eyebrow”

Ai *kerup* “eyes” (B)

AN \**piLek* “eyebrow”, cf. Mantauran Rukai *keLepe*, Maga Rukai *s-kirp* (Dyen 1990, 227).

On the other hand Gjerdman 1926, 44 compares Ai *kerup* with Pol: Puamotu *karu* “pupil of the eyes”, Maori *karu* “eyes”.

## 34. “eye” / “eyebrow”

PAi \*rAr “eyebrow” (V 130), cf. (B) *rara-numa*, *ran-numa* “eyebrow” where *numa* “hair” indicates the meaning “eye” for the first component; the form *tara* recorded by la Perouse (see Naert 1961, 326) allows the reconstruction of PAi \*d- (cf. V 16)

TK: T \*traa “eye” (Li 1977, 119), Kam-Sui \*thla, but Sek *praa*, Liuchou *pia*, Sui Mak *da*, Then ‘*da*, Lakkia \*pla, Ong-Be *da*, Li \*ja, Laqua *te*, Lati *m’cu* id. (AT 283–84; Theraphan 1992, 81);

AN \*maCa “eye” (Dyen, *Lingua* 14 [1965], 291–292);

MY: Miao \*maay, Yao \*muai / \*mu[t]- id. (AT 283–84);

Munda: Kurku *met*, Ho *med*, Kharia *m’d* etc. id. (P 126);

MK \*mat “eye” (MKC #1045): Mon *mat* id.; PBahnar \*mat “eye, face” (Sidwell 1998, #243); PKatuic \*mat (Peyros); VM \*mät; Khmer \*mat “mouth”; Khasi *khymat*; Nicobar: Car *elmat* etc. (P 126; Schmidt 1906, 86, 110, 144; Efimov 1990, 105–06; AT 283; AJ 186: + OJp *me* “eye”); Asli: Semang (Kenering) *met*, (Perak) *mat*, Tembi *maat* etc. id. (SB, E 83).

The correspondence of Ainu *r-/t-* vs. T \*tr- / \*pr- // AN \*maC- also occurs in #24 “die”.

## 35. “finger” / “hand”

PAi \*askE “hand”, \*askE-pEt “finger”, \*aski / \*asik “five” (V 81, 125), cf. (de Angelis) *axichineppù* “5” = (von Strahlenberg) *axiquineppu* “5” (Naert 1962, 126)

AN: Form: Puyuma *ski*<sup>(v)</sup> “claw, fingernail” (Ting 1978, 358);

MK \*sii[ ] “hand, arm” (MKC #244): ?VM \*sāj (Sokolovskaja 1978, 171) = \*si: (Ferlus) > Muong *thay*, VN *tay* “hand, arm”, cf. also Thavung *sii* “hand, arm” (Hayes 1996);

?Munda: Sora *s’i:-n* “hand” (Hayes 1996), Pareng *si:* id. (see MKC #244).

## 36. “fingernail”

PAi \*(H)am (V 78, 94) “finger or toe nails, claws”, cf. Kamčatka *āhm*, Sakhalin *ami* “fingernail” (Klaproth 1823, 310)

MK: Waic \*mhem / \*hmem “fingernail” (Diffloth);

AN: Form: Common Puyuma *hamay* “fingernail” (Ting 1978, 358).

## 37. “fire”

PAi \*apE < \*apOy id. (V 79), cf. Kamčatka *āpēh*, Hokkaido *abe*, *ambe* (Klaproth 1823, 305), Kuril *aboi* “hearth” (Gjerdman 1926, 41–42)

Nihali *āpo* “fire” (Shafer 1940, 355);

AN \*x<sub>1</sub>apuy (Dyen, *Lingua* 14 [1965], 301);

TK: S-CT \*way < \*bway < \*(a)puy, NT \*vii < \*bwi; Kam-Sui \*pwai id. (Li 1977, 79, 286; Thurgood 1988, 212; AT 290; AJ 192–93: plus OJp *Fi* < \*Fui);

MY: Ke-cheng *fwi* “ash”, Kao-p’o *fi*, Kao-fung *hə* Yao-lu *fui*, Thailand Yao *whi* (Chang, *BIHP* 44 [1972], 600);

MK: Khasi *dpey* “hearth, ashes”; Pear *puy* “tinder” (Hayes 1996).

Lit.: Gjerdman 1926, 41–42 & V 163: Ai + AN.

## 38. “flesh”

PAi \*kam “flesh, meat” (V 99), cf. Kamčatka *kām* (Klaproth 1823, 306)

AN \*qaiam “animal; meat” (Dyen);

TK: Li \*xaam id. > White Sand Loi *kham*, Shaved Head *gom* etc. (AT 293);

?MK \*[h]yam “game, meat” (MKC #1382a: MK+AN+TK);

?Nihali *kāv* “flesh” (the difference *v* / *m* cf. Romani *nav* vs. Old Indic *nāma* “name”?).

39. “fly / mosquito”

PAi *\*mOs* “a fly” (V 111)

MK *\*mu(u)ys* / *\*muə[y]s* “mosquito, gnat” (MKC #1496).

40. “go” / “come”

PAi *\*pay-i* (pl.) “to go” (V 124)

TK: T *\*pəi*, Kam-Sui *\*pa:i*, Lakkja *\*pai*, Be *boi* “to go” (Theraphan 1992, 83);

Munda: Gutob *pe, pi, piŋ* “to come”, ? Parei of Viza-Gapatam *vA:ji* id.; cf. Nihali *pi:ja:* (P 151);

?MK: Bolowen *buh*, Alak *bʰh* “to come” (SB, C 221); Kui *pa'* “to go, come” (Prasert); ?Asli: Semang Plus *peh*, Sakai Tanjong *bai, bej* “to come” (SB, C 221).

41. “hair”

PAi *\*numa* “hair”, cf. (de Angelis) *xapa-numa* “capelli della testa” (Naert 1962, 128)

TK: Li *\*nom* “head hair”; ?Laqua *đam* id. (AT 307);

MK: PBahnar *\*ənu:m* “hair bun” (Sidwell 1998, #565); Katuic *\*num* / *\*nə-num[ə/o]m* “to tie hair” (Peyros 1994, #579) and / or Khmer *lóm* “hair of body / of animal” (Hayes 1996);

42. “hair” / “head”

Ai *sapa* “head” (V 134, 123 reconstructs two synonyms *\*sa* & *\*pa* “head”); cf. yet Sakhalin *šaba* (Klaproth 1823, 308), (la Perouse) *chapa* “les cheveux” (Naert 1961, p. 328)

MK: Bahnar *sok sop* “body hair”, Chrau *chòp măt* “eyelash” (Hayes 1996; Sidwell 1996 ms. prefers to compare the Bahnar word with Ai *\*EtOp* “hair” reconstructed in V 86, which is perhaps better comparable with SBahnar *\*ti(i)p* / *\*tiəp* “facial hair” in reconstruction of Sidwell in MKC #A104);

?AN *\*d'[aə](m)but* (Dempwolff) = *\*z[ae](m)but* (Lopez) “hair”, cf. AT 307.

43. “hand” / “arm”

PAi *\*te(-)k* (V 143), cf. Kamčatka *dēk*, Sakhalin *tegi* (Klaproth 1823, 307), (la Perouse) *tay* “l'avant-bras” (Naert 1961, 329)

Munda *\*ti'* (P 84);

MK *\*tii'* “hand, arm” (MKC #66; Shorto 1976, 1062) > Waic *\*te'* (Diffloth); PBahnar *\*ti:* (Efimov 1990, 140; Sidwell 1998, #264); Palaung *tii, tai, tae*; Khmer *tau*; PMon *\*toa*; Nicobar: Car *el-ti:*, Nancowry *táj*; Asli: Tembi *tik<sup>n</sup>, tiŋ*, Sakai Tanjong *tiik*, Besis *tiih* etc. “hand” (SB, H 15);

? AN: Form: Favorlang *tea* “arm”.

Lit.: Gjerdman 1926, 72–3: Ai + AU + Favorlang; V 171: Ai + MK. Matsumoto 1928, #1 compared the AA data with Jp *ta, te*.

44. “hand” / “five”

PAi *\*mon* “hand” (V 110–1), also “labor, work” (Piłsudski 1912 — Majewicz 1986, p. 305)

Munda *\*monloi* “5” > Kurku *mono(i)*, Parei *monloi*, Muwasi *maneiku* etc. (P 177);

MK *\*[]ma'* “right-hand” (MKC #135): NBahnar *\*maa*, SBahnar *\*maa* “right (hand)” (Efimov 1990, 116) < PBahnar *\*ma:* related with Car Nicobar *lahama* “right”; S-WThai *\*xwa* “right side” (Sidwell 1998, #21);

TK: S-CThai *\*mii* “hand” < *\*mya* < *\*(-i)ma*; Kam-Sui *\*myaa* id., SKelao *mle* “hand” : *mle* “5” (cf. Munda) < *\*mla(n)* < *\*lma(n)*; Laqua *mə* “5”; Gelao *mau* “hand” : *bu* “5”, Gao *mpau* : *mpu* id.;

AN *\*lima* “five” / “hand”, cf. Form: Rukai *\*lima* “5” : *\*alima* “hand” (AT 309; AJ 206; Schmidt 1906, 143: AN+MK).

## 45. “head”

Ai (B) *pa* / *pake* (V 123: *\*pa*), cf. Kamčatka *gpa* (Klaproth 1823, 308)

MK *\*[b]uuk* “head” (MKC #361): PBahnar *\*bo:k* id.; Katuic *\*mbɔʔ* “cheek; brain” (Efimov 1990, 104; Sidwell 1998, #480 also adds PCham *\*bɔʔ* “face” which can be a MK loanword);

Munda *\*bɔkɔp* / *\*bɔkɔk* / *\*bɔp* / *\*bɔk* < *\*bɔk(bɔk)* “head” (P 112);

AN *\*buʔuk* (Dempwolff) = *\*Buhek* (Prentice 1974).

## 46. “heart” / “chest” / “body”

Ai *ok* “heart; feelings”

MK: Pear *yok* “breast”; Katuic: Pacoh *oq* “stomach” (Hayes 1996);

AN *\*awak* “body” (Stresemann; cf. AT 249);

?TK: T *\*ək* / *\*ik* “chest”, var. *\*ok* / *\*uk* “chest, breast, heart” (Peyros 1998, 86 sees here a borrowing from Middle Chinese *\*ək* “chest”).

## 47. “husband / man”

PAi *\*hOku* “husband” (V 93)

AN *\*uɣaŋ* (Dempwolff) = *\*huRaN* (Lopez) “man” (Wurm & Wilson 1975, 126).

## 48. “ice” / “freeze”

Ai *kon-ru* “ice” : *ru(p/h)* “ice” (H 231; V 83 reconstructs *\*du-p*)

Asli: Semang Juru *gun* “cold” (SB, C 203);

TK: T *\*xon* / *\*[ɣ]on* (Siam) / *\*xun* (Lao) “to coagulate / freeze” (AT 254).

## 49. “knee” / “foot”

PAi *\*kOkka* “knee” (V 105), cf. Kamčatka *kōhkāh*, Sakhalin *koka šaba* (*šaba* “head”) (Klaproth 1823, 308)

MK: Palaungic: Danaw *kɔʔ* “foot, leg”; VM: Ruc *təkòk* “foot of a tree” (Hayes 1996); or MK *\*kʔ(ɔ)ŋ* “knee” (MKC #486), if the Ainu word is a compound;

TK: T *\*kok* “foot (of tree, hill)”; Lati *ton kho*, Li *khok*, Ong-Be *kok* “knee” (AT 296);

AN: Form: Rukai *\*kukuq* / *\*ququq* “foot, base, origin” etc. (AT 296). Blust, *Oceanic Linguistics* 19 [1980], 96, # 233 reconstructs Rukai *\*koko* “leg” in relation with AN *\*kukud* “shank or hoof of animals”.

Lit.: Gjerdman 1926, 53 compared the Ai “knee” with Tagalog *koko* “elbow” and Stieng *kuktang* “knee”.

## 50. “lake” / “deep water”

PAi *\*tOO* “lake, puddle of water” (V 146), cf. *topo* “pool, puddle” (B)

MY *\*(n)to* “deep”;

AN: Form: Favorlang *to* (Gjerdman 1926, 57: Ai + Jav of Krama *tojâ*) and / or Hesp *\*tubi* “water depth”, cf. Tagalog *tubig* “water” (AJ 179);

?MK *\*nt<sub>1</sub>uuʔ* “(water) hole, well” (MKC #85).

## 51. “lungs”

Ai Kamčatka *bāgāk* (Klaproth 1823, 309)

AN *\*baRaq* id. (Blust 1973);

?Munda: Sora *bəɾɔ* id. (Hayes 1996).

## 52. “man”

PAi *\*kur* “man, person” (V 107), cf. Kamčatka *kūr* “Mensch” = Sakhalin *guru* (Klaproth 1823, 309), Kuril *kor-gur* (redupl.?) “husband” (Rahder, *Orbis* 10 [1961], 204–05 compares the Ainu forms with OJp *koro*, *kori*, Ryukyū *koro* “man” and with the AA forms quoted below)

Munda: Mowasi *koro*, pl. *korku*, Mundari *hoRo* etc. “man” (P 153–4; Bhattacharya, *Anthropos* 65 [1970], 449);

?MK: ?Khmer *kur* “Bahnar of Srê”; Asli: Besis Sep. *kur* “numerative for men”, *mui kur mah* “a single man” (SB, M 23).

## 53. “man”

PAi *\*aynu* “man” (V 82)

AN *\*waNay* (Blust) = *\*yanay* (Stresemann) “man” (Wurm & Wilson 1975, 126).

## 54. “mountain”

Ai *kuru* “hill, mountain” (Tailleur, *Språkliga Bidrag* 4/16 [1961], 144) and / or PAi *\*gur* id. (V 90) > (B) *huru* & *furu*, Kuril (Voznesenskii) *gur*, Saru, Yakumo *hur(-u)* (but cf. # 55)

AN: Oc *\*kor(a,o)* (Grace 1969) = *\*gor(a,o)* (Milke 1968);

MK: Alak *gor*, Kaseng *gòr* “mountain” (Matsumoto 1928, 58: MK + Jp *ikuri* “récif, roche marine”, (dial.) *kura* “roche, amas des pierre”).

## 55. “mountain” / “hill” / “forest”

PAi *\*nupuri* “mountain” (V 118: < OJp *nobor-i* “to climb” ?), cf. (Sakhalin) *(no)buri* (Klaproth 1823, 304)

AN: ?Form: Favorlang *furun* and / or AN *\*bulud* “mountain” (Dempwolff 1925, see Gjerdman 1926, 43: Ai *furu* / *huru* + AN + AU);

Munda *\*biru* “hill” (P 141, 278);

MK *\*bruu* (MKC #182): Bolowen *bru*, Sue *brū*, Kuoi *barou* “mountain”, Waic *\*bre* “forest, outside, sky, weather” (Diffloth), PBahnar *\*bəri*: “forest, wild”; Khmer *\*bray* “forest”; Pear *phri*: “jungle”; PKatuic *\*bəru*: “mountain” etc. (Efimov 1990, 105; Sidwell 1998, #261).

## 56. “mountain peak” / “summit”

Ai *tokon* “small mountain peak”, *tokse* “little hill, a rise in a plain” (B) > Jp *tuka* “hillock, tumulus, mound”

AN *\*tuktuk* “summit” (AJ 222).

## 57. “mountains” / “tree”

Ai *kaja* “pays montagneux, montagnes” (Tailleur 1968, 274)

AN *\*kaju* (Dempwolff) = *\*káS2iu'e* (Dyen & McFarland) “tree”, cf. OJp *kë* < *\*kai* (AJ 256);

MK: Palaung-Wa: Umpai, Bo Luang, Mape *khe* “wood” : *kho* “tree” (Shafer 1966, 38); VM *\*kuy* “firewood” (Thompson 1976, 1173). Shorto & Sidwell reconstruct MK *\*jhoo* / *\*jhəə* / *\*jhee* “tree, wood” (MKC #254).

## 58. “mouth” / “jaws” / “lips”

PAi \**not* (V 116), cf. *not* “mouthful”, *not(u)* “jaws”, *notakam* “cheeks”, *nota* “face”, *notkiri* “chin”, *notkeu* “jaws”, *noči* “mouth, jaws” (B) and (la Perouse) *notame* kann “les joues” (Naert 1961, 327)

AN \**ηu[t]u* “lips” (Dempwolff) = \**ηu(ts)u* (Biggs 1965), cf. Form \**ηudzui* “mouth”;

MY \**ndzuj* “mouth” (AT 340);

MK \**t<sub>1</sub>n<sub>1</sub>ɔh* “mouth” (MKC #2020) and / or Asli: Pangan Ulu Aring *těnöyt*, Orang Hutan (Johor) *snut*, (Indau) *nut*, Sakai Ulu Tembeling *kě-nut* etc. “mouth” (SB, M 203). Shorto & Sidwell reconstruct MK \**t<sub>1</sub>ət* “mouth” (MKC #1001).

## 59. “mouth” / “lips”

PAi \**prAA* “mouth” (V 128), cf. (B) *para*, *paro* & *čaro* (Vovin 1989, 19: *p-* / *č-* < \**pr-*), cf. Sakhalin *paru* : Kamčatka *čār*, *zar* (Klaproth 1823, 310)

AN: Form: Atayal \**padahum* “lips”, cf. Squiliq *prahum* (Li 1981, 287).

## 60. “name”

PAi \**dEE* “name” (V 83), cf. Bihoro *re*, Raichiska *ree*, Kuril (Voznesenskij) *rie*, Nairo *tee* etc.

AN \**[]ag’an* (Dempwolff) = \*(*η*)*aran* (Capell) = \**qaZan* (Pawley) “name” (see Wurm & Wilson 1975, 135);

TK: Kam-Sui \**daan* “name” (AT 343).

Note: The loss of the final nasal also appears in ## 59, 60, 63, 66, 69.

## 61. “nape” / “back”

PAi \**Ok* “nape, back of the neck” (V 120)

MK: Nicobar: Car *uk* “back”, *uk alaha* “skin” (Das).

## 62. “neck” / “back”

PAi \**de[-]kut* “neck” (V 83), cf. Nairo *tekuh* id. vs. (B) *rekutkoni* “croup”, *rekutumbe* “necklace, yoke”, (la Perouse) *tchikot-ampé* (Naert 1961, 337), *rekuči* “throat”, Kamčatka *rěküt*, Sakhalin *reguzy* “neck” (Klaproth 1823, 307)

MK: Nicobar: Car *likun* “neck, nape” (Das); Asli: Semang (Begbie), Orang Benua *ηot*, Pangan Ulu Aring *ηud* “neck” etc. (SB, N 23; Shorto & Sidwell reconstruct \**t<sub>1</sub>ηut/n*); Riang (White Striped) *s’ɔkɔt* “nape of neck” (Luce 1965, 106), Nyakur *k’ɔ:-khút* “neck”;

AN \**likud* (Dempwolff) = \**likúDe* (Dyen & McFarland) “neck” (AT 224).

Lit.: Sidwell 1998a, 36: Ai + Nyakur.

## 63. “nose”

PAi \**Etu* (V 86), cf. (la Perouse) *etou* (Naert 1961, 327), Kamčatka *āhdūm*, Sakhalin *idu* (Klaproth 1823, 310)

TK: T \**daŋ* (Li 1977, 108, 110), Kam-Sui \**nanj*; Lakkia *nanj*; Laqua *tanj*; Ong-Be *lən, zən* < \**doŋ* (AT 345);

AN \**ig’unj* / *ug’unj* (Dempwolff) = \**q<sub>2</sub>íjúŋ* (Dyen & McFarland);

?MK: U *tì* “nose”.

Lit.: Gjerdman 1926, 43 & V 163: Ai + AN; Sidwell 1998a, 36: Ai + U.

## 64. “oil”

PAi \**sum* “oil” (V 141)

MK: Asli: Central Senoi *sěnúm*, Orang Tanjong *sinum* id. (SB, O 11);

Munda: Santali *sunum* “oil”;

?AN: Pol *\*sinu* “oil, grease” (Bruce, Walsh & Waqa). The final *-m* could be lost regularly, cf. Pol *\*inu* / *\*unu* “to drink” < AN *\*inum* (Dyen);

Lit.: Hayes 1996, #90: Ai + Santali + Asli.

65. “**otter / squirrel**”

PAi *\*rakkO* “sea otter” (V 130), cf. Kamčatka *riakko*, Sakhalin *raku* (Klaproth 1823, 312)

MK *\*prɔk* “squirrel” (MKC #412): Katuic *\*para:k* / *\*para:*; SBahnar *prɔ:* < PBahnar *\*pəɔ:k* (Sidwell 1998, #387); Khmer *kəmpruk*; Rear *phrɔ:k*; Sakai *prōk<sup>n</sup>*; VM *\*prɔ:k* (Ferlus) > VN *sóc* “squirrel” (Efimov 1990, 111); cf. PCham *\*prōk* id. which is apparently of MK origin; similarly Lao-Ahom *\*rook* < MK (see MKC #412).

TK: ?T *\*naak* “otter”; Li: Loi *teak*, SLi *na* id. (AT 348).

66. “**palm of hand / five**”

Ai *para* “palm of hand” (Patrie 1982, 16, 72), cf. *para-tek(e)* “hands” (B), Kuril (Torii) *paruteki* “hand” (H 11)

MY *\*pra* “five” (AT 350), cf. Ke-cheng *prai*, Kao-p’o *pla*, Yao-lu *pja*, Thailand Yao *pyaa* (Chang, BIHP 44 [1972], 595);

MK *\*p[d]am* “five” (MKC #1363): PKhmer *\*pram*, SBahnar *\*pram*, NBahnar *\*ba’dam* < PBahnar *\*pə’dam*; VM *\*dam* (Thompson) = *\*dam* “five” (Efimov 1990, 117; Sidwell 1998, #183).

67. “**rain**”

Ai *weni* “fine rain”, *wen-kuriki* “a rain cloud”, *wene* “watery” (B)

TK: Kam-Sui *\*xwin<sup>1</sup>* “to rain” (Thurgood 1988, 215); T *\*fon* “rain”;

MY *\*(m)pwon* “snow; cloud” (AT 360–61).

68. “**river**”

PAi *\*nay* “stream, river”, cf. (B) *na* “water”, (la Perouse) *naye* “river” (Naert 1961, 341)

TK: Kam-Sui *\*nya* “river” (AJ 161), Be *ŋa* “id.; bay, port”, Li *già* “river” (Solnit 1988, 229), PLakkja *\*ts-Niə* id. (Theraphan 1992, 66, 87);

?MK: WBahnar *\*bənaj* “river” (Jacq & Sidwell 2000, #174).

Note: Patrie (1982: 101) compared Ai *nai* “river” with Korean *nai* id. It looks quite convincingly, but the Korean word is derived from Middle Korean *naih*, originating from Old Korean *\*narix* (Ki-Moon 1976, 80). It means the Ainu and Korean words are compatible only in the case that the Ainu form is borrowed from late Korean.

69. “**road**”

PAi *\*truu* > Yakumo, Saru etc. *ru*, Raichiska *ruu*, Nairo *tuu*, (Dobrotvorskij) *tru* & *ru*, Kuril (Voznesenskij) *tojru* & *tru* etc. (V 147)

MK *\*truuŋ* / *\*truəŋ* “path, road” (MKC #698): PMon *\*trəw* “way, road” (Diffloth 1984, 126), Khmer *phlo:v* (Shorto 1971, 175) and / or SBahnar *\*trɔ:ŋ* id. (Efimov 1990, 128) < PBahnar *\*təɔ:ŋ* ~ *\*təru:ŋ* “road, path” (Sidwell 1998, #412; he adds Mon *gləŋ* “road” < PMon *\*glɔvŋ* (Diffloth 1984, p. 123); VN *đu’o’ng* “road” < MK *\*rdi(ə)ŋ* by MKC #590, and without any comments Sino-Tibetan *\*rōŋ* “road”, maybe of substratal, i.e. of MK origin?).

The zero reflex of *\*-ŋ* in Ainu has analogy in the entry “nose”.

## 70. “root” / “tendon”

PAi \**rit* “root”, cf. Kuril (Voznesenskij) *ryt* “tendons” (V 132)

AN \**uyat* (Dempwolff) = \**uR<sub>2</sub>at* (Biggs) = PPhil \**uR<sub>2</sub>aC* (Zorc & Charles) “sinew, vein”;

Munda \**rɛhɛd* “root”: Santali *rɛhɛd*, Mundari *red?* “root” (P 156; Luce 1965, 124);

MK \**ris*/\**riəs*/\**rəs*/\**r’iəs* “root” (MKC #1927): Waic \**rɛs* “root” (Diffloth); Khmer *ris*; Mon *ruih*; PKatuic \**riɛjh* (Peyros); Bahnar *rəh*, Sre *rias*, Stieng *riəh* etc. < PBahnar \**riah* (Sidwell 1998, #332); VM \**re:lh*; Nicobar: Nancowry *’āl*, Central *yiah*; ? Asli: Semang of North Perak *yaes* etc. id. (SB, R 173; Shafer 1966, 25–26).

Lit.: V 169–70: Ai + MK.

## 71. “skin”

PAi \**kAp* “skin, fur” (V 99), cf. (B) *kapu* “skin, bark”, Sakhalin *kapu* “Haut” (Klaproth 1823, 307) > (or < ?) OJp *kaFa* “skin, hide / fur”

AN: SForm \**kaba* > Kanakanabu *káva* “skin”, Paiwan *kava* “(skins-)clothing” (AJ 242);

MK: Stieng *kup*, *kuo:p* “skin, bark”; Asli: Sakai (Sungai Raya) *tšə-kop* “bark”, (C) “skin”, Jakun *tšun-kop* “skin” (SB, S 234).

Lit.: V 168: Ai + MK.

## 72. “skin” / “hair” / “head”

PAi \**ur* “fur coat, skin, hair of body” (V 152)

Munda: Mundari *u:r* “skin”, Santali, Ho *ur* (P 366);

MK \**huur* “skin” (MKC #1687).

## 73. “soul” / “heart” / “breast”

PAi \**rAm* “soul, heart, mind, feelings, think” (V 130), cf. (la Perouse) *tchame* “le devant et le haut de la poitrine” (Naert 1961, 330)

MK: Waic \**rmhom* “heart, mind” > Kawa *hrom* etc. (Diffloth), SBahnar \**pərá:m* “entrails” (Efimov 1990, 64);

AN \**ɣuma* “breast” (Capell) = *Ruma* (Hayes 1996: Ai + AN) or Form: Puyuma *rami* “liver” (Ting 1978, 360).

Lit.: V 169: Ai + Waic.

## 74. “star”

PAi \**kEta* id. (V 102)

AN: Oc \**qata* id. (Grace);

MK: Khmuic: Mal *quut* id. (Thomas & Headley, *Lingua* 25 [1970], 414).

## 75. “stomach” / “heart” / “lungs” / “bladder”

PAi \**pisE* “stomach” (V 126), cf. (B) *pise* “bladder”, *pišoi* “belly of a fish”, Kamčatka *psēh* “stomach”, Sakhalin *pši* (Klaproth 1823, 309)

TK: T \**pɔɔt* “lungs” (Li 1977, 278–79);

AN \**put’u* “heart, bud” (Dempwolff) = \**pus<sub>1</sub>uq* “lungs, heart” (Dyen & McFarland) (AT 312–3);

MK \**puus* / \**puəs* “heart” (MKC #1912).

## 76. “stone”

Ai *pit* “small stone, flint” (B)

AN \**batu* “stone” (Dempwolff);



?TK: T \**pat* “gem, grains of glass, glass pearls, pearl”, Laqua *pə* < \**paatu* (AT 398).

77. “stone”

Ainu: Kuril (Torii) *pira* “rock” (Kagami 1962, 519–21; H 208)

TK: Sek *phra* “cliff, rock”, Dioi *pya* “precipice”; Kam-Sui \**pra* “rock, rocky hill” (AT 398–99; Thurgood 1988, 215)

MY: pYao \**plei* “stone” (Haudricourt; see AT 399).

78. “stone”

PAi \**suma* “stone” (V 141)

MK \**t<sub>2</sub>mɔ̄* “stone” (MKC #146): OMon *tmo*’ “stone, rock, hill”, OKhmer *t(h)mo* “stone”; Praok *simaw*, Mae Sariang *samo*’ id.

Lit.: V 170–71: Ai + MK.

79. “sun” / “day”

Ai *tombe* “sun” or “moon” (B)

Munda: Kharia *tum’bɔ̄* “day, 12 hours”, Sora *’tamba*: “to be forenoon”, *’tamba:-’tɔgal* “day and night” (P 165);

?MK: Nicobar: Car *tawuui* / *tawe* “sun” (Das).

80. “tooth” / “chew”

PAi \**ima(-)k* (V 96) “tooth”, cf. (la Perouse) *yma* (Naert 1961, 327), Kamčatka *imak*, Sakhalin *nimaki* (= \**ni* “tooth” + *imak*- id.), Hokkaido *mimak* (Klaproth 1823, p. 314)

MK: Khmu *mah* “to eat”, Katu *mamah* “to chew” (Hayes 1996) and / or Khmer *ɲiəŋ* “barb”, OMon *ɲek* “tooth”, Niakuol of Petchaben *ɲiek* id. (Shorto 1971, 90);

Nihali *meŋge* “tooth, jaw”;

AN \**mamaq* “to chew” (Dyen & McFarland), cf. Oc \**maka(s)* “tooth” (Grace);

TK: ST \*(*h*)*ma(a)k* > Ahom *mak* “chew the cuds”; Kam-Sui \**hmaak* “chew” (AJ 175).

81. “trunk”

PAi \**tumAm* “trunk (of body / tree), waist” (V 148)

MK: PBahnar \**tə:m* “tree trunk” (Sidwell 1998, #678); PKatuic \**həɗΔ:m* “trunk”; Khmer *tem* etc. (Shafer 1966, 14), OMon *tam* “base, foot, beginning”, in compounds “plant, tree”; Asli: Besisi *to<sup>m</sup>m* “base, foot”, Semang *tom* “tree” etc. (Shorto 1971, 142);

?TK: Thai *ton* “tree trunk”.

Lit.: V 173: Ai + MK.

82. “vulva”

PAi \**pOk* “vagina, bottom of anything” (V 126); ? cf. Jp *fuku* “belly”

AN \**puki* “vulva” (Dempwolff);

MY: Miao (Petchabun) *pau*’ / *pi*’ < \**b[o]*’ / \**bi*’ < \**buq[i]* / *biq[i]* < \**buq[i]* (AT 417);

?MK: Kui *pe*’ “vagina” (Prasert).

V 168: Ai + Kui.

83. “water” / “drink”

Ai (*w*)*akka* (B), (la Perouse) *oouachka* (Naert 1961, 341 cites Sakhalin Ai *wahka* by his records) = (Hokkaido) *wacha*, *wazka*, (Sakhalin) *waka* (Klaproth 1823, 313) “water” (it is

tempting to speculate about e.g. the following development: *wakka* / *wahka* / *wazka* < *\*wažka* < *\*wayka* )

AN *\*wayəɣ* (Dempwolff) = *\*wahiR<sub>123</sub>* (Dyen & McFarland) “water”;

?TK: NKelao *u*, in compounds *wu*, Lati *i* “river” (AT 420);

?MK: Asli: Semaq Beri *la'wak* “river” (Hayes) and / or Sakai of Pulai Guai *wök*, Sakai of Krau *wö*, Semang Paya *uoh* “to drink” etc. (SB, D 166), cf. also Khmer *uak*, Ksinmul *'uk* id. (Sidwell 1996 ms. compares the last two forms with PAi *\*kuu* “to drink” — see V 108);

Note: V 91, 166 reconstructs PAi *\*hdak-ka* and compares it with AU *\*ḍak* “water”: Munda *\*dā* / *\*da* “water” (P 69); MK: PMon *\*daak* (Diffloth); SBahnar *\*da:k* (Efimov 1990, p. 35) < PBahnar *\*da:k* (Sidwell 1998, #45); PKatuic *\*d[ia]* (Peyros); VM *\*ḍak* (Thompson); Nicobar: Central, Coastal *da:k*, Chowra *ra:k* etc. (Shafer 1966, 8–11); Asli: Sakai (Bera & Seriting) *dak* id., Orang Hutan (Palong) *dak* “sea” (SB, W 30).

#### 84. “(fresh) water”

Ai *nam* “fresh or cool (as fresh water), cold as water or one’s feet hands”, *nam wakka* “fresh or cool water” (B)

TK: T *\*nram*; Kam-Sui *\*nam*; Lakkia *num*; Ong-Be *nam*; Li *\*nom* etc. “water” (AT 420);

AN *\*[dḍ]anum* (Dempwolff) = *\*DaNúme* (Dyen & McFarland) “water”;

MY: Yao *\*nam* “cold of water” (Chang, *Language* 42 [1966], 307);

MK *\*n<sub>1</sub>uum* “urine / to urinate” (MKC #1365): Khmer *nom*, Mon *nam*, Talaing *ńam* “to water”, Bahnar *num*, SBahnar *\*'nno:m* id. (Efimov 1990, 134); Asli: Sakai *kenám*, *nəm* “urine” etc. (Shafer 1966, 22, 23).

Note: Schmidt (1906, 134) compared AN with Bahnar *dönäu* “Binnensee”, but it looks as a loan from Chamic.

#### 85. “water”

PAi *\*pE* “water, sap” (V 124), cf. *pen* “source”, *pene* “fine rain; aqueous, watery” etc. (B), Kamčatka *pěh* “water” (Klaproth 1823, 313)

AN *\*ba'ah* (Dempwolff) = *\*baháq* (Dyen & McFarland) “flood, water” etc.;

TK: T *\*ba* “overflow, spill” (AT 349);

?MK: Bahnar *bah* “Mündung eines Flusses”, Khmer *anwāḥ* “kleiner Bach, Kanal” (Schmidt 1906, 155) or perhaps better VM *\*pe* “sea” (Thompson).

#### 86. “white”

PAi *\*detara* (V 83), cf. Sakhalin *tedari*, Hokkaido *tetar* (Klaproth 1823, 314), Yakumo, Asahigawa etc. *retar*, Raichiska, Naira *tetara* id.

Munda: Santali *tartaria* “rein, klar”; Savara *taar* “to shine, brilliant, white”, Gadaba *ta-tār* “white”, Kharia *tardí* id. (Shafer 1966, 14);

MK: Bahnar *tār* “leuchtendes Weiss” (Schmidt 1906, 133);

AN *\*tarah* “clear” (Dempwolff).

V 165: Ai + Munda + MK.

#### 87. “wife” / “woman”

Ai (Kuril by Torii) *kani kokkai* “wife” : *kokkai* “husband” (H 45)

Munda: Kharia *kon-sel* “woman, wife” (cf. P 330);

MK *\*ka(a)n* “woman” (MKC #1126): PKatuic *\*[h/ɣ]əkan* (Peyros); PPEARIC *\*kin* “female”; Khmu *cəmkməm* “woman”; PBahnar *\*('ə)-kan* “woman / wife” > Alak, Sue, Rengao *kan*

“female (animal)”, Stieng *kan* “female”, Tampuon *ŋkan* “woman”; Palaung Wa: Bo Luang *kön* id., Mape *kaun*; Nicobar: Nancowry *kán*, Central & Coastal, Chowra *kan* “wife”, Teresa *keän* (Shafer 1966, 12; Sidwell 1998, #194).

#### 88. “year”

PAi \**paa* “year, season, age” (V 123), cf. Kamčatka *pāh*, Sakhalin *pa* (Klaproth 1823, 308)

TK: T \**pi* “year” (Li 1977, 62, 263); Kam-Sui \**be*, Ong-Be *ʔbei*, Li *ʔbe*; Lakkia *pěi* (Haudricourt, BSLP 62 [1967], 172).

### Conclusion

Following the great specialist in Austronesian (and African) languages, Otto Dempwolff, we assume that the preceding list of lexical parallels between Ainu and the Austric languages represents the first step in the inductive phase of the demonstration of genetic relationship (really a continuation of the first steps taken by Gjerdmann, *et al.*). The following step (already begun, for example, by Norquest, 1998) consists of the formulation of regular phonetic correspondences, which should be verified during the deductive phase. We believe that future progress in comparative and historical Austric linguistics will lead to the complete demonstration of the membership of Ainu within the Austric macro-phylum (along with Austronesian, Thai-Kadai, Miao-Yao, Austroasiatic, and probably also Nihali). If our article helps to stimulate discussion of the position of Ainu in genetic classification, it has served its purpose.

### Abbreviations of languages

AA: Austroasiatic, Ai: Ainu, AN: Austronesian, AU: Austroasiatic, C: Central, E: East, Form: Formosan, Hesp: Hesperonesian, Jav: Javanese, Jp: Japanese, Kor: Korean, MK: Mon-Khmer, MY: Miao-Yao, N: North, O: Old, Oc: Oceanic, P: Proto-, Phil: Philipinese, Pol: Polynesian, S: South, T: Thai, TK: Thai-Kadai, VM: Viet-Müông, VN: Vietnamese, W: West.

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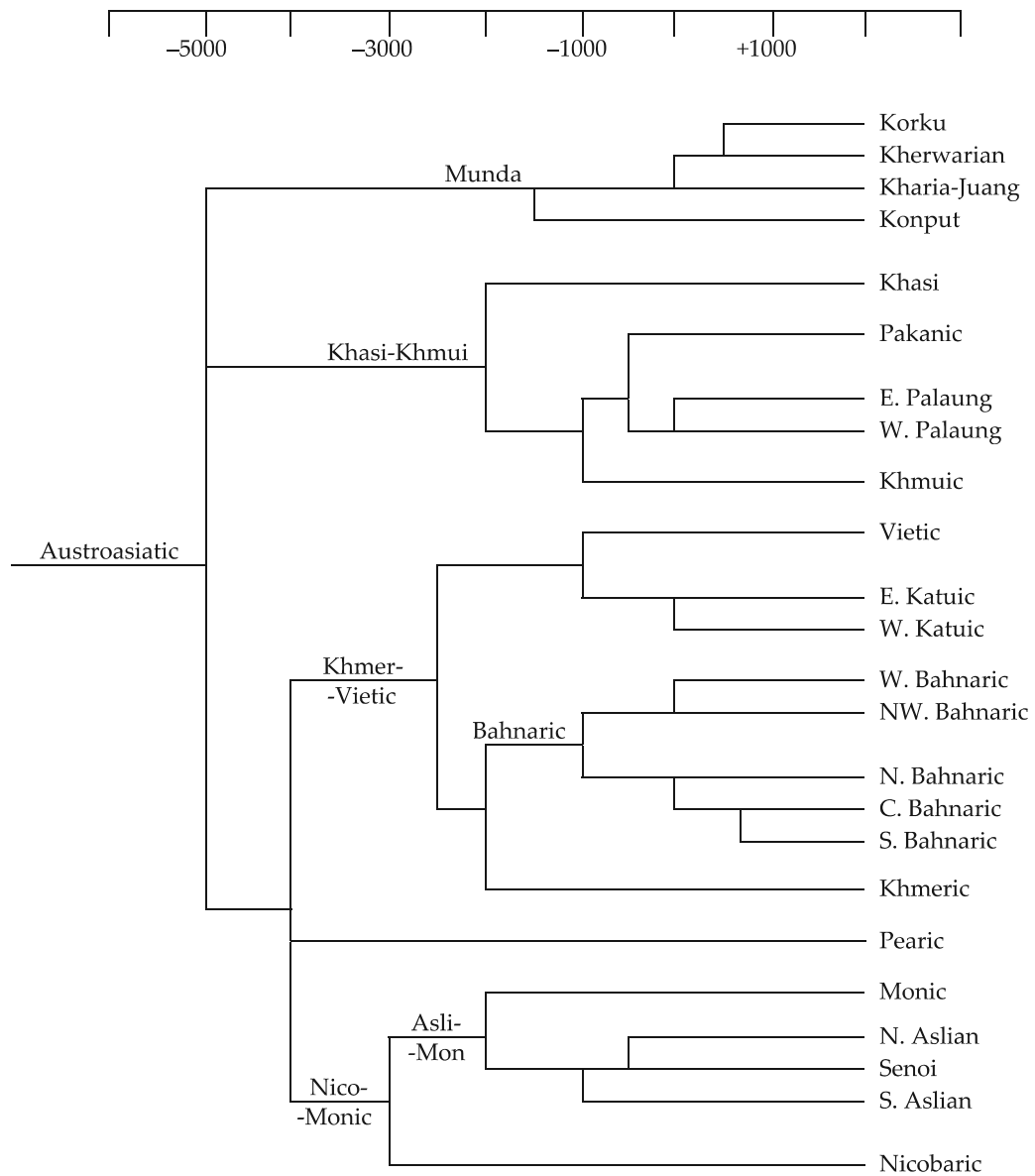
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### Appendix: Austroasiatic languages

Recently two competing classifications of Austroasiatic languages were proposed. Gérard Difloth (2005) is the author of the first model (quoted after van Driem 2006, 169).



Around the same time I. Peiros (2004, 34) offered his own classification of the Austroasiatic languages, based on 'recalibrated' glottochronology, developed by Sergei Starostin.

