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Tunguso-Japonic Linguistic Contact: Morphological Clues to the Directionality of Borrowing

Ruben G.A. PAUWELS

Abstract:

In this paper, eight Tunguso-Japonic etymologies are presented and analyzed. What these etymologies have in common is that the Tungusic etymon is clearly polymorphemic, in the sense that it consists of a root that has been extended by at least one suffix, whereas the corresponding Japonic counterpart is undoubtedly monomorphemic. Due to their substantially different morphological structure, these etymologies robustly corroborate the hypothesis that the directionality of borrowing in the language contact scenario was from Tungusic to Japonic.

Key Words: *Japanese, Old Japanese, proto-Japonic, Tungusic languages, proto-Tungusic, borrowing, language contact, directionality of borrowing, morphology, suffixes*

1. Introduction: The Japonic Languages and the Tungusic Languages

According to Hirako, Igarashi, and Pellard (2024: 5, figure 1.2, referring to Pellard 2015: 15), the **Japonic languages** (J.: 日琉諸語) consist of the following three main linguistic branches:

- (a) the Ryukyuan languages (J.: 琉球諸語);
- (b) the Japanese language (J.: 日本語);
- (c) the Hachijō language (J.: 八丈語).

The **Tungusic languages** form an established language family consisting of mainly endangered languages. Those languages are spoken in Siberia and northern China. Ikegami (2001: 395) proposes the following classification for the Tungusic language family:

- (a) (Group I) Evenki, Solon, Negidal, Even (Lamut);
- (b) (Group II) Udehe, Oroch;
- (c) (Group III) Nanai (Goldi), Ulcha, Orok (Uilta);
- (d) (Group IV) Manchu.

2. The Relation between the Japonic Languages and the Tungusic Languages

The Japonic languages exhibit similarities to Korean, the Tungusic languages, the Mongolic languages, and the

Turkic languages in terms of vocabulary and grammatical structure. As a result, linguists, such as Murayama (1962), Starostin, Dybo, and Mudrak (2003) [EDAL], Robbeets (2005), and others, have proposed a genetic relationship between the five above-mentioned language families and attempted to reconstruct a proto-language, called proto-Altaic. However, the Altaic theory, or the hypothetical Altaic language family, has been rejected by many historical linguists, such as Janhunen (1996), Georg (2003), Vovin (2005), and Hirako, Igarashi, and Pellard (2024), to name just a few.

More specifically, Hirako, Igarashi, and Pellard (2024: 58) state the following regarding the inclusion of the Japonic languages in the putative Altaic language family:

「有名な仮説の1つにアルタイ語族（チュルク諸語、モンゴル諸語、ツングース諸語、時には朝鮮語も入る）との系統関係を仮定するものがある。しかし、アルタイ諸語の間に見られる類似のすべてを接触・借用によるものとし、アルタイ語族の存在すら否定している言語学者も多い。朝鮮語との系統関係を仮定する仮説はより真つ当なものと思われるが、アルタイ語説と同様に、表面的な類似を除くと、文法形式の一致がほとんどなく、類似する語彙の多くは借用語と説明できる。例えば「てら（寺）」「ほとけ（仏）」「つち（槌）」「はたけ（畑）」「かま（釜）」のような文化的な語彙はおそらく朝鮮語からの古い借用語である。」

["Among famous hypotheses [regarding the genetic relation of the Japonic languages], there is one which postulates a genetic relation with the Altaic language family (which includes the Turkic languages, the Mongolic languages, the Tungusic languages, and sometimes Korean as well). However, all of the similarities which one can observe between the Altaic languages can be attributed to **contact and borrowing**, and there are many linguists who deny even the existence of the Altaic language family. The hypothesis which postulates a genetic relation with Korean can be considered more respectable. However, just like the Altaic theory, there is almost no correspondence of grammatical forms, except for superficial similarities, and many instances of similar vocabulary can be explained as loanwords. For example, cultural vocabulary items such as *tera* 寺 ("temple"), *hotoke* 仏 ("Buddha"), *tsuchi* 槌 ("hammer, mallet"), *hatake* 畑 ("plowed field, cultivated field"), and *kama* 釜 ("pot for boiling rice") are probably old loanwords from Korean."] (translation made and emphasis added by the author).

The author subscribes to the hypothesis that similarities between Tungusic and Japonic can be attributed to linguistic contact, but would like to retain an open mind towards the five-pronged (Macro-)Altaic theory, which includes the Turkic, Mongolic, Tungusic, Koreanic, and Japonic branches.

3. The Question of the Directionality of the Linguistic Contact

If it is assumed that there has been linguistic contact between Japonic and Tungusic, or that borrowing between the language families has occurred, then the next question to ask is: What is **the directionality of the borrowing**? The directionality of the borrowing can be established by examining and analyzing the morphological composition or make-up of the words and roots in Tunguso-Japonic etymologies, and applying the historical linguistic principle explained in the following section.

4. Morphological Composition of Words or Roots and Directionality of Borrowing

The morphological structure of words or roots can offer clues to determine the directionality of borrowing. In etymologies where phonological and semantical similarities between words or roots may be attributed to linguistic contact (or borrowing), the word or root which is polymorphemic or morphologically complex (in the sense that it consists of two or more morphemes) is usually the **donor (or source)**, whereas the word or root which cannot be segmented into two or more morphemes (i.e., monomorphemic words or roots) is the **recipient (or borrower)** (Campbell 1998: 65).

Campbell (1998: 65) provides the following examples. English *alligator* is a loanword from Spanish *el lagarto* (“the alligator”). The English noun is monomorphemic while Spanish *el* (“the”) + *lagarto* (“lizard”) (< Latin *lacerta* “lizard”) is bimorphemic. Because the Spanish word is morphologically complex, but the English word is monomorphemic, one can conclude that the direction of the borrowing is from Spanish to English. Similarly, English *vinegar* has been borrowed from French *vinaigre* (“vinegar”), which can be analyzed as *vin* (“wine”) + *aigre* (“sour, keen”). The directionality of the borrowing is undoubtedly from French to English because the French word is bimorphemic whereas the English word is monomorphemic.

5. The Objectives of the Paper

The objectives of the current paper are as follows:

- (1) Presenting Tunguso-Japonic etymologies in which polymorphemic (in practice mostly bimorphemic) Tungusic words or roots correspond to Japonic monomorphemic words or roots. These polymorphemic Tungusic words or roots consist of a root and one (or more) suffixes.
- (2) Corroborating that the Tungusic words or roots are polymorphemic by attempting to identify the meaning and function of the components of the Tungusic words or roots, or, in other words, by trying to determine the meaning and function of the Tungusic roots and suffixes.
- (3) Establishing the directionality of the borrowing for the Tunguso-Japonic etymologies: from Tungusic to Japonic.

6. List of Etymologies

Even though the author does not endorse the (Macro-)Altaic theory, the list below contains multiple Tunguso-Japonic etymologies that have been proposed by scholars who endorse this theory (i.e., Murayama 1962; Starostin, Dybo, and Mudrak 2003 [EDAL]); and Robbeets 2008), or previously used to endorse it (i.e., Itabashi 1993). However, these etymologies may be considered valid in the sense that the similarities in form and meaning between the Tungusic and Japanese lexemes can be explained as the result of linguistic contact.

6.1. (14th century) *abara* “rib, costal bone, costa” < pJ. **anpa-* ← post-pT. **e-bu-* (pT. **xe-bu-*)

J. *abara* 肋 / “(anatomy) rib, costal bone, costa” (NKDJ, Vol. 1, 481a; KNJED 70c) < (14th century) *abara-* (in the compound *abarabone*) (not in JDB; Ōno 2002: 46a) < pJ. **anpa-ra* (reconstruction by the author).

← **post-pT. *e-bu-** (~ **pT. *xe-bu-**) “1. (anatomy) rib; 2. (anatomy) lung” (Russ.: 1. (анат.) ребро; 2. (анат.) легкое) (SSTM II, 435b, s.v. *ewte*; Sunik 1982: 25; Doerfer & Knüppel 2004: 629a (#8318), s.v. *oftila*) (etymology proposed by: the author). The morpheme boundary in **xe-bu-*, the donor word in this etymology, has been proposed by Sunik (1982: 25). The segment **-te-* in pT. **xe-bu-te-le* is a “fossilized collective suffix” (Russ.: “омертвевший суффикс собирательности”) (Sunik 1982: 25).

The compound *abarabone* is attested in the Taiheiki 太平記 (written in the second half of the 14th century) (NKDJ, Vol. 1, 481d). Unlike Ōno (2002: 46a), Martin (1987: 376) considers J. *abara* “rib” as a separate etymon from J. *abara* “sparse, having many gaps” and reconstructs pJ. **anpara*, without morpheme boundary between **anpa-* and **-ra*. However, **-ra* could be the same suffix as **-ra* in J. *kobura* ~ *komura* “calf (of the leg)” < OJ. *kobura* (not in JDB; Ōno 2002: 529b) ~ *ko,mura* (not in JDB; Ōno 2002: 533b) < pJ. **konpu-ra* (reconstructed by the author).

According to SSTM, attested forms are: Evk. *ewtilē* (SSTM) ~ *ewti⁹lē* (Vasilevič 1958: 544a) “1. (anatomy) rib; 2. rib (in a boat)” (Russ.: 1. (анат.) ребро; 2. ребрина (в лодке)), Evk. *ewte* “(anatomy) lung” (Russ.: (анат.) легкое) (Vasilevič 1958: 544a), Sol. *ōte* “lung” (Poppe 1931: 65a), Sol. *ōtelē* “rib” (Poppe 1931: 65a), Neg. *ewtile* “(anatomy) rib” (Cincius 1982: 302), Neg. *ewte* “lung” (Cincius 1982: 302), Evn. *ewtē* “lung” (Russ.: легкое; Germ.: Lunge) (Doerfer 1980: 280), Evn. *ewutle* (SSTM; not in Doerfer 1980) ~ *ewetle* (SSTM; Doerfer 1980: 278) “1. (anatomy) rib 2. side” (Russ.: 1. (анат.) ребро; 2. бок; Germ.: Rippe (anat.)), Arman *ewte* “lung” (Doerfer & Knüppel 2013: 127b (#930), incorrectly glossed as “Rippe” [“rib”]), Arman *ewetle* “1. rib 2. side” (Germ.: Rippe) (Doerfer & Knüppel 2013: 127a (#919)), Ud. *eute* (SSTM) ~ *uente* (Nikolaeva & Tolskaya 2001: 915) “lung”, Ud. *uentile* “rib”, Orch. *uetile* ~ *eutule* “1. (anatomy) rib; 2. thorax, thoracic cage, ribcage” (Russ.: 1. (анат.) ребро; 2. грудная клетка) (Avrorin & Lebedeva 1978: 259a), Nan. (Najxin, Bikin) *xeute*, Nan. (Kur-Urmi) *eute* “lung” (Onenko 1980: 495b), Nan. (Najxin, Bikin) *xeučile*, Nan. (Kur-Urmi) *eutile* “rib” (Onenko 1980: 495b), Ulch. *xeunte* “lung” (not in Sunik 1985), Ulch. *xeuntile* (SSTM; Sunik 1985: 256a) ~ *xeuptile* (SSTM; not in Sunik 1985) “rib”, Ork. *xewčile* (SSTM; not in Ikegami 1997) ~ *xeučile* (SSTM; Ikegami 1997: 238) “1. rib; 2. sternum, breastbone” (Russ.: 1. ребро; 2. грудина; J.: あばら ぼね), Man. *ebči* “1. (anatomy) rib; 2. (anatomy) spine, spinal column, vertebral column; 3. rib of a vessel; 4. (uneven) slope, incline, side of a mountain” (Russ.: 1. (анат.) ребро; 2. (анат.) хребет; 3. ребро судна; 4. покато́сть (неровная), бок горы) (Zacharov 1875: 71a; Norman 2013: 88a).

There are two problems with this etymology. The first problem is that the meaning and function of **-bu-* in pT. **xe-bu-* is not properly explained by Sunik (1982: 25). This renders the segmentation of the etymon into two morphemes less plausible. The second problem is that the reflex of proto-Tungusic word-initial **xe-* in proto-Japonic is supposed to be **ka-*. Accepting this etymology as valid would imply a substantial difference with the other etymologies in this article, namely that the borrowing occurred not at the stage of proto-Tungusic, but at a later stage when **xe-* had already evolved to **e-* in all branches of the Tungusic language family except in Group III (consisting of Nanai, Ulcha, and Oroch). Moreover, recognition of this etymology would exclude proto-Nanaic **xe-bu-* (i.e., the overarching proto-language of Group III) as the donor word because it would have evolved into proto-Japonic **kanpV-*, not **anpV-*.

On the other hand, there are two arguments in favor of this etymology. The first is Rozycki’s (1994: 65) claim that **Wr. Mong. *ebčigün*** “sternum, breast; brisket” (cf. Lessing 1960: 285a) is a “rare ancient loan” from Tungusic “on phonological and etymon basis”. The fact that the Tungusic word has been borrowed into

another adjacent language family buttresses the idea that the word has a relatively high score on the borrowability scale. A second corroborating argument is that in the borrowing process the word-initial proto-Tungusic *x- has been lost in Mongolic as well.

6.2. OJ. *adi* “taste” < pJ. **anti* ← pT. **am-ta*

J. *aji* 「味」 / “taste, flavor” < OJ. *adi* (JDB 28a; Martin 1987: 389; Ōno 2002: 35b) < pJ. **anti* (Martin 1987: 389).

← pT. **am-ta*- “1. taste; 2. smell, scent; 3. tasty; 4. sensation; 5. sweetness” (SSTM I, 39a-40a, s.v. *amta*) (etymology proposed by: Murayama 1962: 158; Starostin 1991: 257, 272, 291; EDAL I, 297; Robbeets 2008: 355).

According to SSTM, attested forms are: Evk. *amta* “1. taste; 2. smell, scent” (Vasilevič 1958: 29a), Sol. *antāš’i* “tasty” (Poppe 1931: 41a), Neg. *amtan* “1. taste; 2. smell, scent” (Cincius 1982: 191), Evn. *amt’ēn* “1. taste; 2. smell, scent; 3. sensation” (Doerfer 1980: 30), Ud. *amta* “taste” (Nikolaeva & Tolskaya 2001: 931), Orch. *amta* “1. taste; 2. smell, scent” (Avrorin & Lebedeva 1978: 163a), Nan. *amtā* “1. taste; 2. sweetness” (Onenko 1980: 38b), Ulch. *amta* “1. taste; 2. tasty” (Sunik 1985: 172b), Ork. *apta* (< **amta*) “1. taste; 2. smell, scent” (not in Ikegami 1997), Man. *amtan* “1. taste; 2. sweetness; 3. pleasure, delight, interest; 4. desire; 5. decency, propriety” (Zaxarov 1875: 46b; Norman 2013: 18a).

The morpheme boundary in pT. **am-ta* “taste” can be established based on the fact that pT. **am-ŋa* “mouth” (SSTM I, 38a-39a, s.v. *amŋa*), which is considered a related word in SSTM (I, 39a), has the same root **am-*, but a different suffix. However, the exact meaning and function of the suffixes *-ta* and *-ŋa* remain unclear.

Cf. **Wr. Mong. *amtan***, **Khal. *amt*** “1. taste, flavor; 2. liking, interest” (Lessing 1960: 39a; SSTM I, 39b-40a, s.v. *amta*). According to Rozycki (1994: 18), this is a “pre-loan correspondence” between Man. and Wr. Mong.

6.3. OJ. *Fadus-* (4G) “to disconnect, to remove” < pJ. **pantu-s-* ← pT. **pā-dī°*

J. *hazusu* 「外す」 / “1. to disconnect, to remove, to unfasten; 2. to miss, to let it go by; 3. to avoid, to dodge” < OJ. *Fadus-* (4G) (not in JDB; Ōno 2002: 1069c) < pJ. **pantu-s-* (reconstruction by the author).

J. *hazureru* 「外れる」 / “1. to get disconnected, to get separated, to get loose; 2. to fail, to miss; 3. to deviate from, to run counter to” < OJ. *Fadur-* (L2G) (not in JDB; Ōno 2002: 1072b) < pJ. **pantu-ra-Ci-* (Martin 1987: 687).

← pT. **pā-dī°* “1. part (of something), portion; 2. some; 3. to reduce, to decrease, to shorten; 4. separately, by oneself; 5. to move away, to separate, to get detached” (Russ.: 1. часть (чего л.); 2. некоторые; 3. уменьшить, сократить; 4. отдельно, особняком; 5. отделиться) (SSTM II, 305a-306b, s.v. *hā* I) (etymology proposed by: EDAL II, 1117).

Martin (1987: 687) reconstructs pJ. **pantu-sa-*, with a monomorphemic bisyllabic root **pantu-* that has been extended with the transitive suffix **-sa-* (which has been reconstructed as **-s-* by the author, because it is a quadrigrade verb). *Fadus-* is attested in the Shinsen Jikyō 新撰字鏡 (ca. 898-901) (NKDJ, Vol. 10, 1128a). Cf. pRy. **pazuri* “to take off” (Thorpe 1983: 338 (#228)).

According to SSTM, attested forms are: Evk. *hā* “1. part (of something), portion; 2. some” (Russ.: 1. часть (чего-л.); 2. некоторые) (not in Vasilevič 1958), Evk. *hādi* (SSTM) ~ *hādī* (SSTM) “part (of something)” (Russ.: часть (чего-л.)) ~ *hādi*° “part (of a whole)” (Russ.: часть (целого)) (Vasilevič 1958: 464a), Evk. *hādi*°n “some” (Russ.: некоторый) (Vasilevič 1958: 464a), Sol. *adī* (Poppe 1931: 39a), *adinin* (Poppe 1931: 39a) “some” (Russ.: некоторые), Neg. *xā* “1. part (of something); 2. some” (Cincius 1982: 285), Neg. *xāl* “some, the others, the rest” (Russ.: некоторые, остальные) (Cincius 1982: 286), Evn. *hadē*°lgi° “to reduce, to decrease, to shorten” (Russ.: уменьшить, сократить) (not in Doerfer 1980), Ud. *xa(n-)* “1. part; 2. some”, Orch. *xa* (SSTM) ~ *xā(n)* (Avrorin & Lebedeva 1978: 242a) “1. some; 2. part of; 3. others” (Russ.: 1. некоторые; 2. часть из; 3. другие), Nan. (Najxin) *pāži*°, (Kur-Urmi) *faži*° “separately, by oneself” (Russ.: отдельно, особняком) (Onenko 1980: 319b), Nan. (Najxin) *pāži*°la-, (Bikin) *faži*°la-, (Kur-Urmi) *fažala-* “1. (Najxin, Kur-Urmi) to move away, to separate, to get detached; 2. (Kur-Urmi) to go away, to disperse, to be divided; 3. (Bikin) to fly away in different directions” (Russ.: 1. отделиться; 2. разойтись, разделиться; 3. разлететься в разные стороны) (Onenko 1980: 319b), Ulch. *pāži*° “separately” (Russ.: отдельно) (Sunik 1985: 223a), Ulch. *pāži*°la- “to move away, to separate, to get detached, to be divided” (Russ.: отделиться, разделиться) (Sunik 1985: 223a), Ork. *padi*° (not in Ikegami 1997) ~ *pāži*° (Ikegami 1997: 151) “separately” (Russ.: отдельно; J.: 分離して, 別れ離れて), Man. *fažu* “fork (the place where the branches of a tree separate or where two things grow together)” (Russ.: развилоч, развилина (место разделения ветвей дерева или срастания двух вещей)) (Zacharov 1875: 1036a; Norman 2013: 105b), Man. *faqsala-* 1. to separate (in two), to part (from); 2. to distinguish (one from another), to separate; 3. to break (into pieces), to chop wood” (Russ.: 1. разделять (надвое), разлучать; 2. отделять, отличать (одно от другого), делать отдельным, особонным; 3. разбивать (на части), раскалывать (дерево)) (Zacharov 1875: 1026a; Norman 2013: 106a), Man. *faqča-* “1. to go away, to disperse, to move away, to leave; 2. to separate, to part from, to part with; 3. to crack, to chap, to split” (Russ.: 1. расходиться, отходить; 2. разлучаться, расставаться; 3. растрескиваться, расщеливаться) (Zacharov 1875: 1027b; Norman 2013: 105b).

There is definitely a morpheme boundary in pT. **pā-di*°, which is assumed to be the donor word of pJ. **pantu-*. However, the exact meaning and function of the suffix *-di*° is unclear.

6.4. OJ. *Fusuma* “quilt, coverlet, bedding” < pJ. **pusu-ma* ← pT. **pul-sa*

J. *fusuma* 「衾」 / “quilt, coverlet, bedding, bedclothes, garment to lie down in” (cf. KNJED 2284c, 2600b) < OJ. *Fusuma* (JDB 633d; Ōno 2002: 1158c; Frellesvig, Horn, et al. 2023) < pJ. **pusu-ma* (reconstruction by the author).

← pT. **pul-sa* “1. blanket, coverlet; 2. sleeping bag” (Russ.: 1. одеяло; 2. мешок (спальный)) (SSTM II, 345a, s.v. *hulla*) = pT. **pul-* + **-sa* (fossilized) collective suffix, “Kollektivsuffix” [“collective suffix”] (Benzing 1955: 69 (1017), “омертвевший собирательный суффикс” [“fossilized collective suffix”] (Sunik 1982: 26, 27) (etymology proposed by: Pauwels 2018: 60).

In Martin (1987: 419), J. *fusuma* “sliding door” and J. *fusuma* “quilt, coverlet, bedding” are considered one and the same etymon. *Fusuma* is attested in the Kojiki 古事記 (712) (NKDJ, Vol. 11, 868a).

According to SSTM, attested forms are: Evk. *hulla* “1. blanket, coverlet; 2. sleeping bag” (Russ.: 1. одеяло; 2. мешок (спальный)) (Vasilevič 1958: 493b), Evk. *hulla-*, *hullaw-* “to cover oneself with a blanket”

(Russ.: укрыться одеялом) (Vasilevič 1958: 493b), Sol. *ulá* ~ *ul'á* ~ *ul'dá* ~ *ul'l'á* “blanket” (Russ.: одеяло) (not in Poppe 1931), Neg. *xola* (< **hulla*) “id.” (Cincius 1982: 290), Evn. *hu^olrě^o* (SSTM) ~ *hulra* (Doerfer 1980: 455) “1. blanket; 2. sleeping bag” (Russ.: 1. одеяло; 2. мешок (спальный); Germ.: (Bett-)Decke), Evn. *hu^olrě^ola-* (SSTM) ~ *hulralā-* (Doerfer 1980: 455) “to cover oneself with a blanket, to wrap oneself in a blanket” (Russ.: укрыться одеялом; Germ.: sich zudecken, sich mit einer (Bett-)Decke zudecken, sich in eine Decke wickeln), Ud. *xula^ha* (SSTM), Ud. (Bikin) *xula* (Nikolaeva & Tolskaya 2001: 927) “1. blanket; 2. bed”, Orch. *xukta* (< **hulta*) “1. blanket; 2. sleeping bag for hunters” (Russ.: 1. одеяло; 2. охотничий спальный мешок) (Avrorin & Lebedeva 1978: 248a), Nan. (Najxin) *polta* (Onenko 1980: 335a), (Bikin & Kur-Urmi) *folta* “1. blanket; 2. sleeping bag”, Nan. (Najxin) *poltala-* (SSTM), *potalago-* (Onenko 1980: 335a), Nan. (Bikin) *foltala-* “to cover with a blanket”, Ulch. *pu^olta* “blanket” (Sunik 1985: 227b), Ulch. *pu^olta-* “to cover with a blanket” (Sunik 1985: 227b), Ork. *pu^olta* “blanket, quilt” (J.: 掛けふとん) (Ikegami 1997: 166), Ork. *pu^olta-* “to cover with a blanket” (not in Ikegami 1997).

6.5. OJ. *usi* ~ *-uzi* “cow, bull, ox” < pJ. **usi* ~ **unsi* ← pT. **öl-se*

J. *ushi* 「牛」 / “1. cow, bull, ox; 2. bullock, steer; 3. cattle, cows; 4. calf” (cf. KNJED 260b) < OJ. *usi* “cow, bull, ox” (JDB 114c; Martin 1987: 564; Ōno 2002: 158a; Frellesvig, Horn, et al. 2023) ~ (as second part of a compound) *-uzi* (not in JDB; Martin 1987: 564; Ōno 2002: 158a) < pJ. **usi* ~ **unsi* (Martin 1987: 564).

← pT. **öl-se* = pT. **öl-* “1. meat (SSTM); 2. (Man.) cattle, livestock, domestic animal (Sunik)” (Russ.: 1. мясо (SSTM); 2. скот, домашнее животное (Sunik) (Benzing 1955: 69 (1017); SSTM II, 262a, s.v. *ulle*; Doerfer 1978: 84-85; Sunik 1982: 27; Alonso de la Fuente 2013: 121) + *-*se* (fossilized) collective suffix, “Kollektivsuffix” [“collective suffix”] (Benzing 1955: 69 (1017), “омертвевший собирательный суффикс” [“fossilized collective suffix”] (Sunik 1982: 26, 27) (etymology proposed by: the author).

According to SSTM, attested forms are: Evk. *ulle* “meat” (Russ.: мясо) (Vasilevič 1958: 439b), Sol. *uldi* ~ *ulde* “id.” (Poppe 1931: 75b), Neg. *ule* (< **ulle*) “id.” (Cincius 1982: 284), Neg. *ulle-* (SSTM) ~ *ullā^o* (Cincius 1982: 284) ~ *ullē-* (Cincius 1982: 284) “to slaughter an animal for meat” (Russ.: заколоть животное на мясо), Evn. *ulrě* “1. meat; 2. body, organism” (Russ.: 1. мясо; 2. тело, организм; Germ.: Fleisch) (Doerfer 1980: 1044), Ud. *ele^he* (SSTM), Ud. (Bikin) *ulē* (Nikolaeva & Tolskaya 2001: 924) “1. meat; 2. muscles; 3. (human) skin” (Russ.: 1. мясо; 2. мышцы; 3. кожа (человека)), Orch. *ukte* (< **ulte*) “meat” (Avrorin & Lebedeva 1978: 240b), Nan. (Najxin, Bikin) *ulikse* “1. meat; 2. muscles” (Russ.: 1. мясо; 2. мышцы) (Onenko 1980: 429a), Nan. (Kur-Urmi) *ule* (< **ul-le* < **ul-se* (Sunik 1982: 27) < pT. **öl-se*) “id.”, Ulch. *ulse* “meat” (Sunik 1985: 245b), Ork. *ul'ise* “meat” (J.: にく (肉)) (Ikegami 1997: 219). Alonso de la Fuente (2013: 124) demonstrated that Ork. *ul'ise* “meat” possesses an epenthetic vowel *-i-*.

Benzing (1955: 69 (1017)) and SSTM (II, 262a, s.v. *ulle*) do not mention Man. or Jur. cognates. However, Sunik (1982: 27) regards Man. *ulxa* (< pT. **öl-xa*) “in general livestock, cattle, domestic animal” (Russ.: скоть вообще, домашнія животныя) (Zacharov 1875: 160b; Norman 2013: 388b) as a cognate to the above-mentioned words for “meat”. An additional cognate is Jur. **urha* / **ulha* (兀兒哈) “livestock, domestic animal, foal, colt” (Kane 1989: 224 (#449)). Consequently, two meanings have been reconstructed for proto-Tungusic **öl-se*: “meat” and “cattle, livestock, domestic animal”.

Martin (1966: 249 (#300)) and Whitman (1985: 233 (#215)) link OJ. *usi* to Midd. Kor. *sywó* “cow”

(Nam 1997: 873a), whence **Kor. so** (KED 968b). However, Vovin (2010: 179 (#215)) writes that the resemblance between the OJ. and Midd. Kor. words is “accidental” because “there are no other examples where MK [= Midd. Kor.] *s-* would correspond to OJ **V_{s-}*.”

6.6. OJ. *waki*, “side, flank (body part)” < pJ. **waki* ← pT. **bar-gī*

J. *waki* 「脇・腋」 / “1. side, flank (of the body or clothing); 2. the side (of an object); 3. aside, away, the other way; 4. armpit, axilla” (cf. NKDJ, Vol. 13, 1258a; KNJED 2777a) < OJ. *waki*, “side, flank (body part)” (JDB 815a; Martin 1987: 567; Ōno 2002: 1425a; Frellesvig, Horn, et al. 2023) < pJ. **waki* (reconstructed by the author).

← pT. **bar-gī* “1. the opposite side; 2. the opposite shore” (Russ.: 1. противоположная сторона; 2. противоположный берег) (SSTM I, 73b-75a, s.v. *bargī*) (etymology proposed by: Itabashi 1993: 131-132; endorsed by Pauwels 2018: 58-59).

Martin (1987: 567) reconstructs pJ. **bak[a-C]i*. However, it is more appropriate to reconstruct word-initial **w-*. Moreover, according to JDB (815a) and Ōno (2002: 1425a), OJ. *waki*, refers to the body part. *Waki* is attested in the Nihon Ryōiki 日本霊異記 (810-824) (NKDJ, Vol. 13, 1258a). Cf. pRy. **waki* “flank” (Thorpe 1983: 287 (#76)).

According to SSTM, attested forms are: Evk. *bargī* “the opposite side, the opposite shore (of a river)” (Vasilevič 1958: 50b), Sol. *bargīgādu* “at the opposite side” (Poppe 1931: 43a), Neg. *bajgi°da* “1. the opposite side; 2. the opposite shore” (Cincius 1982: 195), Evn. *bargē°γ* “the other side of a river” (Doerfer 1980: 70), Evn. *bargi°-* “to cross to the other shore” (not in Doerfer 1980), Ud. *bagæ*, *bagæža* (SSTM), Ud. (Bikin) *bagē(z)a* (Nikolaeva & Tolskaya 2001: 934) “the opposite side (of something)”, Orch. *baggā* (Avrorin & Lebedeva 1978: 165a) ~ *baggia* (Avrorin & Lebedeva 1978: 165b) “at the opposite side”, Nan. *bagi°a* “the opposite shore (of a river, lake, gulf, sea)” (Onenko 1980: 55a), Nan. *bajgi°a* “id.” (Onenko 1980: 57a), Ulch. *baži°* “1. the opposite side of something; 2. the opposite shore, the far shore” (Russ.: 1. противоположная чему-либо сторона; 2. другой, дальний берег) (Sunik 1985: 175a), Ork. *bažžē* “the opposite side, the opposite shore” (J.: 川向う, 向こう岸, 向こう側) (Ikegami 1997: 15), Man. *bažila* “on the opposite shore, on the opposite side of a river” (Russ.: за рѣкою, на томъ берегу, противоположный берегъ) (Zacharov 1875: 480a; Norman 2013: 28a).

According to Sunik (1982: 216), the element **-gī°* is a suffix that can be observed in nouns expressing a location. The meaning of the suffix is “side, edge” (Russ.: “сторона, страна, край”). Cf. pT. **-gī°-* in pT. **tal-gī°-* “farther from the shore” (SSTM II, 150a, s.v. *taggasi*), pT. **žule-gī°* “front” (SSTM I, 273b, s.v. *žulē*) (cf. also Benzing 1955: 60 (1008)).

6.7. OJ. *yamaFi*, “illness, disease” < pJ. **yama-pi* ← pT. **dā-bu-*

J. *yamai* 「病」 / “1. illness, disease; 2. (bad) habit, vice, weakness, failing, passion” (cf. KNJED 2616b) < OJ. *yamaFi*, (JDB 772d; Ōno 2002: 1356a; Frellesvig, Horn, et al. 2023) < pJ. **yama-pi* (reconstructed by author).

J. *yamau* 「病う」 / “to keep being ill” (Martin 1987: 784; not in KNJED) < OJ. *yamaF-* (4G) (not in JDB; Ōno 2002: 1356a) < pJ. **yama-p-* (reconstructed by author).

← pT. **dā-bu-* = pT. **dā-* “to be infected (with), to catch (an illness)” (Russ.: заразиться) (SSTM I, 184a, s.v. *dā-* II) + pT. **-bu-* causative suffix (Benzing 1955: 122 (1070)) (etymology proposed by: Pauwels 2008: 99-100).

Martin (1987: 572) reconstructs pJ. **dama-p[a-C]i*. (> OJ. *yamaFi_i*) and **dama-pa-* (> OJ. *yamaF-* (4G)) (Martin 1987: 784). *YamaFi_i* is attested in the Nihon Shoki 日本書紀 (720) (NKDJ, Vol. 13, 194d). According to Bentley (2008: 268), Southern Ryukyuan cognates all have *-m-* or *-ŋ-* (< **-m-*): Hirara *yam*, Ikema *yam* ~ *yaŋ*, Nagahama *yam*, Tarama *yam*, Ishigaki *yaŋ*, Kohama *yamai*, Yonaguni *dami*, all meaning “illness”.

According to SSTM, attested forms are: Evk. *dā-* “to be infected (with), to catch (an illness)” (not in Vasilevič 1958), Evk. *dāw-* “to infect (with)” (Vasilevič 1958: 102a) (< pT. **dā-bu-* = pT. **dā-* + **-bu-* causative suffix (Benzing 1955: 122 (1070))), *dāwkān-* “id.” (Vasilevič 1958: 102b) (< pT. **dā-bu-kān-*, in which bimorphemic **-bu-kān-* is a causative suffix (Benzing 1955: 123 (1071))), Evk. *dāwuwun* (SSTM) ~ *dāwuwūn* (Vasilevič 1958: 103a) “infection” (Russ.: зараза) (< pT. **dā-* “to be infected” + **-bu-* causative suffix (Benzing 1955: 122 (1070)) + **pūn* suffix to form “Nomina instrumenti” attached to verbal roots to make nouns with the meaning “instrument to ...” (Germ.: Werkzeuge zum ...) (Benzing 1955: 63 (1011))), Neg. *dāyi^o* “to infect (with)” (Russ.: заразить) (Cincius 1982: 208), Neg. *dāp-* “to be infected (with), to catch (an illness)” (Russ.: заразиться) (Cincius 1982: 209), Neg. *dāpu^ohta* “infection” (Russ.: зараза, заражение) (Cincius 1982: 209), Evn. *dāw-* “to be infected (with)” (Russ.: заразиться; Germ.: sich übertragen (von Krankheiten); sich anstecken, sich infizieren, sich (eine ansteckende Krankheit) zuziehen) (Doerfer 1980: 166), Evn. *dāwyi^o* (SSTM) ~ *dāwgī-* (Doerfer 1980: 166) “to infect (with)” (Russ.: заразить; Germ.: anstecken, infizieren), Evn. *dāni^o* “infectious, contagious” (not in Doerfer 1980), Ud. *dā-* “to be infected (with)”, Nan. (Najxin, Kur-Urmi) *dā-* (Onenko 1980: 131a), Nan. (Najxin) *dāri^o* (not in Onenko 1980) “to be infected (with)” (Russ.: заразиться), Nan. *dāwan-* (Onenko 1980: 132a), (Najxin) *dāpqi^o* (not in Onenko 1980) “to infect (with a disease)” (Russ.: заразить (какой-л. болезнью)), Nan. (Najxin, Bikin) *dāqto-* / *daqtu^o* “infected” (Russ.: зараженный) (Onenko 1980: 134a), Ulch. *dā-* (Sunik 1985: 188a), Ulch. *dāri^o* / *dāru^o* (Sunik 1985: 189b) “to be infected (with), to catch (an illness)” (Russ.: заразиться (какой-либо болезнью)), Ork. *dā-* “1. to be infected (with), to catch (an illness); 2. to leave a mark (with a knife, an arrow)” (Russ.: 1. заразиться; 2. оставить след (ножом, стрелой); J.: 1. 伝染する (病気が); 2. きれる (たとえば小刀が)) (Ikegami 1997: 38).

The change of pT. **-b-* to pJ. **-m-* needs to be explained. Martin (1987: 31) provides Japanese doublets that exhibit alternation between *-b-* and *-m-*: *hibo* ~ *himo* “cord”, *kabi* ~ *kami* “paper”, *keburī* ~ *kemuri* “smoke”, *sebi* ~ *semi* “cicada”, *sebai* ~ *semai*, “narrow”, *tuburi* ~ *tumuri* “head”, etc. In this etymology, it is presupposed that there used to exist a doublet *yabaFi_i* (< pJ. **yanpa-pi* ← pT. **dā-bu-*) (old form) ~ *yamaFi_i* (innovative form) and that *yabaFi_i* is lost (not attested).

The borrowability of the Tungusic root is corroborated by the fact that Amuric (Nivkh language) probably borrowed it from Tungusic as well. Cf. pNiv. **dar* “influenza (epidemic)” (Fortescue 2016: 40) (Tunguso-Nivkh etymology proposed by: Krejnovič 1955: 162; endorsed by Knapen 2021: 112).

6.8. OJ. *yasu-si* “1. easy; 2. peaceful” < pJ. **yasu-* ← pT. **jā-sV-*

J. *yasui* 「安い・易い」 / “1. easy, simple; 2. cheap, inexpensive, economical, low-priced” (cf. Martin 1987:

844; KNJED 2607a) < OJ. *yasu-si* “1. easy; 2. peaceful” (JDB 760c; Ōno 2002: 1343b; Frellesvig, Horn, et al. 2023) < pJ. **yasu-* (reconstruction by the author).

← **pT. **ǰā-sV-*** “1. cheap; 2. light; 3. simple, easy” (Russ.: 1. дешевый; 2. легкий; 3. простой, легкий) (SSTM I, 239a, s.v. *ǰā* II) (etymology proposed by: the author).

Martin (1987: 844) reconstructs monomorphemic pJ. **dasu-*, whereas Robbeets (2005: 399) reconstructs pJ. **yasu-*. *Yasu-si* is attested in the Kojiki 古事記 (712) (NKDJ, Vol. 13, 106d).

According to SSTM, attested forms are: Neg. *ǰā* “1. cheap, inexpensive; 2. easy” (Russ.: 1. дешевый; 2. легкий) (Cincius 1982: 213), Ud. *ǰās’a* (SSTM), Ud. (Bikin) *zas’a* (Nikolaeva & Tolskaya 2001: 937) “1. cheap, inexpensive; 2. easy; 3. soft, pliant, pliable (said of materials); 4. fast (said of boats, sleds)” (Russ.: 1. дешевый; 2. легкий; 3. мягкий, податливый (о материале); 4. ходкий (о лодке, нарте)), Ud. *ǰās’aǰi* (adverb) “1. cheaply, inexpensively; 2. easily” (Russ.: 1. дешево; 2. легко) (not in Nikolaeva & Tolskaya 2001), Orch. *ǰā* “1. cheap, inexpensive; 2. simple, easy (said about work, problem)” (Russ.: 1. дешевый; 2. простой, легкий (о работе, задаче)) (Avrorin & Lebedeva 1978: 181a), Orch. *ǰāsu-* (SSTM) ~ *ǰāsi-* (Avrorin & Lebedeva 1978: 183a) “to consider (something) cheap, easy, simple” (Russ.: считать (что-л.) дешевым, легким, простым), Nan. (Najxin, Bikin) *ǰā* “1. cheap, inexpensive; 2. easy” (Onenko 1980: 176a), Nan. *ǰāǰi°* (adverb) “1. easily, without effort; 2. cheaply, inexpensively, at a cheap price” (Russ.: 1. легко, без усилий; 2. дешево, по дешевой цене, по дешевке) (Onenko 1980: 176a), Nan. (Najxin) *ǰāsi°mi°* (adverb) “easily, without effort” (Russ.: легко, без усилий) (not in Onenko 1980), Ulch. *ǰā* “1. cheap; 2. easy; 3. comfortable, convenient, suitable, opportune, accessible” (Sunik 1985: 193b), Ork. *ǰā* “cheap, easy, easy to carry out” (J.: たい やすい, し やすい, (値段が) やす (安) い) (Ikegami 1997: 86), Man. *ǰa* “1. light, light-weight, not heavy; 2. easy, convenient, suitable, opportune, easy to carry out; 3. cheap, inexpensive, not expensive in price, not valuable, not costly” (Russ.: 1. легкий, легковесный, невеский; 2. легкий, удобный, удобоисполнимый; 3. дешевый, невысокий в цене, не ценный) (Zaxarov 1875: 954a; Norman 2013: 202a).

Furthermore, the Nanai compound verbal roots *ǰāŋqola-* (Onenko 1980: 179b) and *ǰāsi°-* (Onenko 1980: 182b) “to do something without effort, without difficulty, easily, without any problem” (Russ.: делать что-л. без труда, без затруднений, легко, запросто), which are not listed in SSTM, may be added to the above-mentioned list of cognates. In Avrorin (1961: 19), *ǰāsi°-* is translated as: “считать легким, не видеть трудности” (“to consider easy, not see any difficulties”).

Nan. *ǰāsi°-* is clearly bimorphemic and has the suffix *-si°-*. The function and meaning of this suffix *-si°-* is: “a derivational suffix which forms verbal stems with an evaluative meaning from nominal stems with qualitative and physical meaning” (Russ.: “словообразовательный суффикс, образующий от имен качественной и предметной семантики глагольные основы оценочного значения”) (Avrorin 1961: 19) (cf. also Sunik 1962: 110). When attached to an adjective or noun, it can be translated as “to consider” + the adjective or noun in question.

7. Conclusion

There exists a number of Tunguso-Japonic etymologies in which polymorphemic Tungusic words or roots correspond in form and meaning to monomorphemic Japonic words or roots. Since the Tungusic words in these etymologies are morphologically complex, whereas their Japonic counterparts are monomorphemic, one may

conclude with certainty that the directionality of the borrowing is from Tungusic to Japonic, and not the other way around.

In the following eight Tunguso-Japonic etymologies this type of different morphological structure in terms of number of morphemes can be observed:

- (1) (14th century) *abara*- ‘rib, costal bone, costa’ < pJ. **anpa*- ← post-pT. **e-bu*- (~ pT. **xe-bu*-)
- (2) OJ. *adi* ‘taste’ < pJ. **anti* ← pT. **am-ta*
- (3) OJ. *Fadus*- (4G) ‘to disconnect, to remove’ < pJ. **pantu-s*- ← pT. **pā-di*^o
- (4) OJ. *Fusuma* ‘quilt, coverlet, bedding’ < pJ. **pusu-ma* ← pT. **pul-sa*
- (5) OJ. *usi* ~ *-uzi* ‘cow, bull, ox’ < pJ. **usi* ~ **unsi* ← pT. **ōl-se*
- (6) OJ. *waki*₁ ‘side, flank (body part)’ < pJ. **waki* ← pT. **bar-gī*^o
- (7) OJ. *yamaFi*₁ ‘illness, disease’ < pJ. **yama-pi* ← pT. **dā-bu*-
- (8) OJ. *yasu-si* ‘1. easy; 2. peaceful’ < pJ. **yasu*- ← pT. **žā-sV*-

This list contains only a relatively small body of valid etymologies. Undoubtedly, more etymologies of this type will be discovered and published in the future.

Abbreviations

- 4G = quadrigrade verb (J.: 四段動詞)
 Evk. = Evenki
 Evn. = Even (also called ‘Lamut’)
 Germ. = German
 J. = modern Japanese
 Jur. = Jurchen
 Khal. = Khalkha Mongolian
 Kor. = modern Korean
 L2G = lower bigrade verb (J.: 下二段動詞)
 Man. = Manchu
 Midd. Kor. = Middle Korean
 Nan. = Nanai (also called ‘Goldi’)
 Neg. = Negidal
 OJ. = Old Japanese (J.: 上代日本語)
 Orch. = Oroch
 Ork. = Orok (also called ‘Uilta’)
 pJ. = proto-Japonic
 pNiv. = proto-Nivkh (or proto-Gilyak)
 pRy. = proto-Ryukyuan
 pT. = proto-Tungusic
 Russ. = Russian
 Sol. = Solon
 Ud. = Udehe (or ‘Udihe’, ‘Udekhe’ or ‘Udeghe’)

Ulch. = Ulcha (or “Ulch” or “Olcha”)

V = unspecified vowel, or unknown vowel

Wr. Mong. = Written Mongolian

Meaning of Symbols

A ← B = Form A (receptor) has been borrowed from form B (donor)

A < B = Form A evolved from form B.

* [before a word or suffix] = reconstructed form (unattested form)

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