

Supplementary Information 2

Basic vocabulary etymologies across the Transeurasian languages, underlying semantically equivalent cognate sets scored as (1) in SI 1

1. Methods

In SI 1, we collected a comparative dataset including 3193 datapoints representing 254 basic vocabulary concepts for 98 Transeurasian languages, including contemporary and historical varieties. We established cognacy classes and coded them as present (1) or absent (0) for all languages in the dataset. The determination of cognacy classes is based on the etymologies given in Section 2 below. These etymologies contain more participants than do the cognacy classes in SI 1 because they allow a certain degree of semantic latitude, whereas in SI only semantically equivalent cognates are scored as (1). All etymologies reflect regular sound correspondences, as listed in Section 3. of this document.

Our 254 basic vocabulary concepts are based on a merger of the Leipzig-Jakarta 200 list (Haspelmath and Tadmor 2009) and the Jena 200 list (Anderson and Heggarty n.d.). The underlying Leipzig-Jakarta 200 list is reduced to 195 items due to the merger of a few meanings (e.g., ‘breast’ and ‘chest’). It is supplemented by the Jena 200 list, which is an updated version of the Swadesh 200 list, currently applied to a comparison of Indo-European languages in the CoBL (Cognacy in Basic Lexicon) project by Anderson and Heggarty. Given the large overlap between the two lists, the final list amounts to 254 concepts.

Compared to the traditional Swadesh list, which is mainly based on intuition, the Leipzig-Jakarta list takes a more systematic and empirical approach to the basic vocabulary because it is based on a quantitative comparison of stable words in the languages across the world. The strength of basic vocabulary is not in the stability of a single concept, but in the overall stability of the body of concepts as a whole.

2. Etymologies

1. FIRE

pJ **pi(r)i* ‘fire’: J *hi* (1.3b), OJ *pi*₂ ‘fire’, OJ *po-* ‘fire’ in OJ *potaru* ‘firefly’, OJ *pokusi* ‘bonfire’, OJ *pokuso* ‘tinder’, OJ *potopor-* ‘get heated’, OJ *poter-* ‘flush, be all aglow’ etc.; Yonamine (Okinawa) *pii*, Shuri (Okinawa) *fii* [hwii], Ishigaki (Yaeyama) *pīi* (B), Hatoma (Yaeyama) *pii*, Yonaguni *cii* (B) ‘fire’
pK **pil* ‘fire’: K *pul*, MK *·pul* ‘fire’

Frellesvig and Whitman (2008) have proposed to add two mid vowels (**e*, **o*) and a high central vowel (**i*) to the four vowels (**i*, **a*, **u*, **ə*), traditionally reconstructed for proto-Japonic. According to their analysis, apophony of OJ *o* and *i*₂ reflects a contraction whereby **ii* > OJ *i*₂. The alternation between OJ *po-* and OJ *pi*₂ ‘fire’ thus reflects pJ **pii* ‘fire’. Comparison with the final liquid in MK *·pul* ‘fire’ indicates that

the proto-Japonic diphthong is the result of liquid loss in an earlier pJ **pi(r)i* ‘fire’. The word for ‘fire’ is also reflected in Ryukyuan languages.

3. TO GO

pJ **na-* ‘to go out, become’: OJ *in-* ‘to go away, leave, depart’ A, OJ *-in-* perfective auxiliary, J *nar-* B, OJ *nar-* ‘to become, come into being’, J *nas-* B, OJ *nas-* ‘to make, do, give birth to’

pK **na-* ‘to go out’: K *na-*, MK *·na-* ‘to go out, emerge, leave, become, come into being, come out’, MK *·nay-* ‘to take out, produce’ (**-i-* causative), MK *nat-* ‘to appear’ (**-t(i)-* passive), MK *-·na-* resultative

pTg **na:-* ‘to go out’: Evk., Even. *-na:-*, Sol. *-na:-*, Neg. *-na-*, Na. *-nda-*, Olch. *-nda-*, Oroch, Orok, Ud. *-na-*, Sibe *-na-*, Ma. *-na-* ~ *-ne-* ~ *-no-* ‘to go out (to verb)’

OJ *in-* ‘to go, leave, depart’ belongs to the n-irregular verb paradigm (*na-hen*) along with only two other verbs: OJ *sin-* ‘to die’ and the perfect auxiliary OJ *-in-*, which are probably reflexes of the same etymon (Robbeets 2005: 123, 162.) The n-irregular verb paradigm is an exception to the athematic paradigm (*yodan*) because it has ‘long’ adnominals (*rentaikei*) *-uru* and subjunctives (*meireikei*) *-ure* in contrast to the ‘short’ adnominals *-u* and subjunctives *-e* of the athematic paradigm.

Whitman (1985) has argued that at some proto-Japanese stage **-r-* was deleted after short vowels but retained after long vowels. The loss of the intervocalic *-r-* in the adnominals and subjunctives of the athematic paradigm is commonly attributed to this rule, so in the case of the n-irregular verb paradigm a preceding long original vowel must have blocked the application of the rule. Since the root vowel in monosyllabic morphemes was automatically long at the proto-Japanese stage, it is inviting to reconstruct monosyllabic pJ **na-* ‘to go’.

The prefix in OJ *in-* ‘to go, leave, depart’ is a lexicalized instance of the Old Japanese verb prefix *i-*. Various semantic and syntactic analyses of this prefix circulate in the literature¹, but, arguing that Old Japanese has active alignment in nominalized clauses, Yanagida and Whitman (2009: 117-119) demonstrate that the *i-* prefix is exclusively attached to active verbs, i.e. to transitive verbs and to intransitive verbs with an agentive subject. The separate accentuation of *i-* is high atonic 1.1. (Martin 1987: 668), which explains the B register in a number of lexicalisations such as J *imasu* B ‘deign to be/stay/go/come’ (< OJ *mas-* A ‘to deign to be/stay/go/come’), OJ *ino2r-* B ‘to pray’ (< OJ *no2r-* A ‘to declare’) and OJ *ituk-* B ‘to purify’ (< OJ *tuk-* B ‘to soak’). Lexicalized stems showing a reduced form of *i-* such as OJ *ik-* / *yuk-* ‘to go’, OJ *yokos-* ‘to send here’ and OJ *yusug-* ‘to wash out, rinse’ have A register. OJ *in-* ‘to go, leave, depart’ and OJ *sin-* ‘to die’ have A register. However, in reference to Kindaichi, Martin (1987: 201) points out that the original accent type may be B because “these verbs originally had a fall (instead of just low) on the ending of the predicative [...] and that of the infinitive [...] like verbs of Type B.” From this perspective, pJ **na-* ‘to go’ may underlie derivations such as OJ *nar-* ‘to become, come into being’ and OJ *nas-* ‘to make, do, give birth to’ which have B register. The grammaticalization of ‘to go’ into a change-of-state verb is cross-linguistically well attested (Heine and Kuteva 2002: 156-157.)

A similar pathway of grammaticalization probably underlies in MK *·na-* ‘to go out, emerge, leave, become, come into being, come out’. In addition to the most common

¹ Martin 1987: 94, 668: independent adverb; Hino 1997: 2-5: agentive marker; Unger 2000: 676: reanalysis of a preceding *-i* converb, Russell 2006: 141-142: goal focus marker; Vovin 2009: 561: directive-locative focus marker.

meaning ‘to become’, the Korean verb is used in the sense of K *na-ka-* ‘to go out, leave’, e.g. in *nwun-ey nata* ‘go out of a person’s favor’. Rhee (1996: 215-216) shows that the basic denotation of MK *·na-* was the motion of getting out of a bounded space. Derivations such as MK *·nay-* ‘to take out, produce’ with the causative suffix **-i-* and MK *·nat-* ‘to appear’ with the passive **-t(i)-* support this semantic analysis. Martin (1992: 263, 702, 933) further considers the so-called “effective suffix” MK *·na-*, that can only apply to the verb MK *·wo-* ‘to come’ yielding MK *·wona-* ‘to end up by coming, ultimately come’, to be a grammaticalization from the auxiliary MK *·na-* ‘to go out, emerge’.

The Tungusic languages share a suffix that denotes departure from a place to other places or towards the object of an action (Benzing 1955a: 1068, Gorelova 2002: 239-240), such as Ma. *feku-* ‘to jump’ → *fekune-* ‘to jump away from the speaker, to jump to the other side’, *guri-* ‘to move’ → *gurine-* ‘to move to another place’ and Ma. *omi-* ‘to drink’ → *omina-* ‘to go to drink’. In Manchu, this construction can be replaced by a periphrastic converb construction with the verb *gene-* ‘to go’. From the viewpoint of cyclic grammaticalization, the synthetic construction may also go back to an original verb pTg **na-* ‘to go out’. Its origin as an independent verb is further supported by the observation that there is no development of vowel harmony for the suffix, except in Manchu.

4 WATER

pK **mil* ‘water’: K *mul*, MK *·mul* ‘water’

pTg **mu:* ~ *mö:* ‘1 water’: Evk *mu:* ‘1’, Even *mö:* ~ *mu:* ~ *mo:* ‘1’, Even *mö:v-* ~ *mo:v-* ‘dilute with water’, Even *mö:de-* ~ *mu:de-* ~ *moda-* ‘grow, swell (of water in a river)’, Even *mö:lken* ~ *mo:lkan* ‘wattery’, Neg *mu:* ‘1’, Solon *mu:* ‘1’, Oroch *mu:* ‘1’, Ud. *mude* ‘inundation’, Olcha *mu:* ~ *mue* ‘1’, Orok *mu:* ‘1’, Na. *mue* ~ *muke*, *moko* ‘1’, Sibe *muke:*, *muku:* ‘1’, Ma. *muke* ‘1’, Jur. *mo* ‘1’

pMo **mören* ‘river’: MMo. *muren* (SH), *müren* (HY), *mören* (Muq) ‘river’, WMo. *mören* ‘large river, lake’, Khal. *mörön*, Ordos *mörön*, Bur. *müre(n)*, Kalm *mörn*, Dag. *mur(e)*, Dong. *moren*, *morán*, *moron*, Bao. *moron*, Eastern Yugur *mereen*, Mgr. *muro:n*

The common reconstruction of the proto-Tungusic form is **mu:* ‘water’. However, Even, Nanai and Jurchen preserve alternant forms such as Even *mo:* ‘water’, *mo:v-* ‘dilute with water’ and *moda-* ‘grow, swell (of water in a river)’, Na. *moko* ‘water’ and Jur. *mo* that reflect pTg **mö:* ‘water’ according to Benzing’s sound correspondences.² Similar to the etymologies under 53 ‘to give’, 79 ‘to blow’ and 80 ‘wood’, an open monosyllabic form with length in Tungusic corresponds to a disyllabic form with a liquid onset in the second syllable in the other Transeurasian languages. This is

² According to the correspondences in Benzing 1955a:

pTg	Ma.	Jur	Evk	Even	Sol	Neg	Oroch	Ud.	Olch.	Orok	Na
*ö	u		u	o	u	u	o/u	o	o/u	o/u	u
*u	u		u / -ö-	u / -ö-	u / -ö-	u / -ö-	u	u	u	u	u

indicative of liquid loss in Tungusic.

As far as Mongolic is concerned, some modern forms suggest **müren*, leaving uncertainty about the original first vowel, but the older varieties as well as the external comparisons support the reconstruction of **mören*.

5 MOUTH

pJ **kuti-i* 'mouth, opening': J *kuti* (2.1), OJ *kuti* 'mouth, aperture, opening', J *kutu-* 'mouth, opening' in J *kutuwa* 'mouth-piece, bit', J *kutugaeru* 'be overturned, capsize', etc.; Yamatohama (Amami) *kuci*, Asama (Amami) *kucii*, Yoron (Amami) *kuci*, Shodon (Amami) *k'uci*, Yonamine (Okinawa) *kucii*, Shuri (Okinawa) *kuci*, Irabu (Miyako) *futsi*, Hirara (Miyako) *futsi* (A), Ishigaki *φuci* (Yaeyama), Ikegami (Yaeyama) *futsi* (A), Hatoma (Yaeyama) *huci*, Yonaguni *tti* (A), pR **kuti* 'mouth'; OKog **kotsi* 'mouth' (Beckwith 2007: 112, 115, 129)

pK **kwut* 'hollow, cavity': K *kwut*, *kwutengi*, MK *·kwut* 'hollow, pit, cave'

The distinction between $i_1 < *i$ and $i_2 < *ii$ is not preserved following dental stops in Old Japanese, but it is possible to reconstruct an earlier **ii* on the basis of the apophonic pair *kutu-* ~ *kuti* 'mouth'. The word for 'mouth' is reflected in Ryukyuan languages and a possible cognate has been reconstructed in Old Koguryo, which makes reconstruction at the proto-Japanic level inviting. The suffix pJ **-i* is a substantivizer following nouns (e.g. OJ *aka* 'red' → *ake₂* 'red object, red cloth'), cognate with the bound noun OJ *i* 'fact (that); that (which)' (Robbeets 2015: 341).

pTg **amga* < ? **ama-g* 'mouth': Evk. *amja*, Even *amje*, Neg. *amja*, Solon *amma*, *angai*, Olcha *aŋma*, Orok *amja* ~ *aŋma*, Na. *amga*, Oroch *amma*, Ud. *aŋma*, Sibe *aŋa* ~ *aŋə*, Ma. *aŋga*, Jur. *am-ŋa*

pMo **ama-n* 'mouth, opening': MMo. *ama(n)*, WMo. *ama(n)*, Khal. *am(an)*, Bur. *ama(n)*, Kalm. *amn*, Dag. *am*, *ama*, Eastern Yugur *aman*, Mgr. *ama*, Bao. *amaŋ*, *aman*, *aməŋ*, Dong. *amaŋ*, *aman*, Mogh. *aman*, *amun*

The Tungusic reconstruction **amga* 'mouth' may ultimately derive from **ama-g*, through the addition of a collective suffix pTg **-g* (Benzing 1955a: 1016). This suffix is also present in pTg **de:re-g* 'face' reflected in Ma. *dere*, Nanai *dereg* and Olcha *dere* ~ *dereg* 'face'. The Tungusic words for 'hole', i.e. Evk. *aŋa*, Neg. *aŋa* and Olcha *aŋgala* are probably connected to this etymon.

In the Mongolic languages we find an unstable stem-final nasal element, morphophonologically alternating with zero, that expresses singularity in contrast with plural forms on *-d*. This stem-final *-n* was added to the simple stem, yielding pMo **ama-n*. The Mongolic languages, e.g. MMo. *amasar*, WMo. *amasar*, Khal. *amsar*, Bur. *amhar*, Kalm. *amsr*, Dag. *amsər* etc., reflect a derived form pMo **amasar* 'opening, cavity, hole'.

pJ **ipa-* 'to tell': J *iw-* (A), OJ *ip-* 'say, tell, talk, speak', J *iwaw-*, OJ *ipap-* (B) 'congratulate'; Yamatohama (Amami) *ʔyuuri*, Asama (Amami) *ʔyun*, Yoron (Amami) *ʔjun*, Naze (Amami) *ʔyun*, Yonamine (Okinawa) *ʔyun*, Shuri *ʔyun*, Irabu (Miyako) *nzi*, Hirara (Miyako) *aʔi*, Ishigaki (Yaeyama) *izuŋ*, Hatoma (Yaeyama) *azun*, Yonaguni *Nduŋ* 'say'

pK **ip* 'mouth': K *ip*, MK *·ip* 'mouth'

184 The -z- in the Yaeyama and Miyako forms is due to the development of proto-
185 Ryukyuan *-y- to -z- in these languages, but not in Yonaguni. A similar development
186 is seen in pR *iyu 'fish' under 40. FISH. The a- in Hirara *aʔi* and Hatoma *azun*, is
187 probably epenthetic (cf. Miyako *asī* 'do').
188
189 40. FISH
190 pJ *(y)iwə 'fish': J *uo* (2.1), OJ *iwo* 'fish', Yamatohama (Amami) *ʔjuu*, Asama
191 (Amami) *ʔyuu*, Yoron (Amami) *ʔyuu*, Shodon (Amami) *ʔyuu*, Yonamine (Okinawa)
192 *ʔyuu*, Shuri (Okinawa) *ʔiyu* (A), Irabu (Miyako) *izu*, Hirara (Miyako) *ʔizu*, Ishigaki
193 (Yaeyama) *idzu* [*izu*] (A), Yonaguni *iyu*, pR *iyu 'fish'
194
195 7. BLOOD
196 pJ *ti 'blood; spirit, force': J *ti* (1.1), OJ *ti* 'blood', OJ *ti* 'spirit, force'; Yamatohama
197 (Amami) *ci(i)*, Asama (Amami) *Ci*, Yoron (Amami) *cii*, Shodon (Amami) *cii*,
198 Yonamine (Okinawa) *cii*, Shuri (Okinawa) *cii*, Irabu (Miyako) *ahaci(i)*, Hirara
199 (Miyako) *tsitsi*, Ishigaki (Yaeyama) *tsi* [*cii*] (A), Hatoma (Yaeyama) *sii*, Yonaguni
200 *ccii* 'blood' (A), pR *ti 'blood'
201 pMo *či < *ti 'blood': MMo. *čisu(n)*, WMo. *čisu(n)*, Dag. *čos*, Khal. *cus(an)*, Ordos
202 *jusu*, Bur. *šuha(n)*, Kalm. *cusn*, Eastern Yugur *čüsən*, *čusun*, Mgr. *čisə*, *cəʒə*, Bao.
203 *čisun*, *čisən*, Dong. *čusun*, Mogh. *čusun*, *čisu*
204 pTk *ti:n 'spirit, breath': OT *tīn* '1 spirit, breath', Tk. *tin* '1', Tat. *tīn* '1', Uz. *tin* '1',
205 Uigh. *tin* '1', Kirg. *tīn* '1', Kaz. *tīnis* '1', Nog. *tīnis* '1', Bash. *tīn* '1', Balk. *tīn* '1', Kpak
206 *tīn* '1', Kum. *tīniš* '1', Khak. *tīn* '1', Shor *tīn* '1', Tuva *tīn* '1', Tofa. *tīn* '1', Yak. *tī:n*
207 '1', Dol. *tī:n* '1', Chu. *čēm* '1'; Tkm. *dī:nč* '2 rest', Az. *dinč* '2', Karaim *tīnc* '2', Gag.
208 *dinnen-* 'to rest'
209
210 Reflexes of pJ *ti 'blood; spirit, force' are found in Mainland Japanese as well as in
211 the Ryukyuan languages. The metaphorical extension of the meaning 'blood' to 'spirit,
212 force' in Old Japanese supports the comparison with pTk *ti:n 'spirit, breath'.
213 The Mongolic forms reflect a petrified suffix -sun that occurs in numerous body part
214 terms, e.g. WMo. *gede-sūn* 'bowel' and *suda-sun* 'arteria' (Poppe 1973: 238-240).
215
216 8. BONE
217 pJ *pəne 'bone': J *hone* (2.3), OJ *pone* 'bone, skeleton, rib', Yamatohama (Amami)
218 *huni*, Asama (Amami) *huuni*, Yoron (Amami) *puni*, Shodon (Amami) *huni*,
219 Yonamine (Okinawa) *puni*, Shuri (Okinawa) *huni*, Irabu (Miyako) *puni*, Hirara
220 (Miyako) *puni*, Ishigaki (Yaeyama) *puni*, Igarashi (Yaeyama) *puni*, Yonaguni *huni*,
221 pR *pone 'bone'
222 pK *peCi 'bone': K *ppyē*, MK *·spyē* ~ *spey* ~ *pspey* 'bone'
223 pTg *peni-ken 'knee': Evk. *henjen*, Even *henjen*, Solon *enē*, Neg. *heñjen*, Olcha
224 *peñe(n)*, Orok *pene*, *peñe(n)*, Na. *peñē*, Oroch *heñje*, *heñen*, Ud. *heñe*
225
226 Within Frellesvig and Whitman's (2008) seven vowel hypothesis, many instances of
227 OJ *e_(l)* in word-final position cannot be etymologized as contractions, but they result
228 from an original pJ *e. Indeed, the Ryukyuan forms support the reconstruction of pJ
229 *pəne 'bone' with a final mid-vowel, which raised only in the Ryukyuan languages.
230 The Middle Korean forms *·spyē* ~ *spey* ~ *pspey* 'bone' have complex initials,
231 which are all secondarily generated through phonological or morphological
232 developments in Korean. If the initial s- in *·spyē* ~ *spey* can be separated as a relic of
233 a genitive s in compound structures, reinterpreted as the initial of the second noun

(**pye* ~ **pey*) with ‘-bone’, then we can reconstruct pK **piCe* or **peCi* which contracted to the tonic open monosyllable in Middle Korean.

The Tungusic forms may incorporate an assimilation of the diminutive suffix pTg **-ka:n* (Benzing 1955a: 1006-1007). This suffix is used with other body parts, e.g. Even *ŋal* ‘hand’ and *ŋal-ka:n* ‘(little) hand’.

9. 2 SG pronoun

pJ **na* ‘2 SG pronoun’: OJ *na*, *nare* ‘2 SG pronoun’; Koniya (Amami) *nam*, Shuri (Okinawa) *naa*, Namizato (Okinawa) *naa*, Sesoko (Okinawa) *naa*, *naN*, Taketomi (Yaeyama) *naara* ‘you, self’, pR **naa* ‘2 SG honorific pronoun’
pK **ne* ‘2 SG pronoun’: MK *ne* ‘2 SG pronoun’

In Old Japanese *na* is used along with *nare* as the main neutral pronoun to express the second person singular ‘you’. Only *nare* is used to express the second person plural. However, since OJ *na* is petrified in some expressions in reference to a first person singular (e.g. OJ *na se* ‘my older brother / fellow’), it is possible that it has grammaticalized from an original **na* ‘person’, reflected in among others OJ *womi,na* ‘woman’ and OJ *oki,na* ‘old man’ (Robbeets 2005: 241). Therefore, I do not exclude that the correspondence with the Korean form may be coincidental. The Ryukyuan pronouns have honorific uses in most languages given above. Contrary to Vovin’s (2008: 65) claim “The distribution in the Ryukyus (no attestations in Sakishima) and its mild honorific nature suggest that Ryukyuan *naa* is a loan from Japanese,” there is an attestation of this form in the Sakishima languages, notably Taketomi (Yaeyama) *naara* ‘you, self’. Hence, Vovin’s deduction that the Old Japanese pronoun *na* must be a loan from Korean *ne*, at a time the Ryukyuan languages had already separated, (Vovin 2008: 65, 2013: 254-255) becomes less convincing.

pTg **si* ‘2 SG pronoun’: Evk. *si*, Even *hi:*, Neg. *si:*, Solon *śi*, Olcha *si*, Na. *śi*, Oroch *si*, Ud. *si*, Sibe *ši:*, Ma. *si*, Ma. *si-ni* ‘2 SG-genitive’, *sim-be* ‘2SG-accusative’, *sin-de* ‘2 SG-dative’, *sin-ci* ‘2 SG-ablative’

pTk **si* ‘2 SG pronoun’: OT *si-ni* ‘2 SG-accusative’, *sin-tä*, *sin-dä*, *sin-idä* ‘2 SG-locative’, *sin-idin* ‘2 SG-ablative’, *siz* ‘2 PL pronoun’; Tk. *sen* ‘2 SG pronoun’, *siz* ‘2 PL pronoun’; Tkm. *sen* ‘2 SG’, *sið* ‘2 PL’; Gag. *sen/sän* ‘2 SG’, *siz* ‘2 PL’; Az. *sän* ‘2 SG’, *siz* ‘2 PL’; KKalp. *sen* ‘2 SG’, *siz* ‘2 PL’; Kirg. *sen* ‘2 SG’, *siz(der)/siler* ‘2 PL’; Bash. *hin* ‘2 SG’, *heð* ‘2 PL’; Tat. *sin* ‘2 SG’, *sez* ‘2 PL’; Karaim *sen* ‘2 SG’, *siz* ‘2 PL’; KBalk. *sen* ‘2 SG’, *siz* ‘2 PL’; Kum. *sen* ‘2 SG’, *siz* ‘2 PL’; Nog. *sän* ‘2 SG pronoun’, *siz* ‘2 PL pronoun’; Khak. *sin* ‘2 SG pronoun’, *sirär* ‘2 PL pronoun’; Uig. *sän* ‘2 SG’, *silä* ‘2 PL’; Uz. *sen* ‘2 SG’, *siz* ‘2 PL’; Shor. *sen* ‘2 SG’, *siler/sler* ‘2 PL’, Tuva *sen* ‘2 SG’, *siler* ‘2 PL’, Tofa. *sän* ‘2 SG pronoun’, *silär* ‘2 PL pronoun’; Yak. *än* ‘2 SG pronoun’, *ähigi* ‘2 PL pronoun’; Dolg. *än* ‘2 SG’, *ähigi* ‘2 PL’; Khalaj *sän* ‘2 SG pronoun’, *siz* ‘2 PL pronoun’; Chu. *e-sě* ‘2 SG pronoun’, *e-sir* ‘2 PL pronoun’

The Turkic second person plural pronoun can be analyzed as a plural in *-z from an original singular stem **si*. The plural -z was no longer productive in Old Turkic, but it is attested in a number of petrified forms including paired body parts such as OT *kö-z* ‘eyes’, *tü-z* ‘knees’, *agü-z* ‘lips’ and *kökü-z* ‘breasts’ and ethnonyms such as OT *ogu-z* and *kirgü-z*. Similar to the Tungusic paradigm, the Turkic paradigm is marked by the insertion of an oblique suffix -n- in some oblique cases. The elision of initial *s- in Yakut is a regular development, while Yak. -higi is a plural suffix.

284 11. TO COME

285 pJ **kə-* 'to come': J *ko-*, OJ *ko₂-* 'to come' (OJ *ko₂nu* 'not come'; *ko₂ba* 'if come';
 286 *ko₂si* 'came' etc.); Yamatohama (Amami) *ki(i)*, Asama (Amami) *kjun*, Yoron (Amami)
 287 *kjun*, Yonamine (Okinawa) *sun*, Shuri (Okinawa) *cuun*, Irabu (Miyako) *fui*, Ikema
 288 (Miyako) *fu.*, Ishigaki (Yaeyama) *kī(:)η* [*kī(i)N*], Yonaguni *kuη*, pR **ko-*
 289 pTk **kel-* 'to come': OT *kel-*, Tk. *gel-*, , Az. *gäl-*, Tkm. *gel-*, Gag. *gel-*, Uig. *käl-* ~ *kil*,
 290 Uz. *kel-*, S.-Yugh. *kel-*, Karaim *kel-*, Kpak *kel-*, Tat. *kil-*, Kirg. *kel-*, Kaz. *kel-*, Bash.
 291 *kil*, Nog. *kel-*, Balkar *kel-*, Kumyk *gel-*, Sal. *gel-*, *gej-*, Khak. *kil-*, Shor *kel-*, Tuva *kel-*,
 292 Tofa *kel-*, Yak. *kel-*, Dol. *kel-*, Khalaj *käl-*, Chu. *kil-*

293

294 12. BREAST

295 pJ **kiki-rə* 'heart': J *kokoro* (3.5b), OJ *ko₂ko₂ro₂* 'heart', MJ *kokoti* 'heart, feelings,
 296 mood'; Yamatohama (Asami) *xohoro*, Asama (Asami) *kukuuru*, Yoron (Amami)
 297 *kuuru*, Shodon (Asami) *k'ohoro*, Shuri (Okinawa) *kukuru*, Hirara (Miyako) *kukuru*,
 298 Irabu (Miyako) *kukuru*, Ishigaki (Yaeyama) *kukuru* (B), Hatoma (Yaeyama) *kukuru*
 299 Yonaguni *kukuru* (B), pR **kokoro* 'heart'; OKog **kir* ~ **kür* 'heart' (Beckwith 2007:
 300 80, 115)
 301 pTg **xökö-n* 'breast': Evk. *uku-* '1 to suck', *ukun* ~ *xukun* ~ *xukur* ~ *xukuxu* '2 breast,
 302 udder, milk', Even *ök-* ~ *uk-* '1', *ökri* ~ *ukri* 'pectoral/ chest-; infant, baby', *okan* '2',
 303 Solon *uxü* 'milk', Neg. *öxö-* ~ *uku-* '1, breast-feed', *öxön* ~ *ökön* 'milk', Oroch *ovoci-* ~
 304 *o:ci-* ~ *ueci-* 'suck', *oko(n)* 'breast, nipple, milk', Ud. *kos'o* - '1', *kos'o* ~ *oko* '2', Olcha
 305 *kueci-* ~ *ko:ci-* '1', *kue(n)* 'breast, milk', Orok *ku:tci-* '1', *qu:(n)* ~ *qo:(n)* '2', Na. *ku:ci-*
 306 ~ *uku-* '1', *kü* '2', Sibe *xuxuη* 'breasts', Ma. *xuxun* 'breast, nipple', *xuxuri* 'infant, baby,
 307 suckling, infancy', Jur. *xuxun* 'breasts'
 308 pMo **kökö-n* 'breast': MMo. *koko-* (SH) '1 to suck the breast', *kokan* '2 breast', pl.
 309 *kokot*, MMo. *köke-* (Muq) '1', *köken* '2', WMo. *kökö-* '1', *kökö(n)* ~ *köke(n)* '2', Khal.
 310 *xöxö-* '1', *xöx* '2', Ordos *gökö-* '1', *gökö* '2', Bur. *xüxe-* '1', *xüxe(n)* '2', Kalm. *kök-* '1',
 311 *kökn* '2', Dag. *mək-* '1', *mək* '2', Eastern Yugur *hkö-* ~ *hgö-* '1', *hkön* ~ *hgön* '2', Mgr.
 312 *kugo-* '1', *kugo* '2', Bao. *kugo-yo-* (-*yo-* causative) '1', *kugo* '2', Dong. *gogo-* '1', *gogo*
 313 '2', Mog. *kökä-* '1', *kökä* 'nipple'
 314 pTk **kökü-r₂* 'breast': OT *kögüz* '1 breast, 2 reason, sense, emotion', Tk. *göyüs* ~
 315 *kökre(k)* (dial.) '1', Tat. *kögüs* (dial.) ~ *kükrek* '1', Uz. *küks* '1, 2', *kəkräk* '1', Uigh. *köküs*
 316 ~ *kökräk* '1', S.-Yug. *köküs* ~ *gö:s* '1', Az. *köks* ~ *köküs* '1', Tkm. *gövüs* ~ *kükrek* '1',
 317 Kirg. *kökürök* '1', Kaz. *kökirek* '1', Nog. *kökirek* '1', Bash. *kükräk* '1', Balkar *kökürek*
 318 '1', Gag. *gü:s* '1', Karaim *kökis* ~ *kökräk* '1', Kpak. *kökirek* '1', Salar *göfrix* '1', Kum.
 319 *kökürek* '1', Khak. *kögis* '1', Shor *kögüs* '1', Yak. *köyüs* 'middle of the back', Dolg.
 320 *köksü* 'back', Chu. *kägär* '1'

321

322 If the Japanese form for 'heart' indeed incorporates a petrified plurality marker pJ *-*rə*
 323 of the type found in among others OJ *ko₁-ra* 'children', *woto₂me₁-ra* 'young girls', *ye-*
 324 *ra* 'branches', *kinu-wata-ra* 'silk clothes' (Antonov 2007: 195, 197), then the plurality
 325 can be taken as indicative of a pre-Japanic semantic shift from 'breasts' to 'heart'.

326 Some of the Ryukyuan forms such as Yoron (Amami) *kuuru* are rather rare. These
 327 forms are used in expressions like 'good-hearted' or 'bad-hearted', while the Chinese
 328 anatomical borrowing *sinzou* 'heart' is used for the organ, e.g., Yamatohama (Asami)
 329 *sindo*, Hatoma (Yaeyama) *sinzoo*, etc. The Ryukyuan attestations and the tentative

Old Koguryo reconstruction suggest that the reconstruction goes back to the proto-Japanic level.³

With exception of the Manchu and Nanai words, which may be borrowings from Mongolic, all Tungusic forms support the reconstruction of an initial **x-* in proto-Tungusic.⁴ Given the reflexes with alternating *o/u* in Oroch, Olcha and Orok, Udehe *o* in *oko* 'milk' and Even *o* in *okan* 'breast, milk', the vowel should be reconstructed as **ö* in line with the correspondence in footnote 2. The word for 'milk' clearly is a derivation from the verb 'to suck' with the nominalizer pTg **-n* (Robbeets 2015: 385-391), but as the derivation is shared between most Tungusic languages, it probably had already taken place at the proto-Tungusic or pre-Tungusic level.

Given a parallel derivation of 'milk' from 'to suck' in Mongolic with a cognate nominalizer pMo **-n* (Robbeets 2015: 391-393), it is likely that the derivation can be traced back to the proto-Transeurasian level. From this perspective, Japanic and Turkic have probably preserved a formation with the common plural suffix pTEA **-rA*, while Tungusic and Mongolic have preserved the formation with the common deverbal nominalizer and singular pTEA **-n*. The plural *-z* < pTk **-r₂* has been mentioned under item 9. 2 SG pronoun.

14. 1 SG pronoun

pJ **wa* ~ **wa-n-* '1 SG/PL pronoun': OJ *wa* (1.3 a) ~ *ware* '1 SG pronoun', OJ *ware* '1 PL pronoun'; Yamato-hama (Amami) *wan*, Asama (Amami) *wan*, Yoron (Amami) *waa*, Shodon (Amami) *waa*, Yonamine (Okinawa) *wanuu*, Shuri (Okinawa) *waa* (nominative / genitive) ~ *wan* (oblique) (B), Irabu (Miyako) *a-*, Hirara (Miyako) *ban*, Ishgaki (Yaeyama) *banu* (A), Hatoma (Yaeyama) *baa*, Yonaguni *banu* (A), pR **wa-nu* '1 SG pronoun'

pMo **ba* ~ **ba-n-* '1 PL excl. pronoun': MMo. *ba* (nominative) ~ *ma-n-* (dative/locative), WMo. *ba* ~ *man-*, Dag. *ba:* ~ *ma:n-* Khal. *man-*, Bur. *man-*, Kalm. *man-*, Ordos *man-*, Dong. *mani* / *mayi* (genitive/accusative), *mai* 'our (postnominal possessive)', Bao. *man-*, Eastern Yug. *bə*, *manə* 'our (postnominal possessive)', Mog. *mo:n-*

Both OJ *wa* and *ware* are used for the first person singular in Old Japanese, but only *ware* is used for the plural. In contrast to modern Japanese (e.g. *watakusi* 'I' ~ *watakusi-tati* 'we') none of these pronouns can be followed by productive plural markers. This observation suggests that the suffix *-re* (**< -ra-(C)i*) goes back to the plural suffix OJ *-ra*, mentioned under 12. BREAST. When the suffix *-re* lexicalized in a way that it was no longer identified with the plural, the petrified plural *ware* probably spread by analogy to the singular. The final nasal in the Ryukyuan forms is probably a reflex of an original oblique case suffix pJ **-n(u)-*, which is also reflected in the East Old Japanese dative case *wa-nu-ni*.

The Mongolic languages display a similar alternation between pMo **ba* and **ma-*

³ I use the term "Japanic" in reference to a genealogical unity that comprises the historical continental varieties of the Japanese language as well as the varieties spoken on the Japanese Islands, including the Ryukyu Islands. The label "Japonic" is usually restricted to a branch of Japanic, namely the language family composed of Mainland Japanese and the Ryukyuan languages.

⁴ Benzing (1955a: 976, 989) lists the following correspondences.

pTg	Ma.	Na.	Olch.	Orok	Oroch.	Ud.	Sol.	Neg.	Ev.	Lam.
<i>*x-</i>	Ø	x-	x-	x-	Ø	Ø	Ø	Ø	Ø	Ø
<i>*k-</i>	k~x	Ø	Ø	Ø	k~x	x~g	x-	x-	k-	k-

371 *n-* the nominative and oblique case forms of the first person plural exclusive pronoun.
 372 The initial **b* assimilated to the nasal oblique suffix. Some oblique forms survived in
 373 languages that lost **ba* itself.

374
 375 pTg **bi* '1 SG pronoun': Evk. *bi*, Even *bi*, Neg. *bi*, Solon *bi*, Oroch *bi*, Ud. *bi*, Na. *mi*,
 376 *bi* (dial.), Orok *bi*, Olcha *bi*, Sibe *bi*.; Ma. *bi*, Jur. *mi-n*
 377 pMo **bi* '1 SG pronoun': MMo. *bi*, WMo. *bi*, Dag. *bi*.; Khal. *bi*, Bur. *bi*, Kalm. *bi*,
 378 Ordos *bi*, Dong. *bi*, Bao. *bi*, *bu*, *bə*, Eastern Yugur *bu*, *bə*, Mgr. *bi*, *bu*, Mog. *bi*
 379 pTk **bi* '1 SG pronoun': OT *min* '1 1 SG pronoun', OT *biz* '2 1 PL pronoun'; Tk. *ben*
 380 '1', Tk. *biz* '2'; Az. *män* '1', *biz* '2'; Tkm. *men* '1', *bi:z* '2'; Gag. *ben* '1', *bis* '2'; Uz. *men*
 381 '1', *biz* '2'; Uig. *män* '1' ~ *biz* '2', Kirg. *men* '1', *miz* '2'; Karaim *men* '1', *biz* '2', Kaz.
 382 *min* '1', *biz* '2'; Nog. *män* '1', *biz* '2', Balkar *men* '1', *miz* '2'; Kpak *men* '1', *biz* '2'; Salar
 383 *me:(n)* '1', *pise(r)* '2'; Kum. *men* '1', *biz* '2', Tat. *min* '1', *bez* '2'; Bash. *min* '1', *beđ* '2';
 384 S-Yug. *piz* '2', Khak. *min* '1', *pis* '2', Shor *men* '1', *pis* '2', Tuva *men* '1', *bis* '2', Tofa.
 385 *män* '1', *bi's* '2'; Yak. *min* '1', *bihigi* '2', Dolg. *min* '1', *bihigi* '2'; Khalaj *män* '1', *biz* '2',
 386 Chu. *e-pě* ~ *e-bě* '1', *e-pir* ~ *e-běr* '2'

387
 388 Parallel to the Turkic second person plural pronoun discussed under 9. 2 SG pronoun,
 389 the first person plural pronoun can be analyzed as a plural in *-*z* from an original
 390 singular stem **bi* or **bä*. Only the Turkic forms with a high front vowel as well as
 391 Chu. *e-pě* reflect the original first singular pronoun **bi*.

392 393 16. LOUSE

394 pMo **sirke* 'louse': MMo. *sərke* 'nit', WMo. *sirke* 'a kind of flea', Khal. *širx* '1 cattle
 395 louse', Bur. *šerxe* '1', Kalm. *širkə* '1', Ordos *širxe* '1'
 396 pTk **sirke* '1 nit': OT (Karakh.) *sirke* '1', Tk. *sirke* '1', Az. *sirkä* '1', Tkm. *sirke* '1',
 397 Gag. *sirkä* '1', Tat. *sirke* '1', Kirg. *sirke*, Kaz. *sirke*, Nog. *sirke* '1', Bash. *hirkä* '1', Balk.
 398 *sirke* '1', Karaim *sirke* '1', Kpak. *sirke* '1', Kum. *sirke* '1', Uz. *sirke* '1', Uig. *sī(r)kä* '1',
 399 Khak. *sirge* '1', Tuva *sirge* '1', Tofa. *si'rxə* '1', Khalaj *sirkä* '1', Chu. *šärga* '1'

400 401 19. ARM/HAND

402 pJ **ta(r)i* 'upper limb, arm, hand': J *te* (1.3a), OJ *te*, OJ *ta-* in e.g. OJ *tanapidi* 'elbow'
 403 (<*ta-* 'arm' + *na* genitive + *pidi* 'joint') and OJ *tomo* 'archer's arm protector' (< *ta-*
 404 'arm' + *omo* 'surface'); Yamatohama (Amami) *θi(i)*, Asama (Amami) *tii*, Yoron
 405 (Amami) *tii*, Shodon (Amami) *t'II*, Yonamine (Okinawa) *tii*, Shuri (Okinawa) *tii*,
 406 Irabu (Miyako) *tii*, Hirara (Miyako) *tii*, Ishigaki (Yaeyama) *tii* (B), Hatoma
 407 (Yaeyama) *tii*, Yonaguni *tii* (B), pR **te* 'arm, hand'
 408 pK **tali* 'lower limb, leg': K *tali*, MK *·tali* 'leg, limb'

409
 410 The Transeurasian languages display a tendency to use a single term for both the limb
 411 and its extremity. When new words for 'arm, hand' or 'leg, foot' come in, they are
 412 likely to push the meanings of previous forms into designating a specific subpart of
 413 the limb. This development is expected to cause overlapping meanings such as
 414 between MK *·pal* 'foot, leg, paw' and MK *·tali* 'leg, limb'. The crossing-over of the
 415 semantic correspondence between upper limb and lower limb in both etymologies
 416 may be explained in the context of naming animal limbs.

417
 418 pJ **sune* 'lower limb, leg': J *sune* (2.3), OJ *sune* 'leg, shin, shank'; Asama (Amami)
 419 *sinii*, Naze (Amami) *sinī*, Shuri (Okinawa) *şini*, Hirara (Miyako) *karasini*, Ishigaki
 420 (Yaeyama) *sini* (B), Yonaguni *ccini* (B), pR **sune* 'leg, shin, shank'

421 pK **son* 'upper limb, arm, hand': K *son*, MK **swon* 'hand'

422

423 Since the quality of the mid vowel is not distinguished after *n* in Old Japanese, we
424 could be dealing with either *e*₁ (<**i*(C)*a*, **i*(C)*ə*, **i*(C)*i*, **e*) or *e*₂ (<**a*(C)*i*/**ə*(C)*i*).

425 However, as there are no apophonic alternations attested for this root and since
426 nominal roots rarely consist of more than two syllables, preference is given to the
427 reconstruction of pJ **sune*. The Ryukyuan forms support this reconstruction.

428

429 pMo **gar* 'hand, arm': MMo. *qar*, *qa:r*, *yar* 'hand, wing (of an army)', WMo. *yar*
430 'hand, arm, flank, wing', Khal. *gar* 'hand, arm, wing (of an army)', Bur. *gar*, Kalm.
431 *yar*, Ordos *Gar*, Dong. *qa*, Bao. *xar*, Dag. *gari*, *gar'*, Eastern Yugur *gar*, Mgr. *gar*,
432 Mog. *yar*

433 pTk **kar-ī* 'arm' (pTk *-ī 3SG possessive) : OT *kar* '1 arm', *karī* (OUig.) '2 forearm,
434 cubit (measure of length based on the length of the forearm from the elbow to
435 the tip of the middle finger, ca. 46 centimeters)', Karakh. *karī* '1', Tk. *karaža*
436 'upper arm, biceps and triceps muscle', Tkm. *gari* '3 shin-bone of animal', 4 measure
437 of length', Az. *gari* (dial.) '3', Tat. *qari* '1', *qara* (dial.) '4', Kirg. *qar* '1', *qari* '1', Kaz.
438 *qar* '2', *qari* '2, 3', Nog. *qari* '4', Bash. *qar* '3', Balk. *qari* '4', Kpak *qar* '2', *qari* '2, 4',
439 Uz. *qari* '1, measure of length, ca. 140–145 centimeters', *qara* (dial.) '3', Uig. *qeri* '4',
440 *qaya* (dial.) '3', S-Yug. *qar* '2', Shor *qari* '1', Oyrat *qari* '1', Yak. *xari*, *xari:*, *xara* '2, 3',
441 Tuva *qiri* '2', Tofa. *qiri* '2', Dlg. *karī* 'radius (bone on the forearm)', Khalaj *qari* '4',
442 Chu. *xor*, *xur* '2, 4', *xurā* 'measure of length, ca. 2 meters'.

443

444 In Turkic, we can reconstruct pTk **kar* 'arm' followed by a lexicalised possessive
445 suffix *-ī. This possessive suffix frequently occurs with words for primary parts of the
446 body (*Róna-Tas & Berta* 2011: 492-494). The common denominator 'arm' is reflected
447 in a variety of meanings denoting different parts of the arm in addition to the
448 meanings relating to measures of length, ranging between the length of only the
449 forearm to that of one or two arms. The attestation of Hungarian *kar* 'arm' supports the
450 reconstruction of West Old Turkic **kar* 'arm'. Since the Chuvash word lacks a final
451 vowel, it is likely that it was also lacking in West Old Turkic. Cross-linguistically the
452 borrowing from the word for 'arm' has been observed in a trade context, involving the
453 meaning 'measure of length' or in a martial context, involving the meaning 'part of an
454 army'. Interestingly, the Turkic and Mongolic forms share the primary meaning 'arm',
455 but they have each developed a distinct secondary meaning, respectively in a trade
456 and military context. This observation argues against a borrowing scenario.

457

458 22. EAR

459 pMo **kul* 'ear': WMo. *qulki*, *qulaquu* '1 earwax, middle ear', *qulmayi*- 'to have the ears
460 laid back, to be crop-eared (intr.)', Dag. *xolgi*, Khal. *xulxi* '1', *xulga* '1', Bur. *xulxa* '1',
461 *xolxi* '1', Kalm. *xulxə* '1', *xulxə* '1', Ordos *xuluGu(n)* '1', Mgr. *xoŋGo*.

462 pTk **kul-kak* 'ear': OT *kulxak* ~ *kulkak* ~ *kulgak*, Tk. *kulak*, Az. *GulaG*, Tkm. *Gulaq*,
463 Gag. *qulaq*, Uz. *quləq*, Uig. *qulaq*, Tat. *qolaq*, Kirg. *qulaq*, Kaz. *qulaq*, Nog. *qulaq*,
464 Bash. *qolaq*, Balkar *qulaq*, Karaim *qulax*, Kpak *qulaq*, Salar *Gulaḡ*, Kum. *qulaq*, S-
465 Yug. *qulaq*, Khak. *xulax*, Shor *qulaq*, Tuva *qulaq*, Tofa. *qulaq*, Yak. *kulga:k*, Dolg.
466 *kulga:k*, Khalaj *qulaq*, Chu. *xālyā*.

467

468 The Mongolic languages reflect a root pMo **kul* 'ear', derived with different suffixes
469 *-*ki*, *-*ku* and *-*mayi*-. The suffix *-*ki* can be identified as a locational suffix,
470 indicating 'that which is located in/on/at', e.g. *degere* 'top, on top of, above' →

degereki 'being above or on top, upper', *emüne* 'south, southern, front' → *emüneki* 'being in front or ahead of (with gen.), southern, preceding' and *qoyitu* 'back, rear, behind, north' → *qoyituki* 'that which is behind or will follow, northern, back, rear, placenta'. Hence, pMo **kul-ki* 'earwax, middle ear' can be analysed as 'that which is located in the ear'.

The Turkic languages reflect a common suffix pTk *-*xAk* used in body part terms, such as *tiz* 'knee' → *tirsgäk* 'elbow', *müñüz* 'horn' → *müñüzgäk* 'hard skin on the hand, which results from manual labour', *yan* 'side' → *yañak* 'cheek-bone' (Erdal 1991:74-76). The alternation of OT -*gAk* with -*kAk* following *l*, *n* and *r* can be explained by reconstructing pTk *-*xAk*, which is still present in the attestation of OT *kulxak*. The voiceless fricative was voiced to -*γAk* and merged with -*gAk* in vocalic environments, but underwent defricativization to -*kAk* in certain continuant environments (Robbeets 2015: 411-416). Therefore, we can reconstruct pTk **kul* as the root for 'ear'.

24. FAR

pJ **mara* 'rare, from afar': J *mare* (2.1), OJ *mare* 'rare, unusual' ~ OJ *mara-* 'from a distance' in e.g. *marapito* 'a person who came to visit from another place, guest' (< *mara* 'from a distance' + *pito* 'person')

pK **meli-* 'be far': K *mel-*, MK *mel-/~me(l)-* 'be far, distant'

25. TO DO/MAKE

pJ *-*ka-* 'to produce a sound or a sensation like the base onomatopoea': J, OJ -*k-*, pR *-*k-*, e.g. in pJ **na* 'crying sound' in OJ *ne* (1.1) 'sound, crying, weeping' → OJ *nak-* A 'to cry'; Yamato-hama (Amami) *naxjuri*, Asama (Amami) *nakyun*, Yoron (Amami) *nakyun*, Shodon (Amami) *nak'yum*, Yonamine (Okinawa) *nacun*, Shuri (Okinawa) *nacyun* [*nacun*], Irabu (Miyako) *nafu*, Ishigaki (Yaeyama) *na(?)kun* [*nakun*], Hatoma (Yaeyama) *nakun*, Hateruma (Yaeyama) *nagun*, Yonaguni *nagun*, pR **naki* 'to cry' pK *-*ki-* 'to produce a sound or a sensation like the base onomatopoea': K, MK -*i-*, e.g. in K *kutek* 'nodding' → K *kuteki*, MK *kuteki-* 'to nod (one's head)'

pTg *-*ki-* ~ -*gi-* 'to produce a sound or a sensation like the base onomatopoea': Ma./Sibe -*ki-* ~ -*gi-*, Evk. -*ki-* ~ -*gi-*, Neg./Solon -*ki-* ~ -*gi-*, Even -*k-* ~ -*g-*, -*kA-* ~ -*gA-*, Orok/Oлча/Oroch/Ud./Na. -*ki-* ~ -*gi-*. e.g. in pTg **sim-ki* 'to cough' in Even *hi:mke-*, Evk. *simki-*, Neg. *simki-*, Olcha *siñbi-*, Orok *sipki-*, Na. *siñbi-*, *simki-*, Oroch *simpi-*, Ud. *simpi-* and Solon *simki-*.

pMo **ki-* 'to do, make; produce a sound or a sensation like the base onomatopoea': MMo. *ki-*, WMo. *ki-*, Khal. *xij-*, Bur. *xe-*, Kalm. *ke-*, Ordos *ki-*, Dong. *kie-*, Bao. *ke-*, *giə-*, Dag. *ki-*, *xi-*, *ši-*, Mgr. *gi-*, *gə-*, Mogh. *ki-*, Eastern Yugur *gə*; iconic in e.g. **čis* (mimetic for *chirping*) → WMo. *čiski-* 'to chirrup, chirp, twitter, tweet'

pTk **kī(-)l-* 'to do, make, produce a sound or a sensation like the base onomatopoea': OT *kil-*, Tk. *kil-*, Tat. *qil-*, Uzb. *qil-*, Uigh. *qil-*, Az. *gıl-*, Tkm. *qıl-*, Khak. *xıl-*, Balkar *qıl-*, Shor *qıl-*, Tuva *qıl-*, Yak. *kīn-*, Dolg. *gīn-* Kirg. *qıl-*, Kaz. *qıl-*, Nog. *qıl-*, Bash. *qıl-*, Karaim *qıl-*, Kpak *qıl-*, Kum. *qıl-*, Chu. *ěś-xěl* 'deed'; iconic in e.g. **su* (mimetic for snapping) → OTk. *suki-* 'snap (one's fingers)'.

The aberrant vowel in Japonic can be explained by resonance with the wide-spread *a*-vocalism of suffixes in the Japanese verbal paradigm.

In Turkic and Mongolic, the verb 'to do, make' seems to be the source of grammaticalization for the iconic suffix. In Turkic, Yakut and Dolgan have a different root-final consonant, which could suggest that the original root is **kī-* and that -*l-* and -*n-* are petrified suffixes. The problem with this explanation, however, is that the

suffix *-(X)l-* derives passives and that *-(X)n-* derives medial verbs in Turkic. The verb *kil-*, however, is typically causative. For a detailed explanation of this etymology, see Robbeets (2015: 239-245).

26. HOUSE

pJ **(y)ipi* 'house, hut': J *ie* (2.3), WOJ *ipe₁*, EOJ *ipi₁*, *ipa* 'house'

pK **cip* < ? **cipi* 'house': K *cip*, MK *cip* 'house'

pTg **ji:b* 'house' in **ji:b-na-* 'go visiting': Oroch *ji:ma-*, Olcha *ji:ma*, Ud. *jima-*, Orok *je:ma-*, Na. *ji:ma-* 'go visiting'.

Although Old Japanese distinguishes between *a* and *ya*, *o_(1/2)* and *yo_(1/2)*, *u* and *yu* and *e_(1/2)* and *ye*, **yi* and *i* have completely neutralized as OJ *i*. It is thus not self-evident to derive all instances of OJ *i* from pJ **i*. As the choice between pJ **i* and pJ **yi* is always dependent on the external cognates, I insert *(y)* between brackets in the reconstruction of pJ **(y)ipi* 'house, hut'. The vowel alternation between WOJ *ipe₁* and EOJ *ipa* 'house' suggest the reconstruction of pJ **(y)ipi-(C)a*, see for instance the alternation between the progressive adnominal form WOJ *ipe₁ru* 'say' and EOJ *ipar-* 'say', which derives from **ip-i ar-u* (say-CONV exist-ADN). Therefore a complex origin as **ipi-ya* with OJ/pJ **ya* 'house' cannot be excluded.

The low pitch of the Middle Korean form points to a disyllabic low-high origin, in which the second vowel may be a reduced vowel or the neutral vowel **i*.

The Tungusic reconstruction **ji:b* 'house' with a high front vowel is only maintained in the derivation with pTg **-na-* 'to go out'; see 3. TO GO. The assimilation to **-ma-* leaves a trace of the original final **b* in the word. The free words for 'house' have shifted their vowels backwards in Evk. *ju:w-ča-* 'to do housework', Evk. *ju:* 'house'; Even *ju:*, Neg. *jo:*, Olcha *ju:(y)*, Orok *du:-qu*, Na. *jo:*, Oroch *ju(g)*, Ud. *jugdi*, Solon *ju:y* and Ma. *jeofi* 'round hovel thatched with straw or birch bark'. The vowel quality may be influenced through contact with Mongolic forms such as WMo. *juuqa*, Khal. *ju:x*, Bur. *zu:xa*, Kalm. *zu:xə*, Ordos *ju:xa*, and Dong. *jowo* for 'stove, hearth'.

Note that in my view, the initial correspondence reflects an original voiced dental stop pTEA **d*, rather than a voiced fricative **j* as suggested by Whitman's (1985) Japano-Koreanic reconstructions. Parallel to the voiceless velar fricative correspondence 21 for pTEA **x*, there is no evidence for a voiced palatal fricative series in Transeurasian. The fact that the correspondence between OJ *y*, MK *c* and Tg *j* and Mo *j* is only found preceding *i* or *y* supports this reconstruction.

27. STONE/ ROCK

pTg **kada:-r* 'rock, cliff' (pTg **-r* plural suffix, e.g. Evk./ Even *oron* 'tame reindeer' → *oror* 'tame reindeers', Even *buyu:n* 'wild reindeer' → *buyu:r* 'wild reindeers'; Benzing 1955: 1025-1026): Evk. *kadar*, *kadaya* '1 rock', Even *qada:r* 'high and steep rock, cliff', *qadaqu* '1', Solon *xada:r* '1', Neg. *kada:* '1', Olcha *qadalı* '1', Orok *qada* '1', Na. *qadar* 'granite, marble', Oroch *kada* '1', Ud. *kada* '1', Sibe *hadə* 'mountain peak', Ma. *xada* 'crag, small cliff, rocky summit; peak'

pMo **kada* 'rock, cliff': WMo. *qada(n)* '1 rock, cliff, crag, ravine', MMo. *qada* (SH) '1', Khal. *xad(an)* '1', Bur. *xada* 'mountain', Kalm. *xadə* 'rock, mountain', Ordos *xada(n)* '1', Dag. *xada*, *xad*, *hade* '1', Dong. *gada* '1', Mgr. *gadā* '1', Eastern Yugur *gada* '1'

The initial weakening in the Shirongolic Mongolic languages and in Eastern

Yugur is due to the following *-d-* (Nugteren 2007: 398).

30. TOOTH

pJ **pa* 'tooth': J *ha*, OJ *pa* 'tooth'; Yamato-hama (Amami) *hwa*, Asama (Amami) *haa*, Yoron (Amami) *paa*, Naze (Amami) *ha*, Yonamine (Okinawa) *paa*, Shuri (Okinawa) *ha* 'tooth, blade', Hirara (Miyako) *paa*, Irabu (Miyako) *paa*, Ishigaki (Yaeyama) *paa* (B), Hatoma (Yaeyama) *paa*, Yonaguni *ha*: (B), pR **pa* 'tooth'
pK **pal* 'tooth': K *ispal*, MK *nispal* 'tooth' < **ni* '(specific) tooth' + *s* genitive + *pal* 'tooth', K *i*, MK *·ni* 'tooth'

Although Robbeets (2005: 400) included the Tungusic forms Olcha *pali* and Nanai *paloa* in this etymology, we have left them out here because of the poor distribution of the Tungusic form and the problematic reconstruction of the final vowel in pTg **palV* 'molar'.

pMo **ari-ga* 'molar, canine, fang' (pMo **-GA* body part suffix, e.g. pMo **kil-ga* 'coarse hair'; see 31. HAIR): WMo. *araya* ~ *ariya* 'molar, tooth of a cogwheel', *aru araya* 'wisdom tooth', MMo. *ara'a* ~ *aral* 'fang', *aratai* 'river deer, predator', *ari'a sidün* 'molar; canine; fang, tusk' (MMo. *sidün* 'tooth'), Khal. *araa(n)* 'molar, tooth of a chisel', Bur. *ara:(n)* 'molar, fang, tooth of a chisel', Ordos *ara*: '1 molar, fang', *araŋga* 'an extra tooth', Kalm. *aran* '1', Dag. *ara: (šid)* 'molar, fang, tooth of a chisel', Baoan *arə*, *ariya* '1', Mgr. *ara*: '1', Eastern Yugur *ara*: '1'
pTk **ar₂(-i)g* 'molar, fang': OT *aziγ* (OUig.) 'canine tooth of animals, tusk, fang', Karakh. *aziγ*, Tk. *azi* 'molar tooth, tusk (of a boar)', Az. *azi*, Tkm. *azi*, Tat. *azaw*, Kirg. *azu*., Kaz. *azuw*, Bash. *aḍaw*, Balk. *azaw*, Kpak *azuw*, Kum. *azuw*, Uz. *ʔziq*, S-Yug. *aziγ*, Khak. *aziγ*, Shor *aziγ*, Oyrat *azu*, *azu*., Tuva *aziγ*, Tofa. *aziγ*, Yak. *ahī*., dial. *ihī*:

The segmentation of the Mongolic form is supported by the Manchu loanword *arsun* 'shoot, bud, fang', which is probably borrowed from pMo **ar-sun*, a derivation of this root for 'fang' with the Mongolic collective and body part suffix **-sUn*; see 7.
BLOOD. The Mongolic word **ariga* 'molar, canine, fang' is often combined with the root **sidün* 'tooth'. This root may derive from pMo **sil* 'tooth' followed by the same body part suffix; see etymology below.

Doerfer (1965: 55-56) proposed to derive OT *aziγ* 'canine tooth of animals, tusk, fang' from the verb *az-* 'go astray'. This analysis should be rejected because from the attestation of Tkm. *azi* 'molar tooth' with a short vowel and Tkm *a:z-* 'go astray' with a long one, we know that proto-Turkic had two distinct roots with a difference in vowel length (Tekin 1986: 144-146). Contrary to his previous idea, Doerfer (1984: 37-38) derived OT *aziγ* in the same way as Turkish *el* 'hand' can be derived from OT *elig* 'hand', suggesting a body part suffix **-ig* ~ **-iγ*. If Doerfer's analysis is correct, the original Turkic form should be pTk **ar₂(i)* 'fang', an exact match with the Mongolic root.

There is no Chuvash cognate preserved, but as borrowings of a Bulgharic form into the surrounding Uralic Mari languages, one may add Hill Mari **arə* preserved in *ar-wü* 'fang' and Meadow Mari **ora* in *ora-püj* 'fang' (*-püj*, *-wü* 'tooth'). The Hill Mari form preserves the Volga Bulghar **ari*, and Meadow Mari reflects the same word with a Chuvash diminutive suffix. We would expect **urə* and its diminutive **ur-a* in contemporary Chuvash, but the root was lost.

621 pMo **sidün* < **sil-sün* 'tooth' (pMo **-sUn* collective and body part suffix; see 7.
 622 BLOOD): MMo. *šidun*, *šidu*, *sudu*, *sidon*, *sidon*, *sidun*, *sidün* 'tooth', WMo *sidü(n)*
 623 'tooth; any projection suggestive in shape of a tooth', Khal. *šüd(en)*, Bur. *šüde(n)*,
 624 Kalm. *šüdñ*, Ordos *šüdü*, Dong. *šədu*, Bao. (*š*)*doŋ*, *hdoŋ*, Dag. *šide*, *šid*, Eastern
 625 Yugur *šdən*, *šədən*, Mgr. *šdi*, Mogol *südiin* 'tooth'
 626 pTk **sil₂* 'tooth; sharp stick': OT *sīš* '1 sharp stick', Karakh. *sīš*, MT *sīš* '1', Tk. *šiš*
 627 '1', Tat. *šeš* '1', Uigh. *šiš* '1', Az. *šiš* '1', Tkm. *čīš* '1', Khak. *səs* '1', Shor *šiš* '1'
 628 Oyrat *šiš* '1', Tuva *šiš* '1', Tofa. *šiš* '1', Kirg. *šiš* '1', Kaz. *is* '1', Bash. *šeš* '1', Balkar
 629 *šiš* '1', Karaim *šiš* '1', Kkp *is* '1', Kum. *čīš* '1', Chu. *šāl* 'tooth'

630
 631 It is appealing to compare pMo **sil* 'tooth' with proto-Bulgharic **sil₂* 'tooth'
 632 underlying in Chuvash *šāl* 'tooth'. This form corresponds to Old Turkic *sīš* 'sharp
 633 stick' and contemporary cognates. The semantic development from 'tooth' to 'sharp
 634 protrusion' is cross-linguistically well attested, for instance, in the technological
 635 meaning of 'tooth' in English and in Russian *zubets* 'a sharp protrusion', which
 636 derives from *zub* 'tooth'.

637

638

639 31. HAIR

640 pJ **kama* ~ *kami* 'hair on the head': J *kami* 'hair', OJ *kami₁* 'top hair'; Yamatohama
 641 (Amami) *xamaci* 'hair, head', Ishigaki (Yaeyama) *akamazi* ~ *ganži*, Hatoma
 642 (Yaeyama) *gamazi*, pR **kamadi* 'hair of the head'
 643 pK **kama* 'hair on the head': K *kama*, MK *ka-ma* 'the whirl of hair on the crown of
 644 one's the head'

645

646 pJ **kara* ~ *ka(r)i* 'hair': J *ke* (1.1), OJ *ke₂* 'hair' ~ *ka* 'hair' in OJ *siraka* 'white hair';
 647 Asama (Amami) *karaazinkii*, Yoron (Amami) *hurazi*, Yonamine (Okinawa) *haraazi*,
 648 Shuri (Okinawa) *karazi* (B), Irabu (Miyako) *karazi*, Hirara (Miyako) *kara^dzi*,
 649 Yonaguni *karaN* ~ *kanaN* (A), *karaNgi* 'mane', pR **karadi* 'hair of the head'
 650 pK **kal* 'hair on the head' (pK **(a/e)k* diminutive in body parts, e.g. *muluph* 'knee'
 651 → *muluphak* 'knee', *thel* 'hair' → *thelek* 'hair'): K *khal* 'hair on the head' (< pK **kal-*
 652 *Λk*) MK *kalki* 'mane' (< MK *kalk-i* with *-i* diminutive in e.g. *i* 'spotted dog',
 653 *ka:yttong-i* 'little dog dropping (said affectionately to babies)' < pK **kal-Λk-i*)

654

655 The two etymologies above indicate an alternation between pJ **kama* ~ *kami* 'hair on
 656 the head' and **kara* ~ *kari* 'hair on the head' which can be traced back to the Japano-
 657 Koreanic level because we can reconstruct both pK **kama* 'hair on the head' and
 658 **kal(a)* 'hair on the head' in proto-Koreanic.

659

660 pMo **kilga-sun* 'coarse hair': MMo. *kilqasun* (SH) '(horse's) tail hair', *qilyasun* (Muq.)
 661 'horse hair', Dag. *kilga:s* 'horse's tail hair', Khal. *ǰalgas(an)* 'hair of the mane and tail',
 662 Ordos *kilgasu(n)*, Bur. *xilga:ha(n)* 'horse hair', Brg *šalgv*: 'coarse hair', Kalm. *kilyasn*
 663 ~ *kilysn*, Eastern Yug. *ǰalǰasən* 'pubic hair', Dong. *imaŋ qaǰasun* 'goat's hair', Mog.
 664 *qilyasun* 'thick hair', Mgr. *čirGāzə* 'coarse hair'
 665 pTk **kil(-k)* 'hair': OT *kil*, Tk. *kil*, Az. *Gil*, Tkm. *Gil*, Uz. *qil*, Gag. *qil*, Uig. *qil*, S-
 666 Yug. *qil*, Khak. *xil*, Shor *qil*, Tuva *xil*, Tofa. *xil*, Yak. *kil*, Dolg. *kil* 'sealine', Tat. *qil*,
 667 Kirg. *qil*, Kaz. *qil*, Nog. *qil*, Bash. *qil*, Balkar *qil*, Karaim *qil*, Kpak *qil*, Kum. *qil*,
 668 Khalaj *qil*, Chu. *xělǰx*

669

670 The Mongolic languages reflect the collective and body part suffix **-sUn*, which is

also identified under 7. BLOOD. Since stem-final *n* drops before this suffix, I do not exclude that pMo **kilga* ultimately goes back to **kil-ka:n*, a diminutive derivation common in body part terms, e.g. MMo. *alaqa:n*, WMo. *alagan* 'palm of the hand', MMo. *elike:n*, WMo. *eligen* 'liver', WMo. *böldegen* 'testicles', etc. (Poppe 1973: 225-226).

Although most Turkic languages reflect pTk **kil*, Chuvash *xələx* indicates a final velar stop in Turkic. Mudrak (1989) argues that a root-final consonant cluster should be reconstructed to Proto-Turkic in the cases where Chuvash has an additional velar after a sonorant. The proposed rule is that PTK **-lk* yields *-l* in Common Turkic but *-ləx/-lək* in Chuvash. The bracketed *(-k)* in pTk **kil(-k)* 'hair' may well be a trace of an ancient body part suffix pTk **(i)k~-(i)k*, which is also reflected in pTk **ka:p-ik* 'bark, shell' and *top-ik* 'ankle bone, wrist bone, knee cap'; see 68. SKIN.

32. BIG

pJ **kiki-* 'to be many': OJ *kokoda* 'very much, plenty', *-da* collective in OJ *e₁ ~ e₁da* 'branch', OJ *iku* - 'how much' in some compounds ~ OJ *ikuda* 'how much, some amount', OJ *sapada* 'much, a lot', etc.

pK **kiki-* 'to be big': K *khu-*, MK **khu-* 'to be big'

pTk **kök* 'big, healthy, thick': Tk. (dial.) *kök*, Az. *kök*, Khalaj *kök*

In line with Ramsey (1993: 438; 1997), verb stems with complex initials that are tonic and monosyllabic and have minimal vowels (MK *o, u, i*) are thought to be created through the loss of a first-syllable vowel. Taking into account velar lenition (cf. 32 BIG and 55 BURN), this internal analysis justifies the reconstruction of pK **kīhi-* < **kiki-* 'big'.

The word is sparsely distributed in Turkic, but appears to have been borrowed as Khalkha *xöx* 'massive (of muscles, flesh etc.)'.

pJ **mana-* 'to be many, big', **manki-* 'to be big': J *amaneku* 'plenty', OJ *mane-* ~

amane- ~ *samane-* (B) 'to be many', *amane-* (B) 'to be extensive', Yonamine

(Okinawa) *magisen* ~ *µaagisen*, Shuri (Okinawa) *mandoon* 'to be/have much' ~

magisan (A) 'to be big', Ishigaki (Yaeyama) *maisjaan*, Hatoma (Yaeyama) *maiian*,

Yonaguni *mai-* (A) 'to be big'

pTg **mani* 'crowd': Evk. *mani* '1 crowd, flock, herd', Neg. *man* '1', Oroch *mañi* '1',

Ud. *mani* '1'; pTg **man(i)-di* 'crowdy': Olcha *mandu* '1', Orok *mandi* '1', Na. *mandu*

'1', Solon *mandê:*, *mandi:* 'very, heavily'.

pMo **man* 'big, high' in pMo **man(-)da-* ~ *mandu-* 'to become big, high': MMo.

mandu- 'to increase, develop', WMo. *mandu-* ~ *mantu-* ~ *manda-* 'to rise (sun, moon,

flame), become higher, tower, spread, develop (intr.)', *manduyur* 'big, fat', Khal.

mandgar, *mantaj* 'big, fat', Bur. *mandagar*, *mantan*, *mantagar* 'big, fat'

pTk **bani* 'big, large': Chu. *mǎnǎ*

The Old Japanese verb *samane-* 'be many' probably contains the prefix *sa-*, which Yanagida and Whitman (2009) describe as a suffix marking inactive intransitive verbs, taking non-agentive and mostly non-human subjects. The simplex verb OJ *mane-* has B register, which is incongruent with the register of the Ryukyuan verbs. However, the assignment of a verb or adjective stem to type A or B is not always straightforward (see Robbeets 2015: 132). If this is the case here, the Ryukyuan forms reflecting **manki-* 'to be big' may be a contraction of the adjective root **mana-* 'to be

720 many, big' and the de-adjectival adnominal ending *-ki, giving rise to the voiced velar
721 stop.

722 The Korean form MK *man-ho- 'be many' and the derived adverb K ma:nhi, MK
723 *man-h-i 'many' are not considered here because *man goes back to a Sino-Korean
724 adjectival noun *MAN 'myriad'.

725 The reconstruction pTg *mandi 'crowdy' can be derived from pTg *mani 'crowd'
726 and the suffix pTg *-di common in the derivation of denominal property nouns such
727 as pTg xug-di 'wide' (Olcha xugdi, Orok xugji, Na. xugji), pTg *bug-di 'variegated'
728 (Evk. bugdi, Even bu:di, Orok bugji), pTg *peg-di 'big' (Evk. hegdi), pTg *pa: 'part'
729 → pa:-di 'separately' (Evk. ha:di 'some part of', Even ha:di(n) 'some, other', Olcha
730 pa:ji, Na. pa:ji, Orok padi 'separately', Solon adĩ 'some'), pTg *loko 'thick' (Evk. luku,
731 Even no:y, Neg. loxo) → lo:g-di 'thick' (Evk. lo:gdi, Even nuqti, Neg. logdi).

732 The Mongolic forms may include the fientive suffix pMo *-dA- which derives
733 verbs with the meaning 'to become like the base' from property nouns, e.g. WMo.
734 idermeg 'chip → idermegde- 'to become chipped' (Robbeets 2015: 305). This leads to
735 the reconstruction of pMo *man 'big, high'.

736 The Turkic cognate is limited to Chuvash, the only surviving language of the
737 Western Turkic branch. If this poor distribution indicates borrowing, the word should
738 be borrowed at a prehistorical stage, when the proto-Mongolic property noun was still
739 in use. However, the root-final vowel in Chuv. mǎnǎ 'big' is not mirrored in the
740 Mongolic form and argues against borrowing.

741 Other instances in which Chuvash initial m- derives from pTk *b- when followed
742 by a nasal are among others Chuv. miŋ, Tat. biŋ 'mole on the face' (< pTk *beŋ),
743 Chuv. mǎy, OT boyin 'neck' (< pTk *bo:ñin), Chu. mǎyǎx, OT (Karakhanide) biyik
744 'moustache' (< pTk *biñik).

745
746 pTg *amban 'big': Olcha amba(n) '1 big, large; 2 very', Orok ambaramji '2', Oroch
747 amba '2', Na. amba(n) '1', Sibe amə '1', Ma. amba '1', Jur. amban (amban-an) '1',
748 amban-lar 'many'
749 pMo *amban 'big, large': WMo. amban '1 big, large; 2 minister, governor, dignitary',
750 Khal. amban '1, 2', Bur. amba '1, 2', Kalm. ambn '1, 2', Mgr. amba '2'

751

752 33. ONE

753 pK *pili- ~ *pila- 'to begin': K piloso 'for the first time (adv.)', K pilos ha- 'to start,
754 begin', piluc- 'to start having labor pains', MK pi-lus ~ pi-los 'from the beginning,
755 beginning (adv./ adj. n.)'; K -(u)s < pK *-s deverbal suffix deriving nominal adjectives
756 and adverbs, e.g. K cilki- 'to be tough' → cilkis 'firm' (Robbeets 2015: 422-423)
757 pTk *bi(:)r 'one': OT bir, Tk. bir, Tat. ber, Az. bir, Tkm. bir, Gag. bir, Uz. bir, Uig.
758 bir, S-Yug. bir, Khak. pər, Shor pir, Tuva bir, Tofa. bir, Yak. bi:r, Dolg. bi:r, bir,
759 Karaim bir ~ bīr, Kirg. bir, Kaz. bir, Nog. bir, Bash. ber, Balk. bir, Kpak bir, Salar
760 pyr, pir, pur, Kum. bir, Khalaj bi, Chu. pēr

761

762 36. HIT/BEAT

763 pJ *tuk- 'to pound, hit with force': J tuku B, OJ tuk- 'to pound, husk, beat, hit with
764 force'; Shuri (Okinawa) cicun

765 pK *t(Δ)hi- < *t(Δ)ki- 'to hit, strike': MK *thi- 'to hit, strike',

766 pTg *dug- 'to hit with force': Evk. dug- '1 to hit, beat, hammer', Even duy- '1', duy-
767 '2 to batter, hit repeatedly', Neg. dūw- ~ duy- '2', dukte- '1', Olcha. dū.čī- '2', Orok

768 *du*: 1, *du*:čī- '2', Na. *du*:- 1, *do*:čī- '2', Oroch *du*:- '1, 2', Ud. *du*:- '2', *dukte*- '1', Ma.
 769 *du*- ~ *du*:- '1, thresh', Jur. *du-ŋu-mij* '1'

770

771 According to Ramsey's law (cf. 32. BIG) the reconstruction of a minimal vowel in pK
 772 **ṭahi*- is legitimate. . The correspondence between Chinese donorwords and Korean
 773 loanwords (e.g. Ch. *cak* 'foot (measure)' is borrowed as MK ·*cah*), phonogram
 774 readings in the Kyelim Yusa (e.g. "ḥwalq-huy for MK *holk* 'earth'), elements in
 775 Paekche placenames (e.g. *tin-qak* for MK "ṭwolh 'stone'), dialectal forms (e.g. dial.
 776 *tolk* for MK "ṭwolh 'stone'), and internal doublets (e.g. MK *sipphu*- versus MK *sikpu*-
 777 'want') all suggest that velar lenition (**k* > **h*) took place at an early stage in Korean
 778 (Martin 1996: 36-37). This observation supports the reconstruction of pK **ṭaki*-.

779 Although the semantic and formal correspondences among the Japanese, Korean and
 780 Tungusic participants are very close, we cannot exclude the possibility that we are
 781 ultimately dealing with a sound symbolic formation.

782

783 37. LEG/FOOT

784 pJ **panki* 'foot, (lower) leg': J *hagi* (?2.3), OJ *pagi*₁ 'shin, shank', Yamatohama
 785 (Amami) *hagi*, Yoron (Amami) *pagi*, Shodon (Amami) *hagi* 'foot', Hirara (Miyako)
 786 *pagz̄i* 'leg', Ishigaki (Yaeyama) *paŋ* [paŋ] 'leg, foot' (B), Hateruma (Yaeyama) *paŋ*
 787 'leg, foot', Hatoma (Yaeyama) *panpisa*, Yonaguni *haŋ* 'leg', pR **pagi* 'foot, leg'; OKog
 788 **ha* 'foot' (Beckwith 2007: 111).

789 pK **pal* 'foot, leg' ~ **pal̥k* 'arm': K *pal*, MK ·*pal* 'foot, leg, paw, extremity', K *phal*,
 790 MK *polh* 'arm'

791 pTg **palgan* 'foot': Evk. *halgan* '1 foot', Even *halgen* '1', Solon *alyã* '1', Neg.

792 *xalgan* '1', Olcha *palja(n)* '1', Orok *palja(n)* '1', Nan. *palgã* 'sole', Oroch *xaga*

793 'paw', Ud. *xaga* 'paw; bear's trace'

794

795 I do not exclude that the original root was pK **pal* 'limb, leg, foot' and that **pal-k*
 796 'arm' is a diminutive derivation in the sense of 'small limb'. The pK diminutive suffix
 797 *-(a/e)*k* occurs frequently in body parts, e.g. *muluph* 'knee' → *muluphak* 'knee', *thel*
 798 'hair' *thelek* 'hair'. The reduced vowel in pK **pal* 'limb, leg, foot' may also be
 799 reflected in MK "ṭolW- 'to tread' ("ṭolp- / *pol* ·*W*[o]- < pK **pḷ*·*lḷ*·*pḷ*- 'tread') but
 800 this derivation is problematic because of the accentual discrepancy.

801

802

803 39. THIS

804 pJ **i* 'you' (derogatory second person pronoun): OJ *i* 'you' (derogatory second person
 805 pronoun)

806 pK **i* 'this' (demonstrative pronoun of the proximal plan): K *i*, MK *i* 'this'

807 (demonstrative pronoun of the proximal plan)

808 pTg **i* 'he, she' (3 SG pronoun): Ma. *i* 'he, she' ~ *i-n*- 'he, she (oblique)', *ineku* 'same,

809 this (day, month, year); likewise, in the same way', Sibe *i*: 'he, she', Jur. *in* 'he, she',

810 Solon *ini* 'his, her'

811 pMo **i* 'he, she, it' (3 SG pronoun) in **i-nu*- (3 SG-genitive) and **i-ma*- (3 SG-

812 oblique): MMo. *ino* (SH) ~ *inu* (HY, Muq) '1 his, her, its' (3 SG possessive pronoun),

813 MMo. *ima*- '2 he, she, it' (3 SG pronoun in oblique cases) 'WMo. *inu* '1', Dag *i(:)n* '1',

814 yam '2', Khal. *ń* '1', Bur. *ń* '1', Kalm. *ń* '1', Mog. *ini* ~ *ni* ~ *ne* ~ *i* '1'

815 pTk **i(-)n*- 'that' (demonstrative pronoun of the distal plan): OT *inča* 'the

816 following, in the following way' (vs. *anča* 'the previous, in the previous way'), OT

817 *intin* 'the one on the other side' (vs. *muntin* 'the one on this side'), OT *inaru* 'forward;

818 from ... on' (vs. *kerü* 'backward', OT *ina* demonstrative interjection (vs. *muna*), OT
819 *inčip* ~ *inčip* 'that having happened' (Erdal 2004: 206-207); Tkm. *inaru* 'I forward,
820 onward', Tuva *inda* 'there', *indiy* 'such', Tofa. *inda* 'there', Khalaj *ina* 'that'
821

822 As a pronoun OJ *i* is used in reference to a derogatory second person pronoun, but
823 the internal evidence for the reconstruction of pJ **i-* as a lexicalized demonstrative
824 pronoun of the proximal plan following Whitman (1985: 217, 246) and Starostin et al.
825 (2003: 577) is rather poor. It solely relies on the derivation of *ima* 'now' from the
826 demonstrative **i-* followed by *ma* 'room, space'. The comparison with Ryukyuan
827 *nama* 'now' suggests that *ma* 'room, space' is indeed the second member of the
828 compound and Ryukyuan *koma* 'here' and *kama* 'there' further suggest that the first
829 member is a demonstrative, but unfortunately there are no other lexicalizations in
830 which OJ *i-* and Ryukyuan *na-* occur as petrified proximal demonstratives.
831 The Mongolic pronouns *inu* 'his/her/its' and *anu* 'their' are the genitive forms of the
832 ancestral pronouns **i* 'he, she, it' and **a* 'they'. The same vocalic opposition between
833 singular and plural pronouns is found between **bi* 'I' vs. **ba* 'we' and **ci* 'you (SG)'
834 vs. **ta* 'you (PL)'.
835 The Japonic, Koreanic and Turkic languages bear traces of a petrified
836 demonstrative use of this pronoun. Since the development from a demonstrative into a
837 personal pronoun is well attested (e.g. French personal pronoun *il* 'he' is derived from
838 the Latin demonstrative *ille* 'that'), but the change in the other direction is not (Heine
839 & Kuteva 2002: 112-113), it is inviting to reconstruct a proximal demonstrative 'this'
840 in the ancestral language.
841

842 pJ **ki-* 'this' (demonstrative pronoun of the proximal plan): J *ko-* (1.1), OJ *ko₂-* 'this';
843 Yuwan (Amami) *ku-ri* 'this', *ku-ma* 'here', Shodon (Amami) *k'u-r*, Shuri (Okinawa) *ku-*
844 *ri* 'this person, thing', *ku-ttaa* 'these people', *ku-ma* 'here', *ku-nu* 'this', Hirara (Miyako)
845 *ku-i* 'this', Ishigaki (Yaeyama) *ku-ri* (A) 'this', Hateruma (Yaeyama) *ku-ri* 'this',
846 Dunan (Yonaguni) *khú* 'this', *khú-ma* 'here', pR **ko-* 'this' (proximal demonstrative)
847 pK **ki-* 'that' (demonstrative pronoun of the mesial plan): K *ku-*, MK *ku-* 'that'
848 pTk **kō* 'this' (demonstrative pronoun of the proximal plan): Chu. *ku* 'this', S-Yug. *gu*,
849 *go*, Salar *ku*
850

851 pJ **ə-* 'that' (demonstrative pronoun of the mesial plan): J *ore* 'I (first person
852 pronoun), OJ *ore* 'self; you derogatory 2sg', OJ *ono₂* 'self'; Shuri (Okinawa) *ʔu-ri*
853 'that person, thing', *ʔu-ttaa* 'they', *ʔm-ma* 'there', *ʔu-nu* 'that' (mesial demonstratives),
854 Amami *u-ri* 'that', *u-ma* 'there' (mesial demonstratives), Hateruma (Yaeyama) *u-ri*
855 (distal demonstrative), Yonaguni *ú* 'that', *ú-ma* 'there' (mesial demonstrative)
856 pMo **e-* 'this' (demonstrative pronoun of the proximal plan) in pMo **e-ne* (this-SG)
857 'this': MMo. *ene* (SH/HY/Muq), WMo. *ene*, Khal. *ene*, Bur. *ene*, Ordos *ene*, Kalm. *en*,
858 Dag. *ənə*, Eastern Yugur. *ene*, Mgr. *ne*, *ni*, Bao. *enə*, *nə*, Dong. *ənə*, Mog. *enə*; in pMo
859 **e-de* (this-PL) 'these': MMo. *ede* (SH/HY), WMo. *ede(n)*, Khal. *ed(en)*, Bur. *ede*,
860 Kalm. *edn*, Dag. *əd(ən)*; in pMo **e-n-de* (this-SG-LOC) 'here': MMo. *ende*
861 (SH/HY/Muq), WMo. *ende*, Khal. *end*, Bur. *ende*, Kalm. *end*, Dag. *ənd*, Eastern
862 Yugur. *ende*, Mgr. *nde*, Bao. *endə*, Dong. *əndə*, Mog. *endə*
863 pTg **e-* 'this' (demonstrative pronoun of the proximal plan): Even *ere* 'this, here', *ecin*
864 'in this way, indeed', *eduk* 'since this time, from here', *ele*: 'here', *eweski*: 'in this
865 direction', *ewgi:le*: 'here', *ewgi:n* 'here', Evk. *er*, *eri* 'this', *ewgi*: 'in this direction', *ele*:
866 'here', *eduk* 'since this time, from here', Solon *eye*: ~ *er* ~ *eri* 'this', *elur* 'these', Neg.
867 *ele*: ~ *eli*: 'in this direction, here', *ewuli*: ~ *ewule*: 'here', *ewgi:le*: ~ *ewgi:li*: 'in this

direction', *edu*: 'here, at this time', *eye* 'this', Ud. *ebede* 'like this', *eyi* 'this', Olcha *yedu* 'here', *yeji* 'with this', *yeki* 'here', *yele* 'from here', *ei* 'this', *e:wu* 'this', Na. *eyebe* ~ *yebe* 'here', *ei* 'this', Orok *edu* ~ *eyedu* 'here', *ewwe*, *eye*, *er*, *eri* 'this', *emete(n)* 'such, like this', Ma. *ere* 'this', *embici* 'or' (*-bi-ci* be-COND.CONV), *eici* 'or', Sibe *erə* 'this', Jur. *e(r)se* 'this'

In addition, Savelyev (2021 in press) reconstructs an emphatic demonstrative Proto-Turkic **e-* retained as an archaism in the Bulgharic branch: PTK **e-* + **kō* (demonstrative) > Chuv. *agâ* 'this'; PTK **e-* + **bu* (demonstrative) > Chuv. *avâ* 'that'; and PTK **e-* + **bV* (1SG pers. pron.) > Old Chuvash (18-19th Century) *a-bə* > modern Chuvash *ebə* 'I'. He assumes that the latter development is taking place in order to restore vowel harmony. A parallel development can be found in or Old Chuvash *a-zə* > Chu. *ezə* 'you sg.', OChu. *abir* > Chu. *ebir* 'we', and OChu. *azir* > Chu. *ezir* 'you pl.'.

40. FISH

pJ **(y)iwə* 'fish': J *uo* (2.1), OJ *iwo* 'fish', Yamatohama (Amami) *ʔjuu*, Asama (Amami) *ʔyuu*, Yoron (Amami) *ʔyuu*, Shodon (Amami) *ʔyuu*, Yonamine (Okinawa) *ʔyuu*, Shuri (Okinawa) *ʔiyu* (A), Irabu (Miyako) *izu*, Hirara (Miyako) *izu*, Ishigaki (Yaeyama) *idzu* [*izu*] (A), Yonaguni *iyu*, pR **iyu* 'fish'
pMo **diya-* 'fish': MMo. *jiqasun* (SH/HY) ~ *jiyasun* (Muq) '1 fish', *jixuči* 'fisher', WMo. *jiyasu(n)* '1', Khal. *zagas(an)*, Bur. *zagaha(n)*, Ordos *jayasu*, Kalm. *zaysn*, Dag. *jagas*, *jaus*, Eastern Yugur *jayasən* ~ *jəyasən*, Mgr. *ʒagəsə* ~ *ʒigəsə* ~ *jagarsi*, Bao. *zilyasun*, Dong. *ʒagəsun*

For the neutralization of pJ **yi* and *i* as OJ *i*, see 26 house.

The Mongolic deep velar consonant with velar origin WMo. *ɣ* < **g* only occurs in stems with back vowels. In intervocalic position, it converged with the deep-velar consonant with bilabial origin WMo. *ɣ* < **β* < **p*/**b* (Poppe 1955: 98). In cases like this, where *ɣ* occurs in stems with back vowels, the origin of the consonant can be either velar or labial.

43. BLACK

pMo **kara* 'black': MMo. *qara* (SH/HY/Muq), WMo. *qara* 'black, dark, obscure', Dag. *xar*, Khal. *xar*, Bur. *xara*, Ordos *xara*, Kalm. *xar*, Eastern Yugur *xara*, Mgr. *xara* ~ *qara*, Bao. *χara*, *χara*, Dong. *qara* 'black, dark', Mog. *qara:* ~ *qaro:* ~ *qarə*
pTk **kara* 'black': OT *qara*, Tk. *kara*, Tat. *qara*, Az. *ɣara*, Tkm. *ɣara*, Gag. *qara*, Uz. *qərə*, Uig. *qara*, dial. *qare*, Khak. *xara*, Shor *qara*, Tuva *qara*, Tofa. *qara*, Yak. *xara*, Dolg. *kara*, Kirg. *qara*, Kaz. *qara*, Nog. *qara*, Bash. *qara*, Balk. *qara*, Karaim *qara*, Kpak. *qara*, Salar *ɣara*, Kum. *qara*, Khalaj *qara*, Chu. *xora*

In addition to the neutral color term *xar* 'black', Dagur also has *kara* 'black (horse colour)', which is a borrowing from Tungusic (Nugteren 2007: 404). The Tungusic terms Evk. *kara:* and Ma. *qara* are specialized to denote the horse colour and so is MK *kala (mol)* 'black horse'. This observation suggests that the Tungusic and Korean terms were borrowed in the context of the spread horse-ridden pastoralism, while the Turkic and Mongolic neutral color terms are cognates.

918 45. STAND

919 pJ **tata-* 'to stand': J *tat-* (B) 'to stand, rise, run high (intr.)', OJ *tat-* 'stand, be built;
 920 leave; (time) pass, elapse', J *tate-* (B), OJ *tate-* 'to stand, erect (tr.)'; Yamatohama
 921 (Amami) *θaθuri*, Asama (Amami) *tacjun*, Yoron (Amami) *tacjun*, Shodon (Amami)
 922 *that-* 'to stand (intr.)', Yonamine (Okinawa) *tacun*, Shuri (Okinawa) *tat-* [*tacun*] (B),
 923 Irabu (Miyako) *taci* ~ *tafu*, Hirara (Miyako) *tqtsi*, Ishigaki *tasuŋ* [*tacun*], Yonaguni
 924 *tatuŋ*, pR **tat-* 'to stand (intr.)'
 925 pK **tata-* 'to run': K *tataT-*, MK *tatoT-* 'reach, attain, get to' (< *ta(h)-* 'reach' + *toT-*
 926 'run'), K *taT-*, MK *toT-* 'to run, rush'
 927
 928 pK **ila-* ~ *ili-* 'to become, come up': K *i:l-* 'to come up, spring up, rise, happen (intr.)',
 929 MK *il-/i(l)-* 'to become, come up'
 930 pTg **ili-* 'to stand up, rise': Evk. *il-* '1 stand up, 2 stand still, stop', Even *il-* '1, 2', Neg.
 931 *il-* '1, Solon *il-* '1 stand up', Oroch *ili-* '1, 2', Ud. *ili-* 'stand', Olcha *ilj-* '1, 2', Orok *ili-*
 932 '1, 2', Na. *ilj-* '1, 2', Ma. *ili-* ~ *ile-* '1,2', Sibe *ila-* ~ *ili-* '2', Jur. **ili-* 'rise'

934 46. BITE

935 pJ **kam-* 'to bite, chew': J *kamu* (B), OJ *kam-* 'to bite, gnaw, chew, masticate, eat';
 936 Yamatohama (Amami) *xamuri* 'to eat', Asama (Amami) *kamyun* 'to eat', Shuri
 937 (Okinawa) *kamun* 'to eat', Hirara *kam* 'to bite', Ishigaki *kamuŋ* 'to bite', Yonaguni
 938 *kamuŋ* 'to bite', pR **kamu-* 'to bite, eat'
 939 pMo **keme-* 'to bite' (+**-la-*/ **-li-* intensive-iterative suffix): MMo. (Muq) *kemile-*
 940 'to gnaw', WMo. *kemeli-*, *kemele-* '1 to gnaw, nibble, crack with one's teeth (tr.)',
 941 *kemki-* '2 to bite, snap with the teeth (tr.)', Khal. *ximle-*, *xemle-* '1', Bur. *ximel-* '1',
 942 Bur. (Bargu dial) *ximil-*, Kalm. *keml-* '1', Ordos *kemele-* '1', *kemxel-* '2', Bao. *kamel*,
 943 Bao. (Dahejia dial.) *kaməl-* 'to bite', Dag. *keme-* '1', Eastern Yugur *kemle-*, *kelme-* '1'
 944 pTk **kem-* 'to bite, chew (intr.)' (+ **(U)r* causative): OT (Karakh.) *kemür-* '1 to
 945 gnaw, chew (tr.)', Tk. *gemir-*, *kemir-* '1', Az. *gämir-* '1', Tkm. *gemir-* '1', Gag.
 946 *kemir-* '1', Uz. *kemir-* '1', Uig. *kemi(r)-* '1', Tat. *kimer-* '1', Khak. *kimər-* '1', Karaim
 947 *kemir-* '1', Kirg. *kemir-* '1', Kazakh *kemir-* '1', Nog. *kemir-* '1', Bash. *kimer-* '1'
 948 Balk. *kemir-*, Kpak *kemir-*, Kum. *gemir-*, Tuva *xemir-* '1', Tof. *xemir-* '1'

950 In his review of Robbeets (2005), Georg (2007: 273) objects: "Had they used more
 951 scientifically oriented sources [...] or any Mongolistic expertise for a change, they
 952 would have found the *meaning* of this verb to be 'to crack open a bone with one's
 953 teeth and to suck the marrow', which makes clear that it is derived from *kemi*
 954 'marrow of bones' and has to be eliminated from this "etymology"." However, these
 955 Mongolic forms can be analysed in two different ways: whereas Georg derives them
 956 from pMo **kemi(n)* 'marrow of the bones', I derive them from pMo **keme-* 'to bite'.
 957 Thus, I take the general meaning 'to bite' as the primary one and assume that the
 958 peripheral attestation of MMo. *kemi-le-* is a case of metathesis. Both *-la-* and *-li-* are
 959 attested as deverbal iterative-intensive suffixes in Mongolic. The intensive-iterative
 960 pMo **-la-* is frequently lexicalized in verb pairs such as WMo. *alqu-* 'to step, walk
 961 (intr.)' *alqula-* 'to march, walk with quick steps (intr.)', WMo. *seji-* 'to butt with the
 962 horns' → *sejile-* 'to butt repeatedly with the horns', WMo. *ili-* 'to caress, stroke' →
 963 *ilile-* 'to touch or stroke repeatedly'. However, the suffix **-la-* in Georg's analysis
 964 may also be the denominal verb suffix, e.g. WMo. *šibayun* 'bird' → *šibayu-la-* 'hunt
 965 birds'. The suffix **-ki* in WMo. *kemki-* 'to bite, snap with the teeth (tr.)' can be
 966 explained either as a deverbal transitivizer or as a denominal verb formant; the second
 967 explanation based on Georg's analysis, is more problematic, however, since **-ki-* is a

grammaticalized form of MMo. *ki-* ‘to make’ with the meaning ‘to make the verb base’, e.g. WMo. *sayad* ‘hindrance’ → *sayadki-* ‘to hinder’. The expected meaning of the derived verb would thus be ‘to make marrow’ rather than ‘to bite’. In the present analysis, WMo. *kemki-* ‘to bite, snap with the teeth (tr.)’ reflects a deverbal transitivizer pMo **-ki*, lexicalized in verb pairs such as WMo. *kel-* ‘to be strung (as pearls) (intr.)’ → *kelki-* ‘to string pearls (tr.)’. Furthermore, the final vowel in all contemporary attestations reflects *-e-* rather than *-i-*, which suggests that **keme-* is the primary form.⁵

According to Clauson (1972: 723), the Turkic transitive verbs meaning ‘to gnaw, chew’ can be derived as a causative of pTk **kem-*. The causative suffix **(U)r* is lexicalized in Turkic verb pairs such as OTk. *ač-* ‘to be hungry’ → *ačur-* ‘to starve (tr.)’, OTk. *keč-* ‘to be late (intr.)’ → *kečür-* ‘to delay (tr.)’ (Erdal 1991: 710-726).

pK **mili-* ‘to bite (tr.)’: K *mul-*, MK (‘)mu(l)-/ *mu-lu-* ‘to bite (tr.)’

pTg **mödö-* ‘to gnaw, nibble, bite’: Evk. *mudu-* ~ *modo-* ‘1 to gnaw, nibble, bite, 2 to tear with the teeth’, Even *mud-* ‘1, 2, to bite to death’, Orok *mudji-* ‘1’

The reconstruction of the vowel pTg **ö* in Tungusic is based on the *u~o* alternation in Evenki, even if the vowel *u* in Even and Orok suggests the reconstruction of pTg **u* in this from; see footnote 2.

50. WHAT?

pJ **ka* (wh-interrogative particle): J *ka* interrogative particle in yes/no and wh-questions, OJ *ka* interrogative particle used in wh-questions; Shuri (Okinawa) *ga* wh-interrogative particle, Tarama (Miyako) *ga* wh-interrogative particle, Yonaguni *nga* wh-interrogative particle, pR **ga* wh-interrogative particle

pK **ka* (interrogative particle): K *ka* interrogative particle in yes/no and wh-questions, MK *·ka* interrogative particle mainly used in yes/no questions

pTg **xa* (wh-interrogative pronoun) in pTg **xa-i* ‘who, which one’: Evk. *i:*, Even *i:*, Solon *i:*, Ud. *i:*, Olcha *xay*, Na. *xay*, Ma. *ay*, Sibe *ai*; in pTg **xa-ba-siki*: ‘where to’: Evk. *awaski:*, Even *awaski:* ~ *awuski:*, Neg. *awaski*, Oroch *awasi*, Olcha *xawasi*, Na. *xaosi*, Ma. *absi*; in pTg **xa-li*: ‘when’: Na. *xali*, Ud. *ali*, Neg. *ali*, Evk. *ali:*; in pTg **xa-du*: ‘how much’: Evk. *adi:*, Even. *adi*: Na. *xadu*, Olcha *xadu*, Ud. *adi*, Neg. *adi*; pTg **xa-son* ‘how big, how many’: Evk. *asun*, Even *asun*, Neg *asun*, Na. *xasun*, Olcha *xasun* and in pTg **xa-oni* ‘how’: Evk. *o:n*, Even *o:n* Na. *honi*, Olcha *xon*, Ud. *ono* (Benzing 1955a: 114)

pTk **ka* (wh-interrogative pronoun) in OT *kanī* ‘where?’ (< **ka*-ACC), *kaŋa* ‘to which place’ (< **ka*-oblique-DAT), *kanta* ‘where’ (< **ka*-oblique-LOC), *kantan* ‘from where’ (< **ka*-oblique-ABL), *kanča* ‘how much, how far, by which way’ (< **ka*-oblique-equative), *kač* ‘how much’, *kañu* / *kayu* ‘1 which’, Tkm. *qay* ‘1’, Uz. *qay* ‘1’, Uig. *qay* ‘1’, Tat. *qay* ‘1’, Kirg. *qay* ‘1’, Bash. (dial.) *qay* ‘1’, Tuva *qayi* ‘1’, Tofa. *qai* ‘1’, Kaz. *qay* ‘1’, Yak. *xaya* ‘1’, Dolg. *kaya* ‘1’, Khalaj *qa:yan* ‘whereto’ (< **ka*-DAT + *yan* ‘side’)

Vovin (2008: 128-129) rejects the comparison of the interrogative markers MK *·ka* and OJ *ka*, noting the fact that MK *·ka* marked yes/no questions, whereas the Old

⁵ Dagur has a verb *kəməy-* ‘to ruminate, chew the cud’, which reflects a final high front vowel. However, in view of the meaning of this form, it is probably a reflex of pMo. **kebi-* ‘to chew, to ruminate’ (Nugteren 2011: 407.)

Japanese *ka* usually marked wh-questions. It can be objected, however, that there are instances in which MK *·ka* does marked wh-questions, e.g. MK *ˈnwu-lul ka·colpi-lq·ka* [who-ACC compare-ADN INT] 'Whom would one compare [with him]?' (Martin 1992: 863) as well as instances in which OJ *ka* marked yes/no questions, e.g. OJ *tano₁si-ku mo₂ ar-u ka* [delightful-INF PT exist-ADN INT] 'Isn't it delightful?' (KK 54; Vovin 2009: 1224). In both Old Japanese and Middle Korean the interrogative *ka* was preceded by a noun or adnominal form of the verb and the Korean form does not display vowel harmony. Therefore, the Japanese and Korean particle seems to go back to an original independent interrogative pronoun. The pronominal origin of the interrogative marker is further supported by the observation that the Old Japanese interrogative is not restricted to sentence-final position, e.g. OJ *iku yo₁ ka ne-t-uru* [how.many night INT sleep-PERF-PCP] 'How many nights have we slept?' (KK 25; Vovin 2009a: 1220). In sum, the seemingly contrastive situation in Old Japanese and Middle Korean may well be the result of a historical change and does not stand in the way of tracing the origin of the interrogative markers back to an original interrogative pronoun in the ancestral language. This observation makes the comparison with the Altaic interrogative pronoun even more plausible.

It can be noted that the Mongolic languages share an interrogative root pMo **ka* 'where?': MMo. *qa'a ~ qa:na* 'where?', WMo. *qa ~ qana ~ qamiya ~ qaya* 'where' (WMo. -*GA* derives local and temporal adverbs; -*A* dative-locative), Khal *xaa*, Bur. *xaa, xaana*, Kalm. *xa ~ xama* (-*ma* indefinite in **yama* 'something', *kemüge* 'something'), Dag *xa:nə*, Eastern Yugur *xana*, Bao *xalə ~ xali ~ hala*, Dong *qala*, Mog. *qana*. However, as the semantics remain restricted to the local interrogative, I suspect that the forms may represent early borrowings from Turkic. From the functional viewpoint, the general interrogative pronoun pMo **ke* is a much more plausible cognate, but here the vowel does not fit. The interrogative is reflected as pMo **ke* 'what' in MMo. *ja'u ke* 'whatsoever'; pMo **ke-n* 'who (SG)', **ke-d* 'who (PL)' in MMo. *ken* (ket PL), WMo *ken* (ked PL), Dag *keŋ*, Mgr. *kän*, Mog. *ken*, Urd. *ken*, Kalm. *ken*, Khal, Bur. *xeŋ*; pMo **ke-r* 'how'; pMo. **ke-li*: 'when?' and pMo. **ke-gün* 'something' in Kalm. *kü:n*, Urd *küm*.

51. CHILD

pJ **wara-pa* 'child': J *warawa* (3.5b), OJ *warapa* 'child'; Yamatohama (Amami) *warabi*, Asama (Amami) *warëë*, Yoron (Amami) *warabi*, Shodon *warabi*, Shuri *warabi*, Nakijin (Okinawa) *warabii*, Irabu (Miyako) *yarabi*, Ishigaki *yarabi ~ meerabi*, Hatoma (Yaeyama) *yarabi*, Yonaguni *myaarabi*, pR **wara-be* 'children' ~ *me-wara-be* 'girl-child'

pTk **ba:la ~ ba:la-pan* 'young animal, child': OT (Karakh.) *bala* '1 young animal, nestling, 2 child', Tk. *bala* '1, 2', Az. *bala, balay* '1, 2', Tkm. *ba:la* '1, 2', Uz. *bōla* '1, 2', *palapan* (dial.) '1', Uig. *bala* '1, 2', Tat. *bala* '1, 2', Karaim *bala* '2', Nog. *bala* '2', Bash. *bala* '2', *belekej* 'small', Balk. *bala* '2', Kpak *bala* '2', Salar *bala* '1, 2', Kum. *bala* '1, 2', Kirg. *bala* '2', Kaz. *bala* '2', *balapan* '1', S-Yug. *mila, mle* '2', Khak. *pala* '2', Shor *pala* '2', Khalaj *bala* '2'

All terms for 'child' participating in this etymology are not kinship terms but refer to a certain age-group. In the Ryukyuan languages, -*bi* < *pR **-be* is a collective suffix for persons, e.g. Chabana (Yoron) *wuhii-bi* 'brother' (Thorpe 1983: 269).

pTg **puri* 'child, offspring': Even *hurel ~ urul ~ urel* '1 child, infant, 2 grandchild, 3 younger brother or sister', *hurken ~ urke:n ~ hurkan* '4 adolescent, 5 young (person),

1064 6 single (person)', Evk. *hurkan* ~ *urkan* ~ *urke:n* ~ *hurke:ke:n*, *urkeke:n* '6, 7 young
 1065 boy, 8 son', Solon *ukkēxē, urkēxē* '4, 5, 7, 8', *uril* '1, 7, 8', Neg. *xujil* '1, 8, 9 daughter',
 1066 Olcha *purul* '1, 8, 9', Orok *puril* '1, 8, 9', *puriye* ~ *pure:* '5', Na. *puril* '1, 8, 9', *puri* ~
 1067 *furi* 'family', Oroch *xi:* 'children, descendants'
 1068 pMo **püre* 'offspring, seed, fruit': MMo. *xüre* (HY), *hüren* (Muq) '1 offspring,
 1069 descendant, seed, fruit, result', WMo. *üre* '1', Dag. *xur*, *hure* '1', Khal. *ür* '1', Bur. *üre*
 1070 '1', Ordos *ür*, *üre* '1', Kalm. *ürn* 'child, offspring, seed, fruit, result', Eastern Yugur
 1071 *hure* '1', Mgr. *fure:*, *fure*, *furie:*, *xuru*, *xure:*, *xurie*, Bao. *fure*, *fəre*, Dong. *fure*

1072
 1073 The final liquid in the Tungusic forms is a petrified plural suffix pTg **-l*, e.g., Evk.
 1074 *ɲa:le* 'hand' → *ɲa:le-l* 'hands', Neg. *oyo* 'reindeer' → *oyo-l* 'reindeers', Even *adal* 'net'
 1075 → *adal-al* 'nets' (Benzing 1955a: 1023-1026). The Tungusic forms in **-kan* reflect a
 1076 lexicalized diminutive suffix pTg **-ka:n*, e.g. Even *ɲa:l-ka:n* 'small hand', Orok *ke:či-*
 1077 *ke* 'puppy', Na. *toke-kan* 'small sleigh', etc. The Manchu form *fursun* 'breed' is
 1078 probably a borrowing from Mongolic as **-sUn* is a collective and body part suffix in
 1079 Mongolic (see 7. BLOOD) but not in Manchu (Rozycki 1994: 83).

1080 1081 53. GIVE

1082 pJ **tama-* 'to give': J *tamaw-* (B), OJ *tamap-* 'to give, bestow on', J *tamawar-* (B) 'to
 1083 be given', J *tabe-* (B) 'to eat', OJ *tab-* 'to deign to give', OJ *tabar-* 'to humbly receive,
 1084 give (to me)'; Yamatohama (Amami) *thaboruri* 'be given from above (only used as an
 1085 auxiliary)', Asama (Amami) *taboojui* 'be given from above', Yoron (Amami) *tabeN*,
 1086 *tabaw-* 'be given from above', Nakijin (Okinawa) *taboori* 'please (give me)
 1087 (imperative only)', Shuri (Okinawa) *tabir-* 'give', Irabu (Miyako) *tabori* 'please (give
 1088 me) (imperative only)', Ishigaki (Yaeyama) *tabooruN* 'be given from above', Hatoma
 1089 (Yaeyama) *tabooruN* 'be given from above'.

1090 pTg *tama-* 'to pay': Evk. *tama-* '1 to pay', Even *tam-* '1', Neg. *tama-* '1', Solon *tama-*
 1091 '1', Olcha *tama-* '1', Orok *tama-* '1', Oroch *tama-* '1', Ud. *tama-* '1', Na. *tamã* 'price'

1092
 1093 pJ **(w)ura-* 'to sell': J *ur-* (A), OJ *ur-* 'to sell', Naze (Amami) *uryuŋ* 'to sell', Shuri
 1094 (Okinawa) *uyuyŋ*, Nakasuji (Miyako) *ɣvi(i)*, Yonaguni *uruŋ*, pR **uri-* 'to sell'
 1095 pK **paɬa-ka-* 'to sell': K *phal-*, MK *pho(l)-* / *pho-l(o)-* 'to sell'
 1096 pTg **bu:-* 'to give': Evk. *bu:-*, Even *bö:-*, Neg. *bu:-*, Solon *bu:-*, Olcha *bu:wu-* Orok
 1097 *bu:-*, Na. *bu:-*, Oroch *bu:-*, Ud. *bu:-*, Sibe *bu-*, Ma. *bu-*

1098 The early drop of the initial labial glide before the rounded u in Japonic may have
 1099 blocked conditioning factor 39b, which would be expected to yield Japonic ***wauru-*
 1100 > ***waru-*. Note however, that Martin (1996: 76) suggests that pJ **wara-* 'to split,
 1101 break' is related to pJ **(w)ura-* 'to sell', which would be in line with 39b.

1102 The Koreanic form involves a deverbal inchoative suffix pK **-ki-* ~ *ka* (Robbeets
 1103 2015: 256-258). The suffix derives verb pairs such as pK **uli-* 'to cry' in MK **wul-* 'to
 1104 cry (intr.)' → MK *wulG-* 'to howl, roar, shout loudly (intr.)' (< pK *uli-yi-* < **uli-ki-*)
 1105 and MK *nul-* 'to increase, be(come) longer, be better' → MK *nulk-* 'to be old, grow
 1106 old (intr.)' (< pK **nil-ki-*).

1107 Similar to the etymologies under 4 WATER, 79 BLOW and 80 WOOD an open
 1108 monosyllabic form with length in Tungusic corresponds to a disyllabic form with a
 1109 liquid onset in the second syllable in the other Transeurasian languages. This is
 1110 indicative of liquid loss in Tungusic.

1111 1112 54. NEW

1113 pJ **ara-* ‘to be new, pure’: J *arai* (A) ‘to be rough, natural, crude’, OJ *ara-* ‘to be
 1114 rough, fresh, new’, J *ara* ‘new, fresh’, J *arau* (A), OJ *arap-* ‘to wash’, Yamatohama
 1115 (Amami) *Parauri* ‘to wash’, Asama (Amami) *Paroyun* ‘to wash’, Yoron (Amami) *aren*
 1116 ‘to wash’, Yonamine (Okinawa) *Paren* ‘to wash’, Shuri (Okinawa) *Parayun* ‘to wash’,
 1117 Irabu (Miyako) *aroo* ‘to wash’, Hirara (Miyako) *aroo* ‘to wash’, Ishigaki (Yaeyama)
 1118 *a:ro: ŋ* [*aaroon*] ‘to wash’, Hatoma (Yaeyama) *araun* ‘to wash’, Yonaguni *ara-* ‘to be
 1119 new’, *aruŋ* ‘to wash’, pR **ara-* ‘to be new’, **ara-wu-* ‘to wash’
 1120 pMo **ari-* ‘to be pure: WMo. *ariy* ‘pure, clear’, *ariyun* ‘1 clean, pure, clear; purity’
 1121 (WMo *-yun* / *-gün* deverbial noun deriving quality words (Poppe 1954: 46)), *arči-* ‘2
 1122 to wipe, clean, erase’, MMo. *ariun* ‘1’, *arči-* ‘2’, *aril-* ‘3 to be(come) clear, clear up’,
 1123 *arilqa-* ‘2’, Khal. *ariun* ‘1’, *arči-* ‘2’, *aril-* ‘3’, Bur. *arūn* ‘1’, *arša-* ‘2’, Kalm. *ärü:n*
 1124 ‘1’, *arč-* ‘2’, Ordos *aru:n* ‘1’, *arci-* ‘2’, Dong. *arun* ‘1’, *ači-* ‘2’, Bao. *aruŋ* ‘1’, Dag.
 1125 *aru:n* ‘1’, *arči-* ‘2’, Mgr. *arin* ‘1’, Mgr. *arili-* ‘3’, Mgr. *ariŋge* ‘cleanly’, *arire-* ‘to
 1126 become pure’, Mogol *oru:n* ‘1’, Eastern Yugur *aru:n* ‘1’
 1127 pTk **arī-* ‘to be(come) pure: OTk. *arī-* ‘1 to be(come) clean, pure’, Az. (dial.) *arī* ‘2’,
 1128 *arīt-* ‘3’, Tkm. *arīg* ‘2’, *art-* ‘3’, Tk. *arī* ‘2 clean, pure’, *art-* ‘3 to clean, purify’, Osm.
 1129 *arīt-* ‘to wipe’, Uz. (dial.) *ari-* ‘1’, Uig. *eriq* ‘2’, Tat. *aru* ‘2’, Kirg. *aru:* ‘2’, Kaz. *aru* ‘2’,
 1130 Bash. *ariw* ‘2’, Balk. *ariw* ‘2’, Kpak. *aruw* ‘2’, S-Yug *ariy* ‘2’, Tuva *ariy* ‘2’, *arīt-* ‘3’,
 1131 Khak. *ariy* ‘2’, Yakut: *ira:s* ‘2’, *irit-* ‘sort out small fruit’, Dolg. *iras* ‘2’, Khalaj *ariy* ‘2’,
 1132 *arut-* ‘3’, Chu. *irā* ‘good’, *irt-* ‘sort out small fruit, take away the inner part of a tree’
 1133

1134 The intensive-iterative suffix pJ **-pa-* (Robbeets 2015: 294) is assumed to derive the
 1135 verb *arau* A ‘to wash’ from a verbal adjective with the meaning ‘to be clean’.

1136 In his review of Robbeets 2005, Kara (2007: 96) suggests that the Mongolic forms
 1137 in this etymology should be treated as early copies from Turkic. He does not provide
 1138 a motivation for this copying scenario, but Marcel Erdal and Hans Nugteren (pc.)
 1139 argue that the suffix *-l-* reconstructed in *aril-* is foreign to Mongolic since the
 1140 commonly attested suffix WMo. *-l-* derives transitive verbs rather than intransitives as
 1141 in this case. However, Poppe (1954: 61, 66 vs. 64) distinguishes two different
 1142 homophonous suffixes WMo. *-l-*: one is a causative or transitive suffix (e.g. WMo.
 1143 *uyu-* ‘drink’ → *uyul-* ‘to give to drink’), while the other is an intensive-iterative suffix
 1144 (e.g. WMo. *dusu-* ‘fall (of drops)’ → *dusul-* ‘to drip’) that can derive transitive as
 1145 well as intransitive verbs. The latter suffix also lexicalized in a number of verb pairs
 1146 granting an inchoative meaning to natural processes, e.g. WMo. *yasi-yun* ‘bitter’ →
 1147 *yasal-* ‘to lament, mourn’, *öte-gü* ‘grey’ → *ötel-* ‘to become old’ (Ramstedt 1912: 7-
 1148 8). It is interesting to observe that, although the transitive suffix practically
 1149 disappeared in Monguor (De Smedt & Mostaert 1964: 93-94 note), the intensive
 1150 suffix still surfaces as Mgr. *-li-* (De Smedt & Mostaert 1964: 148) in e.g. Mgr. *yasen*
 1151 ‘bitter’ → *yaseli-* ‘to become bitter’, *sači-* ‘to sow’ → *sačili-* ‘to scatter, disperse’ and
 1152 *arin* ‘clear, pure’ → *arili-* ‘to clear up (intr.)’. The Monguor forms Mgr. *ariŋge*
 1153 ‘cleanly’ and *arire-* ‘become pure’ are relevant because they can be segmented in a
 1154 root **ari-* ‘to be clean’ and native suffixes. The form Mgr. *arire-* ‘become pure’
 1155 represents the equipollent anticausative counterpart of the causative *arči-* ‘wipe,
 1156 clean,’ which is well represented elsewhere in Mongolic (Robbeets 2015: 288). Given
 1157 the presence of the Japanese cognate and the native origin of the suffix *-l-* in MMo.
 1158 *aril-*, these forms are more likely to have derived from inheritance than from code-
 1159 copying.

1160
 1161 55. BURN

1162 pJ **tak-* ‘to burn, boil (tr.)’: J *taku* (A), OJ *tak-* ‘to burn, boil, cook (tr.)’, Yoron
 1163 (Amami) *takjuN* ‘boil (rice/food), make (alcohol/salt)’, *yakjuN* ‘burn, roast’, Shuri
 1164 (Okinawa) *tak-* ‘to burn’, Hirara (Miyako) *yak’i*, Ishigaki (Yaeyama) *yakuŋ*, Hatoma
 1165 (Yaeyama) *takuN* ‘boil (gruel/glue)’, *yakuN* ‘fry (including deepfry)’, Yonaguni *daguŋ*,
 1166 pR **tak-* ‘to burn, boil’
 1167 pK **tʌhʌ-* < pK **takʌ-* ‘to burn (intr.)’: MK *·tho-* ‘to burn, be on fire (intr.)’, MK
 1168 *ta·hi-*, K *ttay-* ‘to make (fire), heat (with fire) (tr.)’ (MK *-i* causative-passive),
 1169 pTk **ya-k-* ‘to ignite, burn (tr.)’: OT (Karakh.) *yak-* ‘1 to ignite, burn (tr.)’, Tk. *yaq-*
 1170 ‘1’, Tkm. *yaq-* ‘1’, Gag. *yaq-* ‘1’, Az. *yax-* ‘1’, Uz. *yʊq-* ‘1’, Uig. *yaq-* ‘1’, Kirg. *žaq-* ‘1’,
 1171 Kaz. *žaq-* ‘1’, Bash. *yaq-* ‘1’, Nog. *yaq-* ‘1’, Tat. *yay-* ‘1’, Karaim *yaq-* ‘1’, Kum. *yaq-* ‘1’,
 1172 Kpak *žaq-* ‘1’, Yak. *saq-*, Tofa. *ča’q-* ‘to produce fire’, Khalaj *ya:q-* ‘1’, Chu. *šot-* ‘1’
 1173

1174 According to Ramsey’s law (cf. 32. BIG, 36. HIT/BEAT), the original root
 1175 underlying MK *·tho-* ‘to burn, be on fire (intr.)’ can be reconstructed as pK **tʌhʌ-* ‘to
 1176 burn’. In line with conditioning factor 32b, pK **tʌhʌ-* ‘to burn’ can be assumed to be
 1177 an assimilation to the second syllable vowel from pK **tahʌ-*. The transitive verb MK
 1178 *ta·hi-* ‘make (fire)’ can be derived from this root by adding a causative-passive suffix
 1179 *-i-*. As expected, the addition of a final suffix *-i-* blocks the weakening process of the
 1180 vowels. Velar lenition supports the reconstruction of pK **takʌ-* ‘to burn’. The
 1181 correspondence between Chinese donorwords and Korean loanwords (e.g. Ch. *cak*
 1182 ‘foot (measure)’ is borrowed as MK *·cah*), phonogram readings in the Kyelim Yusa
 1183 (e.g. *hwalq-huy* for MK *holk* ‘earth’), elements in Paekche placenames (e.g. *tin-qak*
 1184 for MK *twolh* ‘stone’), dialectal forms (e.g. dial. *tolk* for MK *twolh* ‘stone’), and
 1185 internal doublets (e.g. MK *siphu-* versus MK *sikpu-* ‘want’) all suggest that velar
 1186 lenition (**k* > **h*) took place at an early stage in Korean (Martin 1996: 36-37).

1187 The correspondence with the Turkic verbs may of course be coincidental. Indeed,
 1188 the proto-Turkic verb **yak-* ‘to ignite (tr.)’ may represent a complex form, while the
 1189 inclusion of the Turkic form would lead us to expect register B rather than A in
 1190 Japanese. The attestation of OTk *yal-* ‘to blaze, burn, shine (intr.)’ and OTk *yan-* ‘to
 1191 burn, blaze up (intr.)’ suggests that these verbs are morphologically complex. The
 1192 underlying verb being pTk **ya-* ‘to burn (tr.)’, OTk *yal-* ‘to blaze, burn, shine (intr.)’
 1193 would represent a derivation with a passive suffix pTk **(X)l-* (Erdal 1991: 651-693),
 1194 OTk *yan-* ‘to burn, blaze up (intr.)’ a derivation with an anticausative suffix pTk **(X)n-*
 1195 (Erdal 1991: 584-638) and, Karakh. *yak-* ‘to ignite, burn (tr.)’ with an
 1196 inchoative suffix pTk **(X)k-* (Erdal 1991: 645-650). This inchoative suffix can be
 1197 traced back to proto-Transeurasian (Robbeets 2015: 255-266) Ultimately, Japanese
 1198 and Korean may only have inherited the Transeurasian complex inchoative form.
 1199

1200 56. NOT

1201 pJ **ana-* negative verb: J *na-*, OJ *na-* ‘not to exist’, OJ *-an-* negative suffix; Hirara
 1202 *na:ŋ*, Ishigaku *ne:nu*, Yonaguni *minuŋ*, pR **n(i)ano* ‘not to exist’, Yuwan (Amami) *-*
 1203 *aN*, Yonamine (Okinawa) *-aN*, Shuri (Okinawa) *-aN*, Irabu (Miyako) *-(a)n-*, Tarama
 1204 (Miyako) *-n*, Hateruma (Yaeyama) *-an-*, Ishigaki (Yaeyama) *-anu-*, Hatoma
 1205 (Yaeyama) *-anu-*, Yonaguni *-anu-*, pR **-an(u)-* negative suffix
 1206 pK **an-* negative verb: MK *a·ni* verbal negator (< pK **an-* negative verb + pK **-i*
 1207 deverbial adverbializer), K *anh-*, MK *anh-* ‘not to be/ do’ (< *ani* + MK *ho-*, K *ha-* ‘to
 1208 do, be’)
 1209 pTg **a:na-* negative auxiliary: Even *a:n ~ a:ŋ* (< pTg **a:na-* + **-xA* resultative
 1210 nominalizer), *ac* (< pTg **a:na-* + **-c* perfective nominalizer), *acca* (< pTg **a:na-* +
 1211 **-ca* resultative nominalizer) negative noun, Evk. *a:cin*, Neg *a:cin* (< pTg **a:na-* + **-*

1212 *cin* resultative nominalizer) negative noun, Solon *ašĩ* negative noun Ud. *anci* (< pTg
 1213 **a:na-* + **-cin* resultative nominalizer) negative noun, *ata-* (< pTg **a:na-* + **-ta-*
 1214 subjunctive) subjunctive negative verb, Na. *ana* ~ *ana:* (< pTg **a:na-* + **-xA*
 1215 resultative nominalizer) negative noun, Oroch *ana*, Olcha *ana*, Orok *ana* ~ *anaya*
 1216 negative noun, Ma. *aku:*, Sibe *aku* negative noun (< pTg **a:na-* + **-xU* resultative
 1217 nominalizer), Jur. *a-ċwi*, *o-ha* < **oka* 'no, not'
 1218 pTk **an-* 'not to be(come), be unbecoming': OTk. *anīg* ~ *anīg* ~ *ayīg* 'evil, sin, bad;
 1219 badly, extremely' (OTk. *-(X)g* deverbial noun suffix), Yak. *añĩ*, Dolg. *añĩ*
 1220
 1221 pTg **e-* negative verb: Evk. *e-* independent negative verb and auxiliary, Even *e-*, Neg.
 1222 *e-*, Sol. *e-* Na. *e-*, Olcha *e-*, Orok *e-*, Ud. *e-*, Oroch *e-* negative auxiliary, Jur. *ei-xe*,
 1223 *esi(n)* negative noun
 1224 pMo **e-* negative verb in **e-se* (pMo **-sA* resultative nominalizer): MMo *ese*, WMo
 1225 *ese* ~ *ise* preposed negative adverb, Khal. *es*, Bur. *ehe*, Kalm. *es*, Ordos *ese*, Dong.
 1226 *ese*, Bao. *ese*, Dag. *es*, Mgr. *sə*, *si:*, Mog. *sa*, *sə*, *sō*
 1227 pTk **e-* negative verb in pTk **e-ŋ* negative-imperative: OT (Kharakh.) *eŋ* 'no, not',
 1228 Chu. *an* prohibitive
 1229
 1230 See Robbeets (2015: 174-205) for an extensive description of the diachrony of
 1231 negation across the Transeurasian languages. The negative particles Mgr *bi:*
 1232 (**bu/*bū*) 'don't', *li:* 'not' (**ülü*), *si:* 'not' (**ese*) all replaced their original vowels by an
 1233 irregular *i:*, probably due to group analogy.
 1234
 1235 58. KNOW
 1236 pK **ala-* 'to know': K *a:l-*, MK *al-/ˈa(l)-* 'to know'
 1237 pTg **ala-* 'make known, know': Evk. *alawu:-* '1 to teach, explain' (Evk. *-w-*
 1238 causative), Neg. *alačĩ-* 'to offer as sacrifice' (Neg. *-čĩ-* < pTg **-ti-* causative), Olcha
 1239 *alau-* '1, be responsible', Na. *alo:sĩ-* '1', Orok *alau-* '1', Oroch *alū-* '2 to tell', *alaw-* '1',
 1240 Ud. *alau-* '1' (Ud. *-u-* causative), Ma. *ala-* 'to tell', Sibe *alə-* 'to tell, to inform', Jur.
 1241 *alawa-gi* 'royal decree'
 1242
 1243 62. HEAR
 1244 pJ **uka-* 'to receive, perceive, hear': J *uke-* (B), OJ *uke₂-* 'receive', J *uketamawar-* (B),
 1245 OJ *uke₂tamapar-* 'to humbly listen, hear, receive' (OJ *tamapar-* - 'humbly receive, be
 1246 given'); Shodon *uk'īyūm*, Shuri *ukiyuŋ*, Yonaha (Miyako) *ukīi*, Ishigaki (Yaeyama)
 1247 *uki(ru)ŋ* 'to receive'
 1248 pMo **uka-* 'to understand, think': MMo. *uqa-* (HY, SH) '1 to understand, think', *uqa*
 1249 (SH) ~ *uxa'an* (HY) '2 mind', WMo. *uqa-* '1', *uqaya(n)* '2', Dag. *ogo*, *owo* 'brain', *uka:*
 1250 ~ *uha:n* '2', Khal. *uxa-* '1'; *uxa:* '2', Bur. *uxa-* '1', *uxā(n)* '2', Kalm. *uxə-* '1', *uxa:n* '2',
 1251 Ordos *uxa:* ~ *uxa:n* '2', Eastern Yugur *χGua-tu* '2'
 1252 pTk **uk-* 'to hear, understand': OT *uq-* '1 understand', Az. (dial.) *uyuz* 'knowing
 1253 much', Uz. *uq-* '1', Uig. *uq-* '1', Tat. (dial.) *ux-* '2 hear', Kirg. *uq-* '2', Kaz. *uyin-* '1',
 1254 Kpak. *uq-* '1', Khak. *ux-* '1, 2', Shor *uq-* '1', Tuva *uy-* '1'
 1255
 1256 In spite of the incongruent register, the verb *ukagaw-* (A) 'peep through, spy, watch,
 1257 infer, visit, inquire, hear' is probably a complex verb derived from pJ **uka-* 'receive,
 1258 hear, listen' and pJ **kapa-* 'cross, exchange, mutually do'. These roots are reflected in
 1259 J *uke-* (B) 'receive' and *kaw-* 'buy, cross, exchange, mutually do'. In addition to the
 1260 compound *uketamawaru* 'humbly receive, listen, hear', this verb witnesses to the
 1261 original semantic component 'hear'.

1262 The lexicon of the Transeurasian languages tends to be verb-based: nouns tend to
1263 be derived from verbs, rather than the other way around, e.g., pMo **uka-* 'to
1264 understand, think' -> *uka-gan* 'mind' or pTg **xökö-* 'to suck' -> **xökö-n* 'breast'.
1265 When a deverbal noun is shared but the underlying verb is not, borrowing is the most
1266 parsimonious explanation. This is the case for Tungusic forms for 'mind' such as Evk.
1267 *uka:n*, that cannot be derived from a Tungusic verb 'to understand'.
1268
1269 63. SOIL
1270 pJ **tuti* < **tutu-i* 'soil, ground': J *tuti* (2.3), OJ *tuti* 'earth, soil'; Kin (Okinawa) *sicii*
1271 (B), Hirara (Miyako) *^dzī:* 'ground', *dzī:* (B), Hatoma (Yaeyama) *sici* (B), Ishigaki
1272 (Yaeyama) *cīcī* (B), Yonaguni *di:* (B), pR **zi* 'ground'
1273 pK **tuti* 'bank, ridge, ground': K *tutek* ~ *tuteng* ~ *tuleng* (-*enh* 'dike') 'embankment,
1274 levee, bank around a field', MK *twu-ten* ~ *twutul*, *twu-tulk* 'bank, ridge, levee, mound,
1275 low hill'
1276
1277 Vovin (2008: 124) argues that the Japanese form is a loanword from Korean because
1278 "there is only one isolated attestation in Ryukyuan: Ishigaki *tsitsi* 'earth'". However,
1279 the forms for 'ground, earth' are well distributed across the Ryukyuan languages and
1280 they all have accentuations, which are consistent with the Mainland
1281 Japanese accentuation, so we can presume they are not borrowings from the
1282 Mainland. Therefore, Vovin's argumentation can be dismissed. According to
1283 Frellesvig and Whitman (2008: 16), the Old Japanese vowel *i*₂ can derive from a
1284 contraction of pJ **ii* or pJ **ui*. If Martin is right that *tuti* 'earth, soil, ground' is the
1285 first element in *tuti-hanmyoo* 'Cantharis', while the synonym *niwa-tut/zu* 'Cantharis'
1286 indicates *tutu* 'ground', the root may be **tutu* 'ground', probably substantivized by way
1287 of pJ **-i*. Additional support may come from the verb J *tutum-* (B) 'to pile up dirt,
1288 pack up, cover with, enshroud in' if it is derived with a denominal verbalizer pJ **-ma-*
1289 'to reach a spatial or temporal concept', e.g., OJ *apiida* 'interval' → OJ *apiidam-* 'to
1290 take a break, rest', OJ *kiipa* 'limit, brink' → OJ *kiipam-* 'to reach the limit, reach an
1291 extreme' (Robbeets 2015: 246-250).
1292 pK **twu-ti* seems to be a legitimate reconstruction on the basis of MK *twu-ten*
1293 'bank, ridge, levee, mound, low hill' and MK *twutul*, *twu-tulk* 'id'.
1294
1295 65. RED
1296 pK **pil-ki-* 'to be red' (pK **-ki-* ~ *-ka-* inchoative, e.g. MK *nul-* 'to increase,
1297 be(come) longer, be better' → MK *nulk-* 'to be old, grow old (intr.)' < pK **nil-ki-*
1298 (Robbeets 2015: 257-258): K *pwulk-*, MK *pulk-* 'to be red, be crimson (intr.)'
1299 pTg **pula-* 'to be red': Evk. *xularin* (Evk. *-rin* colour suffix), *xulama* 'red' (Evk. *-ma*
1300 ~ *-me* ~ *-mo-* deverbal noun suffix), *hularga-* 'to redden, turn red' (Evk. *-rgA-*
1301 deverbal intransitive inchoative suffix), Even *xulal-* 'to become red', *xulaña:* 'red'
1302 (Even *-ña:* ~ *ñe:* deverbal colour suffix), Neg. *xolayin* 'red', Solon *ulã* 'red', Na.
1303 *folgã(n)*, Ud. *xulaligi*, Ma. *fulara-* 'to be red, to blush', *fulgan* 'red', Sibe *fäləgan*,
1304 *fulgan* 'red', Jur. *fula-gian* 'red'
1305 pMo **pula-yan* 'red' (-*GAn* resultative deverbal noun suffix, e.g. *uda-* 'to tarry' →
1306 *udayan* 'slow'): MMo. *xula'an* (HY, SH) ~ *hola:m* ~ *hula'an* ~ *hula:n* (Muq), *hulan*
1307 'red', WMo. *ulayan*, Dag. *xula:n* ~ *hula:n*, Khal. *ula:n*, Bur. *ula:n*, Kalm. *ula:n*, Ordos
1308 *ula:n*, Dong. *xulan*, *xulan*, *fulan*, Bao. *felan*, *fulan*, Eastern Yugur *ta:n*, Mgr. *fula:n*,
1309 Mog. *ulo:n*
1310
1311 67. HIDE

- 1312 pK **swum*- 'to hide (intr.)': K *swu:m-*, MK **swum*- 'hide (oneself), conceal oneself,
1313 take cover, lurk in (intr.)'
- 1314 pTg **sume*- 'to hide (intr.)': Evk. *sumet*- '1 to hide, conceal' (Evk. -*t-* ~ -*ci-* causative/
1315 distributive/intensive/progressive), Even *humec*- 'to act in secrecy' (Even -*c-/ -t-* ~ -*ci-*
1316 causative/ distributive/intensive/progressive), *humke:c-* ~ *humke:n-* '2 to whisper'
1317 (Even -*ka:c-* ~ -*ke:c-* intensive), Neg. *sume:t-* '1' (Neg. -*c-/ -t-* ~ -*ci-*
1318 distributive/intensive/progressive), Olcha *sumeci-* '1', Na. *sumeci-* '1' (Na. -*ci-* ~ -*si*
1319 distributive/intensive/progressive), Oroch *sumeci-* '2', Ud. *sumemesi-* '2'
- 1320
- 1321 The causative suffix pTg *-*t-* ~ -*ti-* is reflected in the Tungusic languages as Ma. -*tA-*
1322 ~ -*cA-*, Evk. -*t-* ~ -*ci-*, Even -*c-/ -t-* ~ -*ci-*, Neg. -*c-/ -t-* ~ -*ci-*, Ud. -*si-* and Na. -*ci-* ~ -
1323 *si* (Robbeets 2015: 281-287). However, only Even, Evenki and Manchu preserve the
1324 valence-increasing function of the causative proper next to secondary non-valence
1325 changing uses; the other Tungusic languages have all lost the primary causative
1326 function but maintained non-valence changing meanings relating to the object such as
1327 distributive and complete affectedness of the object, or, to the action such as
1328 intensive, iterative and progressive. All languages further preserve resultative function
1329 and Even displays valence-decreasing function, namely passive.
- 1330
- 1331
- 1332 68. SKIN
- 1333 pJ **kapa* 'skin, bark, shell': J *kawa* (2.3), OJ *kapa* 'skin, leather, fur, pelt, bark, shell';
1334 Yamatohama (Amami) *xo(o)*, Asama (Amami) *koo*, Yoron (Amami) *hoo*, Shodon
1335 (Amami) *k'oo* 'skin, bark', Yonamine (Okinawa) *haa*, Shuri (Okinawa) *kaa*, Irabu
1336 (Miyako) *kaa*, Oura (Miyako) *kaa*, Ishigaki (Yaeyama) *kaa*, Hatoma (Yaeyama) *kaa*,
1337 Yonaguni *kaa*, pR **kawa* 'skin, bark'
- 1338 pK **kap(ʌ)-k* 'skin, bark, shell, outer layer' (pK *-(*a/e*)*k* diminutive suffix frequent in
1339 body parts, e.g. *muluph* 'knee' > *muluphak* 'knee', *thel* 'hair' > *thelek* 'hair'): K
1340 *kkaphwul* 'skin, outer layer, film', MK *ka-phol* 'sheath, scabberd, protective case for
1341 a sword', MK *kephul* 'animal hide', (MK -(*u/o*)*l* diminutive), K *kkaptayki* ~ *kkepteyki*
1342 'skin, shell' (-*tayki* ~ *teyki* diminutive 'thingy'), K *kkepcil*, MK *kepcil* 'skin, bark,
1343 husk'
- 1344 pTk *ka:p-ik* 'bark, shell' (pTk *-(*ik* ~ -*ik* diminutive in body parts or parts of plants,
1345 e.g. OT *top* 'round thing' → *topik* 'ankle bone, wrist bone, knee cap', *kasik* 'bark, peel,
1346 snake-skin', *čopik* 'remainder of fruit discarded after eating'; Erdal 1991: 43): OT
1347 (Karakh.) *kabik* '1 bark, 2 shell', Tk. *kabuk* '1, 2', Az. *yabiy* '1, 2', Tkm. *ya:biy* '1, 2',
1348 Gag. *qap*, *qabi* '1, 2, external cover, covering', Uz. *qabiq* '1, 2', Uig. *qobuq* '1, 2', Tat.
1349 *qabiq* '1, 2', Kirg. *qabiq* '1, 2', Kaz. *qabiq* '1, 2', Nog. *qabiq* '1, 2', Bash. *qabiq* '1, 2',
1350 Balk. *qabuq* '1, 2', Karaim *qabux* '1, 2', Kpak. *qabiq* '1, 2', Kum. *qabuq* '1, 2', Khak.
1351 *xabix* '1, 2', Shor *qabiq* '2', Tuva *xaviq* '2', Chu. *xobă* '1, 2'
- 1352
- 1353 In Korean we find various derivations of a root **kap* or **kaph* 'skin, bark', mainly
1354 with diminutive suffixes. The aspiration in the root **kaph* is reminiscent of K *to:l* ~
1355 dial. *tolk*, MK **twolh* 'stone' in which the final -*h* is considered to be a diminutive
1356 suffix which lenited from the diminutive suffix pK *-(*a/e*)*k* (Martin 1996: 36, 90).
1357 There is a vowel harmonic alternation between **kep* and **kap*, but the external
1358 evidence indicates that the alternant with the retracted vowel is the original root.
- 1359
- 1360 69. SUCK
- 1361 pTg **xökö-* 'to suck': Evk. *uku-* '1 to suck', Even *ök-* ~ *uk-* '1', Neg. *öxö-* ~ *uku-* '1,

- 1362 breast-feed', Oroch *owoci-* ~ *o:ci-* ~ *ueci-* '1', Ud. *kos'o* - '1', Olcha *kueci-* ~ *ko:ci-* '1',
 1363 Orok *ku:tcī-* '1', Na. *ku:ci-* ~ *uku-* '1'
 1364 pMo **kökō-* 'to suck': MMo. *koko-* (SH) '1 to suck the breast', MMo. *köke-* (Muq) '1',
 1365 WMo. *kökō-* '1', Khal. *xöxö-* '1', Ordos *gökō-* '1', Bur. *xüxe-* '1', Kalm. *kök-* '1', Dag.
 1366 *māk-* '1', Eastern Yugur *hkō-* ~ *hgö-* '1', Mgr. *kugo-* '1', Bao. *kugo-yo-* (-*yo-* causative)
 1367 '1', Dong. *gogo-* '1', Mog. *kökā-* '1'
 1368
 1369 See 12. BREAST
 1370
 1371 70. CARRY
 1372 pJ **əpə-* ~ *ənpə-* 'to carry on the back (tr.)': J *ow-* (B), OJ *op-* 'to bear, carry on the
 1373 back', EOJ *opuse-*, OJ *opose-*, J *oose-* (B) 'to charge with', J *obuw-* (B), OJ *obup-* 'to
 1374 carry on the back'; Yoron (Amami) *uujuN* 'return a favour', Yamatohama (Amami)
 1375 *pourī* '(cattle/horse) carries on back', Nakijin (Okinawa) *ʔuuruN* 'carry on back', Shuri
 1376 (Okinawa) *ʔuuyuN* 'to carry a load, carry a responsibility or sin', Hatoma
 1377 (Yaeyama) *uuN* 'carry on back'
 1378 pK **ep-* 'to carry on the back': K *ep-*, MK *ep-* 'to carry on the back (tr.)'
 1379 pTg **ebe-* 'to carry': Na. *iwarī-* 'to tunload', Evk. *ewe-* 'to carry', Even *iw-* 'to bring
 1380 in, to carry inside, to import', Oroč. *ewu-gi-* 'to bring', *iwa-dala-* 'to put a person on
 1381 one's shoulder'
 1382
 1383 The Yaeyama form *offasiN* 'to carry' is considered to be a loan from mainland
 1384 Japanese because in case of cognacy initial *u-* would be expected. (Vovin 2008: 235).
 1385 Although Written Mongolian has a verb WMo. *eyüre-*, *eyür-* 'to carry or load on
 1386 one's back; to bear; to take a burden upon oneself (tr.)' that seems to correspond in
 1387 form and function, it will not be considered here. In view of the poor distribution of
 1388 this verb in other Mongolic languages, where we find verbs of the shape pMo **ergü-*
 1389 'to lift, raise, carry' and pMo **üyür-* 'to carry on the back' instead, I follow Poppe's
 1390 (1955: 48) and Nugteren's (2011: 332) explanation of WMo. *eyüre-* as a
 1391 contamination of these verbs.
 1392
 1393 73. TAKE
 1394 pJ **tira-* 'to take, pick up': J *tor-* 'to take, get' (B), OJ *to₂r-* 'to take, pick up, capture',
 1395 J *toras-* 'to let one have, give', OJ *to₂ras-* 'to deign to take', J *tora-* (B), OJ *to₂rape₂-*
 1396 'to capture'; Yamatohama (Amami) *thururi*, Asama (Amami) *tuyun*, Yoron (Amami)
 1397 *tuyun*, Yonamine *tun*, Shuri (Amami) *tuyun* 'to take', *tur-* (B) 'to take', *turas-* (B) 'to
 1398 let one have, give', Irabu (Miyako) *tui*, Hirara (Miyako) *tul* 'to get', Ishigaki (Miyako)
 1399 *turun* [turan] 'to take, get', Hatoma (Miyako) *turun* 'to take, get', Yonaguni *turun* 'to
 1400 get', *turan* (B) 'to let one have, give' pR **tor-* 'to take, get'
 1401 pK **tili-* 'to hold, lift up': K *tul-*, MK *tul-* 'to hold, carry, raise, lift up'
 1402
 1403 Bentley (1999) distinguished two Old Japanese verbs, notably OJ *to₁r-* 'to hold,
 1404 support' and OJ *to₂r-* 'to take, pick up, capture'. The latter verb is the closest semantic
 1405 fit to the basic vocabulary item and regularly corresponds to the Korean form.
 1406
 1407 pTg **al-* 'to take, receive': Even *al-* '1 to take, receive', Evk. *al-* '1', Neg. *al-* '1', Solon
 1408 *ali-* '1', Orok *ali-* '1', Na. *ali-* '1', Olcha *alu-* '2 to give, hand over', Oroch *alo-* '2',
 1409 Ud. *ali-* '1', *alu-* '2', Sibe *iali-* '1', Ma. *ali-* '1', Jur. *ali-* '2'
 1410 pTk **al-* 'to take': OT *al-* 'to take', Tk. *al-*, Tkm. *al-*, Az. *al-*, Gag. *al-*, Uz. *al-*, Uig. *al*,
 1411 Tat. *al-*, S-Yug. *al-*, Kirg. *al-*, Kaz. *al-*, Nog. *al-*, Bash. *al-*, Balk. *al-*, Karaim *al-*,

- 1412 Kpak. *al-*, Salar *al-*, Kum. *al-*, Khak. *al-*, Shor *al-*, Tuva *al-*, Tofa. *al-*, Yak. *il-*, Dolg.
1413 *il-*, Khalaj *al-*, Chu. *il-*
1414
1415 The Mongolic languages reflect an imperative form 'give!': WMo *ali*, Khal. *al*, *aliv*,
1416 Bur. *alē*, Kalm. *al*, *alā*, Ordos *ali*, Dong. *ali*, Bao. *an*, Mgr. *ali*. This situation
1417 represents a typical case of borrowing, whereby a verb form is only borrowed in its
1418 imperative form, but does not reflect a complete verbal paradigm (e.g. *allez* 'let's go,
1419 come on!' in Flemish from French). Dagur is the only language reflecting a complete
1420 verbal paradigm of the verb *ali-* 'to take, receive', but given the extensive contact
1421 situation with Tungusic languages, this may be seen as a loanverb.
1422
1423 74. OLD
1424 pJ **muka-* 'to be long ago, ancient' (pJ **-si* adverbializer for verbal adjectives, e.g. OJ
1425 *suko₁si* 'a little'): J *mukasi* (?3.1.a), OJ *mukasi* 'long ago, old times'; Yoron (Amami)
1426 *mukasi*, Asama (Amami) *muka:si*, Hirara (Miyako) *mkya:η*, Ishigaki (Yaeyama)
1427 *mukasī*, Hatoma (Yaeyama) *mukasi*, Yonaguni *Nkaci* (A), pR **muka-si* 'long ago,
1428 ancient times'
1429 pK **muk-* 'be(come) old': K *mwuk-*, MK *mwuk-* 'to become old, outdated'
1430
1431 pMo **kari-* 'to weaken': WMo. *qari-* '1 to weaken, to grow less intense', Khal. *xari-*
1432 '1', *xarši-* '2 to become exhausted, become emaciated, weaken from lack of food or
1433 water', Bur. *xaraši-* '2', Kalm. *xār-* '1'
1434 pTk **kari-* 'to be(come) old': OT *kari-* '1 to become old', *karī* 'old', Tk. *kari*, *kart* '2',
1435 Az. *Gari*, *Gart* '2', Tkm. *Garra-* '1', *Garri* '2', Gag. *qari* '2, 3 old woman or man,
1436 woman', Tat. *qari*, *qart* '2', Kirg. *qari-* '1', *qari*, *qart* '2', Nog. *qart* '2', Bash. *qari*, *qart*
1437 '2', Kpak. *qari*, *yarri* '2', Kum. *qart* '2' Uz. *qari-* '1', *qari* '2', Uig. *qeri-* '1' *qeri* '2, 3',
1438 Kaz. *qari* ~ *qeri*, *qart* '2', Khak. *kirə-* '1', *kirə* '2', Shor *qari-* '1' *qari* '2', Tuva *qiri-* '1',
1439 Tofa. *qiri-* '1', Yak. *kirij-* '1', Dolg. *kirij-* '1'
1440
1441 77. THICK
1442 pJ **puta-* 'to be thick': J *hutoi* (B) 'to be thick, burly, fat', OJ *puto₁-* 'to be thick, fat'
1443 (< **puta-wo-ra* (thick-COP-ADN); see Robbeets 2015: 339-340); Shuri (Okinawa)
1444 *butasaN*, Yamatohama (Amami) *hwissa* 'big', Ikema (Miyako) *udakai*, Irabu
1445 (Miyako) *vdaham* 'fat, thick', Hatoma (Yaeyama) *buttaaN* 'fat', pR **buta-* 'stout,
1446 thick'
1447 pK **pwuti-* 'to become thick': K *pu:s-* 'to swell (intr.)', MK **pwuT-* 'to swell,
1448 increase'
1449 pMo **büdü-* 'to be large': WMo. *büdügün*, *bidügün* 'large, huge, big' (WMo *-yun / -*
1450 *gün* deverbal noun deriving quality words (Poppe 1954: 46)), MMo. *bidun*, Dag.
1451 *budun*, *budu:n*, Khal. *büdü:n*, Bur. *büdü:n*, Kalm. *büdü:n*, *bödü:n*, Ordos *büdü:n*,
1452 *bidü:n*, Dong. *biedun*, Bao. *beidoη*, Eastern Yugur *budü:n*, Mgr. *budin*, *bidun*, Mog.
1453 *beidü:n*, *beidun*
1454
1455 The Old Japanese initial *p-* may require special notice because it has been suggested
1456 that its articulatory definition had already become a bilabial fricative *F* by the time of
1457 Old Japanese. Miyake (1999: 396-400) has argued against the spirantization of OJ *p*,
1458 demonstrating that *p* remained unchanged until Middle Japanese when it became a
1459 fricative *f*.
1460 In Mongolic, two verbally encoded adjective stems alternate: pMo **büdü-* 'to be
1461 large' and pMo **bedü-* 'to be large'. The latter form may have arisen through

1462 convergence with a form ancestral to OTk. *bädü-* 'to be(come) big, great' (Doerfer
1463 1963: 235; 1975: 275.). If pMo **büdü-* is not to be considered as a mere vocalic
1464 alternant of **bedü-*, perhaps for iconic reasons, it may belong here as a cognate to the
1465 Japanese and Korean forms.

1466

1467 78. LONG

1468 pJ **nanka-* 'to be long': J *naga-* (B), OJ *naga-* 'to be long'; Yamatohama (Amami)
1469 *nagasari*, Asama (Amami) *nagaahan*, Yoron (Amami) *nagasan*, Shodon (Amami)
1470 *nagasam*, Yonamine (Okinawa) *nagaasen*, Shuri (Okinawa) *nagasan*, Irabu (Miyako)
1471 *na'aham*, Hirara (Miyako) *nagaka'i*, Ishigaki (Yaeyama) *na:sa:η* [*naasaan*], Hatoma
1472 (Miyako) *naan* ~ *nagaan*, Yonaguni *na:η*, pR **naga-* 'to be long', OKog **na(-)mey*
1473 'long (water)'

1474 pK **nalka-* ~ **nilki-* 'to be(come) old, long (in time) : K *nalk-*, MK *nolk-* 'to be(come)
1475 old, be outdated (of objects)', K *nulk-*, MK *nulk-* 'to become old, age (of people)', K
1476 *nul*, MK *nul-* 'to increase, be(come) longer, be better'

1477

1478 If the Korean form is indeed morphologically complex (pK **-ki-* ~ *kā* deverbial
1479 inchoative in MK *nul-* 'to increase, be(come) longer, be better' → MK *nulk-* 'to be
1480 old, grow old (intr.)' < pK **nil-ki-*; see Robbeets 2015: 256-258), the Japanese form
1481 can only be explained as a borrowing.

1482

1483 pMo **uri* 'long past, former' in **uri-da* 'before' (**-da* ~ *-de* local and temporal adverb,
1484 e.g. WMo. *nasun* 'lifetime' → *nasuda* 'always'; Poppe 1954: 57): MMo. *urida* (SH,
1485 HY, Muq), WMo. *urida*, Dag. *ward*, Khal. *urd*, Bur. *urda*, Kalm. *urd*, Eastern Yugur
1486 *urda*, Mog. *urda* 'vicinity, near' and in **uri-ji* 'before last': MMo. *uriju ödür* ~ *urji*
1487 *ödür* 'day before yesterday', Kal. *urdjar*, Ordos *urjidur*, Bur. *uržader*, Kalm. *urj ödr*,
1488 Eastern Yugur *urjüdur*, Mgr. *uzüdur*, Bao. *nziudər*, Dong. *uruzu du*, Mog. *ujavodur*

1489 pTk **ur₂a-* 'to be(come) long (in time/ space)' (pTk **(X)n* deverbial noun/adjective
1490 suffix, e.g. OTk. *yak-* 'to be near, approach' → *yakin* 'near'; pTk **(O)k* deverbial
1491 noun/adjective suffix, e.g. OT *yagu-* 'to come near' → *yaguk* 'near'): OT *uza-*
1492 'be(come) long and drawn out', *uzun* '1 long', *uzak* '2 long-lasting', Tk. *uzun* '1', *uzak* '3
1493 far', Az. *uzun* '1', *uzay* '3', *uzan-* 'to grow', Tkm. *uzi:n* '1', *uzaq* '3', Gag. *uzun* '1', Uz.
1494 *uzun* '1', *uzoq* '3', Uig. *uzun* '1', *uzaq* '3', Khak. *uzun* '1', Shor *uzun* '1', *uzaq* '2', Tuva
1495 *uzun* '1', *uzaq* '3', Tofa. *uzun* '1', *uza-* 'to lengthen, elongate (intr.)', Yak. *uhun* '1',
1496 Dolg. *uhun* '1', Tat. *ozin* '1', *ozaq* '3', S-Yug. *uzun* '1', *ozaq* '3', Kirg. *uzun* '1', *uzaq*
1497 '2,3', Kaz. *uzun* '1', Nog. *uzin* '1', Bash. *ođon* '1', Balk. *uzun* '1', *uzaq* '3', Karaim *uzun*
1498 '1', Kpak. *uzin* '1', *uzaq* '3', Salar *uzin* '1', *uzix* '3', Khalaj *uza:n-* 'to grow', *uza:q* '3',
1499 *uzu:n* '1', Chu. *vărăm* '1', *vărăx* '3'

1500

1501 pK **ola-* 'to last long': K *olay-*, MK *wo-la-* 'to be long(lasting), be a long time since'
1502 pMo **ora-* 'to be late' in **orai* 'late' (pMo **-i* adverbializer, e.g. WMo *daru-* 'to
1503 follow' → *darui* 'thereafter'; Robbeets 2015: 463): MMo. *orai* (SH) '1 late, in the
1504 evening, at night', WMo. *oroi*, *orai*, *orui* '1', Dag. *ore:* '1', Khal. *oroy* '1', Bur. *oroy* '1',
1505 Kalm. *ora:* '1', Ordos *orö:* '1', Eastern Yugur *öröi* '1', Mgr. *urui* '1', *ure:* '1', *uri:* '1'

1506

1507 I do not exclude that the above two etymologies ultimately go back to a single root
1508 with different vocalization.

1509

1510 79. BLOW

1511 pK **puli-* 'to blow': K *pu:l-*, MK *pwul-* ~ *pwu(l)-* 'to blow (an instrument/ of wind)
1512 (tr. / intr.)'
1513 pTg **pu:-* 'to blow': Evk. *huw-*, Even *hu:-*, Neg. *xu:w-*, Solon *u:gu:-*, Olcha *pu:-*,
1514 Orok *pu:-*, Na. *pu:-*, Oroch *xu:-*
1515
1516 If the alternant with velar fricative initial in Middle Turkic *ür-* ~ *hür-* 'to blow'
1517 indicates an original labial stop initial in pTk **(p)ür-* 'to blow', the following Turkic
1518 verbs belong here as well: OT *ür-*, Turkish *ür-* (dial.), Tatar *ör-*, Khakassian *ür-*,
1519 Chuvash *vër-*, Yakut *ür-*, Dolgan *ür-*, Tuva *ür-*, Kazakh *ür-*, Noghai *ür-*, Bashkir *ör-*,
1520 Karaim *ür-*, Karakalpak *ür-*
1521
1522 80. WOOD
1523 pJ **ki(r)i* 'tree, wood': J *ki* (1.3a) 'tree, wood', OJ *ki₂* ~ OJ *ko₂*- 'tree, wood, low woody
1524 plant, plant' in OJ *ko₂dati* 'grove, stand of trees', *kopada* 'tree bark', *ko no pa* 'leaves',
1525 etc.; Yamatohama (Amami) *xī(i)*, Asama (Amami) *kīi*, Yoron (Amami) *sii*, Shodon
1526 (Amami) *kīi*, Yonamine (Okinawa) *kii*, Shuri (Okinawa) *kii*, Irabu (Miyako) *kii*,
1527 Hirara *kii*, Ishigaki (Yaeyama) *kii* (B), Hatoma (Yaeyama) *kii*, Yonaguni *kii* (B), pR
1528 **ke*; OKog **kir* 'tree, wood' (Beckwith 2007: 111, 115)
1529 pK **kili-k* > **kilih* 'tree, wood' (pK *-(a/e)k* diminutive suffix, also in *namu* ~ *namk*
1530 'tree'): K *kulwu*, MK *kuluh* 'a stump (e.g. of a tree), stubble, part of a tree or crop left
1531 in the ground after the it has been cut down; counter for trees; crop, sowing'
1532
1533 The Tungusic languages share a suffix denoting trees and bushes, suggesting an
1534 original shape **-kire:* in addition to **-kurA:* (Benzing 1955a: 1015). Reflexes of **-*
1535 *kire* appear in Evk. *senkire:*, Even *henkeye*, Neg. *senkiye:*, Ma. *senkiri*, Oroch *senki*,
1536 Ud. *senkie* 'wild rosemary' and Oroch *olonki:* 'oak'. However, given the *u* reflex in
1537 Evenki and a faint trace of *o* ~ *u* alternation in the Southern Tungusic languages, it
1538 remains unclear whether we should reconstruct **-kurA:* or **-körA:* on the basis of
1539 Olcha *senkure*, Orok *sekkure*, Nanai *se:ŋkure* 'wild rosemary', Olcha *xaŋgaqura*, Orok
1540 *xaŋgattura* 'elder', Evk. *dikte-mkure* 'blueberry bush', Nanai *xoroŋkola*, Ud. *olonkö*
1541 'oak', Na. *xaŋGoã* 'elder'. Although pTg **-körA* 'tree, bush' would make a good
1542 phonological match to the Japonic and Koreanic forms, I have not included it in the
1543 etymology because the reconstruction of the vowel remains uncertain.
1544
1545 pJ **mori-(C)i* 'woods, wooded hill': J *mori* (2.1) 'woods', OJ *mi₁-moro* 'place/grove
1546 where a god descends'; Yoron (Amami) *mui* 'hill', Asama (Amami) *mui* 'hill', Shuri
1547 (Okinawa) *mui* '(wooded) hill', Hirara (Miyako) *mui* 'woods, forest', Irabu (Miyako)
1548 *mui* 'forest, mountain', Ishigaki (Yaeyama) *-muri* 'hill' (bound form found only in
1549 place names), *yamamurasī* 'grove', Hatoma (Yaeyama) *muru* 'hill', pR **mori* 'woods,
1550 wooded hill'
1551 pK **molo* 'hill, mountain': K *mey*, MK *ˀmwoyh* ~ *ˀmwoy* 'hill, mountain' (< **mwolih* <
1552 ? **mwolwo-hi*), *phi mwo-lwo* (1445 Yong 4, 21b) 'Torreya-nut Mountain
1553 (placename)'
1554 pTg **mo:* 'tree, wood': Evk. *mo:* '1 tree; 2 stick, log, timber; 3 forest, wood', Even *mo:*
1555 '1, 2, 3', Solon *mo:* '1, 2', Neg. *mo:* '1, 2, 3', Olcha *mo:* '1, 2', Orok *mo:* '1, 2, stem of a
1556 tree', Na. *mo:* '1, 2', Oroch *mo:* '1, 2, 3', Ud. *mo:* '1, 2', Ma. *mo:* '1, 2, 3', Sibe *mo:* '1, 2,
1557 3', Jur. *mo* '1'
1558 pMo **mo* 'wood, tree' in pMo **mo-dun* 'wood, tree' (**-dun* ~ *-dün* collective suffix,
1559 e.g. in WMo. *sodun* 'pinion feathers of a bird', *sidün* 'tooth', etc.; Poppe 1973: 233):
1560 MMo. *modun* ~ *mudun* (SH, HY, Muq) '1 wood, tree', WMo. *modu(n)* '1', Dag. *mo:d*

1561 '1', Khal. *mod(on)* '1', Bur. *modo(n)* '1', Kalm. *modn* '1', Ordos *mudu(n)* '1', Eastern
1562 Yugur *mu:dən* '1', Dong. *mutun* ~ *mutuŋ* '1', Mgr. *mo:du* '1', Bao. *muton*, *morton*,
1563 *modon*, Mog. *modun* 'wood', *mudun* 'wooden stick' and in pMo **mo-ci* (**-ci* agentive
1564 suffix, e.g. in WMo. *mal* 'cattle' → *malci* 'herdsman'; Poppe 1954: 41): MMo *moci*
1565 (SH) 'carpenter', Mgr. *moči* 'carpenter'

1566
1567 81. RUN
1568 pJ **pasa-* 'to run': J *hase-* (?B), OJ *pase-* 'to run, gallop', J *hasir-* (B), OJ *pasir-* 'run';
1569 Yamatohama (Amami) *hasiruri*, Asama (Amami) *hasiyun*, Nishikomi (Amami)
1570 *haryur* 'to run, flow', Yonamine (Okinawa) *paN*, Shuri (Okinawa) *hayun* 'to run', Shuri
1571 *har-* (B) 'to run, flow', Irabu (Miyako) *piŋ*, Hatoma (Yaeyama) *paccaasun*, *pariparun*,
1572 pR **pa(si)r-* 'to run'.
1573 pK **pas-* 'to hurry': MK *pach-* 'to rush (intr.)' (< **pas-ka-* with pK **-ki-* ~ *ka* deverbil
1574 inchoative; Robbeets 2015: 256-258), K *pappu-*, MK *pachpo-* ~ *paspo-* 'to be busy'
1575 (< **pas-ka-* - with pK **-pi-* ~ *pa* resultative deverbil adjective suffix, e.g. MK *sulh-*
1576 'to grieve (intr.)' → *sulphu-* 'to be sad'; Robbeets 2015: 296).
1577
1578 The Amami examples reflect pR **pasir-*, while the others all point to pR **par-*.
1579 However, these forms are probably related over the loss of **-s-* before a high front
1580 vowel. In Ryukyuan, pJ **pasira* 'pillar' becomes *paya* or *paiya*. Similarly, the
1581 Ryukyuan counter for animals is *-kara*, thought to be from pJ **kasira* 'head'. We
1582 would then not expect the *-s-* in the Yamatohama and Asama dialects, but it is
1583 quite possible that these forms reflect influence from Kagoshima dialect.
1584 The Nishikomi dialect of Amami Oshima has *haryur* 'run, flow', without the *-s-*.
1585
1586
1587 82. FALL
1588 pJ **tira-* 'fall, scatter': J *tir-* (A), OJ *tir-* 'fall, scatter (intr.)', OJ *tiras-* (A) 'scatter,
1589 strew (tr.)'; Shuri *cirir-* (A) 'scatter (intr.)', *ciras-* (A) 'dry up a bowl (< disperse the
1590 liquid)'
1591 pK **ti-* 'fall, scatter': K *ci-* 'fall, scatter (of flowers/leaves), go down (of sun/moon),
1592 die, die out (of fire), fade away', MK *ti-* 'fall, go down, turn upside down, lose, die'
1593
1594 84. ASH
1595 pJ **papi* 'ash': J *hai* (2.1), OJ *papi* 'ash'; Yamatohama (Amami) *hwe*, Yoron (Amami)
1596 *pai*, Shodon (Amami) *fə*, Yonamine (Okinawa) *pee*, Shuri (Okinawa) *fee* [hwee],
1597 Irabu (Miyako) (*kara*)*paï*, Hirara (Miyako) *paʔi*, Ishigaki (Yaeyama) *pai* (A), Hatoma
1598 (Yaeyama) *pai*, Yonaguni *higun* (B) (<? **pi-nkomi* 'fire trash'), pR **paWe* 'ash'
1599 pK **pap* 'waste in a production process': K *pap* 'waste material generated in a
1600 production process (e.g. sawdust, scraps of cloth/paper left after cutting, earth turned
1601 over by a plow, bits of thread)'
1602
1603 86. DOG
1604 pJ **inu* 'dog': J *inu* (2.3), OJ *inu* 'dog'; Yamatohama (Amami) *ʔiN*, Asama (Amami)
1605 *ʔiN*, Yoron (Amami) *inu*, Shodon (Amami) *iN*, Yonamine (Okinawa) *ʔinnukwaa*,
1606 Shuri (Okinawa) *ʔiN*, Irabu (Miyako) *in*, Hirara (Miyako) *iŋ*, Ishigaki (Yaeyama) *iŋ*
1607 [*iN*] (B), Hatoma (Yaeyama) *iN*, Yonaguni *inu* (loan?), pR **inu* 'dog'
1608 pTg **ina-kun* ~ **ina-ki*: 'dog', **in(a)-da* '(going) with a dog' (pTg **-kun* suffix
1609 common in animal names, e.g. pTg **ju-kun* 'otter', pTg **gia:-kun* 'sparrow hawk';
1610 Benzing 1955: 1015; pTg **-ki*: animal suffix, e.g. pTg *sula-ki*: 'fox', **xölü-ki*:

1611 'squirrel', etc., pTg *-na:- (~ -da:- after *n*) see 3. GO OUT): Even. *ina* ~ *nina* ~ *ɲina*,
 1612 *inakin* ~ *ɲinakin* '1 dog', Evk. *ɲin* '1' (*ɲinal* PL), *ɲinakin* ~ *ginakin*, *ɲinda-* 'to go out
 1613 with the dogs, hunt with the help of dogs', Solon *inaxĩ* ~ *ninaxĩ* ~ *ninakin* '1', Neg. *ina*
 1614 ~ *nina*, *ninakin*, *enakin* ~ *enaxĩ* '1', Oroch *inaki* ~ *inaxki* '1', Ud. *in'an* '1', Olcha *iɲda*
 1615 '1', Orok *nina* ~ *ɲina* '1', Olcha *inda* '1', Na. *inda*, *inakĩ* '1', Ma. *indaxun* ~ *indaju* '1',
 1616 Sibe *jonəhuŋ*, *inəhuŋ* '1'

1617
 1618 The phonological development assumed to have taken place in Tungusic is **ina-kun*
 1619 ~ **ina-ki*: (contamination) > **ina-kin* > **ginakin* (assimilation) > **ɲinakin* >
 1620 **ninakin*. I assume that the Evenki denominal verb *ɲinda-* 'to go out with the dogs,
 1621 hunt with the help of dogs' contains a dissimilated form of the suffix pTg *-na:- 'to go
 1622 out (with)'. Since this suffix is also reflected in the collective suffix pTg *-nan
 1623 'together with' (Benzing 1955: 1021, e.g. *aki:-nan* 'together with the older brother'), I
 1624 assume that the southern Tungusic forms *inda* reflect such a collective derivation.
 1625 Note also that the root pTg **inu:-ke* 'dog, wolf' (e.g. Evk. *ńěkē* 'sable', Even *ɲōke*
 1626 'male (of dog, wolf, fox)', Sibe *juxə* 'wolf', Ma. *ńoxe* 'wolf', *nuxere* 'puppy', Oroch
 1627 *ɲōksjō* 'wolf' (Cincius 1975: 587, 651, 665, 606) may be related.

87. CRY / WEEP

1630 pK **uli-* 'to cry, howl': K *wu:l-* 'to cry, weep, shed tears (of humans); howl, sing (of
 1631 animals); sound, ring (of things) (intr.)', MK *wul-* ~ *wu(l)-* 'to cry, howl, sound
 1632 (intr.)'
 1633 pMo **uli* 'to howl': MMo. *uli-* '1 to howl (of dogs, wolves, etc.)', WMo. *uli-* '1', Khal.
 1634 *uli-* '1', Bur. *uli-* '1', Kalm. *ul̄-*, *ulə-* '1', Ordos *uli-* '1', Eastern Yugur. *olo-* '1'
 1635 pTk **u:li-* 'to cry, howl': OT *ul̄i-* 'to cry (of humans), to howl (of wolves and other
 1636 animals)', Tk. *ulu-*, Gag. *ulu-*, Az. *ula-*, Tkm. *u:li-*, Uig. *ulu-*, Kaz. *ūli-*, Nog. *ul̄i-*,
 1637 Bash. *ūl̄̄-*, Kpak. *ul̄i-*, Karaim *ulu-*, Tat. *ula-*, Kirg. *ulu-*, KBalk. *ulu-*, Kum. *ulu-*,
 1638 Khak. *ulu-*, Tuva *ulu-*, Yak. *uluy-*, Dolg. *uluy*, Chu. *ālax-* 'to neigh'

1640 This etymology was eliminated from the core evidence advanced in Robbeets (2005)
 1641 because it may be a sound symbolic formation.

88. TIE

1644 pJ **kuku-* 'to tie, wrap': J *kukur-* (A), OJ *kukur-* 'to tie up, bundle, fasten', OJ *kukum-*
 1645 (B) 'to tie up, wrap up', J *hagukumu* (A), OJ *pagukumu* 'brood over, foster' (< **pa*
 1646 'feather' + **-n-* + **kuku-ma-* 'wrap'), Shuri (Okinawa) *kukur-* (A) 'to tie up, blindstitch'
 1647 pTg **xuku-* 'to wrap': Evk. *ukuli:-* ~ *hukuli-* 'to wind round', Even *uk-* 'to roll up, put
 1648 a strap together', Neg. *uxil-* 'to wrap up', Solon *uxuli:-* 'to enfold', Olcha *xuku-* 'to wind
 1649 round, entrap', Orok *xukulit̄či-* 'to wind round, entrap', Na. *xuku-* 'to wind round, wrap
 1650 up', Ma. *uxu-* 'to fold up', Jur. *hu-xun-mij am-si-da-lar* 'to contain'

1652 In spite of the incongruent register in Japanese, it seems that J *kukur-* (A) 'to tie up,
 1653 bundle, fasten' and J *kukum-* (B) 'to tie up, wrap up' can be derived from the same
 1654 root pJ **kuku-* 'to tie, wrap'. See 32. BIG for the observation that the assignment of a
 1655 verb register not always straightforward. The confusion may have arisen through
 1656 contamination with J *kukum-* (B) 'to hold in the mouth'.

1659 pMo **boyo-* ~ *boya-* 'to tie up, wrap': MMo. *bo'o-* (SH) 'to block, obstruct', *bo:-* ~
 1660 *bo'o-* (Muq) '1 to tie up, bundle, wrap', *bo'am* (HY) 'dam, barrage', WMo. *boyu-* '1',
 1661 *boyuca* 'bundle, string for tying a bag', Khal. *bo:-*, Bur. *bo:-*, Kalm. *bo:-*, Ordos *bo:-*,

1662 Eastern Yugur *pu:-*, Huzhu Mgr. *bo:-*, Bao. *boyəldə-*
 1663 pTk **bog-* 'to tie up': OT *boy-* '2 strangle, choke', *boy* 'bundle', Tk. *boy-* '1 to tie up,
 1664 constrict by binding', *bo:-* '2', *boy* 'bundle', Az. *boy-* '1, 2', Tkm. *boy-* '1, 2', Gag. *bu:-*
 1665 '2', Uz. *bəy-* '1, 2', Uig. *boy-* '2', Tuva *boy-* '1, 2', Yak. *buoy-* 'to hinder', Dolg. *buoj-* 'to
 1666 hinder; to pacify, appease', Tat. *bu-* '2', Khak. *poy-* '1, 2', Kirg. *bu:-* '1, 2', Kaz. *bu-* '2',
 1667 Nog. *buw-* '2', Bash. *bīw-* '2', Balk. *buw-* '1, 2', Karaim *boy-* '2', Kpak. *buw-* '1, 2',
 1668 Kum. *buw-* '2', Chu. *pāv-* '2'

1670 90. SWEET

1671 pJ **ma-* 'to be sweet, tasty': J *ama-* (A), OJ *ama-* 'to be sweet', J *uma-* (B), MJ *muma-*,
 1672 OJ *uma-* 'to be delicious, appetizing, sweet'; Yamatohama (Amami) *ʔamasari*, Yoron
 1673 (Amami) *amasan* 'to be sweet', Shodon (Amami) *maa-* 'to be tasty', Yonamine
 1674 (Okinawa) *ʔamaasen* 'to be sweet', Shuri *maa-san* 'to be tasty', *ʔamasan* 'to be sweet',
 1675 Irabu (Miyako) *adzimaxam* 'to be sweet', Ishigaki (Yaeyama) *azimasaan* 'to be sweet',
 1676 Hatoma (Yaeyama) *azimaan* 'to be sweet' (< pR **adi-maa-* [taste-be.sweet/tasty] 'be
 1677 sweet'), Yonaguni *maan*, pR **ma:-* 'to be tasty, sweet'
 1678 pK **ma-* 'to be tasty' in **mas* 'flavor' (pK *-s deverbial suffix deriving nominal
 1679 adjectives and adverbs, e.g. K *cilki-* 'to be tough' → *cilkis* 'firm'; Robbeets 2015: 422-
 1680 423): K *mas*, MK *·mas* 'flavor, taste'

1681
 1682 The initial (m)u- may have been protetic in Japanese. The Middle Japanese variant
 1683 *muma-* 'to be delicious, appetizing, sweet' as well as the Ryukyuan cognates support
 1684 this idea. A parallel development has probably taken place in the word for 'horse',
 1685 which is reflected in J *uma* and MJ (m)uma 'horse'. The Ryukyuan cognates of this
 1686 word, e.g. Miyako *nuuma*, Yaeyama *nnma*, Hateruma *qman/nman* 'horse' lack an
 1687 initial vowel and this is also true for its probable Old Chinese model 馬 **m^hra?*
 1688 'horse' (Robbeets 2017).

1689
 1690 pK **tal-* 'to be sweet': K *tal-* 'to be sweet, tasty, pleasant', MK *tol-* 'to be sweet'
 1691 pTg **da:l-* 'to be sweet': Even *da:l-* 'to be sweet, pleasant; to lick off', *dalra* 'tasty,
 1692 sweet' (Even -*ra* ~ -*re* deverbial adjectival noun suffix, Robbeets 2015: 351), *dalsi:*
 1693 'tasty, sweet' (Even -*si:* deverbial adjectival noun suffix, Robbeets 2015: 351), Evk.
 1694 *dalli, daldi* 'tasty, sweet' (Evk. -*li*, -*di* deadjectival adverbializer; Nedjalkov 1997:
 1695 306-307), Neg. *daligdī:* 'tasty, sweet', Ma. *dalxi* 'relish, predilection'

1696
 1697 Note that J *tara* (2.5), *tara-no-ki* 'Japanese angelica tree, fatsia, Aralia elata' (Shuri
 1698 *taarasi* B 'Magnolia obovata' = J *hoonoki* in which hoo may derive from big-leafed)
 1699 is a plant with candied stems which can be used in making cakes or sweets. If not
 1700 related with the Korean word for 'rush, reed' and with the Tungusic words for
 1701 'quitch; reed, cane' (Robbeets 2005), the word may be a compound preserving **tara*
 1702 'sweet, sweetness'.

1703 91. ROPE

1704
 1705 pJ **turu* 'string, line': J *tura* (2.2.a), OJ *tura* 'row, line', J *turu* (2.2.a) 'string,
 1706 bowstring, chord', OJ *turu* 'bowstring, string of a musical instrument', EOJ *tura*
 1707 'bowstring'; Asama (Amami) *cīruu*, Yoron (Amami) *ciru*, Nakijin (Okinawa) *ciruu*,
 1708 Shuri *çiru*, Hatoma (Yaeyama) *siru*, Ishigaki (Yaeyama) *curu*, Irabu (Miyako) *ciru*,
 1709 pR **turu* 'string of a musical instrument, bowstring'.
 1710 pK **cul* 'rope, string, line': K *cwul*, MK *·cwul* 'rope, cord, string, line'

1711

1712 Since OJ *tura* 'row, line' and OJ *tuna* 'rope, cord, string, line' overlap in form and
 1713 meaning, they could be regarded as a case of *-r--n-* assimilation. However, the
 1714 accentuation of the forms is different: J *tura* (2.2.a) has the corresponding accent class
 1715 A in Ryukyuan, while J *tuna* (2.3) has class B in Ryukyuan. The latter form is
 1716 reflected in the Ryukyuan words for 'rope', notably Yamatohama (Amami) *cina*,
 1717 Asama (Amami) *Cinaa*, Yoron (Amami) *cina*, Yonamine (Okinawa) *cinaa*, Shuri
 1718 (Okinawa) *cina*, Irabu (Miyako) *cina*, Hirara (Miyako) *tsina* 'rope', Hatoma
 1719 (Yaeyama) *sina* 'rope' and Yonaguni *nna* 'rope'.

1720
 1721 92. SHADE

1722 pJ **kanka* 'shade, reflection': J *kage* (2.5) 'shadow', OJ *kage*₂ 'shadow, reflection,
 1723 radiance, light' ~ OJ *kaga-*, e.g. in J *kagami*, OJ *kagami*₂ 'mirror' (< 'reflection' +
 1724 'look'); Yamatohama (Amami) *xage*, Asama (Amami) *kaagi*, Yoron (Amami) *hagi*,
 1725 Yonamine (Okinawa) *hagi* 'shade', Shuri (Okinawa) *kaagaa* 'shade, reflection', Irabu
 1726 (Miyako) *kaagi*, Hirara (Miyako) *kagi*, Ishigaki (Yaeyama) *kai* (B) ~ *kaagi*, Hatoma
 1727 (Yaeyama) *kagi*, Yonaguni *kaNgi*, pR **kage* ~ *kaga-* 'shade, reflection'
 1728 pK **kanalh* < ? **kanhal* 'shade, shadow': K *kunul*, MK *·ko·nolh* ~ *·ku·nul* 'shade,
 1729 shadow'

1730
 1731 94. SALT

1732 pJ **tura-* 'unbearable, bitter': J *tura-* (B), OJ *tura-* 'unbearable, bitter, hard'
 1733 pTg **turu-ke* 'salt' (pTg **-xA:* ~ **-kA:* resultative deverbal noun/adjective, e.g. Evk.
 1734 *culbin-* → *culbika-* 'thin, meager', Evk. *upcu-* 'to dispute' → *upcuka* 'disputable')
 1735 Southern Evenki (Chiringda) *turukə* 'salt', Northern Evenki (Tutonchany) *turukə*
 1736 'salt', Northern Evenki (Tura) *turukə* 'salt', Eastern Evenki *turukə* 'salt'. Negidal *tos*
 1737 'salt' is likely to be a borrowing from Turkic.
 1738 pTk **tu.r₂* '1 salt': OT *tuz* '1', Tk *tuz* '1', Az. *duz* '1', Tkm. *du:z* '1', Gag. *tuz* '1', Kirg.
 1739 *tuz* '1', Kaz. *tuz* '1', Nog. *tuz* '1', Bash. *tođ* '1', Balk. *tođ* '1', Tat. *toz* '1', Karaim *tuz* '1',
 1740 Kpak *duz* '1', Sal. *duz*, *düz*, *tuz* '1', Kum. *duz* '1', Uz. *tuz* '1', Uig. *tuz* '1', SYug. *duz* '1',
 1741 Khak. *tus* '1', Shor *tus* '1', Tuva *dus*, Tofa. *tus*, Yak. *tu:s*, Dolg. *tu:s*, Khalaj *tu:z* '1',
 1742 Chu. *tävar* '1'

1743
 1744 95. SMALL

1745 pJ **tipi-* 'to be small' (pJ **-sa* deverbal noun/adjective suffix): J *tiisa-* (B), OJ *tipi*₁*sa-*
 1746 'small, little'
 1747 pTg **čipi-* 'to be small, narrow' ~ pTg **čip-ti-* 'to make small, narrow' (pTg **-t-* ~ *-ti-*
 1748 causative suffix; see 67. TO HIDE): Evk. *čipikte* '1 narrow' (Evk. *-kta* ~ *-kte*
 1749 deverbal resultative noun suffix; Nedjalkov 1997: 299), *čipileme* '1 narrow', *čipka-* '2
 1750 to squeeze, press', *či:pči-* '3 to fill, stuff, push in' (Evk. *-t-* ~ *-či-* causative), Even
 1751 *čuputi* '1', *čipču-* '3', Neg. *čipixet-* '1', *čipixila-* '2', *čipči-* '3' (Neg. *-č-* / *-t-* ~ *-či-*
 1752 causative), Na. *čip* 'tightly', Oroch *čipči-* '3', Ud. *čipči-*, Olcha *čipeči-* '4 to pick up
 1753 with the fingers (of food remnants)', Orok *čipo-* '4', Ma. *čibu-* '3'

1754
 1755 96. WIDE

1756 pJ **nanpa-* > **nanpi-* 'to become long and wide': J *nobe-* (B), OJ *nobe*₂- 'to stretch,
 1757 spread, lengthen (tr.)', J *nobi-* (B), OJ *nobi*₂- 'to extend, lengthen, stretch, spread,
 1758 grow; be postponed (intr.)', J *nobas-* (B), OJ *nobas-* 'to extend, lengthen, stretch,
 1759 spread (tr.)'; Yoron (Amami) *nubasuN* ~ *nubjuN* (tr.), *nubajuN* (intr.), Shuri
 1760 (Okinawa) *nubir-* 'to spread, extend (tr.)' (B) *nubas-* (B) 'to extend, lengthen (tr.)',
 1761 Hatoma (Yaeyama) *nubasuN* (tr.), *nubiruN* (intr.)

- 1762 pK **nelp(i)-* ‘to be wide’: K *nelp-* ‘to be wide’, MK *nep-* ‘to be wide’, MK *nelu-* ‘to
1763 be wide’
- 1764 pTg **nepte-* ‘to become flat and wide’: Even *nebde-* ‘to pull off the skin in one piece’,
1765 *nebde* ‘open(ness); wide(ness)’, *nebden-* ‘to unfold widely; open up (of cloth, wings);
1766 straighten out; open up (of leaves) (intr.)’ (Even *-(A)n₍₂₎-* processive), *nebdehe:* ‘flat,
1767 wide’ (Even *-ñA* deverbial adjectivizer), *nebder-* ‘to open, come out (of flowers)
1768 (intr.)’, *nebdeku* ‘opened up; wide’, Evk. *nepte-* ‘to unfold, smooth out, spread out’,
1769 *nepteme* ‘even, flat’, Neg. *nepte-nepte* ‘even’, Na. *nepte-nepte* ‘even’, Olch. *nepte-*
1770 *nepte* ‘even’, Orok *nette-* ‘spread out’, Oroch *neptenje* ‘even, flat’, Ud. *neptele*
1771 ‘even, flat’
- 1772 pMo **nebse-* ‘to be(come) wide and long’: WMo. *nebseger* ‘wide and long’ (WMo. -
1773 *GAr* deverbial quality noun (Poppe 1954: 46)), WMo. *nebseyi-* ‘to be wide and long
1774 (of clothes), to be tattered, in rags (intr.)’ (pMo **-yi-* anticausative), WMo.
1775 *nebsegene-* ‘to move (of something wide and long)’ (WMo. -*GA-* factitive; Poppe
1776 1954: 61, pMo **-nA-* processive; Robbeets 2015: 235-237), Khal. *nevsiy-*, Bur. *nebši-*
1777
- 1778 Robbeets (2005: 375; 2008, 2015) argues that the voiced series in Japanese, which are
1779 internally derived from original nasal clusters, can be traced back to clusters in the
1780 Transeurasian languages. The original clusters can be divided into homoganic and
1781 heteroganic clusters. Homoganic clusters are composed of a sonorant and a stop
1782 (pTEA **-Rp-*, **-Rt-*, **-Rk-*) and merge in a nasal cluster (pJ **-np-* > OJ *-b-*, pJ **-nt-* >
1783 OJ *-d-*, pJ **-nk-* > OJ **-g-*) in Japanese. In heteroganic clusters, as illustrated in this
1784 etymology, on the other hand, the nasal and the stop have a different place of
1785 articulation, which results in the insertion of a parasitic stop (pTEA **-m^(P)T-*, **-n^(T)K-*,
1786 **-ŋ^(K)T-*). The nasal is lost in the continental Transeurasian languages (**-PT-*, **-TK-*,
1787 **-KT-*), whereas Korean and Japanese lose the final stop (pJ **-mp-* > OJ *-b-*, pJ **-nt-*
1788 > OJ *-d-*, pJ **-ŋk-* > OJ **-g-*.)
- 1789
- 1790 pMo **dalba-* ‘to be wide and flat’: MMo. *dalbaru* ‘wide and flat’ (PMo **-ru ~ rü*
1791 adverbializer), WMo. *dalbayi-* ‘1 to be wide and flat’ (pMo **-yi-* anticausative),
1792 *dalban* ‘wide, broad, flat’ (pMo **-n* deverbial noun suffix), *dalbayar* (pMo **-yar ~ -*
1793 *ger* deverbial nominal adjectivizer), Khal. *dalbay-* ‘1’, Bur. *dalba-* ‘1’, Kalm. *dalwä:-* ‘1’
1794 pTk **yalpa-* ‘to be wide, flat’ in pTk **yalpa-k* ‘wide, flat’ (pTk **-(O)k* deverbial
1795 noun/adjective suffix, e.g. OT *yagu-* ‘to come near’ → *yaguk* ‘near’): OT (Karakh.)
1796 *yalbi* ‘1 broad, flat’, Tk. *yalpik* ‘1’, Gag. *yalpaq* ‘1’, Tkm. *yalpa* ‘2 blade, paddle’,
1797 *yalpaq* ‘1, 3 shallow’, Uz. *yalpəq* ‘1’, Uig. *yalpaq* ‘1’, Khak. *čelbax*, *nalpax* ‘1’, Tuva
1798 *čalbaq* ‘1’, Tofa. *čalbaq* ‘1’, Yak. *salbax* ‘2’, Dolg. *halbax* ‘span; foot’, Tat. *želpək* ‘1’,
1799 Kirg. *žalpaq* ‘1’, Kaz. *žalpaq* ‘1’, Nog. *yalpaq* ‘1’, Bash. *yalpaq* ‘1’, Kpak. *žalpaq* ‘1’,
1800 Kum. *yalpaq* ‘1’, Karaim *yalpaq* ‘1’
- 1801
- 1802 97. STAR
- 1803 pJ **pəsi* ‘star’: J *hosi* (2.1), OJ *posi* ‘star’; Yamatohama (Amami) *husi*, Asama
1804 (Amami) *husii*, Yoron (Amami) *pusi*, Shodon (Amami) *husy*, Yonamine (Okinawa)
1805 *pusii*, Shuri (Amami) *husi*, Irabu (Miyako) *pusi*, Hirara (Miyako) *pusi*, Ishigaki
1806 (Yaeyama) *fusi* [*pusi*](B) ~ *pusu*, Hatoma (Yaeyama) *pusi*, Yonaguni *huci* (A), pR
1807 **posi* ‘star’
- 1808 pK **peli* ‘star’: K *pye:l*, MK *pyel* ‘star’ (Hyangka 12, 7. semantogram + li = ? MK
1809 *pyeli*)
- 1810
- 1811 98. IN

- 1812 pJ **soko* 'depth, bottom: J *soko* (2.1), OJ *so₂ko₂* 'bottom, sole, depth'; Yamatohama
 1813 (Amami) *suxu*, Asama (Amami) *syuku*, Yoron (Amami) *siki*, Shodon (Amami) *suku*
 1814 Yonamine (Okinawa) *sukuu* ~ *sikuu*, Shuri (Okinawa) *suku*, Irabu (Miyako) *suku*,
 1815 Ooura (Miyako) *suku*, Ishigaki (Yaeyama) *suku*, Hatoma (Yaeyama) *suku*, Yonaguni
 1816 *sugu* (A) 'bottom', pR **soko* 'bottom'
 1817 pK **soko* 'depth, inside': K *so:k* 'inside, interior', MK **swok* 'deep down, within,
 1818 inside'
 1819
 1820 pMo **örü* 'interior': MMo. *oro* ~ *ore* '1 inside, interior, heart, abdomen' WMo. *örü* ~
 1821 *öri* '1', Dag. *erecu*: 'chest, bosom, breast', Khal. *ör* '1', Bur. *üre* '1', Kalm. *örä* '1',
 1822 Ordos *örö*, *ör* '1', Mog. *ourä* 'heart, mind'
 1823 pTk **ö:r₂* 'interior': OT *öz* '1 interior part of an organism, pith, marrow, spirit, self',
 1824 Tk. *öz* '1', Az. *öz* '1', Tkm. *ö:z* 'self', Gag. *yöz* '1', Uz. *öz* '1', Uig. *öz* '1', Yak. *üös* '1',
 1825 Dolg. *üös* '1', Tat. *üz* '1', Kirg. *öz* '1', Kaz. *öz* '1', Nog. *öz* '1', Bash. *üδ* '1', Karaim *öz* '1',
 1826 Kpak *öz* '1', Kum. *öz* '1', Khalaj *êz* '1', Chu. *var* '1'
 1827
 1828 99. HARD
 1829 pJ **kata-* 'to be hard, dense': J *kata-* (A), OJ *kata-* 'to be hard, solid, tough, rigid';
 1830 Yoron (Amami) *hata_{sa}N* 'thick (of liquid), dense (e.g. of seedlings), Yamatohama
 1831 (Amami) *xaθasari* 'thick (of glue, gruel), densely packed (of hair, grass)', Nakijin
 1832 (Okinawa) *hataaseN* 'strong (of tea), densely packed', Shuri (Okinawa) *katasaN* (A)
 1833 'to be hard, sturdy, sure, saturated', Irabu (Miyako) *kataham* 'thick (of liquid), dense
 1834 (seeds, holes in a sieve)', Hatoma (Yaeyama) *kataaN* 'strong (tea), hard', pR **kata-* 'to
 1835 be gathered together in a dense fashion'
 1836 pK **kata-* 'to be hard, severe': K *kwut-*, MK *kwut-* 'to be hard', K *kkatalop-*, MK
 1837 *skatalwop-* 'to be hard, difficult, complicated; be harsh, severe' (adj. n. + MK *-lwop-*
 1838 'to be characterized by'); pK **s(u/o)-* intensive prefix)
 1839 pMo **kata-* 'to become hard, dry': WMo. *qata-* '1 to become hard, dry (intr.)', *qata-*
 1840 *yu* '2 hard' (WMo *-yu* / *-gü* deverbal noun deriving quality words (Poppe 1954: 46)),
 1841 MMo. *qata'u* '2', *qätämär* 'dried (meat)', Dag. *katən*, *katen*, *katu*: '1', Khal. *xat-* '1',
 1842 *xatu*: '2', Kalm. *xatə-* '1', *xatu*: '2', Ordos *gatu*: '2', Kalm. *xatə-* '1', *xatu*: '2', Ordos
 1843 *yatu*: '2', Dong. *qīdun*, *qītun* '2', Bao. *χotoŋ* '2', Eastern Yugur *yadu*: '1', Mog. *xata* '2',
 1844 Mgr. *xada*:- '1', *xadoŋ* '2'
 1845 pTk **kat-* 'to be hard': OT *kat-* 'to be hard, firm, though', *katig* '2 hard' (OTk. *-(X)g*
 1846 deverbal noun suffix), OT (Karakh.) *kat-* '1', *katig* '2', Tk. (dial.) *kat* '2', Az. *gati* '2',
 1847 Tkm. *gat*, *gati* '2', Uz. *kətik* '2', Uig. *ketik* '2', Khak. *xatiy* '2', Shor *kadiy* '2', Tuva
 1848 *ka'diy* '2', Yak. *kīta:nax* '2', Dolg. *kīta:nak* '2', Tat. *kati* '2', Kirg. *katu*: '2', Kaz. *katti*
 1849 '2', Nog. *kat* '2', Bash. *kati* '2', Kpak. *katti* '2', Kum. *kati* '2', Chu. *xidä* '2'
 1850
 1851 In Korean, relatively retracted and non-retracted vowels alternate phonologically in
 1852 certain color adjectives, mimetic and expressive adjectives, a phenomenon referred to
 1853 as "ablaut" by Vovin (2008: 6) and as "heavy and light isotopes" by Martin (1992:
 1854 343-344). The non-retracted vowels *e*, *ey*, *wu*, *wi* (< MK *wuy*) are typical of the heavy
 1855 isotopes, while the retracted vowels *a*, *ay*, *o* (MK *wo*), *oy* (MK *woy*) are typical of the
 1856 light isotopes. The non-retracted vowels are associated with weighty, bulky concepts,
 1857 while the retracted vowels are used for small and unsubstantial things, e.g. K *ce:k-* 'to
 1858 be small in number or quantity, few' vs. K *ca:k-* 'to be small in size, tiny'⁶. It is not

⁶ It can be noted that the interpretation of "heavy and light isotopes" in terms of a distinction between relatively high front versus relatively low back vowels (e.g. Martin (1992: 343-344) would suggest that lower vowels were used for smaller things. This runs counter the notions of "naturalness" of phonetic

1859 surprising that the adjective meaning ‘to be large’ has a more advanced vowel in its
 1860 default form K *khu-*. A trace of a retracted alternant, however, can be found in the
 1861 obsolete adjective K *ha-* (< MK *·ho-*) ‘to be large in number, much, many, be great’,
 1862 lexicalized, for instance, in K *hankul* ‘hankul, lit. great script’. Similarly, the stem
 1863 meaning ‘to be hard’ has developed an advanced vowel in its default form K *kwut-*,
 1864 MK *kwut-* ‘to be hard’, while there is a trace of a retracted —and probably original—
 1865 alternant in the adjective with metaphorical meaning K *kkatalop-*, MK *skatalwop-* ‘to
 1866 be hard, difficult, complicated; to be harsh, severe’. This form can be derived from
 1867 **s-kata-lwop-* (INT-hard-be.characterized.by). The first element is the intensive prefix
 1868 pK **s(u/o)-* > MK *s-* > K reduplication (Lee 1977: 145, Ramsey 1977: 64, Martin
 1869 1996: 24, 27, 91), e.g. MK *tih-* ~ *stih-* ‘to pound’.⁷ The last element is the verbal
 1870 adjective formant pK **-lwop-* > MK *-lwop-* > K *-lop-* ‘to be characterized by’ (Martin
 1871 1992: 677), e.g. K *say* ‘new’ vs. *saylop-* ‘to be new’. Apophony between the non-
 1872 retracted vowel *wu* and the retracted vowel *a* can be found in other adjective pairs,
 1873 such as in K *phalah-*, MK *·pha-la ho-* ~ K *phwulu-*, MK *phwulwu-*, *phwulu* ‘be blue’,
 1874 where it is used for its expressive effects only.

1875
 1876 100. CRUSH / GRIND

1877 pJ **pinta-ka-* ‘to crush’ (pJ **-ka-* deverbil inchoative, e.g. OJ *par-* ‘to open (ground),
 1878 clear (land) (tr.)’ → *paruk-* ?B ‘to clear up, open up (intr.)’; Robbeets 2015: 255-256):
 1879 MJ *fidak-* (A), OJ *pidak-* ‘to crush’
 1880 pTg **pinče-* ‘to crush’: Even *hênčik-* ~ *ênčik-* ~ *hincuk-* ‘to crush’ (Even *-k* deverbil
 1881 suffix; Benzing 1955b: 47), *hinčil-* ~ *hênčil-* ‘to break down’ (Even *-l* deverbil
 1882 inchoative; Benzing 1955b: 44), Neg *xiŋčel-* ‘to crush, break down’

1883 pJ **sura-* ‘to grind, rub’: J *sur-* (B), *sure-* (B) ‘to rub against each other’, OJ *sur-* ‘to
 1884 grind, rub’, J *surari* ‘without trouble, smoothly’ (*-ri* adverbializer), *sura-sura* ‘without
 1885 a hitch, smoothly’, Shuri *sir-* ‘rub, grind’, *šiyuŋ* ‘to rub’, Shodon *k’usryum*, Hirara
 1886 *sipag’i*, Ishigaki *sisuŋ*, Kabira *suri*, Yonaguni *ccituŋ*, *ciruŋ*, pR **suri-* ~ **kosuri-* ‘to
 1887 rub’
 1888 pTg **suru-* ‘to grind: Ma. *šuru-* ‘to grind, whet, sharpen’
 1889 pTk **sür(ü)-* ‘to rub, smear’ (pTk **-ti-* causative-passive; e.g. OT *ari-* ‘to be(come)
 1890 clean (intr.)’ → *arüt-* ‘to clean (tr.)’; Robbeets 2015: 290-292): OT *sürt-* ‘1 to rub,
 1891 smear (tr.)’, MT *sür-*, *sürüt-*, *sürt-* ‘1’, Tk. *sür-*, *sürt-*, Az. *sürt-*, Tkm. *sür-*, *sürt-*, Gag.
 1892 *sürüt-*, Uz. *surt-*, Tuva *sür-*, Yak. *ür-*, Khak. *sürt-*, Kirg. *sür-*, *sürt-*, Kaz. *sürt-*, Nog.
 1893 *sür-*, *sürt-*, Bash. *hür-*, *hürt-*, Balk. *sürt-*, Karaim *sürt-*, Kpak *sür-*, *sürt-*, Kum. *sürt-*,
 1894 Chu. *sěr-*

1895
 1896 In a few cases Manchu displays a palatal sibilant *š-* rather than *s-* in correspondence
 1897 with words with initial *h-* in Even and initial *s-* in the other Tungusic languages.
 1898 There is no internal ground for this palatalization, such as a following high vowel.

symbolism (a.o. Sapir 1929).

⁷ Whereas Martin reconstructs pK **s(u/o)-*, Ramsey and Lee refer to the *s*-clusters as reinforced pronunciations that do not necessarily go back to an original sibilant prefix. The authors agree that the verbs with *s*-clusters represent intensive meaning. The intensification was apparently restricted to processive verbs in Middle Korean. Other examples of such verb pairs are MK *kužu-* ~ *skužu-* ‘to pull’, MK *pipuy-* ~ *spi-puy-* ‘to rub’, MK *twutuli-* ~ *stwu-tuli-* ‘to beat’, MK *sip-* ~ *ssip-* ‘to chew’, MK *·sus-* ~ *·ssus-* ‘to wash’, MK *kulh-* ~ *skulh-* ‘to boil’, MK *sa-hol-* ~ *ssa-hol-* ‘to chop’, MK *ku-cit-* ~ *skucit-* ‘to scold’. Instances of a descriptive verb pairs reflecting the intensive prefix are MK *polo-* (*-ll-*) ‘be straight, fast, act quickly’ vs. MK *·spol-* (*-ll-*) ‘be fast; be sharp, pointed’, MK *·so-* ‘be cheap’ vs. MK *·sso-* ‘id.’, MK *kel-* (~ *ke(l)-*) ‘get stuck, obstructed’ vs. MK *·skelW-* ‘be difficult’.

1899 However, as it concerns only a few cases and since the palatalization is restricted to
1900 Manchu, Benzing (1955a: 989-990) refrains from establishing a separate palatal
1901 sibilant *š- in proto-Tungusic. I do not consider Even *huruŋ*- 'to grind, pound, mash,
1902 pestle, crumble, divide in small parts', *huruwe*- 'bits and pieces, crumbs' to be related
1903 here. These forms derive from pTg **puru*- 'to crush', reflected in Evk. *huru*-, *hurgu*-,
1904 *horo*- 'crush', Ma. *furu*- 'to chop, cleave', Olcha *pori*- 'to crush', Na. *purtu* 'crumbs'.
1905
1906 pK **niki*- 'to crush to a pulp, knead': K *iki*-, MK *niki*- 'to crush to a pulp, mash, knead,
1907 beat water into flour'
1908 pMo **niku*- 'to knead, crush': WMo. *niqu*- ~ *nuqu*- '1 to knead (flour), mash, crumple,
1909 rub, press, massage', *niquyur* 'implement for kneading dough', MMo. *nuqu*- '1', Khal.
1910 *nuxa*- '1', Bur. *ñuxa*- '1', Kalm. *nuxə*- '1', Ordos *nuxu*- '1', Bao. *noġə*- '1', Dag. *nogu*-
1911 '1', Mgr. *nuġu*- '1', Mog. *nuqu*- ~ *noqu*- 'to crush', Dong. *nuqu*- 'to hit with force'
1912 pTk **yik*- 'to crush, demolish, destroy': OTk. *yik*- '1 to crush, demolish, destroy', OT
1913 (Karakh.) *yiq*- '1', Tk. *yik*- '1', Az. *yix*- '1', Tkm. *yiq*- '1', Gag. *yiq*- '1', Tat. *yiq*- '1',
1914 Kirg. *žiq*- '1', Karaim *yiq*- ~ *yix*- '1', Kaz. *žiq*- '1', Nog. *yiq*- '1', Bash. *yiq*- '1', Kpak.
1915 *žiq*- '1', Kum. *jīq*- ~ *jix*- '1', Uz. *yiq*- '1', Uig. *yiq*- '1', Khak. *yuq*- '1', Oirat *yiq*-, *dīq*-
1916 '1', Khalaj *yuq*- '1', Chu. (dial.) *šāx*- '1'.
1917
1918 101. MOUNTAIN
1919 pJ **yama* 'mountain': J *yama*, OJ *yama* (2.3) 'mountain', Asama (Amami) *yamaa*
1920 'mountain', Irabu (Miyako) *yama* 'mountain', Ishigaki (Yaeyama) *yama* 'mountain',
1921 Yonaguni *dāma* 'mountain'
1922 pK **yem* 'mountain': K *yem* 'small stoney island, small rocks sticking out of the
1923 water', K *yemso* 'goat', MK *·yem*-*sywó* 'goat' (*·sywo* 'cow'), K *yemkyo* 'shallot', MK
1924 *·yem-kywo* 'scallion (*Allium chinense*)' (Sino-Korean 薑 *kywo* 'onion')
1925
1926 This etymology has been recently suggested by Ratte (2016: 323-325). Given the
1927 contemporary Korean meaning 'island consisting of rocks' and the preservation of the
1928 word in compounds such as MK *·yem*-*sywó* 'goat' (mountain-cow) and MK *·yem*-
1929 *kywo* 'scallion' (mountain-onion), the reconstruction of the meaning 'mountain' is very
1930 likely.
1931
1932 102. TO SIT
1933 pJ **wo*- 'to sit, be': J *iru* A, OJ *wi*- 'to sit, be' (< **wo* + *-(C)*i*-), J *oru* A, OJ *wor*- 'to
1934 be, exist' (< **wo*- + **-ra*- anticausative), OJ *wos*- ?A 'deign to control/rule/eat/drink/
1935 wear' (< **wo*- + **-sa*- causative), OJ *wo* focus marking in nominalized clauses of the
1936 type O-*wo* S-*ga* V, Yamato-hama (Amami) *içjuri* 'to sit', Shuri (Okinawa) *jijuN* 'to
1937 sit', Shuri *ir*- A 'to sit', Shuri *un* 'to be, exist', Irabu (Miyako) *bizi:du buz* 'to sit',
1938 Ishigaki (Yaeyama) *birin* 'to sit, settle', pR **wir*- 'to sit' (< **wo* + *-(C)*i*-); Ryukyuan
1939 imperfect (ad)nominals e.g. Shodon *-un*, *-ur*, *-um* (< **wo* + nominalizer).
1940 pK **o*- 'to be': MK *-w^u/o*- modulator
1941 pTg **o*:- 'to become, make': Evk. *o*:-, Even *o*:-, Neg. *o*:-, Ma. *o*:-, Sibe *o*:-, Jur. *o-fia*,
1942 Olch. *o*-, Orok *o*-, Na. *o*-, Ud. *o*- / *o*:-, Solon *o*:-,
1943 pMo **bo*(:)- 'to become': WMo. *bol*- 'become, take place, be, exist; be able, be
1944 possible', (SH/ HY/ Muq.) MMo. *bol*-, (IM) MMo. *bul*- 'to become, be; be possible',
1945 Khal. *bol*-, Bur. *bolo*-, Kalm. *bol*-, Ordos *bol*-, Dag. *bol*-, Eastern Yugur *bol*-, Huzhu
1946 Mgr. *olə*-, *o:li*-, Minhe Mgr. *boř*- 'to become', *bər*- 'to be able', Bao. *ol*-, Dong. *bolu*,
1947 *olu*- 'to be possible, be proper', Mog. *bol*-, Khitan **po*- 'to become, promote' (Kane
1948 2009: 112)

1949 pTk **(b)o:l-* ‘to become’: OTk. *bol-* ‘to become’, Karakh. *bol-* ‘to become’, *ol-* ‘to
 1950 be’, MTK. *bol-* ‘to become’, *ol-* ‘to be’, Khalaj *ôl-*, Tk. *ol-*, Az. *ol-*, Gag. *ol-* ‘to
 1951 become’, Tkm. *bol-*, Tat. *bul-*, Uzb. *bul-*, Uig. *bo(l)-*, Sary-Yughur *pol-*, Khak. *pol-*,
 1952 Shor *pol-*, Oyr. *bol-*, Chu. *pol-*, Yak. *buol-*, Dol. *buol-*, Tuva *bol-*, Kirg. *bol-*, Kaz.
 1953 *bol-*, Nog. *bol-*, Bash. *bul-*, Balk. *bol-*, Krm. *bol-*, KKalp. *bol-*, Sal. *vol-*, *vo:-*, *bo:-*,
 1954 Kum. *bol-* ‘to become’
 1955 pTk **ol-* ‘to sit down, be sitting’ (**-Ur* / **-tUr* causative): Karakh. *oltur-*, Tk. *otur-*,
 1956 Tat. *utir-*, MTK. *oltur-*, Uzb. *utir-*, Uig. *oltur-*, Az. *otur-*, Tkm. *otur-*, Khak. *odir-*,
 1957 Oyr. *otur-*, Chu. *lar-*, Yak. *olor-*, Dol. *olor-*, Tuva *olur-*, Tof. *olir-*, Kirg. *otur-*, Kaz.
 1958 *otir-*, Nog. *oltir-*, Bash. *ultir-*, Balk. *oltur-*, Gag. *otur-*, Krm. *otur-*, KKalp. *otir-*, Sal.
 1959 *oht(ir)-* ‘to sit down, be sitting’
 1960
 1961 The Japanese verbs OJ *wi-* ‘to sit, be’, OJ *wor-* ‘to be, exist’ and OJ *wos-* ‘to deign to
 1962 control/rule/eat/drink/ wear’ are usually derived from a common root followed by the
 1963 suffixes **(C)i-* causative-anticausative (Robbeets 2015: 315), **-ra-* anticausative
 1964 (Robbeets 2015: 309) and **-sa-* causative respectively (Martin 1989: 698, 742, 743).
 1965 The semantics of OJ *wos-* suggest a common semantic denominator ‘take possession
 1966 of’, which can be interpreted as the causative of an existential auxiliary. Yanagida &
 1967 Whitman (2009: 127-129, 134) find that the function of the object marker OJ *wo* in
 1968 nominalized clauses of the type O-*wo* S-*ga* V is really a focus marker and that its
 1969 relative position is such that it always precedes the subject. Therefore, they suggest
 1970 that it has grammaticalized from an original copular verb. The original form of the
 1971 copula is traditionally considered to involve an *o*₂ and is thus derived from pJ **wə-*
 1972 according to Frellesvig & Whitman’s (2008) analysis. However, it may also be
 1973 derived from pJ **wo*, because OJ makes no distinction between *o*₁ (< **o*) and *o*₂ (<
 1974 **ə*) after *w*. Moreover, Pellard (2011: 10) advances evidence from Ryukyuan that the
 1975 original shape indeed was pJ **wo-*. The expected reflex of pJ **wə-(C)i-* ‘to sit, be’ in
 1976 Ryukyuan is pR **wer-*. In reality, however, attestations such as Shuri *jijuN* reflect an
 1977 original pR **wir-* ‘to sit’ (Thorpe 1983: 328-29), which derives from pJ **wo-(C)i-* ‘to
 1978 sit, be’. Taking into account grammaticalization theory (Heine & Kuteva 2002: 278),
 1979 the primary meaning of pJ **wo-* should be reconstructed as ‘to sit’. We cannot
 1980 exclude the possibility, however, that the polysemy ‘to sit, to be’ may already have
 1981 been present in the proto-language ancestral to Ryukyuan and Japanese.
 1982 As proposed by Martin (1996: 13, 83; 2006: 222), the Korean cognate is the
 1983 modulator MK *-w^u/o-*. It is a bound stem that attaches itself to other verb stems and is
 1984 more often than not followed by the (ad)nominalizers MK *-(u/o)m*, MK *-(u/o)l* and
 1985 MK *-(u/o)n* (Martin 1992: 269-273; Ramsey & Lee 2011: 205-207; Robbeets 2015:
 1986 347, 366, 383). These suffixes may appear either in the modulated or unmodulated
 1987 form, e.g. MK *yel-um* ‘fruit’ and MK *yel-wu-m* ‘the bearing (of fruit)’ from MK *yel-*
 1988 ‘to bear (fruit) (tr.)’. The modulated alternants are assumed to go back to a
 1989 periphrastic construction consisting of copula and (ad)nominalizer (Robbeets
 1990 2015:160-161). Note that the Ryukyuan imperfect (ad)nominals, e.g. Shodon *-un*, *-ur*,
 1991 *-um* are derived in a parallel way from an original copula pJ **wo* and an
 1992 (ad)nominalizer.
 1993 Benzing (1955a: 120) and Doerfer (1965: 358) suggest a historical connection
 1994 between pTg **o:-* ‘to become, make’ and the other Altaic forms. The open
 1995 monosyllabic form with length in Tungusic may be indicative of original liquid loss,
 1996 as it is in the etymologies for 4 WATER, 53 GIVE, 79 BLOW, 80 WOOD and 118
 1997 YEAR. Benzing assumes that the root-final liquid was dropped in Tungusic because it
 1998 was reanalyzed as the inchoative suffix **-l*. The initial voiced labial stop may have

been lost before a long labial vowel, as it probably did in Korean as well. As far as the labial lenition is concerned, however, observing that Tungusic lacks words with initial *w- followed by a labial vowel, Doerfer suggests that it went over *w- to zero here.

The historical and contemporary Mongolic languages support the reconstruction of pMo *bo(:)l- ‘to become’, which grammaticalized into a copula or into verbs of ability and possibility. The final vowel in Mangghuer and Dongxiang is epenthetic in nature (Nugteren 2011: 244-245). The Huzhu Monguor form o:li- may point to original vowel length in Mongolic. Note that there is no final liquid in the Khitan reconstruction *po- ‘to become, promote’.

The historical and contemporary varieties of Turkic support the reconstruction of pTk *bo:l- ‘to be(come)’. Vowel length is reflected in Yakut *buol-* ‘to become’. There is sporadic elision of initial *b- in the forms with the meaning ‘to be’ in Old Turkic and Middle Turkic. The b- was also elided in the verbs meaning ‘to become’ in Khalaj, in the Oghuz Turkic languages in the West and in Salar, probably through an intermediate form with v-. Sporadic lenition of initial *b- is found in the same geographic distribution for other monosyllabic roots with non-high vowels and final liquids, such as pTk *be:r- ‘to give’ reflected as Khalaj *ver-*, Tk. *ver-*, Az. *ver-*, Gag. *ver-*, Sal. *be(r)-*, *ve(r)-*, *ve:(r)-*, pTk *ba:r ‘existence’ reflected as Khalaj *va:r*, Tk. *var*, Az. *var*, Gag. *var*, Sal. *ba:r*, *va:r* and pTk *bar- ‘walk’ reflected as Khalaj *var-*, Tk. *var-*, Az. *var-*, Gag. *var*, Sal. *ba:r-*, *var-*. In view of the sporadic lenition of initial *b-, the copular verb pTk *bo:l- ‘to be(come)’ may be internally related to pTk *olur- ~ *oltur- ‘to sit down, be seated, settle down, reside’, an etymology that has been proposed by Räsänen (1969: 79, 360). The original verb stems are reflected in the alternation between OTk. *olur-* and *oltur-* ‘to sit down, be sitting’ and in historical and contemporary varieties reflecting one stem or the other.⁸ The underived root pTk *ol- ‘to sit down, be sitting’ may be reflected in Mongolic borrowings such as WMo. *olbuy* ‘square cushion for sitting, mattress’. Clauson (1972: 150) has proposed to explain the Turkic reflexes of *oltur- as instances as resulting from dissimilation of -l- to -lT-, but it is more likely to regard pTk *ol-ur- ~ *ol-tur- as derivations with the suffixes -Ur and -tUr, which both derive causatives in Turkic (Erdal 1991: 710, 799). Robbeets (2015: 290) shows that the lexicalization of causative suffixes, such as pTk *-t(i)- in Soy. *olīt-* ‘to sit, be sitting’ is recurrent in posture verbs, suggesting the development of valence-neutral meaning such as intensive and progressive-resultative from original causative suffixes. If the posture verbs and copular verbs can indeed be related, grammaticalization theory would lead to the reconstruction of pTk *bo:l- ‘to sit down, be sitting; become, be’, with static and dynamic posture as the original meaning and static and dynamic copula semantics ‘to become, be’ as the secondary meaning.

Given the polysemy of ‘to sit, be’ reconstructed for Japonic, it cannot be excluded that the grammaticalization from the posture verb ‘to sit down, be sitting’ into a copular verb ‘to become, be’ was already under way in proto-Transeurasian. The original polysemy seems to have left traces at the peripheries of the family, namely in Turkic and Japonic. The loss of the final liquid in proto-Japanese-Korean may be explained by the originally monosyllabic nature and long vowel of the verb pTEA *bo:l- ‘to take a position, become, be’. The same explanation can account for the development of pTk *bo:- ‘to become’ into Sal. *vo:-/ bo:-*. Other studies reconstructing a common copular verb pJK *bo- ‘to be’ or pTEA *bo(:)l- ‘to become’

8

include Poppe 1960: 99, Menges 1968b: 145-146, Miller 1981: 851, Street 1985: 639, Kortlandt 1997, Starostin et al. 2003: 372-73 and Martin 2006: 222-223.

106. RIGHT

pK **pal-* 'to be at the righthand side': K *palu-* (-ll-), MK *palo-* (-ll-) 'to be to the right; be right, correct, honest; be direct, straight, immediate', K *palun* 'that is on the righthand side (modifier); the right side (noun)'

pMo **bara-* 'to be at the righthand side' (**-yun* ~ *-gün* deverbial noun suffix for qualities and abstract nouns): WMo. *barayun* 'righthand side, right; west, westrightist (political)', MMo. *bara'un*, *barān*, *bārawun* '1 righthand side, right; 2 west, western', Khal. *baru:n* '1, 2', Bur. *baru:n* '1, 2', Kalm. *baru:n* '1, 2, southwest', Ordos *baru:n* '1, 2', Dgx. *borun* '1, 2', Dag. *baran*, *baren* '1, 2', Eastern Yugur *baru:n* '1, 2', Mgr. *baroŋ*, *waroŋ* '1, 2', Mogol *baranyōl* '1, 2'.

Given the attestation of K *palay-* 'fade out, discolor, get washed out (intr.); fade, bleach, wash out (dye) (tr.)' (**-i* causative) and WMo. *bara-* 'finish, expire, exhaust, wear out', WMo. *barayan* 'object visible in the distance, silhouette' and WMo. *barayan* 'dark', I do not exclude the possibility that the Transeurasian verb **bara-* 'to be at the righthand side' ultimately derives from a common verb **bara-* 'to fade out, to sink (of the sun)'

108. TO GRASP

pJ **tuka-* 'to grasp, hold' (pJ **-ma-* deverbial inclinational suffix; Robbeets 2015: 248-250): J *tukam-*, OJ *tukam-* (B) 'to grasp, catch, hold', J *tuka*, OJ *tuka* (2.3) 'hilt, grip, handle', Asama (Amami) *cikamjun* 'to grasp', Yonamine (Okinawa) *sikaamin* 'to grasp', Irabu (Miyako) *tskam* 'to grasp', Ishigaki (Yaeyama) *cikamun* 'to grasp, capture', Yonaguni *khácimirun* 'to grasp'

pK **taka-* 'to receive': K *tha-*, MK *·tho-* 'to get, receive'

pTg **tuk-* 'to take into one's arms' (**-i* resultative deverbial noun suffix): Evk. *tuŋin* 'carrying (a baby) on one's back, shoulders, arms', *tukihin-* 'to take on back, shoulders, into arms', Even *tok-* 'to carry on one's back; to take into one's arms', Olcha *tūwu(n)* 'an armful', *tūwu-lə-* 'to take into one's arms', *tūwu-lə-či-* 'to carry a baby in arms', Na. *tuxi* 'armful', *tuxi-lə-* 'take in one's arms', *tuxi-si-* 'carry in one's arms', Ud. *tugələ-nə-* ~ *tugələ-* ~ *tuələ-* 'to take into one's arms; to embrace'

The Old Japanese *tuka* 'hilt, grip, handle' may reflect a noun derived from the verb root underlying OJ *tukam-* (B) 'to grasp, catch, hold'. Note that this pattern of nominalization also underlies in derivations such as OJ *tuk-* (A) 'build' → OJ *tuka* (2.2) 'mound, hillock, tumulus', OJ *por-* (B) 'to dig' → OJ *pōra* (2.4?) 'cave, cavern', OJ *nap-* (B) 'twist, make rope' → OJ *nāpa* (2.3) 'rope, cord' and OJ *tuk-* (B) 'be attached, come in contact' → OJ *tuka* (2.3/2.4?) 'bundle' (Robbeets 2015: 156).

In line with Ramsey (1993: 438; 1997), verb stems with complex initials that are tonic and monosyllabic and have minimal vowels (MK *o*, *u*, *i*) are thought to be created through the loss of a first-syllable vowel. Taking into account velar lenition (cf. 32 BIG, 55 BURN), we can reconstruct pK **taka-* 'to receive'.

113. TWO

- 2094 pJ **puta* 'two' (pJ *-*tu* substantivizer): J *hutatu*, OJ *putatu* 'two', Yamatohama
 2095 (Amami) *taaci*, Shuri (Okinawa) *taaci*, Irabu (Miyako) *futaaci*, Ishigaki (Yaeyama)
 2096 *putaazi*, Yonaguni *ttaaci* 'two', pR **puta-tu* 'two'.
 2097 pK **p(ʌ)cak* 'pair': K *ccak*, MK *pcak* 'pair'
- 2098
 2099 114. BOTTOM
- 2100 pJ **sita* 'bottom, below': J *sita*, OJ *sita* (2.2a) 'under, lower, bottom', Yoron
 2101 (Amami) *sica* 'below', Shuri *sica* 'below', Hirara (Miyako) *sita* 'below', Ishigaki
 2102 (Yaeyama) *sita* 'below', Yonaguni *ttara* 'below' < **sita-ra*.
 2103 pK **s(i)ta* 'ground' (pK *-(i/ʌ)*k* place suffix): K *ttang*, MK *·stah* 'ground'
- 2104
 2105 The final -*h* in MK *·stah* 'ground' probably is a reflex of the place suffix *-(i/ʌ)*k*, e.g.
 2106 in MK *pas* ~ *pask* 'outside' (< **pasʌ-k*), (< **pasʌ-k*), *math* 'yard' (< **matʌ-k*), *alph*
 2107 'front' (< **alpʌ-k*), MK *path* '(dry) field' (< **patʌ-k*), MK *muth* 'dry land' (< **mutʌ-*
 2108 *k* 'dry land'), etc. Forms with complex initials that are tonic and monosyllabic are
 2109 likely to be the result of the loss of a first-syllable minimal vowel (MK *o*, *u*, *i*).
 2110 Therefore, it is reasonable to reconstruct pK **s(i)ta-k* 'ground' whereby the choice of -
 2111 *i*- as the lost minimal vowel is supported by the comparison with Japanese.
- 2112
 2113 115. TO LIE DOWN
- 2114 pJ **na-* 'to lie down': J *neru*, OJ *ne-* (A) 'to lie down, sleep', *nasu* 'to deign to sleep,
 2115 put to sleep', Asama (Amami) *nindui* 'to lie down, sleep', Shuri (Okinawa) *nintoön*
 2116 'sleep (stative)', *ninzun* 'to lie down (dynamic)', Hirara (Miyako) *niv* 'to lie down,
 2117 sleep', Irabu (Miyako) *nivvi bui* 'to lie down, sleep', Ishigaki (Yaeyama) *nibin* 'to lie
 2118 down, sleep', Yonaguni *nindun* 'to lie down, sleep'
- 2119 pTg **ne:-* 'to lay down, put down': Evk. *nə:-* 'to put, to set; to select; to accept; to let
 2120 down', Even *nə:-* 'to put', *nə:-ku* 'barn', *nə:-kči-* 'to save', Solon *nə:-* 'to put', Neg.
 2121 *nə:-* 'to put, to set; to collect in one place; to bury', Na. *nə:-* '1 put, set, place; 2 leave,
 2122 save; 3 nominate', *nə:-ktə-* 'to put, spread many objects', *nə:-ku-* '1 to put smth. back;
 2123 2 to keep smth. for future use; 3 to nominate smb again for the same position; 4 to
 2124 marry a widow of a relative', Olcha *nə:-* ~ *nə:gbu-* 'to put', Ud. *nə-* 'to put', Oroch
 2125 *nə:-* 'to put, to place, to set'
- 2126
 2127 118. YEAR
- 2128 pK **selV* 'year, age': K *se:l* 'the New year (season)', *sel-nal* 'New years Day', MK *·sel*
 2129 'the New year (season)', MK *·sel* 'years of age', K *sal* 'years of age'
- 2130 pTg **se:* 'year, age': Sibe *sə* 'age', Ma. *sə* '1 year (of age), age', Jur. *se* 'year', Olcha
 2131 *sə:* 'age', Na. *sə:* 'age', Ud. *sə* 'year (age)', Oroch *sə:* '1 year (of age); 2 age of a
 2132 person'
- 2133
 2134 Whitman (1985: 235) analysed OJ *ko₂zo₂* 'last year, tonight, last night' as a compound
 2135 of the proximal demonstrative OJ *ko₂-* < pJ **kə-* 'this' and pJ **sə* 'year'. However this
 2136 analysis is problematic because the OJ *ko₂zo₂* means 'last year', not 'this year';
 2137 compare for instance with OJ *ko₂yo₂pi* 'this night', which is derived from the
 2138 demonstrative and OJ *yo₂pi* 'night'. Since there is no unambiguous internal evidence
 2139 for the reconstruction of pJ **sə* 'year', I have not included it here, even if it would
 2140 make a regular fit to the Korean and Tungusic forms.
- 2141 Similar to the etymologies 4 WATER, 53 GIVE, 79 BLOW and 80 WOOD, an
 2142 open monosyllabic form with length in Tungusic corresponds to a disyllabic form

- 2143 with a liquid onset in the second syllable in the other Transeurasian languages. This is
 2144 indicative of liquid loss in Tungusic.
 2145
 2146 pMo **jil* 'year': WMo. *jil* '1 year', MMo. *jil* '1', Khal. *žil* '1', Bur. *žel* '1', Kalm. *jil* '1',
 2147 Ordos *jil* '1', Dag. *jil* '1', Eastern Yughur *jəl* '1', Mgr. *žir*, *žur*, *jil* '1', Mog. *jil* 'time'
 2148 pTk: **yil* 'year': OT *yil* '1 year', Karakhanid *yil* '1', MTK. *yil* ~ *il* '1', Tk. *yil* '1', Az. *il*
 2149 '1', Tkm. *yil* '1', Gag. *yil* '1', Tat. *yil* '1', Kirg. *jil* '1', Kaz. *žil* '1', Nog. *yil* '1', Bash. *yil*,
 2150 Balk. *žil*, Karaim *yil* '1', Kkpak. *žil* '1', Salar *yel* '1', Kum. *yil* '1', Uz. *yil* '1', Uig. *yil* '1',
 2151 S-Yug. *yil* '1', Khak. *čil* '1', Shor *čil* '1', Tuva *čil* '1', Tofa. *čil* '1', Yak. *sil* '1', Dolg. *hil*
 2152 '1'
 2153
 2154 121. TO WEAVE
 2155 pJ **orə*- 'to weave': J *oru* A 'weave', OJ *oro2s*- 'deign to weave', Asama (Amami)
 2156 *ɸujun* 'to weave', Shuri (Okinawa) *ɸujun* 'to weave', Irabu (Miyako) *ui* 'to weave',
 2157 Ishigaki (Yaeyama) *urun* 'to weave', Yonaguni *úrun* 'to weave'
 2158 pK **ola* 'unit of woven fibers, component of woven fabric': K *o:l*, MK *wol* 'strand of
 2159 rope, ply, warp', K *olk*- 'to tie up, bind, weave' (< pK **ola* 'woven fabric' + *·ka*-
 2160 inchoative; Robbeets 2015: 258)
 2161 pTg **poro*- 'to spin (nettle and hemp threads); to rotate, turn': Evk. *horol*- 'to spin,
 2162 whirl, go around', *horoli*: 'around', Neg. *xoyil*- ~ *xoyol*- 'to spin; to circle; to eddy
 2163 (about water)', *xoyil* ~ *xoyol*, *xoxsin* 'eddy', Ud. *xoli*- 'to circle (about birds); to circle,
 2164 to whirl', Sibe *foro*- 'to spin; to turn', Ma. *foro*- 'to spin; to turn, to turn around, to
 2165 face, to turn toward', *forko* 'spinning wheel', *foron* 'swirl, curl, whirl; rotation (of an
 2166 arrow between the fingers)', *foro-no*- 'to turn (in that direction)', *forontu* 'curly,
 2167 having curly hair', Olcha *pori*- 'to weave (nets)', *porpu(n)* 'a spindle; a device for
 2168 weaving nets'; Oroch *porpu* 'a spindle for spinning nettle and hemp threads'
 2169 pMo **poro*- 'to tie around, entwine; rotate, turn' in **poro-go*- 'to wrap' (*-*ga*-
 2170 causative) and **poro-ti*- 'roll, rotate' (*-*ti*- intensive): WMo. *oriya*- '1 to tie around,
 2171 entwine, wrap, bandage, wind, roll (tr.)', *oruya*- '1', *orči*- '2 to turn around, roll,
 2172 rotate' (intr.)', MMo. *hura*- '1', *xorči*-, *horči*-, *orči*- '2', *orčul*- '2', Khalkha *orō*- '1',
 2173 *orči*- '2', Buriat *oro*:- '1', *oršo*- '2', Kalmuck *ora*:- '1', *orčə*- '2', Ordos: *oro*:- '1',
 2174 *orčín* 'around', Dgx. *xoro*- '1', Baoan *horə*-, Dagur *oré*:-, Eastern Yughur *horo*:-,
 2175 Mgr *furo*:-, *xuro*:- '1'
 2176 pTk **pō:r*- 'to plait, weave': OT (Karakh.) *ör*- 'to plait (hair or other fibers)', MTK
 2177 *ör*- '1 to weave, plait, twist things together', *örmek* 'cloth woven from camel hair',
 2178 Kirg. *ör*- '1', Kaz. *ör*- '1', *örīm* 'woven part of sth (e.g. of a whip); bundle', Nog. *ör*-
 2179 '1', Bash. *ür*- '1', Karaim *ör*- '1; to spin', Kkpak *ör*- '1', Tat. *ör*- 'to plait, to knit, to
 2180 darn, to interlace, to interweave, to build (a wall), to lay bricks or stones in a
 2181 building', Tk. *ör*- '1', Az. *hör*- '1; to knit', Tkm. *ō:r*- '1', Gag. *yör*- '1; to knit', Uz.
 2182 *or*- '1', Uig. *ō(r)*- '1', Yak. *ör*- '1', *örū* 'plaiting', Dolg. *ör*- 'to plait, bind together,
 2183 wind', *örū* 'plaiting', Khalaj *hiri*-, *hör*- 'to plait', Chu. *var* 'best part; sort of fiber;
 2184 flax', *věren* 'cord, rope'
 2185
 2186 The expected reflex of pTEA **p*- is **p*- in proto-Japonic and proto-Koreanic
 2187 However, an initial labial stop sporadically drops before a (long?) rounded pJK **o*(:),
 2188 as it probably also did in the reflexes of pTEA **bɔ:l*- 'to sit down, become, be' in
 2189 Japanese and Korean; see 102 TO SIT. Old Japanese makes no distinction between *o*₁
 2190 (< **o*) and *o*₂ (< **ə*) in initial position, but I have opted for **o* in pJ **orə*- 'to weave'
 2191 because it entails a regular correspondence. The root-final vowel of pJ **orə*- is an
 2192 irregular fit, which may be due to vowel reduction in root-final position.

2193 The regular reflexes of pTg **p-* are Nanai/ Olcha/ Orok *p-*, Manchu *f-*, Evenki/
 2194 Even *h-*, Negidal/Oroch/ Udehe *x-* and Solon Ø (Benzing 1956: 981). Except for
 2195 Oroch *po:ɾpu*, *po:ɾfu* 'spindle', which is probably a borrowing from Olcha, the
 2196 cognates are thus corresponding regularly and suggesting the reconstruction of an
 2197 initial pTg **p-*.

2198 The initial labial stop pMo **p-* is regularly preserved in the peripheral Mongolic
 2199 languages, notably as *f-* in Monguor *furō-*, as *h-* in Shira-Yughur *horō-* or Baoan
 2200 *horə-* and as *x-* in Dongxiang *xoro-*, but it disappeared in the central Mongolic
 2201 languages.

2202 For Turkic, it is commonly assumed that word initial pTk **p-* developed over a
 2203 bilabial fricative into *h-*, leaving only a trace in Khalaj *h-* and finally disappeared in
 2204 most of the contemporary Turkic languages. Given the attestation of Khalaj *hōr-*
 2205 'plait' it is legitimate to reconstruct pTk **pō:r-* 'to plait, weave'.

2206 Although the semantic association between 'to weave' and 'to spin' is not
 2207 explicitly mentioned in List et al. (2014), the polysemy can be observed in Karaim
 2208 *ōr-* 'to weave, plait; spin' (Bakov et al. 1974: 442) in which the original meaning 'to
 2209 weave' developed into 'to spin'. This is also the direction of the semantic shift
 2210 assumed for the Tungusic and Mongolic proto-forms.

2211

2212 122. AT

2213 pJ **-tu* denominal suffix expressing locative relationship: OJ *-tu* genitive-locative
 2214 marker, e.g. *pe₁-tu nami₁* (seaside-GEN.LOC-wave) 'waves on the beach'.

2215 pK **t_{AY}* locative postnoun: K *tey*, MK *·toy* 'place, case, circumstance', K *eti* 'where?',
 2216 MK *e-tōy* 'where, which place?' (*e-* interrogative/indefinite)

2217 pTg **-du* dative-locative suffix (for recipient, goal, direction and location) (Benzing
 2218 1955: 79, 83): Even *-du* ~ *-tu* ~ *-du^ɛ* ~ *-tu^ɛ*, Solon *-du*, Evk. *-du* ~ *-tu*, Neg. *-du*: ~ *-*
 2219 *tu*:, Na. *-do* / *-du*, Olcha *-do* / *-du*, Orok *-do* / *-du*, Ud. *-du*, Oroch *-do* / *-du*, Ma. *də*,
 2220 Sibe *-d*, Jur. *-dolo*, e.g., Ud. *zugdi-du* 'in the house', *Bali-du* 'in the city of
 2221 Khabarovsk', *kniga-du* 'in the book', etc. (Nikolaeva 1999: 75);

2222 pMo **-du* denominal suffix expressing locative relationship (Poppe 1955: 196,
 2223 Gruntov & Mazo forthc.): WMo. *-du* ~ *-tu* ~ *-dū* ~ *-tū* denominal locative, dative-
 2224 locative, e.g. *emüine-dū* 'southern' (*emüine* 'front'), *yadaya-du* 'outer' (*yadaya*
 2225 'outside'), *morin-du* 'to the horse' (*morin* 'horse'), *yajar-tu* 'in the country' (*yajar*
 2226 'country'); MMo. *-du* ~ *-tu*, e.g. *aman-du* 'in the mouth', *yartu* 'on the hand'; Mog. *-du*
 2227 ~ *-tu* dative-locative suffix; Mgr. *-du* dative suffix; Dgx. - *də*; Kangjia *-du* ~ *-tu*; Oirat
 2228 *-du* ~ *-tu* dative-locative suffix; Ordos *-du* ~ *-tu* dative-locative suffix; Kitan *-də* ~ *-dɔ*
 2229 ~ *-du* dative-locative suffix

2230

2231 The genitive-locative suffix *-tu* is no longer productive in Old Japanese, although it
 2232 occurs more frequently in early than in late Old Japanese texts (Vovin 2005: 152), e.g.
 2233 *pe₁-tu nami₁* (seaside-GEN.LOC-wave) 'waves on the beach'. The marker is not
 2234 preserved in the Ryukyuan languages, except in one compound related to J matuge
 2235 'eyelashes' (< pJ **ma-tu-nkai* eye-GEN.LOC-hair), i.e., Shuri *maçigi*, Nakijin
 2236 *maciigi*, Yamatohama *macigī* and Ishigaki *macini* 'eyelashes'.

2237 In Written Mongolian and Middle Mongolian, the denominal locative suffix has an
 2238 allomorph in *-tu* following all consonants other than *n*, *ng*, *l* and *m*. In Mogol, Ordos
 2239 and Oirat, the allomorph *-tu* is restricted to the environment following *q*, e.g. Mog.
 2240 *morin-du* 'to the horse' and *xoq-tu* 'to the earth'.

- 2241 The lack of vowel harmony for the suffix in Mongolic, except Written Mongolian
 2242 and Tungusic, supports the origin of the marker as a locative postposed noun meaning
 2243 'place, at', a status, which is preserved in Korean.
 2244
- 2245 pTg *-*da*: locative postnoun 'side' (Benzing 1955: 1009): Even -*da* ~ -*də* 'side, part',
 2246 e.g., in Even *amar-da:-n* 'backside', Even *jul-də:-lə*: 'in front', Evk. -*gida* 'space,
 2247 side', e.g. *amar-gida* 'backside' (*amar* 'back'), Neg. -*gida:*, -*da*: 'side', Solon *ami-*
 2248 *da:-du* 'afterwards'
- 2249 pMo *-*da* ~ *-*de* dative-locative (direction, location) (Poppe 1955: 195): WMo. -*da* ~
 2250 -*de* adverbial marker of time and space, e.g. *urtu-da* 'long time', *nasu-da* 'always', *en-*
 2251 *de* 'here'; MMo. -*da* ~ -*de* dative-locative, e.g. *na-da* 'to me', *üile-de* 'to the work';
 2252 Khal. -*da* ~ -*ta* ~ -*de* ~ -*te* dative-locative; Bur. -*da* ~ -*ta* ~ -*de* ~ -*te* dative-locative;
 2253 Kalm. -*da* ~ -*ta* ~ -*de* ~ -*te* dative-locative; Dag. -*da* ~ -*ta* ~ -*de* ~ -*te* dative-locative,
 2254 Ordos -*da:-n* ~ -*ta:-n* ~ -*de:-n* ~ -*te:-n* dative-locative in reflexive-possessive
 2255 declension
- 2256 pTk *-*da* ~ -*de* locative suffix (Tenišev et al. 1997): OT -*DA* (-*t* ~ -*d* ~ -*a* ~ -*ä*-) '1
 2257 locative', e.g. *köl-tä* 'at the lake'; Tk. -*DA* (-*d* ~ -*t*, -*a* ~ -*e*) '1', Az. -*dA* (-*a* ~ -*ä*-) '1',
 2258 Tkm. -*dA* (-*a* ~ -*e*) '1', Gag. -*DA* (-*d* ~ -*t*, -*a* ~ -*e*) '1'; Bash. -*DA* (-*d* ~ -*t* ~ -*ǵ* ~ -*l*,
 2259 -*a* ~ -*ä*-) '1', Tat. -*DA* (-*d* ~ -*t*, -*a* ~ -*ä*) '1', KBalk. -*dA* (-*a* ~ -*e*) '1', Karaim -*DA* (-*d* ~ -*t*, -*a* ~ -*e*) '1', Kkpak. -*DA* (-*d* ~ -*t*, -*a* ~ -*e*) '1', Kaz. -*DA* (-*d* ~ -*t*, -*a* ~ -*e*) '1',
 2260 Khak. -*DA* (-*d* ~ -*t*, -*a* ~ -*e*) '1', Kirg. -*DA* (-*d* ~ -*t*, -*a* ~ -*e* ~ -*o* ~ -*ö*) '1', Kum. -*dA*
 2261 (-*a* ~ -*ä*-) '1', Nog. -*DA* (-*d* ~ -*t*, -*a* ~ -*e*) '1', Altay -*DA* (-*d* ~ -*t*, -*a* ~ -*e* ~ -*o* ~ -*ö*)
 2262 '1', Uig. -*DA* (-*d* ~ -*t*, -*a* ~ -*ä*) '1', Uz. -*da* '1'; Shor -*DA* (-*d* ~ -*t*, -*a* ~ -*e*) '1', Tofa. -
 2263 *DA* (-*d* ~ -*t*, -*a* ~ -*e*) '1', Tuvan -*DA* (-*d* ~ -*t*, -*a* ~ -*e*) '1'; Khalaj -*dA* (-*a* ~ -*ä*)
 2264 ablative, Chu. -*RA* (-*r* ~ -*t*, -*a* ~ -*e*) '1'
- 2265
 2266
 2267 123. EDGE
- 2268 pJ **pasi* 'edge, extremity': J *hasi*, OJ *pasi* ~ *pazi* (2.1) 'extremity, margin, verge',
 2269 Yoron (Amami) *pasi* 'edge', Yonamine (Okinawa) *pasii* 'edge', Yonaguni *haci* 'edge'
 2270 pK **pasA-k* 'outside, beside' (pK *-(i/ʌ)k place suffix): K *pakk*, MK *pas* ~ *pask*
 2271 'outside (of a limit), exterior boundary, beside, other'
- 2272
 2273 The final -*k* in MK *p* probably is a reflex of the place suffix *-(i/ʌ)k, e.g. in MK *math*
 2274 'yard' (< **matA-k*), *alph* 'front' (< **alpA-k*), MK *path* '(dry) field' (< **pata-k*), MK
 2275 *muth* 'dry land' (< **mutA-k* 'dry land'), etc. In this case, the place suffix is maintained
 2276 as -*k* following *s*; there are no **sh* clusters in Middle Korean. Forms with complex
 2277 initials that are tonic and monosyllabic are likely to be the result of the loss of a first-
 2278 syllable minimal vowel (MK *o*, *u*, *i*).
 2279
- 2280 126. CHEEK
- 2281 pJ **po* 'cheek': J *hoho*, OJ *popo* (2.3) 'cheek'
 2282 pK **pol* 'cheek': K *pol*, MK *pwol* 'cheek'
- 2283
 2284 The Japanese word is generally taken as a reduplication. Rate (2016: 2018)
 2285 explains the *-*r* loss in Japanese by a process whereby pJ **po(r)-por* reformed
 2286 analogically to **po-po* by dropping final **r* in order to preserve the transparency
 2287 of the reduplication.
 2288
- 2289 129. HOLE
- 2290 pJ **ana* 'hole': J *ana*, OJ *ana* (2.3) 'hole', Yoron (Amami) *ana* 'hole', Yonamine

2291 (Okinawa) *ana* 'hole', Irabu (Miyako) *ana* 'hole', Hatoma (Yaeyama) *ana* 'hole',
 2292 Yonaguni *ànanpu* 'hole'
 2293 pK **an* 'interior, inside' (pK *-(i/ʌ)*k* place suffix): K *an*, MK *anh* 'interior, inside'
 2294
 2295 For the place suffix pK *-(i/ʌ)*k* place suffix; see 123. EDGE.
 2296
 2297
 2298 130. TO GROW
 2299 pJ **ura*- 'to mature, ripen' (*(C)*i*- causative-anticausative): J *ure*-, OJ *ure*- (B) 'to
 2300 mature, ripen'
 2301 pTg **ure*- 'to grow, ripen': Evk. *uruktu* 'bush', Sol. *urilə* 'grain', Ma. *ursan* 'new
 2302 shoots that sprout from old roots, new branches that appear on a tree that has been cut
 2303 away', *ursana*- 'to sprout from old roots or an old stock', Sibe *ursan* 'seedlings,
 2304 bystander branches', *ursa-na*- 'to revive', Jur. *ure*- 'to ripe', *uri*- 'to become ripe', Na.
 2305 *urə*- 'to grow, ripen; to develop', *urə-ktə* 'willow rod', Olcha *urə*- 'to grow', *urə-qtə*
 2306 'a rod', Orok *urəktə* 'a rod'
 2307 pMo **ur-ga*- ~ **urgu*- 'to grow' (WMo. -*GA*- < pMo **-gA* factitive; Poppe 1954: 61):
 2308 WMo. *uryu*- 'to grow, sprout; to appear, show up; to rise (of sun) (intr.)', *uryuca*
 2309 'harvest, yield, crop', MMo. *urqu*-, *hurya*-, *uryu*- '1 to grow', Khal. *urga*- '1', Bur.
 2310 *urga*- '1', Kalm. *uryə*- '1', *uryəmə*r 'harvest, yield, crop', Ordos *urGu*- '1', Dag. *orgu*-,
 2311 *orege*-, *orgo*- '1', Mog. *uryu*- '1', Eastern Yugur *uğarma* 'plant' (< **urga-ma*)
 2312 pTk **ur* 'growth, excrescence': Tk. *ur* '1 growth, excrescence', Az. *ur* 'burl, wart (on a
 2313 tree); tumor; crop', Tat. *ūrī* '1', Kirg. *ur* 'burl, wart (on a tree), Bash. *ūrū* 'burl, wart (on
 2314 a tree); bump; nodule; outgrowth, excrescence', Nog. *uri* 'gland; excrescence', Kaz.
 2315 *ūra* 'bump, excrescence', Tuva *uru* '1', Shor *ur* '1', Oyrat *ur* '1', Yak. *ur* '1'
 2316
 2317 Nugteren (2011: 533) considers the Middle Mongolian form *hurya*- in the
 2318 Muqaddimat al-adab as a secondary form. The Mongolic forms of the shape **ur-ga*-
 2319 'to grow' can be derived as a factitive derivation of an original root pMo **ur*- 'to
 2320 grow', while the forms of the shape **urgu*- 'to grow' could represent an assimilation of
 2321 the stem-final vowel to the preceding one. However, the derivation with a factitive
 2322 suffix remains problematic because the resulting verb is not transitive.
 2323
 2324 132. BELLY
 2325 pJ **para* 'belly': J *hara*, OJ *para* (2.3) 'belly, stomach, abdomen'
 2326 pK **pʌ(l)i* < **pʌ(l)ʌi* 'belly': K *pay*, MK *poy* 'belly'
 2327
 2328 MK *poy* can be derived through liquid loss and vowel contraction from pK **pʌ(l)i*
 2329 'belly'. Proto-Korean words of the shape *(C)*Vʷli*, in which *V* is any vowel except
 2330 the minimal vowel *i* and has an initial high pitch, have lost the liquid and contracted
 2331 to tonic words of the shape (C)*Vy* or ʷ(C)*Vy* in Middle Korean. One illustrative
 2332 doublet that bears an internal trace of the lost liquid is MK *pu-li*- 'to practice (magic),
 2333 summon a ghost; to make move (an object)' vs. MK *pwuy*- 'to rub, twist'. Ratte
 2334 (2016: 200) derives both verbs from the same original root and explains the
 2335 alternations of *u* and *wu* in Middle Korean as a neutralization or confusion at an
 2336 earlier stage. MK *pu-li* < **pi-li* < *pu-liy*- neutralized the original vowel to *u* [ɨ] and
 2337 therefore, retained the liquid, whereas MK *pwuy*- < **pu-li* < *pu-liy* preserved the
 2338 original vowel *wu* [u] and therefore, lost the liquid and contracted the vowels. EMJ
 2339 *purup*- 'call forth, raise spirits; brandish an object, make move' and OJ *purup*- 'to
 2340 sift, sieve' < pJ **puru*- 'to shake, brandish' are probable cognates. Another potential

2341 internal doublet is MK *·so(l)-* / *·so-l(o)-* < **·sa·la-* 'to burn; melt, make vanish (tr.)'
 2342 and MK *·soy-* 'to leak, escape out (intr.)' < **·sa·li-* < **·sa·lay* < **·sa·la-i-*
 2343 (make.vanish-INTR). OJ *sar-* (A) 'leave, depart' < pJ **sara-* is a likely cognate. Other
 2344 Middle Korean words of similar shape in which external evidence suggests liquid loss
 2345 are MK *·kwuy* 'ear' < pK *·ku(l)i* 'ear' in comparison with pMo **kul* 'ear' and pTk **kul-*
 2346 *kak* 'ear' (see 22 EAR); MK *·pi* 'rain' < pK **puy* < **·pu·(l)-i* (rain-NMLZ) in
 2347 comparison with OJ *pur-* < pJ **pura-* 'to rain' and Orok *pure:-* < pTg **pur-* 'to
 2348 drizzle' (Martin 1996: 47, 95; Starostin et al. 2003: 1105-1106); MK *·say* 'new' < pK
 2349 **·sa(l)i* in comparison with OJ *sara* (2.5.) 'new'.

2350 In support of this process of liquid loss following high-pitched vowels other than
 2351 **i*, it can be observed that Middle Korean verbs ending on *-li* with initial low pitch
 2352 display a variety of vowels in their initial syllable, e.g. MK *ka·li-* 'to branch off', MK
 2353 *se·li-* 'to get steamed up', MK *wu·li-* 'to soak', MK *cwo·li-* 'to decrease, omit', MK *tu·li-*
 2354 'to hang down' and MK *no·li-* 'go down' belonging to accent Class 2.2 and MK *wuli-*
 2355 'to soak out', MK *kwuli-* 'to stink' and MK *huli-* 'to be muddy' belonging to accent
 2356 Class 2.0. By contrast, the large majority of Middle Korean verbs ending on *-li* with
 2357 initial high pitch display a vowel *u* in their initial syllable, e.g. MK *·kuli-* 'to draw',
 2358 MK *·kuli-* 'to miss', MK *·nuli-* 'to mark off', MK *·puli-* 'to work, use sth', MK *·tuli-* 'to
 2359 humbly give', MK *·tuli-* 'to put in, dye', with exception of MK *·choli-* ~ *·chali-* 'to
 2360 prepare, concentrate' and MK *·poli-* 'to crack open, break'. This observation suggests
 2361 that following all other vowels than *u* the liquid got lost and made the verb root
 2362 contract to one yodized syllable.

2363 2364 136. TO DIG

2365 pJ **uka-* 'to dig, excavate': J *ugat-* 'to dig, excavate; pierce; put on', OJ *ukat-* 'dig,
 2366 bore, wear', OJ *uke₂-* 'to open up, be bored'
 2367 pMo **uka-* > **uku-* 'to dig, excavate': WMo. *uqu-* 'to dig, excavate, poke out, chisel
 2368 out; to cut out; to find or expose someone's fault', *uqumi* 'carving tool, chisel, cutter,
 2369 gouge', *uqara* ~ *uqur* 'spoon'; MMo. *uqu-* 'to dig, delve', *uqali* 'axe', Khal. *uxa-* 'to
 2370 dig, dig out, cut out; to dig into (e.g. past); to burgle, break in', *uxam* 'excavation, pit,
 2371 cavity; gouge', *uxmal* 'dug out, carved out'; Bur. *uxami* 'adze', Kalm. *uxə-* 'to dig,
 2372 delve', Ordos *uxa-* 'to dig, delve'.

2373 2374 138. HOT

2375 pJ **yu* 'hot water': J *yu* (1.3a), OJ *yu* 'hot water', Shodon (Amami) *yu*, Shuri
 2376 (Okinawa) *yu.*, Hirara (Miyako) *yu.*, Ishigaki (Yaeyama) *yu.*, Yonaguni *du.*, pR **yu*
 2377 'hot water' (Thorpe 1983: 298)
 2378 pK **ta-* ~ **ti-* ~ **ta-* ~ **te-* 'to be hot, warm': K *te:p-* (-w-), MK *·teW-* 'be hot, warm',
 2379 (pK **-pi-* ~ *-pa-* suffix deriving verbs from property words 'to spontaneously develop
 2380 the property expressed by the base'; Robbeets 2015: 294), K *ttakap-* ~ *ttukep-* 'be
 2381 hot, heated, burning' (-*kep-* adjective suffix), *ttakkun ha-* 'be hot, heated', K *ttattus*
 2382 *ha-* 'be warm, mild', K *ttasu ha-* 'be warm, mild', K *ttasup-* 'be nice and warm',
 2383 MK *toso-*, MK *toso ho-*, MK *tosi ho-* 'be warm, mild', MK *tostosi* 'warmly', MK
 2384 *tusi* 'warmly' (pK **-s* resultative deverbal noun suffix, e.g. K *cilki-* 'to be tough, be
 2385 durable, be lasting, be persisting' → *cilkis* 'firm, unyielding'; Robbeets 2015: 422,
 2386 pK **-i* adverbializer)
 2387 pTg **du:l-* 'to be warm': Evk. *du:l-* ~ *dulil-* 'to rise (about the sun); to warm (about
 2388 the sun)', Even *dū:l-* 'to be warm (about weather)', *dū:lan* 'warm (wind, air, day)',
 2389 *dū:lan-* 'to get warm', Jur. *dulu'u* 'warm (of spring)'
 2390 pMo **dula-* 'to be(come) warm' (WMo. -*GAn* resultative deverbal noun suffix, e.g.

2391 *uda-* 'to tarry' → *udayan* 'slow'): WMo. *dulayan* 'warm, heated (not of liquids);
 2392 warmth', *dulayara-* 'to become warm (of weather and room temperature) (intr.)';
 2393 MMo. *dula'an* 'hot, sunheat', Khal. *dula:n* 'warm; heat, warmth; temperature'; *dula:ra-*
 2394 'to get warm, warm up (weather)', Bur. *dula:n* 'warm', Kalm. *dul* 'warm; warmth',
 2395 *dula:n* 'warm', *dula:ra-* 'to get warm, be warmer (of weather), warm oneself', *dulwus*
 2396 'light of the warming son', *dulwä:-* 'to give warmth (of the sun)', Ordos *dul* 'without
 2397 wind and not cold', *dula:n* 'warm', Dag. *dɔ:l-* 'to become warm (of weather)', *dula:n*
 2398 'warm', Eastern Yugur *dula:n* 'warm' (Nugteren 2011: 319).
 2399 pTk **yili-* 'to be(come) warm' (OTk. *-(X)g* deverbil noun suffix, e.g. *bış-* 'to ripen,
 2400 reach maturity; cook (intr.)' → *bışig* 'ripe, mature; cooked'; Erdal 1991: 172–232):
 2401 OT *yiliy* '1 warm', Karakhanid *yili-* 'to become hot', *yiliy* ~ *iliy* '1, lukewarm', MTK.
 2402 *yiliq* ~ *iliq*, Tk. *ilik* 'tepid, lukewarm', Az. *ilik* 'warm, warmish', Tkm. *yili* '1', Gag. *ili*
 2403 'lukewarm', Tat. *jili* '1', S-Yug. *iliy* '1', Kirg. *jiluu* 'warm, kind, tender; warmth, soul,
 2404 nest', Kaz. *žili* 'warm, kind, tender; warmth', Nog. *yili* '1', Bash. *yili* 'warm, hot (of
 2405 meal); warmth', Balk. *žili*, Karaim *yili* ~ *ili* 'warm; lukewarm', KKalp. *žilli* 'warm,
 2406 kind, tender; warmth', Kum. *yili* 'warm, kind, tender', Sal. *yili* '1', Uz. *iliq* '1', Uig.
 2407 *ilman* '1', Tofa. *čiliy* '1', Tuva *čiliy* '1', Khak. *čiliy* 'warm, kind, tender; warmth, warm
 2408 weather, kindness, tenderness', Shor *čili-* 'to become warm', Oyrat *đilu* '1', Yak. *silās*
 2409 '1', Dolg. *hīlās* '1'
 2410
 2411 As in the above etymology, the alternation between pK **ta-* ~ **ti-* ~ **ta-* ~ **te-* 'be
 2412 hot, warm' is probably expressive in origin
 2413 Given the occurrence of the Written Mongolian resultative deverbil noun suffix -
 2414 *GAn*, it is inviting to reconstruct an underived verbal form pMo **dula-* 'to be(come)
 2415 warm'. This simplex verb root is further supported by the attestation of the verb Dag.
 2416 *dɔ:l-* 'to become warm (of weather)' as well as by underived nominal forms such as
 2417 Kalm. *dul* 'warm; warmth' and Ordos *dul* 'without wind and not cold'. Moreover,
 2418 Kalmuck displays other derivations from the original simplex root such as *dulwus*
 2419 'light of the warming son', *dulwä:-* 'to give warmth (of the sun)'.
 2420 Similarly, most Turkic forms are derived with the deverbil noun suffix *-(X)g* and
 2421 allow the reconstruction of a verbal form pTk **yili-* 'to be(come) warm', which is
 2422 reflected as such in Karakhanid *yili-* 'to become hot' and Shor *čili-* 'to become warm'.
 2423 This etymology assumes stem-final **-l-* loss at a time when Japano-Koreanic
 2424 separated from Altaic, similar to the liquid loss found in 101 SIT.
 2425
 2426 140. TO REMAIN
 2427 pJ **nakə-* 'to remain, be left over': J *nokor-*, OJ *no₂ko₂r-* (B) 'to remain, be left over,
 2428 survive', *nokos-*, OJ *no₂ko₂s-* (B) 'to leave behind, keep back, leave undone',
 2429 Yamato-hama (Amami) *nohoruri* 'to remain', Shuri (Okinawa) *nukujun* 'to remain',
 2430 Irabu (Miyako) *nukui* 'to remain', Ishigaki (Yaeyama) *nukurun* 'to remain'
 2431 pK **nek* 'remnant': K *nek-nek* 'sufficient', *nekul-nekul* 'generous'
 2432
 2433 pJ **ama-* 'to remain, be left over': J *amaneku* 'widely, generally', J *amari*, OJ *amari*
 2434 (3.4) 'rest, surplus, excess'; J *amar-*, OJ *amar-* (B) 'to remain, be left over; be in
 2435 excess, be too much', J *amas-*, OJ *amas-* (B) 'to excel, be in excess, increase', Yoron
 2436 (Amami) *amajuN* 'be left over', Yamato-hama (Amami) *amaruri*, Nakijin (Okinawa)
 2437 *?amaarun* 'be left over; surpass', Shuri (Okinawa) *qamar-* 'be excessive', *amas-* 'to let
 2438 remain', Hatoma (Yaeyama) *amaruN*.
 2439 pTg **eme-* 'to leave, remain' (pTg **-nA* processive, e.g. Evk. *kiki-* 'to whistle' →
 2440 *kikine-* 'to howl (of wind)'; Robbeets 2015: 230–235; pTg **-p-* reflexive-anticausative,

2441 e.g. Even *beri*:- 'to lose' → *beri*:*b*- 'to get lost, disappear'; Robbeets 2015: 296-298):
 2442 Evk. *əmə*:- ~ *əmə*:*n*- 'to leave; to lose', *əmə*:*ntə* 'remnant; forgotten', *əmə*:*p*- 'to stay;
 2443 to stay behind', Even *əmə**n*- 'to leave, to quit', *əmə**b*- ~ *əmə**p*- 'to stay; to stay
 2444 behind', Neg. *əmə*:*n*- 'to leave, to lose', Sol. *əmə*:*n*- 'to leave', Oroch *imən*- 'to leave
 2445 smb in the care of smb', Ud. *imənə*- 'to leave',

2446

2447 141. COLD

2448 pTg **bege*- 'to be cold, freeze' (**-n* deverbial noun): Evk. *bəgi*:- ~ *bəi*:- 'to get cold; to
 2449 freeze', *bəgin* ~ *bogin* 'a cold; freezing'; Even *bəyi*- 'to freeze', *bo*:*yə* 'frazil', Neg.
 2450 *bəyi*:- 'to freeze smth.', Ma. *bəyə*- 'to freeze, to be cold', *bəyə**n* 'freezing, cold', Sibe
 2451 *bəyə*- 'to feel cold', Olcha *bəyi*- 'to be cold', Na. *bəi*- 'to freeze smth. (cheeks, ears,
 2452 etc.)'

2453 pMo **bege*- 'to be cold' (**-rA*- anticausative, e.g. WMo. *ebde*- 'to destroy' → *ebdere*-
 2454 'to fall to pieces'; Robbeets 2015: 313; **-dA*- passive, e.g. *dugul*- 'to hear' → *dugulda*-
 2455 'to be heard'): WMo. *begere*- 'to suffer extremely from frost, freeze, become stiff or
 2456 numb from cold (intr.)', WMo. *begelei* 'glove(s), mitten(s)', WMo. *begdere*- 'to be left
 2457 stupefied, to be paralyzed with fear', Khal. *be:re*- 'to be cold', Bur. *be:re*- 'to be cold',
 2458 Kalm. *be:r*- 'to become stiff (due to age or cold)', Ordos *be:re*- 'to be cold', Dag.
 2459 *be:re*- ~ *be:de*- 'to be cold'

2460

2461 In Mongolic the root **bege*- 'to be cold' can be inferred from derivations with the
 2462 anticausative suffix **-rA*- such as WMo. *begere*- 'to suffer extremely from frost,
 2463 freeze, become stiff or numb from cold (intr.)', literally 'to colden oneself' and with
 2464 the passive **-dA*- such as WMo. *beg-de-re*- 'to be left stupefied, to be paralyzed with
 2465 fear' and Dag. *be:-de*- 'to be cold'.

2466

2467 pTg **gilči*- 'to be cold (tactile)' (**-si* deverbial resultative nominalizer; Robbeets 2015:
 2468 423; **-rA* deverbial (ad)nominalizer; Robbeets 2015:349-352; pTg **-lu*- deverbial
 2469 inchoative; Robbeets 2015: 259): Evk. *gildi* ~ *gilli* ~ *gilləmə* ~ *gildəmə* 'shiny (about
 2470 water, ice surface); cold (about water, ice)', *gildihi*- 'clear (about water)'; Even *gilra*,
 2471 *gilsī* 'cold (about liquids)', *gilral*- 'to become cold (about water, weather)'; Sol. *getti*-
 2472 'to freeze'; Neg. *gelegdi* ~ *giligdi*, *gelesi* ~ *gilisi* 'cold (about liquid); it is cold
 2473 (because of the cold water)', Olcha *gitisi* 'cold', *gituli* ~ *gituwli* 'cold (tactile)', Orok
 2474 *gītčulī* ~ *gīčulī* 'cold (about liquids/tactile)', *gītčīlū*- 'to become cold'; *gītčīsī*- ~ *gīčīsī*-
 2475 'to get cold'; Na. *geče* 'it is cold (tactile)', *gečena*- 'to become cold', *gečese*- 'cold',
 2476 *gəcəse*- 'to feel cold, to be cold'; Oroch *giči-si* 'cold', Ud. *gilihi* 'cold (about objects
 2477 and liquids); cold (adv.)', *gilili*- 'to get cold' (Ud. *-li*- deverbial inchoative), Jur. *geti*-
 2478 'to freeze'

2479 pTk **kiš* 'winter': OT *kīš* '1 winter', Karakhanid *kīš* '1', Tk. *kīš* 'winter, winter cold',
 2480 Az. *gīš* '1', Tkm. *gīš* '1', Tat. *kīš* '1', Khak. *χīs*, *xīsχī* '1', Kirg. *kīš* '1', Kaz. *kīs* '1', Nog.
 2481 *kīs* '1', Bash. *kīš* '1', Balk. *kīš* '1', Karaim *kīš* '1', KKalp. *kīs* '1', Kum. *kīš* '1', Uz. *kiš* '1',
 2482 Uig. *kiš* '1', Tuva *kīš* '1', S-Yug. *kīs* '1', Shor *kīškī*, *kīš* '1', Yak. *kīs*, *kihīn* '1', Dolg.
 2483 *kihīn* '1', Khalaj *kīš* '1', Chu. *xəl* '1'

2484

2485 144. THIN

2486 pMo **nari*- 'to be thin' (**-GAn* resultative deverbial noun suffix, e.g. *uda*- 'to tarry' →
 2487 *udayan* 'slow'; **-d*- fientive; e.g. *sula* 'weak' → *sulad*- 'to be weak'; **-n* deverbial noun
 2488 suffix, e.g. MMo. *ayu*- 'to be afraid' → *ayun* 'fear'; Robbeets 2015: 391-393): WMo.
 2489 *narid*- 'to become thin, slender, narrow, tight', *narin* 'fine (not coarse); narrow; tight;
 2490 thin, slender; high-pitched', *nariqan* 'rather fine, thin, slender'; MMo. *narin*, *narən*,

- 2491 *na:ri:n* 'thin'; Khal. *nari:d-* 'to be too narrow, too fine', *nari:n* 'thin, fine', Bur. *narín*
2492 'thin, fine', Kalm. *närñ* 'thin, fine', Ordos *nari:n* 'thin, fine'. Dgx. *naruy* 'thin, fine',
2493 Bao. *naroy* 'thin, fine', Dag. *narín*, *naríen* 'thin and cylindrical, slim, slender', *narie-*
2494 *eme* 'millet' (ame 'grain'), Eastern Yugur *narən* 'thin, fine', Mgr. *narín*, *narəy* 'thin,
2495 fine', Mogol *no:rin*, *nərin* 'thin, fine'
2496 pTk **yari-* 'to be thin, poor' (OT *-I* deverbial noun suffix, e.g. *kön-* 'to be straight' →
2497 *köni* 'straight' ; Erdal 1991: 340; OT *-lXg* denominal adjective suffix 'possessing the
2498 quality of the base', e.g. *küč* 'power' → *küčlüg* 'powerful'; Erdal 1991: 139): OT
2499 *yarlig* 'poor, destitute', Karakhanid *yarlig* '1 poor, destitute; 2 miserable, pathetic',
2500 MTk (Kypchak) *yarli* '1', Tkm. *yarli* (dial.) '1', Tat. *yarli* '1; 2', Tat. *yari* 'thin film,
2501 membrane', Nog. *yarli* '1, 2', Bash. *yarli* '1', Bash. *yari* 'thin film, membrane', KBalk.
2502 *jarli* '1', Karaim *yarli* '1, 2', KKalp. *žarli* '1', Kum. *yarli* '2', Kirg. *žaro:* 'lean, skinny
2503 (of an animal)', *žardī* ~ *žarli* ~ *žarili* '1', Kaz. *žara-* 'to be poor', *žar(i)li* '1', Tuva
2504 *čariyda-* 'to spend, consume', Chu. *yur*, *yurā* 'poverty'
2505
2506 Both the Mongolic and Turkic forms can probably be derived from original property
2507 verbs, but even if this would not be the case, the etymology would remain valid. I
2508 regard the Turkic forms going back to OT *yarlig* 'poor, destitute' as an adjective in *-lig*
2509 from the deverbial noun in *-i/ø* from pTk **yari-* 'to be thin, poor'. The Chuvash word
2510 Chu. *yur* ~ *yurā* 'poverty' reflects the underived deverbial noun pTk **yar(i)* 'poor,
2511 poverty'. It is also witnessed in Bashkir and Tatar *yari* 'thin film, membrane',
2512 preserving the original meaning 'to be thin'. The common meaning 'thin' is also
2513 present in Kirg. *žaro:* 'lean, skinny (of an animal)'. In support of the deverbial
2514 derivation, it can be noted that the suffix *-lXg* is more frequently added to deverbial
2515 nouns than to underived nouns, e.g., *isi-* 'be hot' → *isi-ndi* 'heated (thing)' → *isi-ndi-*
2516 *lig* 'heated' (Erdal 1991: 152). In addition, the Kazakh descriptive verb *žara-* 'to be
2517 poor' supports the deverbial derivation suggested here.
2518
2519 147. SOUR
2520 pJ **su-* 'to be sour': J *su-* 'to be sour, acid, tart', OJ *su-* B 'to be sour, acid, tart', J *su*,
2521 OJ *su* (1.3) 'vinegar, sour', OJ *suye-* (B) 'to turn sour, spoil (intr.)', Yamatohama
2522 (Amami) *siisari* 'sour', Shuri (Okinawa) *siisan* 'sour', Irabu (Miyako) *siṽkam* 'sour',
2523 Ishigaki (Yaeyama) *siisaan* 'sour', Yonaguni *ccan* 'sour'
2524 pK **siy-* ~ **səy-* 'to be sour': K *swi-*, MK *soy-* ~ *suy-* 'to be sour'
2525
2526 149. DAY
2527 pK **nal* 'day': K *nal* 'day, 24 hours, weather', MK *·nal* 'day'
2528 pMo **nara-n* 'sun': WMo. *nara(n)* '1 sun', MMo. *naran*, *narān* '1', Khal. *nar(an)* '1',
2529 Bur. *nara(n)* '1', Kalm. *narñ* '1', Ordos *nara(n)* '1', Dgx. *naran* '1', Bao. *narəy* '1', Dag.
2530 *nar*, *nare* '1', Eastern Yugur *naran* '1', Mgr. *nara* '1', Mog. *naran*
2531
2532 152. WHITE
2533 pJ **sero-* ~ **sera* '(to be) white': J *siro-* B, OJ *siro₁-* 'to be white', J *siro* (2.5), OJ
2534 *siro₁* 'white', J/ OJ *sira-* in e.g. J *sirakami*, OJ *sira-kami₁* 'white hair', Yamatohama
2535 (Amami) *sirusar* 'white', Shuri (Okinawa) *sirusan* 'white', Irabu (Miyako) *ssukam*
2536 'white', Ishigaki (Yaeyama) *ssusaan* 'white', Yonaguni *ccudari* 'white', pR **siro-*
2537 'white' (Thorpe 1983: 347), OKog **tšiar* 'silver' (Beckwith 2004: 100, 112)
2538 pK **siala-* 'be white': MK *syey-* 'to become white (of hair, of face)', K *hay-* 'be white
2539 (preserved only in compounds)' ~ K *huy-* 'be white, be fair; be gray, hoary', MK *·hoy-*

2540 ~ MK *·huy-* ‘to be white’, K *ha:yah-* ~ *he:yeh-*, MK *·ha:ya ho-* ‘be very white, be
 2541 pure (snow) white, be immaculate’
 2542 pTg **sia:ra-* ‘to be light, white’: Ma. *šara-* ‘to become white’, *šari* ‘1 a kind of wild
 2543 lettuce with edible leaves and roots; 2 bright, shining’, *šariša-* ‘to flash white, light
 2544 up’, Sibe *šarambi* ‘white hair’, *šarinža-* ‘to become white’, Evk. *se:ru:-* ~ *he:ru:-* ‘to
 2545 sparkle with all colours’, *se:run* ‘a rainbow’ (pTg **-n* deverbil noun; Robbeets 2015:
 2546 385-390), *serəmə* ~ *səramə* ‘yellow’ (pTg **-mA* nominalizer; Robbeets 2015: 367-
 2547 374), Orok *se:rro* ~ *širo* ‘rainbow; half-moon’
 2548 pMo **siara* ‘yellow’: WMo. *sira*, MMo. *šira*, *šira:*, Khal. *šar*, Bur. *šara*, Kalm. *šarə*,
 2549 Ordos *šara*, Dgx. *šəra*, *šira*, Bao. *šira*, Dag. *šara*, *šar*, *šari*, Mgr. *šira*, Mogh. *šira*,
 2550 *sira:* ‘yellow’
 2551 pTk **sia:rī-* ‘to be white, yellow’ (pTk **(X)g* deverbil noun suffix; Erdal 1991:172-
 2552 232): OTk. *šarīg*, *sarīg* ‘1 yellow’, Karakh. *sariy*, MTk. *sariy*, Tk. *sari* ‘1’, Az. *sari* ‘1’,
 2553 Tkm. *sa:rī* ‘1’, Tat. *sari* ‘1’, Uz. *sariq* ‘1’ Uig. *seriq* ‘1’, SYug. *sariy* ‘1’, Tuva *sariy* ‘1’,
 2554 Kirg. *sari* ‘1’, Kaz. *sari* ‘1’, Bash. *hari* ‘1’, Sal. *sari* ‘1’, Khalaj *sa:ruy* ‘orange’, Chu.
 2555 *šur*, *šurā* ‘white’, *šur-* ‘to become white’

2556
 2557 The seven vowel system of proto-Japanese, recently introduced by Frellesvig and
 2558 Whitman (2008) proposed a double origin for OJ *i*; the front vowel derives either
 2559 from pJ **e* or from pJ **i*. External etymologies reflecting pJ **e* are rather few in my
 2560 dataset, but there seems to be a correspondence with diphthongs such as pK **ie*, pTg
 2561 **ia*, pMo **ia* and pTk **ia*; see sound correspondence 40b in SI 1. In the case of OJ
 2562 *siro*₁- ‘be white’, there is no internal or Ryukyuan evidence, supporting the
 2563 reconstruction of a mid front vowel. However, Frellesvig and Whitman (2008: 37)
 2564 take the attestation of MK *syey-* ‘become white (of hair, of face)’ as external evidence
 2565 for the reconstruction of pJ **sero* ‘white’. The Koguryo cognate OKog **tsiar* ‘silver’
 2566 proposed by Beckwith, while semantically rather distant, would support the high front
 2567 vowel, early in pre-Japonic .

2568 In Korean, we find a number of related verb stems such as MK *·hoy-* ~ MK *·huy-*
 2569 ‘to be white’ and MK *·ha:ya ho-* ‘be very white, be pure (snow) white, be
 2570 immaculate’. MK *·ha:ya* ‘white’ can be considered as the nominal encoding of the
 2571 verbal adjective MK *·ha:ya-* ‘to be white’; see Robbeets 2015: 94-95). Although
 2572 Martin (1996: 36) and Whitman (1999) reconstructed an original **s-* underlying these
 2573 Korean forms, the current opinion tends towards original **h-* developing into *s-*
 2574 (Whitman 2012, Francis-Ratte 2016: 425-426). Given that the sound development *s* >
 2575 *h* is cross-linguistically more frequent than the other way around and given the words
 2576 with initial **s-* corresponding to Korean words with initial **h-* in Japanese and the
 2577 other Transeurasian languages, I think that the original sound was **s-*, not **h-*. I
 2578 propose the following development in Korean, whereby the fientive ending **-i-* in the
 2579 derived verb blocked the development from the palatalized sibilant **si-* into **h-*. MK
 2580 *o* [ʌ] was the RTR variant of the high central vowel MK *u* [i] and in most cases it
 2581 comes from a weakened *a*. Therefore, I suggest a development from pK **haya-* ‘be
 2582 white’ into MK *·hoy-* with an expressive vocalic alternation in MK *·huy-*.

2583
 2584 pK **siala-* (be.white) > **hala-* > **haya-* in MK *·ha:ya ho-* > MK *·hoy-* ~ MK *·huy-*
 2585 pK **siala-i-* (be.white-FIENTIVE) > pK **siəlay-* > pK **siəyay-* > MK *syey-*

2586

2587 In comparison with other syllables with a palatalized onset, there is a
 2588 disproportionally high number of syllables of the shape *Cye* in Korean. This
 2589 observation makes the origin as an original diphthong more likely.

It is clear that Tungusic forms such as Ma. *sira* ‘yellow’, Even *hirāṇan* ‘yellowish (of Reindeer skin)’ and Ud. *si*: ‘yellow paint’ are copies from Mongolic (Miller & Street 1975: 133, Doerfer 1985: 302, Rozycki 1994: 184). These are nominal forms with high front vowels meaning ‘yellow’. However, the Tungusic stems proposed in the etymology can be derived from verbally encoded adjectives, reflect pre-glided low vowels and share the meaning ‘to be light’ or ‘to be white’.

Similar to the vowel development of pMo **čagaan* ‘white’ into MMo. *čiya*: *n*, Dag. *čiya*:(*n*), Mgr. *čiga*:*n*, Bao'an *čigaŋ* and Kgj *čixɔ* (Nugteren 2011: 298), it cannot be excluded that the form giving rise to MMo. *šira* ‘white’ had a palatalized initial of the shape **šara* ~ **siara*. The proto-Mongolic form may be borrowed from Turkic because the Mongolic words are restricted to the meaning ‘yellow’ and cannot be derived from verbally encoded adjectives. Contrary to Doerfer (1963: 220-221) who considers the parallel between the Mongolic and Turkic forms as a coincidence, Georg (2007: 274) explains it in terms of a loan connection. He finds that “adding Japanese to this does not lead to any serious objections on the semantic side, but the vowel does not fit the Turkic etymon (which is the source of Mongolian here.)” But if Turkic indeed is the loan source of Mongolian, this indicates that the model was pTk **sia:ra*- ‘yellow’ with a diphthong that matches the **-e-* in the Japanese etymon.

Since the formant *-(X)g* is very frequent in deverbal nouns in Old Turkic, e.g. OTk. *isi*- ‘to be hot’ -> *isi-g* ‘hot; heat’, the adjective pTk **siari*- ‘to be white, yellow’ may originally have been verbally encoded. This is supported by the Chuvash descriptive verb *šur*- ‘to become white’. The palatal sibilant in Chuvash, Khazar and in the Hungarian loanwords *šār* ‘yellow’ and *šārgā* ‘yellow’, as well as the palatalized variant Orkhon OTk. *šarig* support the diphthong in the reconstruction.⁹ Note that Róna-Tas et al. (2011: 691-695) propose that the West Old Turkic models underlying H *šār* ‘yellow’ and *šārgā* ‘yellow’ are WOT **šari* and **šarug*, respectively, but they derive both forms from a single origin **siari-g*. In my view, pTk **sia:ri*- ‘to be white, yellow’ represents the original proto-Turkic form, rather than deriving it from pTk **sa:ri*-, as is proposed by them. Róna-Tas et al. (2011: 693) further point out that the meaning ‘yellow’ is probably secondary because it denotes a light yellow colour, which probably evolved from the word for ‘white’. The original meaning ‘white’ is preserved in Chuvash and in the Khazar place name.

153. SEW

pJ **nup*- ‘to sew, stitch’: J *nuu* B, OJ *nup*- ‘to sew, stitch, embroider’, Yoron (Amami) *nuujun* ‘to sew’, Shuri (Okinawa) *noojun*, Hirara (Miyako) *nuu* ‘to sew’, Igarashi (Yaeyama) *noon* ‘to sew’, Yonaguni *nuŋ* ‘to sew’, pR **noCu*- ‘to sew’, pK **nupi*- ‘to sew, quilt’: MK *nwu*(*·*)*pi*- ‘to quilt’, MK *nwu-pi* ‘quilting’
pTg **nup*- ‘to prick, pierce’: Evk. *lupa*- ‘to prick’, *lupu*:- ‘to go through, pierce’, Even *nybas an*- ‘to prick’, Neg. *lepu*- ‘to pierce’, Na. *loqpa*- ‘to prick (intr.)’, Olch. *loqpa*- ‘to prick oneself’, *loqpu*(*n*) ‘a splinter’, Orok *lukka*- ~ *luqpa*- ~ *lupqa*- ‘to prick oneself, to impale oneself upon smth; to prick smth’

The Tungusic verb stem is probably a compound of pTg **nup*- ‘to prick, pierce’ with a suffix **-kA-*, perhaps the alternant of the inchoative suffix pTg **-xA-* in voiceless

⁹ Old Turkic distinguished between two sibilants in native words: alveolar /s/ and palatal /š/ (Erdal 2004: 82-83). The distinction is found in most runiform inscriptions of Orkhon Old Turkic. Manichean writing uses two different characters, but other Old Uighur texts do not distinguish consistently, as is the case here for Orkhon OTk. *šarig* vs. Uighur OTk. *sarig*.

2636 clusters (see Robbeets 2015: 259.) Poppe (1960, 74) finds that the initial *l*- in the
 2637 Tungusic languages is a secondary development from an original **n*-: “Das
 2638 anlautende *l* im Mandschu-Tungusischen ist sekundärer Herkunft und geht
 2639 gewöhnlich auf ein anlautendes **n* (meistens vor einem folgenden **m*) zurück.” This
 2640 view is consistent with the general absence of initial liquid phonemes across the
 2641 Transeurasian languages. The environment in which this development takes place
 2642 needs further study, but it should probably be extended to the position before **-PK*-
 2643 clusters, e.g. pTg **nabga:n*- ‘to glue, stick’ in Evk. *labgan*-, Even *nabgan*-, Neg.
 2644 *labga:n*-, Orok *lamba*-, Ud. *laghamu*-; pTg **nobgi* ‘squirrel nest’: Evk. *lopi* (dial.
 2645 loki:); Neg. *lo:bi*, Ulcha *logbu*, Na. *lo:bi*, Ud. *loi*; pTg **napki* ‘tiers, straps (for skis)’:
 2646 Ulcha: *la:xi*, Orok *la:pu*, Na. *la:pi*, Oroch *lappi*; pTg **napku*- ‘to insert, hang: Evk.
 2647 *lapku*-, Even *napkü*-. Note that Even consistently retains the initial nasal here.
 2648 Semantically, the Tungusic cognate is a weak fit because the semantic association
 2649 between ‘to sew’ and ‘to pierce’ does not appear in List’s (2014) database.
 2650
 2651 pK **sili* ‘thread’ < ? pK **sil(i)*- ‘to sew, tie together’? (pK **-i* deverbial noun; Robbeets
 2652 2015: 459): K *sil*, MK *ˊsil* ‘thread’
 2653 pTg **sira*- ‘to sew together, tie together’: Evk. *sira*- ~ *hira*- ‘to piece down, to
 2654 lengthen, to add (cloth, belt)’, Even *hiraq*- ‘to piece down, to lengthen, to add (a belt,
 2655 a rope), to connect, to add’, *hiraqan* ‘phalanx of a finger’, Neg. *seya*- ~ *siya*- ‘to
 2656 lengthen, continue a belt, a rope; connect two parts’; *siya:n* ~ *siyā:n* ‘thread; way
 2657 (figurative)’; *siyāktā* ‘thread’; Orok *sira*- ‘to lengthen, to piece down; to add a belt, a
 2658 rope etc.; to connect together ends of a rope, a thread etc.’; Ma. *sira*- ‘to continue,
 2659 follow; to connect, tie together; to inherit’, *sirame* ‘next (in sequence); step- (e.g.
 2660 *sirame ama* ‘stepfather’; *siran* ‘continuation, succession, sequence, order’; Sibe *sira*-
 2661 ‘to inherit; connect; to join; to continue’; Jur. *sir(a)-ru* ‘inherit’; Olcha *sira*- ‘to
 2662 connect’, *sira-žu*- ‘to add; to marry a widow of the elder’s brother; to inherit’, *sira*-
 2663 *ču-žu*- ‘to tie together’; Na. *sera*- ‘to sew together cords, threads; to continue telling a
 2664 fairy-tale which was interrupted’, *sera-go*- ‘marry a widow of one’s elder brother;
 2665 keep on fire of one’s clan; to tie together two cords’, *sera-kta*- ‘to tie together several
 2666 cords, threads’, *sera-ča* ‘knot (to lengthen a cord, a thread); a cord, a thread (for
 2667 lengthening)’; Oroch *siya*- ‘to sew together, piece down’; Ud. *sā-*, *sā-si*- ‘to piece
 2668 down, to lengthen (cloths), to sew together (climbing skins); to add (a rope, a belt)’;
 2669 *sā* ‘cross joint of climbing skins (in piecing down)’
 2670 pMo **siri*- ‘to sew, stitch, quilt’: WMo. *siri*- ‘1 to quilt, stitch (tr.)’, Khal. *šire*- ‘to
 2671 make firm by sewing, to quilt’, Bur. *šere*- ‘to stitch (usually the sole of a shoe)’, Kalm.
 2672 *šir*- ‘1’, Ordos *šire*-, *širi*- ‘1’, Dgx. *širi*- ‘1’, Dag. *širi*-, *šire*- ‘1’, Eastern Yugur *širā*- ‘1’,
 2673 Mgr. *širi*-, *širā*- ‘to cover a bed with a counterpane’
 2674 pTk **siri*- ‘to sew, stitch, quilt’: Karakhanid *siri*- ‘to sew, to quilt or smock a garment’,
 2675 Tk. *siri*- ‘to sew tightly, quilt’, Az. *siri*- ‘to quilt; to foist, impose’, Tkm. *sira*- ‘to sew;
 2676 to stitch; to quilt’, Tat. *sir*- ‘to quilt’, Kaz. *sir*- ‘to stitch’, Nog. *siri*- ‘to quilt’, Bash. *hür*-
 2677 ‘to quilt’, KKalp. *siri*- ‘to sew; to quilt’, Kum. *siri*- ‘to sew; to quilt; to fasten, attach’,
 2678 Uig. *širi*- ‘to quilt’, Khak. *siri*- ‘to sew; to quilt’, Tuva *siri*- ‘to sew; to quilt’
 2679
 2680 Given the rising tone, MK *ˊsil* ‘thread’ can be derived from an original polysyllabic
 2681 form, whereby the contraction was likely to be due to the equality of the vowel in
 2682 both syllables, thus pK **sili* ‘thread’. Given the reconstruction of a deverbial noun
 2683 noun suffix pK **-i* ~ *∅*, attested in e.g., MK *hal*- ‘to slander’ → MK *hali* ‘slandering’
 2684 and MK *nwu:pi*- ‘to quilt’ → *nwu:pi* ‘quilting’, it is possible that the Korean form
 2685 originally derived from a verb pK **sil(i)*- ‘to sew, tie together’. Note that the deverbial

- 2686 derivation from 'to sew, tie together' as 'thread' is also attested in the Tungusic
 2687 languages, e.g. Na. *sera-* 'to sew together (cords, threads)' → *sera-ča* 'cord, thread'.
 2688
 2689 161. MANY
 2690 pJ **opə-* 'to be many, be much': J *oo-*, OJ *opo-* (B) 'to be many, much, copious,
 2691 abundant; great, big', J *ookii*, OJ *opoʔki-* (B) 'big, large, great, grand', Yoron (Amami)
 2692 *uppuusa* 'many', *upisjan* 'big', Shuri (Okinawa) *ʔuhooku* 'many', Irabu (Miyako)
 2693 *upukam* 'big', Yonaguni *ubusaan* 'big'
 2694 pK **op-* 'enough', K *opwus* (*ha-*) ~ *opus* (*ha-*) 'substantial, sufficient, moderately,
 2695 wealthy' (K *-us* ~ *-s* suffix deriving impressionistic adverbs, e.g., K *cop* - 'to be
 2696 narrow' → K *copus* (*ha-*) 'narrow'; Martin 1992: 912)
- 2697 162 TO CHEW
 2698 pMo **kebi-* 'to chew, ruminate': WMo. *kebi-* '1 to ruminate, chew the cud', MMo.
 2699 *kebi-* '1', Khal. *xeve-* ~ *xive-* 'to chew; to ruminate, chew the cud', Bur. *xibe-* 'to chew,
 2700 ruminate (only said about bovines)', Kalm. *kew-* '1', Ordos *kewe-* '1', Eastern Yugur
 2701 *kewə-* '1', Mgr. *ke:yi-* '1'
 2702 pTk **ke:b-* 'to chew, ruminate': Karakhanid *kevše-* '1 to ruminate, chew the cud', Tk.
 2703 *gev-* 'to try to gnaw or chew; to champ (the bit)', *geviš* 'rumination', Az. *gövšä-* '1',
 2704 *göyüş* 'cud', Tkm. *gä:vüşe-* 'to ruminate; to eat, have a snack', *gä:vüş* 'cud', Gag.
 2705 *gevšen-* '1', Tat. *küşä-* 'to ruminate; to eat, have a snack', *kevšek* 'cud', Khak. *kipsen-*
 2706 '1', Kirg. *küyšö-* 'to ruminate; to shiver (of the upper part of the body), to move (of
 2707 shoulder blades); to husk (grain)', Kaz. *küyis* 'cud', Nog. *küyze-* '1', Bash. *köyšä-* 'to
 2708 chew; to ruminate', *köyöš* 'cud', Karaim *kövšen-* 'to chew', KKalp. *güyse-* 'to ruminate;
 2709 to say the same thing many times'; Salar *küşä-* 'to chew', Kym. *güyše-* '1', Uz. *kawša-*
 2710 'to chew, ruminate', Uig. *köyši-* 'to ruminate', *köšändi* 'cud', Tuva *kegžen-* '1', *kegženig*
 2711 'cud', Tofa. *kegže-* '1', Shor *kepžen-* 'to eat, have a snack', Yak. *kebiy-* 'to ruminate; to
 2712 gnaw', Khalaj *kä:viš* 'rumination, cud', Chu. *kavle-* ~ *keve-* ~ *kelle-* '1', *kavle*, *kavlek*
 2713 'rumination, cud'
 2714
 2715 164. WET
 2716 pJ **uru-* 'to be wet' (pJ **-pa-* ~ *-pə-* reflexive-anticausative; Robbeets 2015: 292-
 2717 294): OJ *urup-* (?B) 'to get muddy, be wet', J *uruow-*, OJ *urupop-* (?B) 'to get damp,
 2718 get moist, receive profits, get enriched', OJ *urum-* (?B) 'to get wet, moist'
 2719 pK **uli-* 'to soak': K *wuli-*, MK *wuli-* 'to steep, soak, bleach'
 2720 pTg **ula-* 'to wet, soak' (pTg **-p-* anticausative; Robbeets 2015: 296-298): Evk. *ula-*
 2721 'to soak, to wet (legs); to become wet; to melt (about falling water snow)', *ulap-* 'to
 2722 become wet' (Evk. *-p-* anticausative; Robbeets 2015: 298); Even *ul-* 'to soak, to wet',
 2723 *ulab-* ~ *ulap-* 'to get wet', Sol. *ulakku:* 'wet', Ma. *ulga-* ~ *ulha-* 'to wet, dampen, dip
 2724 in a liquid', *ulgaku:* 'inkwell, well for ink on an inkstone', Jur. *ul(h)a-* 'to wet, to
 2725 dampen, to dip in liquid', Orok *ula-* 'to soak; to wet', Na. *ulariko:* (dial.) 'wet', Ud.
 2726 *ula-* 'to soak, to wet; to set a net', *ula-sa-* 'to become wet (about dried fish); to be
 2727 settled (about net)'
 2728
 2729 Although the semantic association between 'be wet' and 'to soak' is not given in List's
 2730 (2014) database, the polysemy is attested in Even *ula-* 'to soak, to wet (legs); to
 2731 become wet'.
 2732

2733 pJ **nura-* 'to be(come) wet': J *nure-*, OJ *nure-* (A) 'to be(come) wet, damp; to come
 2734 undone, loose', Yoron (Amami) *niditun* 'to be wet', Shuri (Okinawa) *ndir-* (A) 'to get
 2735 wet', *nditoon* 'to be wet', Hatoma (Yaeyama) *zoori bee* 'to be wet'
 2736 pMo **nor-* 'to be(come) wet': WMo. *nor-* 'to become wet, soaked, drenched, damp,
 2737 moist (intr.)', *norya-* 'to wet, moisten, soak (tr.)', MMo. *nur-* 'to be wet, soak', *norma*
 2738 'moistened', Khal. *nor-* 'to get wet', Bur. *nor-* '1 to become wet, soaked', Kalm. *nor-*
 2739 'to become wet', *norya-* 'to make wet', *noryu:(n)*, *noru:* 'wet', Ordos *nor-* '1', Dgx.
 2740 *nor-* ~ *nuru-* ~ *noru-* '1', Dag. *noir-* '1', *noirga-* 'to make wet', Mgr. *no:ri-* ~ *nori-* '1'

2741
 2742 165. FOUR

2743 pJ **yā* 'four' (pJ **-tu* substantivizer): J *yotu*, OJ *yo₂* (1.1) 'four', Yamatohama
 2744 (Amami) *yuuci* 'four', Shuri (Okinawa) *yuuci* 'four', Irabu (Miyako) *yuuci* 'four',
 2745 Ishigaki (Yaeyama) *yuuci* 'four', Yonaguni *duuci* 'four'
 2746 pTg **dü-gin* 'four': Neg. *diyīn* ~ *diyīn* 'four', *diyī-ni:* ~ *diy-ni:* 'four persons', *diyī-təl*
 2747 ~ *dik-təl* 'in fours', *diyijā:* ~ *diyjā:* 'four times', *diyī:* 'fourth'; Ma. *duin* 'four', *duiṅ-*
 2748 *gə* 'folded in four, in fours, fours times', *duiṅ-gəri* 'four times', *dui-tə* 'four each';
 2749 Sibe *duin* 'four', *dui-tə* 'each four', Na. *duĩ* 'four', *duyā-(čī-)gu-* 'to do smth. for a
 2750 fourth time', *duyā-(čīā)* 'fourth', *dui-kān* 'only four', *dui-ltā* 'four days', *dui-ltā:*
 2751 'during four days', *dui:-dui:* 'in four (distr.)', *dui:ni* 'four persons', *duirsu-* 'to
 2752 quadruple; to fold four times'; Olcha *dui(n)* 'four', *duiy* 'fourth', *dui-ltā* 'four days',
 2753 *dui-ñi* 'four persons'; Orok *ji:n* 'four', *ji:n-do* ~ *ji:n-ni:* 'four persons', *ji:-ltā* 'four
 2754 times; four days', *ji:yā* 'fourth'; Ud. *di:* 'four'; Oroch *di:(n)* 'four', *di:-wæ* 'fourth',
 2755 *di:-mdā* 'four times', *di:-ntā* ~ *di:-ñji* 'in fours', *di:-ñæ* 'four persons', Jur. *du'in*
 2756 'four', Evk. *dygin* 'four', Even *diyān* 'four', *diyī* 'fourth' and Sol. *digi* 'four'.
 2757 pMo **dō-* 'four' (pMo **-rbAn* suffix in lower numerals, e.g., **gu-rban* 'three', **ha-*
 2758 *rban* 'ten'; *-cin* suffix in decimal numeral units, e.g., **gu-cin* 'thirty'): WMo *dörbe(n)*
 2759 '1 four', *döci(n)* '2 forty', MMo. *dorben*, *dorbä:n*, *durbän* '1', *docin*, *ducin*, *ducin* '2',
 2760 Khal. *döröv* '1', *döc(in)* '2', Bur. *dürbe(n)* '1', *düşē(n)* '2', Kalm. *dörwṇ* '1', *döçṇ* '2',
 2761 Ordos *dörwö* '1', *döci* '2', Dgx. *žieruan*, *žieron* '1', Bao. *deroṇ*, *deraṇ* '1', Dag.
 2762 *durube(n)*, *durub*, *durāb* '1', *duci(n)*, *duc*, *duci* '2', Eastern Yugur *dörwān*, *dörwen* '1',
 2763 *dōžin* '2', Mgr. *de:ran*, *de:ren* '1', *te:žin*, *težin* '2', Mog. *dürbo:n*, *dorbə:n* '1'

2764
 2765 I do not exclude that the Koreanic and Turkic reconstructions proposed for 'four', i.e.
 2766 pK **yā* and pTg **tō:rt* are ultimately related. However, as the vowel do not
 2767 correspond regularly in Korean, while the initial consonant does not correspond
 2768 regularly in Turkic, I do not include these forms in the etymology. The Korean form
 2769 is reconstructed on the basis of MK *ye-tulp* 'eight', whereby Whitman (2012) analyzes
 2770 this form as **yā-tuWul* (four-two), i.e. four times two whereas Ratte (2016: 447)
 2771 explains it as pK **yā-tā-tiWi* 'four-COPULA-ten'. As the exact nature of the second
 2772 element remains unclear, the reconstruction is rather speculative.

2773 The reconstruction of pMo **dō-* 'four' is further supported by pMo **dō-nen* 'four-
 2774 year-old'.

2775 The reconstruction of pTk **tō:rt* 'four' is based on OT *tört* '1 four', Karakhanid *tört*
 2776 '1', Tk. *dört* '1', Az. *dörd* '1', Tkm. *dō:rt* '1', Gag. *dört* '1', Tat. *dürt* '1', Kirg. *tört* '1',
 2777 Kaz. *tört* '1', Nog. *dört* '1', Bash. *dürt* '1', Balk. *tört* '1', Karaim *dört* '1', Kkpak *tört* '1',
 2778 Kum. *dört* '1', Uz. *tört* '1', Uig. *tō(r)t* '1', Tuva *dört* '1', Tofa. *dört* '1', S-Yug. *dürt*, *türt*
 2779 '1', Khak. *tört* '1', Shor *tört* '1', Yak. *tüört* '1', Dolg. *tüört* '1', Chu. *tāvāt* '1'.

2780
 2781 166. SOFT

2782 pJ **mīri-* 'to be weak, fragile': J *moro-* (B), OJ *moro₂-* 'to be brittle, fragile'

2783 pK **milil-* 'to be(come) soft, mellow': K *mwulu-*, MK *mulu-* 'to soften, become
2784 tender', K *mwulleng* ~ *mollang ha-* 'to be soft, tender'
2785
2786 pJ **yapa-* ~ **yopa-* 'to be soft, weak': J *yawaraka-* 'to be soft, tender, smooth', Mod. J
2787 *yafa-* 'to be soft', OJ *yapa-* 'to be hungry', J *yowa-* 'to be weak', OJ *yo₁wa-* (B) 'to be
2788 weak', Yamatohama (Amami) *yawarasari* 'soft', Shuri (Okinawa) *yahwarasan* 'soft',
2789 Irabu (Miyako) *yapaham*, *yaaraham* 'soft', Ishigaki (Yaeyama) *ya₁parasaan* 'soft'
2790 pK **yepuy-* 'to become weak' < ? **yepu-* 'to be weak' (pK **-i-* fientive; Robbeets
2791 2015: 320): K *yewui-*, MK *ye-wuy-* 'to become thin, emaciated, haggard, to grow
2792 gaunt; to get impoverished', North Kyengsang *yebinda*, South Hamkyeng *yabinda*,
2793 South Cenla *yabunda* 'become thin, weak' (Vovin 2010: 221)
2794 pTk **yaba-* 'to be(come) soft, mild, quiet' (OT *-(X)š* deverbil property noun/adjective,
2795 e.g. *ari-* 'to be clean, pure' -> *ari:š* 'clear, pure'; Erdal 1991: 262-275): OT *yaval-* '1 to
2796 be(come) tamed, calmed, quietened', Karakhanid *yaval-* '1', *yava* (*yer*) 'warm, cosy
2797 (place)', *yavaš* 'mild, meek; gentle'; Tk. *yavaš* 'quiet, calm, even-tempered; cautious;
2798 slow', Az. *yavaš* 'quiet; cautious; slow', Tkm. *yuvaš* 'gentle, mild, quiet; calm, even-
2799 tempered', Gag. *yavaš* 'mild; quiet; slow', Tat. *yuwaš*, *yuaš* 'mild; gentle; calm;
2800 modest; submissive; Khak. *čabas* 'mild; gentle; quiet', Kirg. *jo:š* 'mild; gentle', Kaz.
2801 *žuwas* 'mild; quiet; submissive', Nog. *yuwas* 'mild; gentle; quiet; calm', Bash. *yīwaš*
2802 'mild; gentle; quiet; submissive', Balk. *juwaš* 'mild, quiet, submissive', Kum. *yuvaš*
2803 'mild; gentle; quiet; calm, harmless'; *yavaš* 'quiet, calm', Uz. *yuwāš* 'mild; quiet;
2804 submissive', Uig. *žuvaš* (~ *žuyaš* ~ *yavaš* ~ *yuvaš* ~ *yuyaš*) 'mild; quiet; slow', Tuva
2805 *ča:š* 'mild; quiet; submissive'; Shor *čobaš-* 'to be(come) tamed, calmed, quietened',
2806 *čobaš* 'mild; quiet; submissive'
2807
2808 The Japanese adjective *yawaraka-* 'soft, tender, smooth' is a derivation from the
2809 verbal adjective stem underlying OJ *yapa-* 'to be hungry' and Edo mod. J *yafa-* 'to be
2810 soft'. The original root pJ **yapa-* probably stood in expressive vowel alternation with
2811 pJ **yopa-*, reflected in J *yowai* 'weak'. According to List et al. (2014), the meanings
2812 'soft' and 'weak' are commonly combined on the same lexeme across the languages of
2813 the world.
2814 In spite of Vovin's (2010: 221-222) remark that there are "no good Koreo-Japonic
2815 etymologies reflecting pJK **y-*, creating another gap that strongly speaks against a
2816 genetic relationship", the present sound correspondence probably does not reflect a
2817 consonantal but a vocalic correspondence, going back to an original diphthong pTEA
2818 **ia*. In this basic vocabulary list, it occurs word-initially in 101 MOUNTAIN and 194
2819 OPEN and word-medially in 12 BREAST, 152 WHITE and 178 WOMAN.
2820 Given the frequency of the deverbil noun and adjective suffix *-(X)š* in Turkic in
2821 addition to the attestation of verbal forms such as OT *yaval-* '1 to be(come) tamed,
2822 calmed, quietened' and underived property nouns such as Karakhanid *yava* 'warm,
2823 cosy', it is legitimate to derive the Turkic forms from an original verbal adjective pTk
2824 **yaba-* 'to be(come) soft, mild, quiet'. The common denominator of the Turkic
2825 meanings is 'soft' or 'weak' in the metaphoric sense.
2826
2827 167. LOOK
2828 pTg **kara-* 'to look, watch, observe' (pTg **-mA-* optative; Benzing 1955: 121; **-ku*
2829 deverbil instrumental noun; Robbeets 2015: 471; pTg **-n* deverbil noun; Robbeets
2830 2015: 386): Evk. *karaw-* 'to guard; to watch out for (an animal)' (Evk. *-w-*
2831 anticausative; Nedjalkov 1997: 228), *karama-*, *karma-* 'to guard, protect'; Even *qaran-*
2832 ~ *qaraŋčī-* 'to stare' (Even *-(A)n-* deverbil processive for spontaneous action;

2833 Robbeets 2015: 232-233) , *qarqi-* 'to wait', Sibe *karma-* 'to protect; to defend; to
 2834 bless', *karman* 'protection; blessing'; Ma. *kara-* 'to look down from a height, to gaze
 2835 into the distance', *karan* 'a lookout tower, watchtower, platform', *karaba* 'mutual
 2836 protection', *karma-* 'to protect, to take care of', *karman*, *karmačun* 'protection',
 2837 *karmaku:* 'protector', *karmasi* 'protector, patron', Olcha *qargaču-* 'to watch out for;
 2838 to hunt a large animal', *qargaku* 'a hunting watchtower'; Na. *qargači-* 'to watch over
 2839 smth., from a high place or rising on toes; to look between one's legs, bowing (about
 2840 children)'; Orok *qarga-* 'to observe; to look from a high place; to observe a place',
 2841 *qargaytu* 'observation post', *qargaqu* 'observation tower; binocular'
 2842 pMo **kara-* 'to look, watch': WMo. *qara-*, *qarayul* [check], MMo. *qara-* '1 to look',
 2843 *qara:ul* '2 patrol, watch', Khal. *xara-* 'to look, look at, face; to look after, care for; to
 2844 look out for', *xaru:l* 'watch-post; guard, watch'; Bur. *xara-* '1'; Kalm. *xarə-* 'look out
 2845 over, gaze; have nothing to do, hang around', Ordos *xara-* '1', Dag. *xara:la-* '1', *xaro:l*
 2846 '2', Eastern Yugur *χaru:l* '2', *χarəmul* 'sight', Mgr. *xaru:la-*, *xarə-* '1', *xarəmul* 'sight',
 2847 Mog. *qara-* '1'

2848
 2849 Since the verb root pTg **kara-* is well distributed across the Tungusic languages and
 2850 since most of the derivations are morphologically transparent, consisting of the verb
 2851 root and an attested deverbial suffix, I do not follow the suggestion made by Doerfer
 2852 1985 (51, 138) and Rozycki (1994: 135) that all Tungusic forms are borrowed from
 2853 Mongolic. Nevertheless, this does not exclude that some of the morphologically
 2854 unanalyzable forms in Tungusic such as Ma. *karun* 'outpost sentry, border, guard' may
 2855 be nevertheless borrowed from Mongolic.

2856
 2857 169. THAT
 2858 pJ **ə-* 'that' (demonstrative pronoun of the mesial plan): J *ore* 'I (first person
 2859 pronoun), OJ *ore* 'self; you derogatory 2sg', OJ *ono₂* 'self'; Shuri (Okinawa) *ʔu-ri*
 2860 'that person, thing', *ʔu-ttaa* 'they', *ʔm-ma* 'there', *ʔu-nu* 'that' (mesial demonstratives),
 2861 Amami *u-ri* 'that', *u-ma* 'there' (mesial demonstratives), Hateruma (Yaeyama) *u-ri*
 2862 (distal demonstrative), Yonaguni *ú* 'that', *ú-ma* 'there' (mesial demonstrative)
 2863 pTg **e-* 'this' (demonstrative pronoun of the proximal plan): Even *ere* 'this, here', *ecin*
 2864 'in this way, indeed', *eduk* 'since this time, from here', *ele:* 'here', *eweski:* 'in this
 2865 direction', *ewgi:le:* 'here', *ewgi:n* 'here', Evk. *er*, *eri* 'this', *ewgi:* 'in this direction', *ele:*
 2866 'here', *eduk* 'since this time, from here', Solon *eye:* ~ *er* ~ *eri* 'this', *elur* 'these', Neg.
 2867 *ele:* ~ *eli:* 'in this direction, here', *ewuli:* ~ *ewule:* 'here', *ewgi:le:* ~ *ewgi:li:* 'in this
 2868 direction', *edu:* 'here, at this time', *eye* 'this', Ud. *ebede* 'like this', *eyi* 'this', Olcha *yedu*
 2869 'here', *yeji* 'with this', *yeki* 'here', *yele* 'from here', *ei* 'this', *e:wu* 'this', Na. *eyebe* ~ *yebe*
 2870 'here', *ei* 'this', Orok *edu* ~ *eyedu* 'here', *ewwe*, *eye*, *er*, *eri* 'this', *emete(n)* 'such, like
 2871 this', Ma. *ere* 'this', *embici* 'or' (*-bi-ci* be-COND.CONV), *eici* 'or', Sibe *erə* 'this', Jur.
 2872 *e(r)se* 'this'

2873 pMo **e-* 'this' (demonstrative pronoun of the proximal plan) in pMo **e-ne* (this-SG)
 2874 'this': MMo. *ene* (SH/HY/Muq), WMo. *ene*, Khal. *ene*, Bur. *ene*, Ordos *ene*, Kalm. *en*,
 2875 Dag. *ənə*, Eastern Yugur. *ene*, Mgr. *ne*, *ni*, Bao. *enə*, *nə*, Dong. *ənə*, Mog. *enā*; in pMo
 2876 **e-de* (this-PL) 'these': MMo. *ede* (SH/HY), WMo. *ede(n)*, Khal. *ed(en)*, Bur. *ede*,
 2877 Kalm. *edn*, Dag. *əd(ən)*; in pMo **e-n-de* (this-SG-LOC) 'here': MMo. *ende*
 2878 (SH/HY/Muq), WMo. *ende*, Khal. *end*, Bur. *ende*, Kalm. *end*, Dag. *ənd*, Eastern
 2879 Yugur. *ende*, Mgr. *nde*, Bao. *endə*, Dong. *əndə*, Mog. *endā*

2880
 2881 pJ **a-* 'that' (demonstrative pronoun of the distal plan): J *a-*, OJ *a-* (1.2) 'that (distal)'
 2882 in J *ano*, *are* 'that one', *asoko*, J *atira* 'over there', Amami *a-* 'that (distal)' in *a-ri* 'that

2883 one', *a-ma* 'over there', Shuri (Okinawa) *ʔa-* 'that (distal)' *ʔa-ri* 'that one', *ʔa-ttaa*
 2884 'they', *ʔa-ma* 'there', *ʔa-nu* 'that', Kuroshima (Yaeyama) *a-ma* 'over there'
 2885 pTk **a-n-* 'that' (demonstrative pronoun of the distal plan in the oblique cases) (pTk
 2886 **-n-* oblique suffix in pronouns): OT *a-n-iŋ* 'that (GEN)', *a-ŋa* 'that (DAT)', *a-n-i* 'that
 2887 (ACC)', *a-n-ta* 'that (LOC)', *a-n-tin* 'that (ABL)', *a-ŋaru* 'that (DIR)'; Tkm. *ana* 'here,
 2888 look! (particle)'; Tat. *a-n-da* 'that (LOC)', *a-ŋa* 'that (DAT)', *a-n-ar* 'that (DIR)'; S-
 2889 Yug. *a* 'that (NOM)'; Khak. *a-n-da* 'that (LOC)', *a-yaa* 'that (DAT)'; Kirg. *a-n-ta* 'that
 2890 (LOC)', *a-(y)a* 'that (DAT)', Bash. *a-n-ta*, *a-n-da* 'that (LOC)', *aŋ-a* 'that (DAT)';
 2891 Balk. *a-n-da* 'that (LOC)', *aŋ-ya* 'that (DAT)'; Karaim *a-n-da* 'that (LOC)', *a-n-ar* 'that
 2892 (DAT)'; Salar *a-n-di* 'that (LOC)', *aŋ-a* 'that (DAT)'; Tuva *a(ŋ)-a* 'that (DAT)'; Tofa.
 2893 *a(ŋ)-a* 'that (DAT)', Shor *a-n-da* 'that (LOC)', *a-(y)a* 'that (DAT)', Yak. *anara*: 'here,
 2894 look! (particle)', Khalaj *ä-rä* 'that side', Chu. *ä-n-a* 'that (DAT)'

2895
 2896 In most Turkic languages, except Sary-Yughur, the root of the distal demonstrative *a-*
 2897 is restricted to the oblique cases and marked with the oblique nasal suffix *-n-*. It acts
 2898 as an oblique counterpart for the distal demonstrative *ol* 'that'. Although Old Turkic
 2899 displays a two-way distinction in its demonstratives, i.e. OT *bo* / *bun-* 'this' vs. *ol* /
 2900 *an-* 'that', many contemporary Turkic languages such as Turkish make a three-way
 2901 distinction, e.g., Tk. *bu* 'this', *şu* 'that', *o* 'that (over there)'. Demonstrative pronouns
 2902 in earlier and contemporary varieties of Mongolic and Tungusic exhibit a proximal-
 2903 distal distinction, e.g., MMo. *ene* 'this' vs. *tere* 'that', Khal. *e-* 'this' vs. *te-* 'that', Ma.
 2904 *ere* 'this' vs. *tere* 'that' and Evk. *er(i)* 'this' vs. *tar(i)* 'that'. Demonstrative pronouns
 2905 in Contemporary and Middle Korean, however, show a proximal-mesial-distal
 2906 opposition: K *i* 'this', *ku* 'that', *ce* 'that over there' and MK *i* 'this', *ku* 'that', *tye* 'that
 2907 over there'. This is also true for Contemporary Japanese: J *ko-* 'this', *so-* 'that', *a-*
 2908 'that over there'. In contrast to most accounts of Old Japanese demonstratives, which
 2909 posit a three-way contrast between OJ *ko*₂ 'this', *so*₂ 'that' and *ka* 'that over there',
 2910 Frellesvig (2010: 139-142) and Frellesvig & Whitman (2008: 27-29) argued that the
 2911 distal demonstrative OJ *ka* was not a productive member of the demonstrative system,
 2912 but originally just a vowel-harmonic alternant of the proximal demonstrative OJ *ko*₂
 2913 and that pre-Old Japanese had a simple proximal-distal distinction; see 39 THIS.
 2914 Similarly the distal pronouns discussed here, pJ **a-* and pJ **ə-* 'that' may originally
 2915 have been vowel-harmonic variants. Even if most Ryukyuan languages have a
 2916 proximal-mesial-distal opposition, Yaeyama is limited to a proximal *kuri* vs. distal *uri*
 2917 (Aso 2016: 429). This supports the claim that proto-Japonic originally had a two-way
 2918 distinction as elsewhere in Transeurasian. Proto-Japonic may have shifted to a three-
 2919 way opposition under substratum influence of pre-Ainu, where each demonstrative
 2920 pronoun denotes a different degree of proximity: *ta an* 'this' (distal), *ne an* 'that'
 2921 (mesial), *to an okai* 'that over there' (distal).

2922
 2923

2924 170. TO CUT

2925 pJ **kira-* 'to cut': J *kiru* B, OJ *ki₁r-* 'to cut', OJ *ki₁ras-* B 'to run/ sell out of', J *kireru*
 2926 B, OJ *ki₁re-* 'to be sharp, get cut, run out', Yamatohama (Amami) *kiruri* 'to cut', Shuri
 2927 (Okinawa) *cijun* 'to cut', Irabu (Miyako) *cii* 'to cut', Ishigaki (Yaeyama) *kisun* 'to cut',
 2928 Yonaguni *ccun* 'to cut', pR **kiri-* 'to cut' (Thorpe 1983: 276)
 2929 pTg **giri-* 'to cut out': Evk. *gir-* ~ *ger-* ~ *kir-* 'to cut out (with scissors)', *giri-ptun*
 2930 'cloth piece', Even *gīr-* 'to cut out', Neg. *gey-* ~ *giy-* 'to cut out', Ma. *giri-* 'to trim
 2931 with a knife or scissors, to cut evenly, to cut a strip'; *giri-n* 'strip; section, area'; *gir-*
 2932 *dan* 'cloth or strips of pelts cut with scissors; evenly cut slices of meat; pennant;

2933 border trim on a banner'; *giriku*: 'a small knife for trimming skin, paper, and cloth',
 2934 Olcha *giri-* 'to cut out', *girsu* 'woman's knife for cutting things out', Oroch *giri-* 'to
 2935 cut out', *giri-ptula* 'cloth pieces, remnants', Na. *gere-* 'to cut out with a knife',
 2936 *gerego-* 'to recut out, to cut out anew', *gereкта-* 'to cut out many objects', *gereкто*
 2937 'cut out', *geremsa*, *gereptola* 'cloth rags', *gereče-* ~ *gerenase-* 'to cut out many
 2938 times', *gerso*: 'woman's knife for cutting objects out', Oroch *gi:-* ~ *giyi-* 'to cut out
 2939 with a knife', Ud. *gi:-* ~ *gi:na-* 'to cut out with scissors'
 2940 pTk **kīr-* 'to cut, scrape': Karakh. *kīr-* 'to scrape, strip (hair), pluck out (hair), to cut
 2941 off', Tk. *kīr-* 'to break, split (wood); to rough-grind, crush (grain); to hurt, injure', Az.
 2942 *gīr-* 'to break; cut', Tkm. *gīr-* 'to scrape', Gag. *kīr-* 'to break, crack', Tat. *kīr-* 'to break;
 2943 to scrape; to shave; to grate; to whet; chafe', Khak. *xīr-* 'to cut; to scrape; to shave; to
 2944 chafe', Kirg. *kīr-* 'to scrape; to shave', Kaz. *kīr-* 'to scrape; to shave; to chafe', Nog.
 2945 *kīr-* 'to scrape; to shave', Bash. *kīr-* 'to scrape; to shave; to grate; to chafe; to whet',
 2946 Karaim *kīr-* 'to scrape; to shave', Kkalp. *kīr-* 'to scrape; to shave', Uz. *kīr-* 'to scrape; to
 2947 shave; to break', Uig. *ki(r)-* 'to scrape; to shave; to break', Yak. *kīriy-* 'to cut', *kīra*
 2948 'small', Dolgan *kīriy-*, *kīrpala:-* 'to cut', Tuva *kīr-* 'to break; to exterminate all without
 2949 exception', Khalaj *kīr-* 'to break', Chu. *xīr-* 'to scrape'

2950
 2951 The Mongolic forms WMo. *kira-*, *kiru-*, Khal. *x'ar-* and Kalm. *kur-* that support the
 2952 reconstruction of pMo **kira-* 'to cut into small pieces, mince' have been omitted
 2953 since they can be assumed to have been copied from Turkic. If they were cognates,
 2954 we would expect an initial voiced velar (**g-*) in Mongolic (Robbeets 2004b: 170-
 2955 172).

2956 The Chuvash verb *xīr-* 'to scrape' has an irregular vowel correspondence and may
 2957 thus be due to borrowing.

2958
 2959

2960 171. MOTHER

2961 pJ **əmə* 'mother': OJ *omo* (2.4?), EOJ *amo* 'mother'
 2962 pK **ema* 'mother': K *enni* 'older sister', K *emeni* 'mother' (dialect *emennim*, *emni*,
 2963 *emi* 'mother'), MK *·e-ma·nim* > *·e-mi*, K *emma* 'mommie', MK *·e-ma* 'mother!'
 2964 pTg **eme* 'mother (in law)': Sibe *əmhə* 'mother-in-law', *əmilə* 'female', Ma. *əmə*
 2965 'mother', *əməkə* 'husband's mother, mother-in-law', *əmhə* 'wife's mother, mother-in-
 2966 law (in some early texts it may also refer to a husband's mother)', *əmilə* 'the female
 2967 of birds', Jur. *emuhe* 'mother in law', Ud. *əmə* 'mother in law (mother of the wife)'
 2968 pMo **eme* 'woman', **eme-gen* 'elderly woman, grandmother' (pMo **-gAn* diminutive,
 2969 e.g. *beri-gen* 'daughter in law', **kūri-gen* 'brother in law', *kūri-gan* 'lamb', **bota-gan*
 2970 'camel foal', etc.): WMo. *eme* '1 woman, wife; female (n. and adj.)', *emege* 'grand-
 2971 mother, grand- (adj.)', MMo. *eme* '1', *emege* ~ *emegen* '2 elderly woman,
 2972 grandmother', Khal. *em* '1', *emgen* '2', Bur. *eme* 'woman; female', *emgen* '2', Kalm.
 2973 *emə* '1', *emgn* 'elderly woman, wife, woman', Dag. *emgun* '1' (< **eme-küün* female-
 2974 person), *emeg* '2', Eastern Yugur *eme* 'female', *emgen* '2', Mgr. *imu* 'girl (term of
 2975 endearment)', *mugən* '2', Bao. *emə* 'wife', Kgj. *eme* '1', Dgx. *əmə* 'woman, wife,
 2976 female'
 2977 pTk **eme* 'mother; old woman': Tk. (dial.) *eme* 'old woman', Az. (dial.) *ämä* 'old
 2978 woman', Chu. *ama* 'mother; female; queen bee; a mother goddess; part of plough; a
 2979 part of gates'

2980

2981 The forms mentioned here form no exception to the general observation that
 2982 formations for 'mother' or 'father' across the world are commonly nursery terms. For

this reason, the etymology was removed from the core evidence in Robbeets (2005). However, as the term of 'mother' is part of the basic vocabulary list, I mention it here. Besides, given the regular sound correspondences, it cannot be excluded that the nursery formation took already place in the ancestral Transeurasian language.

176. WARM

pJ **nuku-* 'to be warm': J *nuku-*, Mod. J *nuku-* (B) 'to be warm, mild, genial', dial. *noko-* 'to be warm', Yoron (Amami) *nukusan* 'warm', Shuri (Okinawa) *nukusan* 'warm', Irabu (Miyako) *nufukam* 'warm', Ishigaki (Yaeyama) *nuφusaan* 'warm', Yonaguni *nūkucan* 'warm', pR **nuku-* 'to be warm' (Thorpe 1983: 345)
pK **nuk-* ~ **nok-* 'to be(come) warm, mild, soft': K *nwuk-*, MK *nwuk-* 'to be damp, moist, tender, soft, to become mild, become warm', MK *nwok-* 'to melt, dissolve, become warm'

The alternation between pK **nwuk-* and **nwok-* is probably expressive in origin. In Korean, relatively retracted and non-retracted vowels tend to alternate phonologically in certain color adjectives, mimetic and expressive adjectives, e.g. K *ce:k-* 'to be small in number or quantity, few' vs. K *ca:k-* 'to be small in size, tiny' or K *nwuleh-* vs. *nolah-* 'to be yellow'. A similar phenomenon may be at the origin of the vowel alternation in standard Japanese *nuku-* and dialectal *noko-* 'to be warm'.

177. TO COVER

pMo **bürü-* 'to cover' (pMo **-yi-* anticausative, e.g., pMo **kaja-* 'to bend (tr.)' → WMo. *qajayi-* 'to be crooked (intr.)'; Robbeets 2015: 263): WMo *bürüg* 'dark, dusky, overcast; timid', *bürüyi* 'twilight, dusk; obscure, dark', *bürülje-* 'to become clouded or dimmed (of eyes etc.)' (WMo. *-lja-* distributive suffix in rhythmic motion), MMo. *huri-* '1 to cover', Khal. *büre-* 'to cover, to face, to line', *büriy* '2 dusk', Bur. *büri-* '1', *bürü:l*, *bürü:r* '2', Kalm. *bür-* 'to wrap sth. in sth, to cover, to supply a blanket, lid or roof (tr.)', *büri-* 'to be dark, to be overcast, to dawn (intr.)', Ordos *büri-* '1', Dag. *huri:* '2', *burgie:n* '2', Eastern Yugur *burkoloG* '2', Mgr. *burə-*, *huri-* '1'
pTk **bürü-* 'to cover' (pTk **(X)n-* processive suffix, e.g. OT *to-* 'to close' → *ton-* 'to be closed'; Robbeets 2015: 237-239): Karakhanide *bürün-* 'to be covered, wrapped', Tk. *bürü-* 'to cover up, fill (of smoke in a room); to wrap, enfold, envelop', Az. *bürü-* 'to cover; to wrap; to close; to surround; to fill', Tkm. *büre-* 'to cover', Gag. *bürü-* 'to cover', Dolg. *bürüy-* 'to cover', Yak. *bürüy-* 'to cover'

In Turkic, the majority of forms reflects a common shape **bürke-*: Bash. *börkä-* 'to close (tr.)', KKalp. *bürke-* 'to cover; to close; to be misty, grey, cloudy (of a day, weather)', Kaz. *bürke-* 'to cover; to wrap; to mask, disguise; to hide', Khak. *pürge-* 'to cover; to wrap', Kirg. *bürkö-* 'to cover', Kum. *bürke-* 'to cover; to envelop, shroud', Nog. *bürke-* 'to cover', Tat. *börkä-* 'to close', Shor *pürge-* 'to cover; to wrap', Altay *bürke-* 'to cover; to close; to wrap (tr.)', Tuvan *bürge-* 'to surround; to be misty, grey, cloudy (of a day, weather)' and Chu. *pəwrke-* 'to cover; to dress'. Since it is not possible to identify a deverbal verb suffix of the shape **-kA* in Turkic, these verbs are probably borrowed from a Mongolic model, i.e. pMo **bürke-* 'to cover, become cloudy' < **bürü-kü e-* (cover-NMLZ-VBLZ) reflected in WMo. *bürke-*, Khal. *bürxe-* and Bur. *bürxe-* 'to cover, become cloudy' (Nugteren 2011: 59, 294-295).

3033 178. WOMAN

3034 pJ **me* 'woman, female': OJ *omina* 'old woman, woman', OJ *womina* 'young woman'

3035 (OJ *o-* 'aged', OJ *wo-* 'young', OJ *na* 'name, person'), J *onna* (3.2b) 'woman', J *me*

3036 (1.3b), OJ *me₁* 'female', Yamatohama (Amami) *onagu* 'woman', *mii* 'female',

3037 Yonamine (Okinawa) *inaaguu* 'woman', *miimun* 'female', Irabu (Miyako) *midum*

3038 'woman', *mii-munu* 'female', Ishigaki (Yaeyama) *miidun* 'woman', *mii-munu* 'female',

3039 Yonaguni *mīnuna* 'woman', *mii-munu* 'female'

3040 pK **mye* 'woman': K *myanuri* 'daughter in law, son's wife', MK *mye-nol*, *mye-noli*

3041 'son's wife'

3042

3043 Whitman and Frellesvig (2008) argued in favor of reconstructing a seven vowel

3044 system in proto-Japonic, adding two mid vowels (**e*, **o*) to the traditionally

3045 reconstructed system. They proposed that **e* raised in similar environments as **o* in

3046 proto-Japonic, merging with **i* in all positions except word-finally, where it became

3047 OJ *e₂*. The reconstruction pJ **me* 'woman, female' yields a good example of the

3048 alternation between the fully raised word-nonfinal OJ *i* in OJ *o-mi-na* 'old woman,

3049 woman' and the partially raised word-final OJ *e₂* in OJ *me₁* 'female'.

3050 Even if the second part of the Korean word remains unexplained, the comparison

3051 with pK **mye* 'woman' seems to point to an original diphthong pTEA **ia*. In our basic

3052 vocabulary list, this correspondence occurs word-initially in 101 MOUNTAIN, 136

3053 WHICH, 166 SOFT and 194 OPEN and word-medially in 12 BREAST and 152

3054 WHITE.

3055

3056

3057 179 DEEP

3058 pJ **kipa-* 'to be characterized by a rapid decline': J *kiwa*, OJ *ki₁pa* (2.3) 'side, edge,

3059 margin, brink', OJ *kipam-* 'to take to outermost limit', J *kewasii*, OJ *kepasi-* (B)

3060 'steep, precipitous'

3061 pK **kip-k_Λ-* 'to be deep' (pK **-ki- ~ -k_Λ-* inchoative, e.g. MK *·mul* 'water' → MK

3062 *mwulk-* 'be watery'; Robbeets 2015: 257-258): MK *kiph-* 'to be deep', K *kiphi*, MK

3063 *ki-phuy ~ ki-phuy* 'depth'

3064

3065 The verb MK *kiph-* 'to be deep' goes back to an original thematic stem pK **kipk_Λ-*,

3066 with the vowel reflected in MK *ki-phuy ~ ki-phuy* 'depth', a derivation with the

3067 deverbal noun suffix pK **-i* (Robbeets 2015: 459).

3068

3069 pJ **puka-* 'to be deep': J *huka-*, OJ *puka-* (B) 'to be deep, thick, dense', OJ *pukame₂-*

3070 (B) 'to make deep (tr.)', *puke₂-* 'to deepen (tr.)', Yamatohama (Amami) *hukasari*

3071 'deep', Irabu (Miyako) *fukaham* 'deep', Hatoma (Yaeyama) *hukaan* 'deep', Yonaguni

3072 *kkân* 'deep'

3073 pK **pok_Λ- ~ puki-* 'to be deep' → **pok_Λ-k ~ puki-k* 'deeply' (pK **(i/Λ)k* adverbializer,

3074 e.g. MK *kuž-* 'to draw a line' → *kužuk* 'secluded, private'): K *phok ~ phuk* 'deeply,

3075 completely; falling down, sinking in (adv.)', MK *phok* 'deeply', MK *·pwok* 'deep

3076 inside, mist' is a bound noun in MK *·poy-s-·pwok*, K *pay-kkop* 'navel, belly

3077 button' (MK *poy* 'belly') and in K *pwok-phan* 'the very midst'

3078

3079 180. ABOVE

3080 pJ **u-pa-(C)i* 'above' (pJ **pa* 'place'): J *ue* (2.2.a), OJ *upe₂* 'above, upper part', Yoron

3081 (Amami) *ui* 'above', Shuri (Okinawa) *ʔwii* 'above', Irabu (Miyako) *waara* 'above',

3082 ishigaki (Yaeyama) *ui* 'above', Yonaguni *ui* 'above'

3083 pK **u-k* 'above' (pK **(i/ʌ)k* place suffix): K *wi*, MK *wuh* 'above, upside, upper part',
3084
3085 In Korean there is an exceptional class of non-rising low nouns of one syllable which
3086 may end in a voiced or voiceless consonant. Martin (1996: 45) regards these nouns as
3087 reductions from 2 syllables with a minimal vowel MK *u/o* in the second, so that a
3088 high accent may be imputed for the second syllable. A good number of these words
3089 seem to be compounds with the place suffix pK **(i/ʌ)k*, e.g. MK *·stah* 'ground',
3090 MK *pas* ~ *pask* 'outside' (< **pasʌ-k*), *math* 'yard' (< **matʌ-k*), *alph* 'front' (< **alpʌ-*
3091 *k*), MK *path* '(dry) field' (< **patʌ-k*), MK *muth* 'dry land' (< **mutʌ-k* 'dry land'), etc.
3092
3093
3094 183. OTHER
3095 pJ **pəka* 'other' < **pəka-* 'to come beside, outside': J *hoka*, OJ *poka* (2.4.) 'other,
3096 another, different', Asama (Amami) *hukaa* 'other', Shuri (Okinawa) *huka* 'outdoors',
3097 Irabu (Miyako) *puka* 'outdoors', Ishigaki (Yaeyama) *huka* 'outdoors', Yonaguni *hùga*
3098 'other'
3099 pK **peki-* 'to come next, follow': K *pekum* 'second, next', MK *pekwum* 'next,
3100 following', MK *peke* 'next', MK *pe·kun* 'being second (attributive)'
3101
3102 Given a parallel formation in Korean, whereby MK *pek-e* 'next' can be derived from
3103 an original verb pK **peki-* 'to come next, follow', the Japonic reconstruction pJ **pəka*
3104 'other' can probably be analyzed as a deverbal noun on the basis of the nominalizing
3105 suffix pJ **-a* hypothesized by Sakakura (1966: 286–303); see also Robbeets 2015:
3106 156.
3107
3108 186. TO RISE
3109 pJ **iki-* 'to rise, raise': OJ *oki₂-* (B) 'arise', *okoru* (B?), OJ *oko₂r-* 'to arise', *okosu*
3110 (B), OJ *oko₂s-* 'to raise', Shodon (Amami) *ʔwihijum* 'to rise', Shuri (Okinawa) *ukijun*
3111 'to rise', Irabu (Miyako) *ukii* 'to rise', Ishigaki (Yaeyama) *ukirun* 'to rise', Yonaguni
3112 *ugirun* 'to rise', pR **oke-* 'to rise' (Thorpe 1983: 321)
3113 pTg **ög(ö)-* 'to rise, go up, mount', **ögö-i-* 'above' (pTg **-i-* deverbal noun suffix,
3114 e.g., Even *das-* 'to cover' → *dasi-* 'a cover'; Robbeets 2015: 461-462): Evk. *uw-* ~ *ug-*
3115 'to mount (a horse etc.)', *ugi:-* 'above, up (postposition)'; Even *oy-* 'above
3116 (postposition)', *oyər-* 'to raise', *u:-* 'to mount'; Solon *ugu-* 'to mount a horse', *uge-*
3117 *sxi-* 'up'; Neg. *uyi-* ~ *uyi-* 'to raise', *uyi-də-* 'upper side, space above', *uyi* 'up, above
3118 (postposition)', Ma. *wəsi-* 'to rise, go up; to advance (in rank)'; *wəsi-hun* 'upward, up;
3119 eastward, east; honorable, revered, respected; your (honorific)'; Sibe *wəsi-* 'to rise; to
3120 flourish; to increase in price'; Olcha *u:wu* 'upper', *uy-* 'on, above (postposition)';
3121 Orok *uwwə:* ~ *uwu* ~ *ui* 'upper side, upper space; high'; *u:-won-* 'to seat; to put; to
3122 mount smb on a deer or a horse'; Na. *uwui* 'upper; highest' (Onenko 1980: 423), *o:-*
3123 'to get (in a boat, in a plane etc.); to start; to but in to conversation; to transmit a
3124 disease', *uyə* 'upper side', *uyə-* 'on smth.; above smth. (postposition)', *uyə-ji* 'upside
3125 down', *uyəktulə-* 'above (post)', *uy-lə* 'on top of (adverb)'; Oroch *ui-* ~ *uyi-* 'to raise',
3126 *uyə* 'upper', *ui-* 'upper side (postposition)'; *u:-* 'to sit down in a boat, on a sledge, to
3127 mount a horse etc.'; Ud. *ui-* 'above (postposition)', *una-* 'to sit down in a boat, to take
3128 a train, to mount a horse etc.; to get an animal trace'
3129 pMo **öge* 'going up; going upward, upstream; being above' < ? **ög-* 'to go up' (pMo.
3130 **-dA* adverbial marker deriving nominally encoded adjectives, e.g., WMo. *batu* 'firm'
3131 → *batu-da* 'firmly'; pMo **-sA-* denominal verb suffix, e.g., WMo. *ayajim* 'slow,
3132 slowly (adv. / adj)' → *ayajimsa-* 'to slow down, become slow'): MMo. *o'ede* 'l

3133 upwards, upstream, above', WMo. *ögede* 'upwards, uphill, upstream, towards', *ögede*
 3134 *bol-* 'to rise, get up' (WMo. *bol-* 'be(come), exist'), WMo. *ögse-* '2 to go up', Khal. *ō:d*
 3135 '1', *ögsö-* '2', Bur. *ō:de* '1', *ügse-* '2', Kalm. *ō:də* '1', *öksə-* '2', Dag. *wə:d* '1', Ordos
 3136 *ō:dö* '1', Kgj *ude*, Dgx. *ojie* '1', Bao. *odə* '1', Mog. *öädä* '1'
 3137 pTk **ög-* 'to raise, heap up' (OT *-(X)š* deverbal property noun/adjective, e.g. *arī-* 'to
 3138 be clean, pure' -> *arī:š* 'clear, pure'; Erdal 1991: 262-275): OT *ük-* '1 to heap up', *üküš*
 3139 'many', Karakh. *ük-* 'to heap up; to accumulate', *üküš* 'many', MTK. *ük-* 'to accumulate',
 3140 *üküš* 'many', Tk. *ögüs* 'many', Tat. *üy-* '1', Khak. *üg-* 'to heap up; to hill up, raise the
 3141 earth around plants', Kirg. *üy-* '1', Kaz. *üy-* 'to heap up; to accumulate', Nog. *üy-* '1',
 3142 Bash. *üy-* '1', KKalp. *üy-* '1', Uig. *üy-* '1', Uz. *uy-* 'to heap up; to accumulate', Altay *ii:-*
 3143 '1', Dolg. *ügüs* 'many', Yak. *ügüs* 'many'

3144
 3145 The sporadic attestation of the Tungusic vowel reflex *o* where *u* would be expected,
 3146 for instance in Even *oy-* 'above (postposition)', *oyər-* 'to raise' and in Nanai *o:-* 'to
 3147 get (in a boat, in a plane etc.); to start; to but in to conversation; to transmit a disease'
 3148 may lead to the reconstruction of pTg **ög-* rather than **ug-* 'to ride, mount'.¹⁰
 3149 The nominal adjective pMo **öge* 'going up' can be reconstructed, given the occurrence
 3150 of an adverbial marker **-dA*, which derives from nominally encoded adjectives and of
 3151 a denominal verb suffix **-sA-* in Mongolic. Parallel to the derivation in the Tungusic
 3152 cognate, it cannot be excluded that pMo **öge* 'going up' further derives as the verbal
 3153 noun in pMo **-i* (Robbeets 2015: 462-463) from an original verb **ög-* 'to go up'.
 3154 Similar to the *i ~ e* alternation in word pairs such as WMo. *kemeli-* ~ *kemele-* 'to
 3155 gnaw', the compounds **ög-i-de* (go.up-NMLZ-ADVZ) 'above' and **ög-i-se-* (go.up-
 3156 NMLZ-VBLZ) 'to go up' may have assimilated to WMo. *ögede* 'upwards, uphill,
 3157 upstream, towards' and *ögse-* 'to go up'.

3158 The historical stages of Turkic have a voiceless velar, but the modern forms lead to
 3159 the reconstruction of pTk **ög-* 'to heap up' with a voiced velar stop.

3160
 3161 pJ **taka-* 'to be high, elevated': J *taka-* (B), OJ *taka-* 'to be high, elevated', J *take*
 3162 (2.3/ 2.4), OJ *take₂* 'peak, mountain', Yoron (Amami) *takasan* 'tall', Shuri (Okinawa)
 3163 *takasan* 'tall', Irabu (Miyako) *ta'aham* 'tall', Ishigaki (Yaeyama) *takasaan* 'tall',
 3164 Yonaguni *thāgan* 'high, tall', pR **taka-* 'to be high, tall' (Thorpe 1983: 296),
 3165 pK **teki-* 'to increase, make go up, make high': MK *teu-* 'to increase (tr.)', MK *te*
 3166 'more, longer, further', K *tek, teki* 'plateau'
 3167 pTg **dege-* 'to rise, go up, fly' (pTg **-dA-* fientive suffix; e.g. Even *ya:* 'what' → *ya:-*
 3168 *da-* 'use what, make from what'): Ma. *dəyā-* 'to fly', *dəkdə-* 'to rise; to float', Sibe
 3169 *dəyā-* 'to fly', *dəyā-tun* 'aircraft', Jur. *de-* 'to fly', Even *dəy-* 'to rise; to ascend, to go
 3170 up; to fly away', *dəyi ~ dəyi* 'bird', Neg. *dəy-* 'to fly, to fly away', *dəyi:* 'a bird';
 3171 Solon *degeli-* 'to fly', *degae-* ~ *dedde-* 'to raise', *degi* 'bird'; Olcha *dəgdə-* 'to fly';
 3172 Ud. *d'e:li-* ~ *d'eyli-* 'to fly', *dəgdə-* 'to rise (about the sun); to raise a heavy thing; to
 3173 go up on a wing, to learn to fly (about birdlings)', Oroch *dəili-* ~ *də:li-* 'to fly', Na.

¹⁰ According to the correspondences in Benzing 1955a:

pTg	Ma.	Jur	Evk	Even	Sol	Neg	Oroch	Ud.	Olch.	Orok	Na
*ö [ʌ]	u		u	o	u	u	o/u	o	o/u	o/u	u
*u	u		u / -i-	u / -i-	u / -i-	u / -i-	u	u	u	u	u

3174 *dəgdə*- ‘1 to fly, 2 to go up to the water surface, to go up (e.g. about dust)’, *dəgdə-gu-*
3175 ‘to rise (about the sun)’
3176 pMo. **dege*- ‘to rise, go up’: WMo. *degere* ‘top, on top of, high; higher or better than
3177 (with the ablative) (n. / adj /postpos.)’ (WMo. *-ra* / *-re* adverbializer < **-r* deverb
3178 noun + **-a* dative; Robbeets 2015: 355-357), WMo. *deyedü* ‘higher, upper, best
3179 (adj.)’ (WMo. *-du* / *-dü* derives local nominal adjectives; Poppe 1954: 50), WMo.
3180 *degegši* ‘upward, above, higher than (adv.)’ (WMo. *-yši* / *-gši* derives directional
3181 adverbs; Poppe 1954: 58), WMo. *degde*- ‘to rise, float, fly up (intr.)’ (WMo. *-da-* / *-*
3182 *de-* fientive/passive suffix; Robbeets 2015: 305-306), WMo. *degüli-* ‘to jump across,
3183 jump a distance, leap’ (pMo **-li-* intensive), MMo. *de'ere* ‘top, on top of, high’, Khal.
3184 *de:-* ‘1 above, up’, *degde-* ‘2 to rise, fly up (intr.)’, *dü:lle-* ‘3 to jump, leap’, Bur.
3185 *de:r(e)* 1, *degde-* 2, Kalm. *de:-* 1, *degdä-* 2, Ordos *de:-* 1, *degde-* 2, Dgx. *žierä* 1,
3186 *žiedu* ‘higher, upper, best (adj.)’, Bao. *de-Gon* 1, Dag. *de:re* 1, *derede-*, *degede-* 2,
3187 Mgr. *däre* 1, *dē-di*, *te-šä* 1, *digine:-* ‘to jump on one leg’, *dü:li-* ‘to jump, dance, beat
3188 (heart)’, Mog. *de:rä* ‘top, on top of, high’, *dēkši* ‘upward, better than’, *dei-du* ‘above’,
3189 *dekšä-* ‘to come up’
3190 pTk **yeg* ‘upper part’: OTk. *yeg* ‘1 better than (adv. with object of comparison in the
3191 ablative)’, Karakh. *yeg* ‘1’, Tk. *yey*, *yey* ‘1’, MTk. *yik*, Az. (dial.) *yeg* ‘1’, Tkm. *yeg*
3192 ‘1’, Chu. *ši* ‘upper part, surface’
3193
3194 According to Martin (1996: 30) the MK verb *teu-* ‘to increase (tr.)’ and its adverb MK
3195 *te* ‘more, longer, further’ may have been derived from an original verb pK **teyi-* <
3196 **teki-*. The elision of the velar stop assumed here is reminiscent of the derivation of
3197 the MK verb *tao-* ‘to get exhausted, come to an end’ and its adverb **ta* ‘all’ from
3198 **tayA-* < **takA-* by Martin (1996: 79). The latter derivation is supported by the rising
3199 tone of the adverb and by the preservation of a velar in MK *takoy* ‘all’, which is
3200 probably a lexicalized deverbial noun. Even though in the case of MK *teu-* ‘to increase
3201 (tr.)’, the adverb *te* ‘more, longer, further’ lacks the rising tone, additional support for
3202 an original velar is provided by K *teki* ‘plateau’, which may be a lexicalized deverbial
3203 noun.
3204 The common semantic feature in all branches is ‘to rise, go up’. As indicated by the
3205 Even meaning ‘to rise, to ascend, to go up, to fly away’ (Doerfer et al. 1980: 168), the
3206 Tungusic semantics ‘to fly’ derive from ‘to go high’.
3207 Since the suffix in WMo. *dege-re* ‘top, high; higher or better than’ is the
3208 adverbializer WMo. *-ra* / *-re*, which derives from a deverbial noun suffix **-r* in the
3209 dative **-a*, it is clear that we are dealing with an original verbal base **dege-* ‘to rise,
3210 go up’. The verbal origin is further supported by other lexicalizations, including
3211 various deverbial suffixes such as the fientive/passive suffix or the intensive suffix.
3212 OTk. *yeg* ‘better than’ has the same semantics as the Mongolic adverb and also puts
3213 its object of comparison in the ablative. In Chuvash Chu. *ši*, *šiye* ‘upper part, surface’
3214 the meaning ‘high place’ is preserved.

3215 pMo **kali-* ‘to rise, go up, fly’: WMo. *qali-* ‘to soar, fly, skim (in flying); to flow over
3216 the brim, overflow’, *qalil* ‘steep slope’, Khal. *xali-* ‘to soar, sail (of bird)’, to overflow;
3217 to exceed, go beyond’, Bur. *xali-* ‘to soar, fly’, Kalm. *xälä-* ‘to rise; to fly up; to be very
3218 high; to overflow (of rivers); to emigrate (of people)’, Ordos *xali-* ‘to soar, fly’
3219 pTk **kali-* ‘to rise’ (pTk **-(X)k* deverbial inchoative, e.g., OT *tar-* ‘to disperse, scatter’
3220 → *tarik-* ‘to be driven away, go away’; Robbeets 2015: 264-266): OT *kalī-* ‘to rise in
3221 the air; jump’, Karakhanid *kalī-* ‘to rise in the air; jump’, Tk. *kalk(i)-* ‘to rise; to
3222 emerge; to depart, to start; to be cancelled; to disappear; to fall off, peel off; to be

3223 collected, harvested', Az. *ğalχ-* 'to rise; to increase (intr.)', Tkm. *ğalk-* 'to increase
 3224 (intr.)', Tat. *kalχ-* 'to rise; to float (on a surface), to stand up, overtop', Kirg. *kalχi-* 'to
 3225 float (on a surface)', Kaz. *kalχi-* 'to soar (of a bird); to float (on a surface); to remove
 3226 fat from the surface of soup', Nog. *kalχ-* 'to float (on a surface)', Bash. *kalχ-* 'to rise; to
 3227 emerge; to develop', KKalp. *kalχi-* 'to float (on a surface); to swell; to take off', Kum.
 3228 *kalχ-* 'to float (on a surface); to wiggle, jiggle', Uz. *qalq-* 'to rise', Khak. *xali-* 'to rise;
 3229 to jump up', Yak. *kiliy-* 'to rise on one leg', Tuva *xali-* 'to rise, run'

3230

3231 Although the semantic association between 'to rise' and 'to fly' is not included in List
 3232 et al. (2014), the polysemy is frequently attested on various lexemes in individual
 3233 Transeurasian languages, such as in Even *dəy-* 'to rise; to ascend, to go up; to fly
 3234 away' or in Kalmuck *xälə-* 'to rise; to fly up'. Therefore the semantic comparison
 3235 between both meanings is legitimate.

3236 189. TO BREAK

3237 pJ **kaka-* 'to break': J *kaku*, MJ *kak-* (A) 'to break, lack', J *kakeru* (A), OJ *kake₂-* 'to
 3238 break off, be broken off'
 3239 pTg **xaka-* 'to break, cut, tear': Neg. *aki-* / *kaki-* 'to cut off branches or twigs from
 3240 a tree, to lop', Olcha *xəkpə-čū-* 'to break off, to bite off', *χaqpa-lu-* 'to break a dead
 3241 tree', Orok *χaqpa:* 'a piece', *χaqpa-* '1 to take away; 2 to separate, to break off, to
 3242 tear off', Na. *χaga-* 'to cut, to cut oneself', *χa:ga-qta-* 'to cut off many objects',
 3243 *χa:ga-oxā* 'a wound', *χa:ga-nase-* 'to cut many times', *χaqpa:-*, *xəkpə-* 'to be torn off;
 3244 to fall off', *χaqpa-li-* 'to tear off', Ud. *akpinda-* 'to prick, to stab; to cut off, to rip up',
 3245 *kakpaligi-* 'to tear off'
 3246 pMo **kaka-* ~ **kaga-* 'to break, split' (pMo **-l-* intensive-iterative, **-rA-*
 3247 anticausative, **-cA-* progressive): MMo. *qaqal-* '1 to break, split, chip (tr.)', *qaqaca-*
 3248 '2 to separate, break away from (tr./intr.)', MMo. *qaqara-* '3 to break, split, burst
 3249 (intr.)'; WMo. *qayal-* ~ *qayala-* 'to break, split, chip, cut through (hard objects); to
 3250 make an incision; to draw a dividing line; to plow or till land (tr.)' (WMo. *-l-*
 3251 intensive-iterative, e.g. WMo. *dusu-* 'fall (of drops)' → *dusul-* 'to drip'; Poppe 1954:
 3252 64, Robbeets 2015: 106), *qayaca-* 'to break away from, separate, part with; to be
 3253 separated (tr./intr.)' (WMo. *-cA-* progressive suffix for continuous action, e.g. WMo.
 3254 *ergi-* 'to turn or move around' → *ergice-* 'to keep going or coming back, make
 3255 rounds'; Robbeets 2015: 199), *qayara-* ~ *qayar-* 'to break, fall asunder; crack, crash,
 3256 split burst (intr.)' (WMo. *-rA-* anticausative; Robbeets 2015: 313, Poppe 1954: 65),
 3257 Khal. *xagala-* '1', *xagaca-* '2', *xagara-* '3', Bur. *xaxal-* '1', *xaxasa-* '2', *xaxar-* '3',
 3258 Kalm. *xayl-* '1', *xayc-* '2', *xayr-* '3', Ordos *xagal-* '1', *χağar(a)-* '3', Mog. *qaqala-* 'to
 3259 cut up', *qaqara-* '3', Dag. *ğāğalu-*, *xagala:-*, *hagere-*, *hagare-*, *hagela:-* '1', *xayər-* '3',
 3260 Eastern Yugur *χağāča-* '2', *χağara:-* ~ *hqara-* '3', Mgr. *xğalə-* '1', *χa:žä-* '2', *xğara:-*
 3261 '3', Bao. *gal-* '1', *gar-* '3', Dgx. *ğāğalu-* '1', *ğāğaca-* '2', *ğāğara-* '3'
 3262 pTk **kak-* 'to beat, hit, injure, mow': Karakh. *kak-* 'beat, hit, knock, tap', Tk. *kak-* 'to
 3263 beat, hit; beat into, nail, hammer; to push; engrave, stamp', Gag. *kaχ-* 'beat into, nail,
 3264 hammer', Az. *ğax-* 'to beat, hit; to say to one's face', Tkm. *kak-* 'to beat into, nail,
 3265 hammer; to shake (off), jolt; to slam, clap'; Uzb. *kək-* 'to beat, hit; to knock, tap; to
 3266 nail, hammer; to shake (off), jolt; to slam, clap', Uig. *kak-* 'to beat, hit; nail, hammer;
 3267 to shake (off), jolt; to knock, tap; to wave one's hand; to slam, clap; to flap one's
 3268 wings'; Karaim *kak-* 'to beat, hit; to knock, tap; nail, hammer; to thresh'; Tat. *kak-* 'to
 3269 beat, hit; to knock, tap; nail, hammer; to shake; to slam, clap; to flap one's wings';
 3270 Bash. *kak-* 'to beat, hit', Kirg. *kak-* 'to knock, tap; to slam, clap; nail, hammer; to
 3271 shake; to repel; to drive game', Kaz. *kak-* 'to knock, tap; nail, hammer; to shake; to

3272 slam, clap; to hit, run over (of a car); to steal'; KBalk. *kak-* 'to beat, hit; to knock, tap;
3273 to shake; to wave one's hand; to print; to kill', KKalp. *kak-* 'to beat, hit; to beat into,
3274 nail, hammer; to shake; to knock, tap; to catch (a thought); to offend', Kum. *kak-* 'to
3275 beat, hit; to beat into, nail, hammer; to shake; to knock, tap; to slam, clap; to wave
3276 one's hand'; Nog. *kak-* 'nail, hammer; to shake; to knock, tap; to wave one's hand; to
3277 slam, clap; to charm', Khak. *xax-* 'to shake off; to throw out, dump; to play an
3278 instrument', Tuva *kak-* 'to beat, hit; to knock, tap; to nail, hammer; to urge on (a
3279 horse); to mow; to depart', Tofa. *ka 'k-* 'to beat, hit; to knock, tap; to mow; to send (a
3280 telegram)', Dolg. *kakriy-* 'to break into small pieces'
3281
3282 In Mongolic, the Buriat and Moghol suggest **kaka-*, while Eastern Yugur *χagara:- ~*
3283 *hqara-* preserves an alternation between both variants **kaka-* and **kaga-*. The other
3284 Mongolic languages lead to the reconstruction of **kaga-*.
3285
3286 pJ **yanpu-* 'to break, tear, split': J *yaburu* (?B'), OJ *yabur-* 'to tear, rip, break', J
3287 *yabureru* (?B'), OJ *yabure-* 'to get torn, get burst, be worn out', Yonamine (Amami)
3288 *yan ~ yanbin* 'to tear', Shuri (Okinawa) *yayun ~ yanzun ~ yandun* 'to tear', Shuri
3289 *yandi ~ yaburi* 'to get torn', Irabu (Miyako) *yabui ~ yai* 'to tear', Ishigaki (Yaeyama)
3290 *yarun* 'to tear', Yonaguni *nūda* 'to tear'
3291 pTg **delpe-* 'to split, break': Ma. *dəlhə-* 'to divide, to separate', *dəlhə-bu-* 'to make
3292 split; to cut up (a slaughtered animal)', *dəlhən* 'dividing, separation', Sibe *dəlhə-* 'to
3293 separate; to split; to divorce', Na. *dətpəjkin-* 'to split, to crack', Evk. *dəlpəm- ~*
3294 *dəlpərgə-* 'to crack (about ice); to burst' (*-rgA-* decausative inchoative), Even *delke-*
3295 'to split, separate', Solon *delpe-* 'to split, to crack'
3296 pMo **delbe-* 'to burst, break' (pMo **-lA* intensive-iterative; pMo **-rA* anticausative)
3297 WMo. *delbele-* '1 to break, crack (tr.)', WMo. *delbere-* '2 to burst, go to pieces
3298 (intr.)', Khal. *delbele-* '1', *delbere-* '2', Bur. *delbel-* '1', *delber-* '2', Kalm. *delwɨl-* '1',
3299 Ordos *delbel-* '1'
3300
3301 Robbeets (2005: 375; 2008) argues that the voiced series in Japanese, which are
3302 internally derived from original nasal clusters, can be traced back to clusters in the
3303 Transeurasian languages. The original clusters can be divided into homoganic and
3304 heteroganic clusters. Homoganic clusters are composed of a sonorant and a stop
3305 (pTEA **-Rp-*, **-Rt-*, **-Rk-*) and merge in a nasal cluster (pJ **-np-* > OJ *-b-*, pJ **-nt-* >
3306 OJ *-d-*, pJ **-nk-* > OJ **-g-*) in Japanese. The sound correspondence reflected here,
3307 namely OJ *-b-* < pJ **-np-* with pTg **-lp-* and pMo **-lb-* is regular from this
3308 perspective. Another illustration of a homoganic cluster correspondence is provided
3309 by etymology 32 BIG, 37 LEG/FOOT and 100 CRUSH.
3310 In heteroganic clusters, on the other hand, the nasal and the stop have a different place
3311 of articulation, which results in the insertion of a parasitic stop (pTEA **-m^(P)T-*, **-*
3312 *n^(T)K-*, **-ŋ^(K)T-*). The nasal is lost in the continental Transeurasian languages (**-PT-*,
3313 **-TK-*, **-KT-*), whereas Korean and Japanese lose the final stop (pJ **-mp-* > OJ *-b-*, pJ
3314 **-nt-* > OJ *-d-*, pJ **-ŋk-* > OJ **-g-*.) Etymology 96 WIDE illustrates a heteroganic
3315 cluster correspondence.
3316
3317 pTg **butu-* 'to break': Evk. *butukte* 'piece', Even *bū:t-* 'to break in pieces (glass, dishes
3318 etc.)', Neg. *boktal-* 'to break off', *boktakin-* 'to get broken off; to crack', Olcha *buqta*
3319 'piece', *buqtaža-* 'to get broken off', *buqталу-* 'to break in two', *buqталчу-* 'to break in
3320 pieces', Na. *boqta:-* 'to break off', Oroch *buktaga-* 'to be broken, Ud. *buktala-* ~
3321 *buktali-* 'to break across', *buktaga-* 'to be broken across'

- 3322 pMo **buta-* 'to break (pMo **-l-* intensive-iterative; pMo **-rA* anticausative): WMo.
 3323 *buta* 'in fragments, in pieces, completely broken (adverb)', *butara-* 'to break to pieces,
 3324 smash; to disperse, scatter (intr.)', MMo. *butāra-* '1 to be broken', Khal. *butal-* 'to
 3325 break', *butar-* '1', Kalm. *butu* 'piece of dust (in the air)', *butr-* 'to scatter, to disperse
 3326 (e.g. of dust by the wind) (intr.)', Ordos *butara-* '1', Dgx. *pudura-~putura-* '1', Mgr.
 3327 *pudəra:-* '1'
 3328
 3329
 3330 191 TO SPIN
 3331 pJ **tumu* 'spindle': J *tumu* (2.4), OJ *tumu* 'spindle', J *tumug-* (B), OJ *tumug-* 'to spin,
 3332 make into yarn', Shuri (Okinawa) *çing-* (B) 'to spin'
 3333 pTg **tom(u)-* > *tumu-* 'to spin' (pTg **-ku ~ *-ko* deverbil instrumental noun suffix,
 3334 e.g. Na. *xado-* 'to mow' → *xadoko* 'scythe'): Even *tum-* '1 to spin, wind, coil, spool,
 3335 wrap', *tumenje* 'thread wind around a bobbin', *tomqo-* 'to spin strings for threads; to
 3336 spin threads', *tomqon* 'spinning of strings; yarn'; Evk. *tum-* '1', *tomko* 'a thread';
 3337 *tomko-* 'to spin threads; to tie with a thread'; Neg. *tum-* '1', *tumu* 'string of thread,
 3338 parcel, roll', *tomko* 'thread', *tomko-* 'to spin threads'; Solon *tum-* 'to bind, knit, string
 3339 together, tie', *toŋxo-* 'to spin threads'; Oroch *tumu-* '1', *tompo* 'a sinew or nettle
 3340 thread', *tompo-* 'to spin threads; to weave a net'; Olcha *tumu-* '1', *toŋpo* 'short threads
 3341 of nettle or hemp', *toŋpo-* 'to spin threads'; Orok *tumu-* '1', *toqpo-* ~ *topqo-* 'to spin
 3342 threads, rope, cord'; *toqpo ~ topqo* 'thread; rope'; Na. *tumu-* '1', *tompo-* 'to spin
 3343 threads of fishskin', *tompo* 'threads made of fishskin'; Ud. *tompo-* 'to spin threads,
 3344 ropes'
 3345 pMo **tomu-* ~ **tamu-* 'to spin': WMo. *tomu-*, *tamu-* '1 to twist or spin thread or rope',
 3346 MMo. *tamu-* ~ *toma-* ~ *tomu-* ~ *doma-* '1', Khal. *tam-* ~ *tom-* '1', Bur. *tomo-* '1', Ordos
 3347 *tamu-* '1', Kalm. *tom-* ~ *töm-* 'to twist, twine; to string together (rope), make rope (by
 3348 turning horse hair between the hands)', Eastern Yugur *tomu-* ~ *tömɔ-* ~ *tomə-* '1', Dgx.
 3349 *tomu-* '1', Bao. *toməl-* '1', Mgr. *tomu-* ~ *tamu-* '1'
 3350
 3351 The Tungusic reconstruction displays a vowel alternation between **tom(u)-* and
 3352 **tumu-* 'to spin'. Given the preservation of **tom(u)-* in derived nouns with the
 3353 instrumental suffix and re-verbalizations thereof, I assume that **tom(u)-* assimilated
 3354 to **tumu-*.
 3355 In Mongolic we find a vowel alternation between **tomu-* ~ **tamu-* 'to spin',
 3356 reminiscent of the alternation between pMo **dalan* 'seventy' and **dolaan* 'seven'
 3357 (Nugteren 2011: 512).
 3358
 3359 194. TO OPEN
 3360 pJ **aka-* 'to open': J *ak-* (A) 'to open, be opened, become vacant (intr.)', J *ake-*, OJ
 3361 *ake₂-* (A) 'to open (tr.); to get bright (intr.)', J *aki* 'gap, opening, aperture', Yonaguni
 3362 *ágirun* 'to open'
 3363 pK **aki-* 'to open' (pK **-s* resultative deverbil noun suffix, e.g. K *cilki-* 'to be tough,
 3364 be durable, be lasting, be persisting' → *cilkis* 'firm, unyielding'; Robbeets 2015: 422,
 3365 pK **-i* deverbil noun suffix, e.g. MK *kiph-* 'be deep' → *kiphuy* 'depth'); Robbeets
 3366 2015: 459-460): K *akali* 'mouth, opening', K *akus* 'a little open', MK *akwui* 'mouth,
 3367 opening', MK *akwungi* 'mouth, beak'
 3368 pMo **agu-* 'to open' (pMo **-i* deverbil noun, e.g., WMo *bü-* 'to exist' → *büyi*
 3369 'existence'; Robbeets 2015: 462-463): WMo. *ayu-* 'to scoop out, to drain (tr.)', *ayud-*
 3370 'to spread, become extended, vast (intr.)', *ayudal-* 'to open (as a bag), to expand,
 3371 extend (tr.)', WMo. *ayuyi* 'cave, grotto; vast, extended, great'; Khal. *aguy* 'cave', *aguu*

3372 'mighty, great', Bur. *agi* 'cave, hole', Kalm. *ayu*: 'grotto, cave; vast and great', *ay*
3373 'small holes, gap', Ordos *aG^{wi}*: 'cave, hole', Dag. *agui* 'cave, hole'

3374

3375 The semantic development from 'to open' to 'to open up, extend' with derived nouns
3376 meaning 'opening' and 'vast' proposed for Mongolic is frequently seen cross-
3377 linguistically, for instance also in the connection between OJ *paruk*- 'to open up' and
3378 OJ *paruka* 'far, distant, remote' or between OJ *piⁱrak*- 'to open' and OJ *piⁱro*- 'wide,
3379 broad, spacious'.

3380

3381

3382 pK **yele*- 'to open': K *ye*: *l*-, MK *·yel*- ~ *·ye(l)*- 'to open; start up, set up; hold (e.g.
3383 banquet)'

3384 pMo **yara*- > **ira*- 'to open': WMo. *yara*- ~ *ira*- 'to open wide; to expose; to draw
3385 open; to cut open; to split', MMo. *ya:ra*- ~ *yarā*- '1 to open wide, split open', Khal.
3386 *yara*- 'to pull open, to pull apart, to slit, to part', Bur. *yara*- '1', Kalm. *ir*- 'to cut open,
3387 to split with a knife, to plough', *yar*- 'to split, to slaughter, separate meat in pieces and
3388 remove the soft parts from the bones', Ordos *ir*- '1', Dgx. *yara*- '1', Mgr. *ya:ra*- '1'
3389 pTk **ya:r*- 'to split': OT *yar*- 'to split, cleave (with a sharp instrument)', Karakhanid
3390 *yar*- '1 to split', Tk. *yar*- 'to split, rend, cleave, cut through; to break through (of
3391 military)', Az. *yar*- '1', Tkm. *ya:r*- '1', Gag. *yar*- '1', Tat. *yar*- '1', Kirg. *jar*- '1', Kaz.
3392 *žar*- '1', Nog. *yar*- '1', Bash. *yar*- '1', Balk. *jar*- '1', Karaim *yar*- '1', Kkpak *žar*- '1',
3393 Salar *yar*- '1', Kum. *yar*- '1', Uz. *yər*- '1', Uig. *ya(r)*- '1', S-Yug. *yar*- '1', Shor *čar*- '1',
3394 Khak. *čar*- '1', Tuva *čar*- '1', Yak. *sar-ka:x* 'split (adj.)', Dolg. *sar-ka:k* 'split (adj.)',
3395 Chu. *śor*- '1'

3396

3397 Although the semantic association between 'to open' and 'to split' is not explicitly
3398 mentioned in List et al. (2014), the polysemy can be observed in WMo. *yara*- ~ *ira*-
3399 'to open wide; to split'.

3400

3401

3402 199. UDDER

3403 pMo **deleng* ~ **deling* 'udder': WMo *deleng* '1 udder, teat', Khal. *delen(g)* '1', Bur.
3404 *delen(g)* '1', Ordos *deliŋ* '1', Kalm. *deliŋ* '1', Dag. *delin* '1', Eastern Yugur *delen* '1',
3405 Mgr. *dəlaŋ*, *diliŋ* '1', Bao. *dəlaŋ* '1', Kgj. *deliɔ* '1', Dgx. *žielien* '1'

3406 pTk **yēlin* 'udder': Karakhanid *yelin* '1 udder', Tk. *yelin* '1', Az. *yelin* '1', Tkm. *yelin*
3407 '1', Gag. *yelin* '1', Tat. *žilen*, Kirg. *jelin* '1', Kaz. *želin* '1', Nog. *yelin* '1', Bash. *yelen* '1',
3408 Balk. *yelin*, *jelin*, *želin* '1', Kkpak *želin* '1', Kum. *yelin* '1', Uig. *yelin*, *yilim*, *žilim* '1',
3409 Yak. *silin* '1', Chu. *śilə* '1'

3410

3411 In Mongolic, Ordos *deliŋ*, Dag. *delin*, Mgr. *diliŋ* and Kgj. *deliɔ* seem to reflect a
3412 vocalic alternant pMo **deling*, which agrees with the Turkic cognate (Nugteren 2011:
3413 315). This alternation is reminiscent of *i* ~ *e* alternation elsewhere in Mongolic, e.g.,
3414 WMo. *kemeli*- ~ *kemele*- 'to gnaw'; see 186 RISE for an alternation in proto-
3415 Mongolic. The final velar nasal in the Mongolic reconstruction may preserve a trace
3416 of the body part suffix pMo **-GA*; see 30 TOOTH and 31 HAIR.

3417

3418 200. FIVE

3419 pK **ta*- 'five' (pK **-[C]ʌis* suffix deriving low numerals): K *tases*, MK *ta:sos* 'five',
3420 K *tas mal* 'five mal (measure)', *tas toy* 'five toy (measure)', *tas kop* 'five hop (measure)',
3421 *tas ton* 'old Korean nickel' (ton 'money), etc.

3422 pMo **ta-* 'five': WMo. *tabu(n)* 'five', *tabi(n)* '2 fifty', MMo. *tabun* '1', *tabin* '2', Khal.
 3423 *tav(an)* '1', *tav* ' (tavin) '2', Bur. *taba(n)* '1', *tabi(n)* '2', Kalm. *tawn* '1', *tawn* '2', Ordos
 3424 *tawu* '1', *tawi* '2', Dag *ta:wu*, *ta:wun* '1', *tabi*, *tab* '2', Eastern Yugur *ta:βən* '1', *taβən*
 3425 '2', Mgr. *ta:wən*, *ta:wun* '1', *tayin* '2', Bao. *tawuŋ* '1', Dgx. *tawuŋ* '1', Mog. *tabun* '1'

3426

3427 In Korean, the numbers MK *ta-sos* 'five' and MK *ye-sus* 'six' seem to contain a suffix
 3428 MK *-u/os*; they occur in several shorter variants such as *tas ton* 'old Korean nickel' in
 3429 which the *-s-* is a genitive and attributive marker and *ton* means 'money'. Since the
 3430 medial *-s-* in both numbers did not undergo the expected lenition to *-ž-* in the
 3431 environment **CVCΛ/i*, Martin (1996:55) suggests to derive both forms from
 3432 **tas-[C]Λs* and **yes-[C]is*, in which the consonant cluster blocks the lenition. As such
 3433 pK **-[C]Λis* could be reconstructed as a suffix deriving low numerals.

3434 The common element in the numerals for 'five' and 'fifty' is pMo **ta-*. The suffix **-*
 3435 *bun* in the lower numerals may be connected to the suffix **-rbAn* in, **gu-rban* 'three',
 3436 **dō-rben* 'four' and **ha-rban* 'ten'. The suffix in decimal numeral units in 'fifty' seems
 3437 to be **-bin*, while in the numerals 'thirty' and 'forty' it appears as **-cin*: **gu-cin*
 3438 'thirty' and **dō-ci(n)* '2 forty'; see 165 FOUR.

3439

3440

3441

3442 3. Regular sound correspondences

3443

3444

3445 **Table 3.1 Reconstruction of the basic consonant inventory of Proto-Japonic**

pJ	OJ	J	Amami	Okinawa	Miyako	Yaeyama	Yonaguni
*p	p	h- -w- -ø-	ϕ- h- ç- -ø-	p- ϕ- -ø-	p- f- -ø-	p- -ø-	ϕ- h- tɕʰ- ç- -ø-
*np	ⁿ b	b	b	b	b	b	b
*t	t	t	t	t	t	t	t
*nt	ⁿ d	d	d	d	d	d	d
*k	k	k	k- k ^h - -k- -k ^h -	k- -k-	k- f- -k- -f-	k- ϕ- f- h- -k-	k- k ^h - ø- -g-
*nk	ⁿ g	g	g	g	g	g ɲ ø	ɲ
*s	s	s	s	s	s	s	s c
*ns	ⁿ z	z	^d z	z	z	z	d
*m	m	m	m	m	m	m	m
*n	n	n	n	n	n	n	n
*r	r	r	r	r	r	r	r
*w	w	w	w- b- y- g- ϕ- -ø-	w- b- g- ʔ- -ø-	b- -ø-	b- -ø-	b- -ø-
*y	y	y	y	y	y	y	d- -y-

3446

3447

3448 **Table 3.2 Reconstruction of the basic vowel inventory of Proto-Japonic**

pJ	OJ	J	Amami	Okinawa	Miyako	Yaeyama	Yonaguni
*a	a	a	a	a	a	a	a
*ə	o(2)	o	u	u	u	u	u
*o	o(1)	o	u	u	u	u	u
*o	u	u	^h u	u	u	u	u
*u	u	u	² u, N	u, N	u, N, ø	u, N, ø	u, N, ø
*i	o(2)	o	u	u	u	u	u

*i	i _(l)	i	[?] i, N	[?] i, ^y i, N	ɲ, w, s, N, ø	N, ø	i, N, ø
*e	i _(l)	i	^h i, i	^h i, i	i	i	i
*e	e _(l)	e	yu	yu	yu	yu	du

Table 3.3 Reconstruction of the basic consonant inventory of Proto-Koreanic

pK	MK
*p	p, W /β/ > w (lenition)
*t	t, l /r/ (lenition)
*c	c
*k	k, G /ɣ/ > ø (lenition)
*h	h
*s	s, ž (lenition)
*m	m
*n	n
*r	l

Table 3.4 Reconstruction of the basic vowel inventory of Proto-Koreanic

pK	MK
*a	a
*Λ	o /Λ/
*i	u /i/
*e	e
*o	wo /o/
*u	wu /u/
*i	*i
*ia	*ye

Table 3.5 Reconstruction of the basic consonant inventory of Proto-Tungusic

pTg	Jur.	Ma.	Sibe	Oro ch	Ud.	Na.	Na. Bikin	Orok	Olch a	Eve n	Sol.	Evk.	Neg.
*p-	f-	f-	f-	x-	x-	p-	f- x-	p-	p-	h-	ø-	h-	x-
*-p-	f	f b ø	v ø	p w ø	p f w	p	f	p	p	b w ø	p w g ø	p b w ø	p w
*b-	b-	b-	b-	b-	b-	b-	b-	b-	b-	b-	b-	b-	b-
*-b-	b w ø	b f w ø	v ø	b w ø	b w ø	b w ø	w ø	b w ø	b w ø	b w ø	b p w ø	w ø	w ø
*t-	t-	t-	t-	t-	t-	t-	t-	t-	t-	t-	t-	t-	t-
*-t-	t	t	t s	t	t	t	t	t	t	t	t	t	t
*d- *ji-	d- dʒi-	d- dʒi-	d- dʒi-	d-	d-	d- dʒi-	d- dʒi-	d- dʒi-	d-	d-	d-	d-	d-
*-d- *-ji-	d dʒi	d dʒi	d dʒi	d	d	d dʒi	d dʒi	d dʒi	d	d	d	d	d
*k-	x-	x-	x-	k- ø-	k- ø-	k- ø-	k- ø-	k- ø-	k- ø-	k- ø-	x- ø-	k- ø-	k- ø-
*-k-	k x ø	k x	k ɣ	k ø	k x ɣ ø	k ɣ ø	k ɣ ø	k ø	k ɣ ø	k	k x	k x	k x

*g-	g-	g-	g-	g-ŋ-	g-ŋ-	g-ø-	g-ø-	g-ŋ-	g-ŋ-	g-ŋ-	g-n-	g-ŋ-	g-ŋ-
*-g-	ɣ w ø	ɣ w y ø	ø	ɣ w y ø	ɣ w y ø	ɣ w y ø	y ø	ɣ w y ø	ɣ w y ø	ɣ y	ɣ ø	ɣ	ɣ y w
*č-	č-	č-	č-	č-	č-	č-	č-	č- > t-	č- > t-	č-	s-	č-	č-
*-č-	č	č	č	č	s	č	č s	č > t	č	č	š	č	č
*x-	w- ø-	w- ø-	v- ø-	x- ø-	w- ø-	x- s-	x- s-	x- s-	x- s-	ø-	ø-	ø-	ø-
*-x-	x	x	x k ɣ	k	ø	x ø	x k	x ø	x ø	k	x	k	k x
*s-	s-	s-	s-	s-	s-	s-	s-	s-	s-	s-	s-	s-	s-
*-s-	s	s	s	s	s h ø	s	s	s	s	s	s	x	s
*m-	m-	m-	m-	m-	m-	m- ŋ-	m-	m-	m- ŋ-	m-	m-	m-	m-
*-m-	m	m	m	m	m	m	m	m	m	m	m	m	m
*n-	n-	n-	n-	n-	n-	n- l-	n- l-	n- l-	n- l-	n-	n-	n- l	n-
*-n-	n	n	n	n	n	n	n	n	n	n	n	n	n
*-r-	r	r	r	y ø	y ø	r	r	r	r	r	r	r	y ø
*-l-	l	l	l	l	l	l	l n	l	l	l	l	l	l

Table 3.6 Reconstruction of the basic vowel inventory of Proto-Tungusic

pTg	Jur.	Ma.	Sibe	Oro ch	Ud.	Na.	Na. Bikin	Oro k	Olch a	Eve n	Sol.	Evk.	Neg.
*a	a	a	a	a	a	a	a	a	a	a	a	a	a
*e	e	e	e	e	e	e	e	e	e	e	e	e	e
*o	o	o	o	o	o	o	o	o	o	o	o	o	o
*ö	u	u	u	o u	o	u	u	o u	o u	o	u	u	u
*u	u	u	u	u	u	u	u	u	u	u ö	u ö	u ö	u ö
*ü	u ei	u ei	u i	i	i u	u o	i o	i u	i u o	i	i	i u	i o
*i	i	i	i	i	i	i i	i i	i	i i	i	i	i i	i i
*ia	ie 'a	iya ai 'a	ia a	iæ ei	iæ æ a	i'a ea	iæ	i:	i:	ia	i:	i:	i:

Table 3.7 Reconstruction of the basic consonant inventory of Proto-Mongolic

PMo	MMo	WMo	Khal.	Bur.	Kalm.	Dag.	EYu	Mgr.	Dgx.	Bao.	Mog.
*p	h VøV Cb	ø	ø	ø	ø	x š	h	x f š	x f š	x f š	ø ?
*b	b	b	b- -v-	b	b- -w-	b -v- -r	b- p- -w-	b -ø- -yi	b- p- -v-	b- p- -v-	b -b- -f
*t	t	t	t	t	t	t	t d	t d	t -d	t	t
*d	d -t	d	d	d	d	d -r	d	d	d j	d	d
*k(A)	q x	q	x	x	x	k x	q x	x	q	x	q
*k(E)	k	k	x	x	k	k x	k	k	k	k	k
*k(i)	k	k	x	x	k	k x	k	ć	k	k	k
*g(A)	q -V-	ɣ	g	g	g	g	ğ	ğ	ğ	ğ	ɣ
*g(E)	g	g	g	g	g	g	g	g	g	g	g
*g(i)	g	g	g	g	g	g	g	g	g	g	g
*č	č	č	č	s š	č	č	č ž	č	č -ž-	č -ž-	č

										-č	
*s	s š	s	s š	h š -t	s š	s š -r	s š	s š ʒ	s š	s š	s š
*m	m	m	m -m -n	m -m -n	m -m -n	m -m -n	m	m	m -n	m	m
*n	n	n	n	n	n	n	n	n	n	n -ŋ	n
*-r-	-r- -r	-r- -r	-r- -r	-r- -r	-r- -r	-r- -r	-r- -r	-r- -r	-r- -ø	-r- -r	-r- -r
*-l-	-l- -l	-l- -l	-l- -l	-l- -l	-l- -l	-l- -l	-l- -l	-l- -l	-l- -n	-l- -l	-l- -r

Table 3.8 Reconstruction of the basic vowel inventory of Proto-Mongolic

PMo	MMo	WMo	Khal.	Bur.	Kalm.	Dag.	EYu	Mgr.	Dgx.	Bao.	Mog.
*a	a	a	a	a	a ä	a	a	a ä i ø-	a ə	a e i	a o ö
*e	e	e	e i ö	e ü	e i ö	e ü	e i- o- ø-	e ə a i u ø-	e ie ü ye-	e -iN -aN	e ü
*o	o	o	o	o	o ö	o -(u)a- wa-	o ö	o u ö u- ø-	o u -uaN	o u o-	o u
*ö	o u	ö	ö	ü	ö	ü	ö o:	u o o: o- ø-	o u -uaN	o u o-	ö ü
*ü	u	ü	ü	ü	ü	ü	u ə ø- u-	u ə i ø- u-	u	u e u- -oŋ	ü
*u	u	u	u	u	u ü	u o -(u)a- wa-	u ə ø-	u o ə ø-	u	u e a o	u
*i	i	i	i	i e	i	i	i	i	i ə	i	i

Table 3.9 Reconstruction of the basic consonant inventory of Proto-Turkic

	OT	Chu.	Kh.	CTat	Kum.	KBal.	Krm.	Tat.	Bas h.	Kaz.	Kirg.	Kpak	Nog.
*-p-	p	b	b	b p	b	b	b	b p	b	b	b p	b p	b
*-p	-p	-p	-p	-p	-p	-p	-p	-p	-p	-p	-p	-p	-p
*b-	b-	p-	b-	b-	b-	b-	b-	b-	b-	b-	b-	b-	b-
*-b-	b	v ø	v ø	v	w y ø	w y ø	w y ø	w y ø	w y ø	b w y ø	b y -ø	b w y ø	b w y ø
*-t-	t-	t- č-	t-	t-	t-	t-	t-	t-	t-	t-	t-	t-	t-
*-t-	t	-d- -t	t	-d- -t	t	t	t	t	t	t	t	t	t
*-t	t	-d- -t	t	-d- -t	t	t	t	t	t	t	t	t	t
*y-	d-	y-	d-	y-	y-	y-	y-	y-	y-	y-	y-	y-	y-
*-d-	d	y r	d	y	y	y	y	y	y	y	y	y	y
*-d	d	y r -ø	d	y	y	y	y	y	y	y	y	y	y
*k(A)-	q-	x-	q-	q-	q-	q-	q-	q-	q-	q-	k-	q-	k-
*k(E)	k-	k-	k-	k-	k- g-	k-	k-	k-	k-	k-	k-	k-	k-
*-k(A)-	q	-g- -k -ø	q	-y- -q	-y- -q	-y- -q	-y- -q	-y- -q	-y- -q	-y- -q	-y- -q	-y- -q	-y- -q
*-k(E)-	k	-g- -k -ø	k	-g- -k	-g- -k	-g- -k	-g- -k	-g- -k	-g- -k	-g- -k	-g- -k	-g- -k	-g- -k
*-g(A)-	ɣ	ø	ø	w y	w y	w y	g w	w y	w y	w y	w y	w y	w y

*-g(A) *-g				-ø - w -y	-ø -w -y	-ø -w -y	y ø	-ø - w -y	-ø - w -y	-ø - w -y	-ø -w - y	-ø -w -y	-ø -w - y
*-g(E)- *-g(E) *-g	g	v y	y w y	w y -ø - w -y	w y -ø -w -y	w y -ø -w -y	g w y ø	w y -ø - w -y	w y -ø - w -y	w y -ø - w -y	w y -ø -w - y	w y -ø -w -y	w y -ø -w - y
*-č- *-č	č	-ž- -š	č	j č -č	č	č	j -č	č	s	š	č	š	š
*-lč	-š	-š	-š	-š	-š	-š	-š	-š	-š	-s	-š	-s	-s
*s-	s-	s- š-	s-	s-	s-	s-	s-	s-	h-	s-	s-	s-	s-
*-s- *-s	s	z ž -s -š	s	s	s	s	s	s	θ	s	s	s	s
*-m- *-m-	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m
*-n- *-n	n	n m	n	n	n	n	n	n	n	n	n	n	n
*-r-	r	r	r	r	r	r	r	r	r	r	r	r	r
*-r₂-	z	r	z	z	z	z	z	z	δ	z	z	z	z
*-l-	l	l	l	l	l	l	l	l	l	l	l	l	l

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PTk	Tk.	Az.	Gag.	Tkm.	Uz.	Uigh.	Tuv.	Tofa	Shor	Khak.	Yak.	Dolg.
*-p- *-p	b p -p	b p -p	b p -p	b p -p	v p b -v -p -b	p -p	-v- -p	b p -p	b -p	b -p	b -p	b -p
*b-	b-	b-	b-	b-	b-	b-	b-	b-	p-	p-	b-	b-
*-b- *-b	v y ø	v y ø	v ø	w y ø	v g y ø	b v g y ø	v ø -g	b ø -g	b ø -g	b ø -g	b ø	b ø
*t- *-t- *-t	t- d- t d	t- d- t d	t- d- t d	t- d- -t- -d- -t	t t	t t	t- d- -d- -t	t- d- -d- -t	t- -d- -t	t- -d- -t	t t	t t
*y- *-d- *-d	y- y y	y- y y	y- y y	y- y y	y- y y	y- y y	d- -d- -t	d d	z z	z- -z- -s	t t	t t
*k(A)- *-k(E)-	k- g- g-	k- g- g- g-	k- g- k- k-	k- g- g- g-	q- k- k-	q- k- k-	q- x- k- k-	q- k- k-	q- k- k-	x- k- k-	q- x- k- k-	k- k- k-
*-k(A)- *-k(A)	-y- -q	-y- -q	-k- -q	-k- -q	q q	q q	-g- -q	-g- -q	-y- -q	-y- -q	-y- -x	-g- -k
*-k(E)- *-k(E)	-g- -k	-g- -k	-g- -k	-g- -k	k k	k k	-g- -k	-h- -k	-g- -k	-g- -k	-g- -k	-g- -k
*-g(A)- *-g	y w y ø	y w y ø	y w y ø	y w y ø	-y- -q	-y- -q	y ø y ø	y ø y ø	y ø y ø	y ø y ø	ø ø	ø ø
*-g(E)- *-g	y w y ø	y w y ø	y w y ø	y w y ø	-g- -k	-g- -k	g ø g ø	g ø g ø	g ø g ø	g ø g ø	ø ø	ø ø
*-č- *-č	č j -č	č j -č	č j -č	č j -č	č č	č č	-ž- -š	-j- -š	č -š	č -s	-h- -s	č -s
*-lč	-š	-š	-š	-š	-š	-š	-š	-š	-š	-s	-s	-s
*s- *-s- *-s	s- s s	s- s s	s- s s	s- s s	s- s s	s- s s	s- -z- -s	s- s s	s- -z- -s	s- -z- -s	ø- t t	ø- t t
*-m- *-m	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m	m -n -m

*-n-	n	n	n	n	n	n	n	n	n	n	n	n
*-r-	r	r	r	r	r	r	r	r	r	r	r	r
*-r₂-	z	z	z	z	z	z	s	s	s	s	s	s
*-l-	l	l	l	l	l	l	l	l	l	l	l	l

Table 3.10 Reconstruction of the basic vowel inventory of Proto-Turkic

PTk	OT	Chu.	Kh.	CTat	Kum.	KBal.	Krm.	Tat.	Bash.	Kaz.	Kirg.	Kpak	Nog.
*a	a	u	a	a	a	a	a	a	a	a	a	a	a
*e	e	i	ä e	e	e	e	e	i	i	e	e	e	e
*o	o	u	o	o	o	o	o	u	o	o	o	o	o
*ö	ö	ü ä	e ö	ö o	ö	ö	ö	ü	ü	ö	ö	ö	ö
*u	u	vä- -ä-	u	u	u	u	u	o	o	ü	u	u	u
*ü	ü	ä	ü i	ü u	ü	ü	ü	ö	ö	ü	ü	ü	ü
*i	i	ä ě	i	i i	i	i	i	i	i	i	i	i	i
*i	i	ä ě	i	i	i	i	i	e	e	i	i	i	i
*ia	a	yu	a	a	a	a	a	a	a	a	a	a	a

PTk	Tk.	Az.	Gag.	Tkm.	Uz.	Uigh.	Tuv.	Tofa	Shor	Khak.	Yak.	Dolg.
*a	a	a	a	a	a e	ɔ a ä	a	a	a	a	a	a
*e	e	ä e	e	e	e	ä e	e	e	e	i	i	i
*o	o	u	o	o	o	o	o	o	o	o	o	o
*ö	ö	ü	ö	ö	o	ö	ö	ö	ö	ö	ö	ö
*u	u	u	u	u	u	u	u	u	u	u	u	u
*ü	ü	ü	ü	ü	u	ü	ü	ü	ü	ü	ü	ü
*i	i	i i	i	i	i	i	i	i	i	i	i	i
*i	i	i	i	i	i	i	i	i	i	ə	i	i
*ia	a	a	a	a	a e	ɔ	a	a	a	a	a	a

Table 3.11 Consonant correspondences between the Transeurasian languages

	pJ	pK	pTg	pMo	pTk	pTEA
1.	*p-	*p-	*p-	*p-	*b-/ *p-	*p-
2.	*-p-	*-p-	*-p-	*-y-	*-p-	*-p-
3.	*p- / *w-	*p-	*b-	*b-	*b-	*b-
4.	*-p-/ *-w-	*-p-	*-b-	*-b-/ -y-	*-b-	*-b-
5.	*-np-	*-pC-	*-PC-	*-PC-	*-P(C)-	*-m ^(P) T-
6.	*-np-	*-Rp-	-RP-	*-RP-	*-RP-	*-Rp-
7.	*t-	*t-	*t-	*t-	*t-	*t-
8.	*-t-	*-t-	*-t-	*-t-	*-t-	*-t-
9.	*t- / *y-	*t- (ci-)	*d- (ji-)	*d- (ji-)	*y-	*d-
10.	*-t-/ *-y-	*-l-	*-d- (-ji-)	*-d- (-ji-)	*-d-	*-d-
11.	*-nt-	*-c-	*-TC-	*-TC-	*-TC-	*-n ^(T) K-
12.	*-nt-	*-Rc-	*-RT-	*-RT-	*-RT-	*-Rt-
13.	*k-	*k-	*k-	*k-	*k-	*k-
14.	*-k-	*-k- (-h-)	*-k-	*-k-	*-k-	*-k-
15.	*k-	*k-	*g-	*g-	*k-	*g-
16.	*-k-	*-k- (-h-)	*-g-	*-g-	*-g-	*-g-
17.	*-nk-	*-kC-	*-KC-	*-KC-	*-KC-	*-ŋ ^(K) T-
18.	*-nk-	*-Rk-	*-RK-	*-RK-	*-RK-	*-Rk-

19.	*t-	*c-	*č-	*č-	*č-	*č-
20.	*-t-	*-c-	*-č-	*-č-	*-č-	*-č-
20b.	*-si	*-l(i)/ -c	*-l(č)	*-l(č)	*-l(č)~ -š	*-lč
21.	*k-	*k-, h-	*x-	*k-	*k-	*x-
22.	*-k-	*-k-	*-x-	*-g~~k-	*-g~~k-	*-x-
23.	*s-	*s-	*s-	*s-	*s-	*s-
24.	*-s-	*-s-	*-s-	*-s-	*-s-	*-s-
25.	*m-	*m-	*m-	*m-	*b-	*m-
26.	*-m-	*-m-	*-m-	*-m-	*-m-	*-m-
27.	*n-	*n-	*n-	*n-	*y-	*n-
28.	*-n-	*-n-	*-n-	*-n-	*-n-	*-n-
29.	*-r-	*-l-	*-r-	*-r-	*-r-	*-r-
30.	*-r-	*-l-	*-r-	*-r-	*-r ₂ -	*-r-
31.	*-r-	*-l-	*-l-	*-l-	*-l-	*-l-

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Table 3.12 Vowel correspondences between the Transeurasian languages

	OJ < pJ	MK < pK	pTg	pMo	pTk	pTEA
32.	-a- < *-a-	-a- < *-a-	*-a-	*-a-	*-a-	*-a-
32b.	*CaCa	*CΛCΛ	*CaCa	*CaCa	*CaC	*CaCa
33.	-a- < *-a-	-e- < *-e-	*-e-	*-e-	*-e-	*-ə-
34.	-o- < *-ə-	-e- < *-e-	*-e-	*-e-	*-e-	*-ə-
35.	-o- < ? *-o-	-wo- < *-o-	*-o-	*-o-	*-o-	*-ɔ-
36.	-u- < *-o-	-wo- < *-o-	*-o-	*-o-	*-o-	*-ɔ-
37.	-o- < *-i-	-u- < *-i-	*-ö-	*-ö-	*-ö-	*-o-
38.	-u- < *-u-	-wu- < *-u-	*-u- (gü)	*-ü-	*-ü-	*-u-
39.	-u- < *-u-	-o- < *-Λ-	*-u-	*-u-	*-u- /-i-	*-ʊ-
39b.	PaRu- < *PauRu-	*PΛRΛ- ~ *PiRi-	*PuRu-	*PuRu-	*PuR-	*PoRo-
40.	-i- < *-i-	-i- < *-i-	*-i-	*-i-	*-i-/-i-	*-i-
40b	-i- < *-e-	-ye- < *-ia-	*-ia-	*-ia-	*-ia-	*-ia-
40c	-e(ɪ) - < *-e-	-ye- < *-ia-	*-ia-	*-ia-	*-ia-	*-ia-
40 d	-o- < *-ə-	-e- < *-ə-	*-ü-	*-ö-	*-ö-	*-iu-
41.	a- < *-a-	a- < *-a-	*a-	*a-	*a-	*a-
41b.	a- < *-a-	e- < *-e-	*e-	*e-	*e-	*ə-
42.	o- < *-ə-	e- < *-e-	*e-	*e-	*e-	*ə-
43.	o- < ? *-o-	wo- < *-o-	*o-	*o-	*o-	*ɔ-
44.	o- < *-i-	ø < ? *-i-	*ö-	*ö-	*ö-	*o-
45.	u- < *-u-	wu- < *	*u-	*u-	*u-	*u-

		*u-				
46.	i- < *i-	i- < *i-	*i-	*i-	*i-	*i-
46b	i- < *e-	ye- < *ia-	*ia-	*ya-	*ya-	*ia-
46c	ya- < *ia-	ye- < *ia-	*ia-	*ya-	*ya-	*ia-
46d	o- < *-ə-	ye- < *iə	*ü-	*ö-	*ö-	*iu-

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3503 Abbreviations

3504	Ama.	Amami
3505	Az.	Azerbaijani
3506	Bao.	Bao'an
3507	Bash.	Bashkir
3508	Bur.	Buriat
3509	Chu.	Chuvash
3510	Dag.	Dagur
3511	Dlg.	Dolgan
3512	Dong.	Dongxiang
3513	EYugh.	Eastern Yughur
3514	Even	Even
3515	Evk.	Evenki
3516	Gag.	Gagauz
3517	J	Japanese
3518	Jur.	Jurchen
3519	Kalm.	Kalmuk
3520	KBalk.	Karachay-Balkar
3521	Krm.	Karaim
3522	Kkp.	Karakalpak
3523	Karakh.	Karakhanide
3524	Kaz.	Kazakh
3525	Khak.	Khakas
3526	Khal.	Khalkha
3527	Khalaj	Khalaj
3528	Kir.	Kirgiz
3529	K	Korean
3530	Kum.	Kumyk
3531	Ma.	Manchu
3532	MK	Middle Korean
3533	MMo.	Middle Mongolian
3534	Miy.	Miyako
3535	Mogh.	Moghol
3536	Mgr.	Monguor
3537	MT	Middle Turkic

3538	Na.	Nanai
3539	Neg.	Negidal
3540	Nog.	Nogai
3541	Oki.	Okinawa
3542	Olcha	Olcha
3543	OJ	Old Japanese
3544	OT	Old Turkic
3545	Ord.	Ordos
3546	Oroch	Oroch
3547	pJ	proto-Japonic
3548	pK	proto-Koreanic
3549	pMo	proto-Mongolic
3550	pTEA	proto-Transeurasian
3551	pTg	proto-Tungusic
3552	pTk	proto-Turkic
3553	Shor	Shor
3554	Sibe	Sibe
3555	Sol	Solon
3556	Tat.	Tatar
3557	Tofa.	Tofalar
3558	Tk.	Turkish
3559	Tkm.	Turkmen
3560	Tuva	Tuva
3561	Ud.	Udehe
3562	Uigh.	Uighur
3563	Uz.	Uzbek
3564	WMo.	Written Mongolian
3565	Yae.	Yaeyama
3566	Yak.	Yakut
3567	Yon.	Yonaguni

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