ARE THE CARIAN PSEUDO-GLOSSES OF SCYTHIAN ORIGIN? A RE-EXAMINATION[∗]

Orçun ÜNAL[∗∗]

Abstract: Carian is an extinct language of the Anatolian branch of the Indo-European language family, which is attested in numerous inscriptions, graffiti, and coins written in the so-called Carian script. The Carian glosses cited by Byzantine writers, mainly by Stephan of Byzantium, are the main secondary source for the Carian language. Despite the hundred-year-long search for etymologies and the almost completed decipherment of the Carian inscriptions, these pseudo-glosses have not been fully explained. The present study links three of the seven most certain of these glosses, namely κόον/κῶν/κοῖον 'sheep', γίσσα 'stone', and ἄλα 'horse', to some Altaic and Xiongnu words and traces their origin back to a non-Indo-European language spoken among the Scythians. The language in question is assumed to be the donor of Proto-Turkic *kōńǐ 'sheep', Proto-Bulgar Turkic *kïsa 'rock, cliff', and Early Common Turkic *halan 'horse'. These forms also entered the Mongolic, Tungusic, and other neighboring languages. The parallelism between the Carian pseudo-glosses and these word forms is the result of the linguistic contact at the two opposite ends of the Scythic culture.

Keywords: Carian pseudo-glosses, Altaic, Xiongnu, Scythians, language contact.

Sözde Karca Glossalar İskit Kökenli Mi? Bir Yeniden İnceleme

Öz: Kar dili, Hint-Avrupa dil ailesinin Anadolu kolundan soyu tükenmiş bir dildir ve Kar yazısı olarak adlandırılan yazıyla yazılmış çok sayıda yazıt, grafiti ve sikke üzerinde tanıklanmıştır. Bizanslı yazarların, özellikle de Bizanslı Stephanos'un aktardığı Karca glossaları, Kar dilinin ana ikincil kaynağıdır. Yüzyıllık etimoloji araştırmalarına ve Kar yazıtlarının deşifresinin neredeyse tamamlanmış olmasına rağmen, bu sözde glossalar tam olarak açıklanamamıştır. Bu çalışma, bu glossaların en kesin yedisinden üçünü, yani κόον/κῶν/κοῖον 'koyun', γίσσα 'taş' ve ἄλα 'at' sözcüklerini bazı Altayca ve Hunca kelimelerle ilişkilendirmekte ve kökenlerini İskitler arasında konuşulan Hint-Avrupa dışı bir dile götürmektedir. Söz konusu dilin Proto-Türkçe *kōńǐ 'koyun', Proto-Bulgar Türkçesi *kïsa 'kaya, uçurum' ve Erken Genel Türkçe *halan 'at' sözcüklerinin kaynağı olduğu varsayılmaktadır. Bu biçimler Moğolca, Tunguzca ve diğer komşu dillere de girmiştir. Sözde Karca glossalar ile bu sözcük biçimleri arasındaki paralellik, İskit kültürünün iki karşıt ucundaki dilsel temasın sonucudur.

Anahtar kelimeler: Sözde Karca glossalar, Altayca, Xiongnu, İskitler, dil teması.

[∗∗] Dr, Department of Turkology and Central Asian Studies, University of Göttingen, Germany. E-posta: orcununal@live.com, ORCID: 0000-0002-2591-9035.

Carian and Its Secondary Sources

Carian is an extinct language of the Anatolian branch of the Indo-European language family, which was spoken in Southwestern Asia Minor and closely related to the Luwic dialects. Written records in Carian are found to some extent in Caria and Greece but more abundantly in Egypt since Carians served there as mercenaries under the pharaohs. Carian inscriptions and graffiti are written in the so-called Carian script, which is exclusively employed for this language. The decipherment of the script has been a great challenge for scholars for many decades although it has now been nearly completed and is generally accepted.

Like many other languages, Carian has primary as well as secondary sources. Many Carian glosses are cited in the works of the Byzantine writers, particularly in the *Ethnica* of Stephan of Byzantium. He refers to these glosses when explaining the names of various cities. However, unlike in other languages, virtually none of these glosses have equivalents in the attested vocabulary of the Carian language. For this reason, they are sometimes designated "pseudo-glosses".

These glosses were first dealt with by Sayce (1893, pp. 116–120), later by Brandenstein (1935) and Dorsi (1979), and most recently by Adiego (1993, 2007). The long list of glosses given by Sayce and Brandenstein, which included more than 60 entries, has been reduced to six reliable and three dubious ones by Dorsi (1979). In agreement with Dorsi, Adiego (2007) discusses only six definite and three dubious glosses. Despite these academic debates, which have now lasted for over a century, only one or two of the glosses can be adequately explained. For instance, Simon's (2022) recent etymology for βάνδα 'victory' as deriving from PIE *wen- 'to overwhelm, win' (Rix, 2001, pp. 680–681) with the suffix -to-, is quite convincing.

Before proposing any etymologies for these glosses, the crucial question of whether the glosses given by Stephan of Byzantium are authentic must be addressed. Adiego (2007, pp. 11-12), who deals with this question, convincingly argues in favour of the authenticity of the glosses, although Stephan's etymologies for the toponyms may turn out to be inaccurate or invented. Long before Adiego, Brandenstein (1936, pp. 33, 35) had already put forward a similar argument.

In the following section, I will discuss three Carian pseudo-glosses and demonstrate that they have close equivalents in the vocabulary of the so-called "Altaic"[1] languages. Having shown the systematic similarity between the glosses

---

[1] In the present study, the term "Altaic" (both with and without the quotation marks) refers to a genetically unrelated group of languages that consists of Turkic, Mongolic, Tungusic, Korean and Japonic.

and some words in the Altaic languages, I will investigate what lies beneath this conspicuous link.

1. Three Carian Pseudo-Glosses

1.1. κόον/κῶν/κοῖον 'sheep'

The Carian pseudo-gloss occurs in the *Commentarii ad Homeri Odysseam* of Eustathius of Thessaloniki (1115–1195/6) and the manuscript T of *Scholia Graeca in Homeri in Iliadem* (*Scholia Vetera*).[2] The gloss is referred to in relation to the name of the island of Kos (Κῶς). The form attested in the manuscript T of *Scholia Graeca in Homeri in Iliadem* is κοῖον (Erbse, 1974, p. 622) and it is unambiguous. The passage in Eustathius (933, 32–34), however, is rather puzzling (van der Valk, 1979, p. 633). Immediately after having given the name of the island as Κόον and Κῶν (both in the accusative), Eustathius remarks that the Carians use the same word for sheep (Gr. πρόβατον). It is not clear from this statement whether the gloss is Κῶς or Κῶν.

Carruba (1965, p. 557) takes κῶς for the original form of the gloss and relates it to Luwian *ḫawi-š* and Hieroglyphic Hittite *hawa-š*. Dorsi (1979, p. 29) instead believes that Eustathius forgot to mention the actual gloss and thus gave the impression that the word for 'sheep' in Carian is identical with the name of the island. Dorsi establishes the original form of the gloss as κοῖον. Georgiev (1981, p. 212) considers κῶς and κοῖον two separate words and argues that the former "is derived with the shift *aw > ō* from **haws < *hawas* = Hier[oglyphic] Luw[ian] *hawa-s*, Lyc[ian] *xava-* 'sheep' from PIE **xew-*" while the latter is a derivative of the former. Barth (1984, pp. 129–130) asserts that the correct form must have been κῶν or κῶς and connects it with κῶας 'sheepskin' and its hypothetical contracted form κῶς. Erbse (1986, pp. 389–390) prefers κόον, which occurs twice in Eustathius, to κοῖον and deems the latter form suspicious though he does not rule out the possibility that Eusthatius changed κοῖον to κόον to support his etymology.[3] Since it is a simpler explanation, he concludes that κοῖον in T is a graphical error. Yet Erbse does not hesitate to state that κόον (= πρόβατον) might be an invention that was ascribed to the Carians. Adiego (2007, p. 10) supports Carruba's etymology by reconstructing a putative Carian **kóϝον* coming from Proto-Anatolian **Hāwo-*.[4] However, no known Indo-European language retains **h₂-* as a stop.

---

[2] The manuscript T is cod. Townl. (Brit. Mus. Burney 88) and dates to 1014 or 1059 CE (Erbse, 1969, p. CI).

[3] Mette (1952, p. 70) has already bracketed the *iota* in κοῖον.

[4] Melchert (1994, pp. 235, 257) reconstructs the Proto-Anatolian word for 'sheep' as **Hé/ówV-* (< PIE **h₂ówis*).

The Carian pseudo-gloss κόον/κῶν/κοῖον 'sheep' is strongly reminiscent of the Turkic word for 'sheep', which can be reconstructed as *$k\bar{o}ń$ on the sole basis of the inner-Turkic evidence (Clauson, 1972, p. 631; Doerfer, 1963–1975, §1590; Doerfer, 1971, pp. 194, 301; Li, 2013, pp. 551–554; Räsänen, 1969, p. 279; Tenišev, 2001, pp. 431–432).

A virtually identical word for 'sheep' is also found in the Mongolic languages. Shimunek (2017, p. 365) reconstructs the Common Serbi-Mongolic form as *$k^hɔnı$ 'sheep'. However, the Mongolic word already occurs as part of an epithet in the Tabgač (Tuòbá 拓跋) language of the 4th century CE. This title is kù-rén-zhēn 庫仁眞 (Bazin, 1950, p. 311; Boodberg, 1936, p. 171), the pronunciation of which can be reconstructed as $k^hɔ^h$-ɲin-tɕin (Pulleyblank, 1991, pp. 175, 265, 401) for Early Middle Chinese. The Chinese transcription reflects *$końinčin$ (Ligeti, 1970, p. 306 n.) or *$końinčĭn$ 'herdsman', a derivative with the Turko-Mongolic formative +$čI(n)$. Thus, the earliest Pre-Proto-Mongolic form of the word should be reconstructed as *$końïn$ (see Janhunen, 1998, p. 419). This form yielded *$konïn$ in Proto-Mongolic (Nugteren, 2011, p. 419) and 昏 *qun (better *xun) 'sheep (羊)' in Kitan (Sūn & Niè, 2008, p. 72). It also occurs as a loanword in Proto-Tungusic *$konin$ 'sheep' (Doerfer, 1985, p. 37) and Proto-Nivkh *$χon'$ 'sheep' (Fortescue, 2016, p. 165).[5] The tentative reading $qoń[i]y$[6] 'sheep' of Vovin (2019a, p. 127; 2019b, pp. 187, 189), which is attested in the recently deciphered Bugut Brāhmī inscription, somehow stems from the Pre-Proto-Mongolic form *$końïn$.[7]

Pre-Proto-Mongolic *$końïn$ 'sheep' is a loanword from Late Proto-Turkic *$k\bar{o}ńĭ$, which yielded *koń* in the Orkhon inscriptions. Purely hypothetically, *$k\bar{o}ńĭ$ may even go back to *$koxońĭ$ or *$koʔońĭ$. In this case, the long vowel /ō/ would be the result of the contraction of the sequence */oCo/ where C stands for a consonant from the velar to laryngeal range.[8]

It is evident that the Carian pseudo-gloss κόον/κῶν/κοῖον 'sheep' bears a striking resemblance to Turkic *$k\bar{o}ńĭ$ (< *$koHońĭ$) 'sheep' formally as well as semantically.

◊ Car. pg. κόον/κῶν/κοῖον 'sheep' (Gr. πρόβατον) | PT (*$koHońĭ$? >) *$k\bar{o}ńĭ$ 'sheep' → PPM *$końïn$ (> PM *$konïn$ 'id.', Kit. *xun* 'id.') → PTg. *$konin$ 'id.' → Nivkh *xoń* 'id.'

---

[5] According to Sūn (2004, p. 227), the word occurs as 火唵 *$honan$ 'sheep (羊)' in Jin Jurchen.

[6] The word is transliterated as $\bar{k}o$-$ñ^{?}$ ×-$y^{?}$.

[7] Vovin (2021, p. 531) argues for a borrowing from Mongolic into Turkic.

[8] Janhunen (2016, pp. 192–193) suggests a similar explanation for the emergence of long vowels in Turkic.

1.2. γίσσα 'stone'

In *Ethnica*, Stephan of Byzantium alludes to this gloss in the context of the Carian city name Μονόγισσα and states that in the Carian language γίσσα denotes 'stone': γίσσα γὰρ τῇ Καρῶν φωνῇ λίθος ἑρμηνεύεται (Adiego, 2007, pp. 8, 455; Billerbeck, 2006–2017, Vol. 3, pp. 328–329; Meineke, 1849, p. 456).

Paribeni (1936, p. 292) compares the gloss with Greek γύψος 'gypsum, chalk, cement'. Georgiev (1960, p. 610; 1981, p. 212) considers the gloss cognate with the New High German word *Kies* 'gravel', which, in his opinion, goes back to Indo-European **giso-*. Middle High German *kis* 'pebble, scrap' and New High German *Kies* 'gravel, grit' both go back to **kisa-* (Kroonen, 2013, p. 289). Its diminutive forms occur in Germanic and Baltic languages. In view of this limited attestation, Kroonen (2013, p. 289) argues that the word is unlikely to be of Indo-European origin and cites Permic, Ob-Ugric, and Georgian words with similar meanings. The Udmurt and Komi words he cites go back to Proto-Permic **kȯža* and this, in turn, to Proto-Uralic **kȣčȝ* 'sand, sandy place' (Csúcs, 2005, p. 333). The Khanty word is dealt with by Steinitz (1966–1993, p. 429) under the headword *kič-* (~ *χĭš*) 'fine sand'. It entered Mansi as *χis*. Together with the Permian words, the Khanty word goes back to Proto-Uralic **kȣčȝ* (Rédei, 1988–1991, Vol. 1, p. 226). As regards Georgian *kviša* 'sand', Klimov (1964, 1998), Fähnrich and Sardshweladse (1995), as well as Fähnrich (2007), unfortunately do not provide any etymological information. Perhaps it can be linked to Armenian *xič* 'pebble' or *kič** 'stone', both of which are of unknown origin (Olsen, 1999, p. 943). Although the relationship of Proto-Germanic **kisa-* to Proto-Uralic **kȣčȝ* and Georgian *kviša* is an open question awaiting further investigation, it is a good comparand for the Carian gloss γίσσα 'stone'. García Trabazo (2004, p. 315 n.) remarks that "Carian" γίσσα still lacks a convincing etymology. Adiego (2007, p. 8) does not offer any further etymology for this gloss.

In Turkic, one word is strongly reminiscent of the Carian gloss. It only occurs in Chuvash in two forms: хыса *xïsa* 'pologij sklon, pokatost'; vozvyshennost' [gentle slope; slope; elevation] (Ašmarin, 1994–2000, Vol. 16, p. 100), хыса *xïsa* '1. pologij sklon, kosogor 2. anat. pax; lobok 3. to že, čto xïsak' [1. a gentle slope, slope 2. anat[omical] groin; pubis 3. the same as xïsak] (Skvorcov, 1982, p. 573), хыса *xïsa* 'pologij sklon, pokatost'' [gentle slope; slope] (Sergeev, 1968, p. 83) and хысак *xïsak* '1. utjos, skala 2. mys, vystup berega 3. kraj, kromka čego-l. 4. gran', rebro' [1. cliff, rock 2. promontory, promontory of the shore 3. edge, edge of sth. 4. facet, edge] (Skvorcov, 1982, p. 573).

Egorov (1964, p. 315) and Fedotov (1996, Vol. 2, p. 383) deal with Chuvash *xïsa* and *xïs* 'groin' and relate it to Common Turkic (mainly Oghuz) *kāsïk* 'groin' (Clauson, 1972, p. 666). However, they do not refer to the homophonous word that means 'slope, cliff, rock'.

If it followed the regular sound changes, Chuvash *xïsa* would theoretically go back to Proto-Bulgar Turkic *kasa(*-g/-k*). Nevertheless, given that the Bulgar Turkic word occurs as a loanword in Mongolic *kïsaɣa ~ *kiseɣe (< **kïsa+ɣa*) 'precipice, steep riverbank', which yielded WM *kisa* /kisā/ 'steep precipice, steep riverbank' (Lessing, 1995, p. 473), Khalkha *хясаа* 'steep cliff, precipice' (Bawden, 1997, p. 497), and Kalmyk *kisān* ~ *kisēn* 'enge; daher: bergkluft (Ö[löt]), kummer, angst (D[örböt] Ö[löt])' [constriction; hence: mountain cleft (Ö[löt]), sorrow, fear (D[örböt] Ö[löt])] (Ramstedt, 1935, p. 233)[9], it is certain that Chuvash *xïsa* comes from a Proto-Bulgar Turkic form *kïsa. The suffix +*ɣA* is solidly attested in the Mongolic lineage, whereas it is absent in Para-Mongolic (Shimunek, 2017, pp. 449–453). Mongolic *temeɣe(n)* 'camel' (cf. Turkic *tävä* 'id.') is another example which can be added to those given by Shimunek. Despite other proposed etymologies, Kit. 𘬜𘭞 [340.244] ‹x.s› *hes 'cliff, precipice (of a mountain)' (Kane, 2009, p. 113; Wu & Róna-Tas, 2020, p. 678) goes back to *kise[10], the unsuffixed variant of Mongolic *kïsaɣa ~ *kiseɣe. The elision of the coda vowel following the *i*-breaking in Kitan is paralleled by 𘭞𘬡 [028.073] *šen* 'new (新)' (< *sine) (Shimunek, 2017, p. 370). The Manchu word given as *hiṣe* 'gefährliche abschüssige Stelle am Berghang' [dangerous slope on the mountainside] by Hauer (2007, p. 231) and *hisy* 'a very steep and dangerous spot on a mountainside' by Norman (2013, p. 174) as well as Evk. *hise* (*ihe*, *iše*, *hihe*, *hiše*) 'kamen'' [stone], *hiseɣ* (*iheɣ* ~ *ihek*) 'kamenistyj bereg, kamenistoe mesto; gruda kamnej' [rocky shore; rocky place; pile of stones] (Cincius, 1975–1977, Vol. 2, p. 328) are connected with Mongolic *kïsaɣa ~ *kiseɣe and Kitan *hes (< *kise). The Evenki forms are probably relatively late loans from Buryat although their exact origin remains unknown. The Sirenikski Eskimo forms кисяхъ *kisjax* 'kamen'' [stone] (Miller, 1897, p. 224), кисыг' (x') *kisəɣ* (*-x*) 'kamen'' [stone] (Menovščikov, 1964, p. 212), кисых' *kisəɣ* 'kamen'' [stone] (Vakhtin, 2000, p. 556) are, in turn, borrowed from Evenki.[11]

Turkish dial. (Derbent -Yozgat) *kïs* 'çürük kaya, sert toprak' [crumbling rock, hard soil] (Türk Dil Kurumu, 1993, p. 2839), albeit quite isolated, may be cognate with Proto-Bulgar Turkic *kïsa, although the loss of the second vowel is irregular. Turkish dial. *kısağı* 'çevresi sarp ve engebeli yer' [steep and rugged place] (Türk

---

[9] Ramstedt implicitly connects the Kalmyk noun with the Turkic verb *kïs-* 'to compress, to squeeze'.

[10] The Small Script graph 𘬜 [340] ‹x› suggests a front vocalism.

[11] Vovin (2015, p. 94) considers Evk. *hisə* 'stone' a loan from Sireniksi *kisəG* 'stone', which is, he thinks, isolated in Eskimo. Fortescue and Vajda (2022, p. 208) instead connect the Sirenikski form with Aleut *kuci-X* 'rock', which they trace back to an earlier **kicV-*.

Dil Kurumu, 1993, p. 2839), on the other hand, seems to be a loanword from Mo. *kïsaɣa* 'precipice, steep riverbank'.

The correspondence between the Common Turkic /ï/ and the Chuvash /ĭ/ is rare but not unattested. The Chuvash *xïsa* is a merger of the Proto-Bulgar Turkic forms *kāsïk* 'groin' and *kïsa* 'slope, cliff, rock'. Proto-Bulgar Turkic *kïsa* 'rock, cliff, slope' is a good comparand for the Carian gloss γί(σ)σα 'stone'.

Another word resembling Proto-Bulgar Turkic *kïsa* is found in Yeniseian. According to Werner (2002, Vol. 2, pp. 84–85), Ket ²*qeˀsʾ*, Yugh ²*χεˀs* 'sandy shore', Imbat Ket *xäs* 'sand', Pumpokol *kit* 'stone', Arin *qes* 'stone', and, perhaps, Kott *hanaŋ* (< *haš*) 'shore' go back to PY *qeˀs* 'sandy shore, sandbank'. Werner (2003, p. 76) refines his reconstruction to PY *qeˀs/*qeˀt* 'shore sand, shore pebble, pebble'. PY *qeˀs* may be connected with the Turkic word over an older metathesized *qiaˀs*. Similarly, PY *sen* 'shaman' (Werner, 2002, Vol. 2, p. 184; Werner, 2006, p. 53) may be traced back to *siam* if it is related to the (unattested) common base of PTg. *samān* 'shaman' (Doerfer, 2004, pp. 699–700) and PS *såmpȃ-* 'zaubern' [to perform magic] (Janhunen, 1977, p. 135).

The last word which can be added to the group of Proto-Bulgar Turkic *kïsa*, Mongolic *kïsaɣa*, Kitan *hes*, and Yeniseian *qeˀs*, is a Hu ethnonym in Chinese transcription. It also supports our reconstruction of *qiaˀs*. This ethnonym is that of the Jié 羯 who founded the state of the Later Zhao 後趙 (319–351 CE) in northern China in the 4th century CE under the leadership of Shí Lè 石勒 (273–333 CE). Pulleyblank (1962, pp. 246–248) links this ethnonym to the Yeniseian word for 'stone' because the family name Shí Lè 石勒 denotes 'stone' in Chinese, although the ethnonym is not glossed anywhere. This etymology has been reviewed and endorsed by Ligeti (1970, p. 273 n.), Vovin (2000, p. 91) and Werner (2003, p. 76). The pronunciation of jié 羯 is reconstructed by different authorities as follows: MC *kjät* (Schuessler, 2007, p. 312), ONWC *kat*, Kumārajīva (ca. 400 CE, Chang'an) *gar-*, *-kar-*, Jñānagupta (550–600 CE, Chang'an area) *-kas-* (Coblin, 1994, p. 334), EMC *kiat* (Pulleyblank, 1991, p. 154), EMC *kjät* (Vovin, Vajda & de la Vaissière, 2016, p. 128).[12] If a form like *kiat* 'stone' underlies the Chinese transcription, it also underpins the reconstruction *qiaˀs*, which later yielded Yeniseian *qeˀs*. Note that the Common Yeniseian /s/ surfaces as [t] in another Xiongnu gloss as well: juétí 駃騠 *kuti* or

---

[12] Shimunek, Beckwith, Washington, Kontovas & Kurban (2015, p. 146) reconstruct *kiar* for the theoretical Middle Chinese and argue that this must have transcribed the Turkic form *kïr*. This reconstruction is criticised at length by Vovin, Vajda & de la Vaissière (2016, pp. 126–128).

*kute 'horse'. Vovin (2000, p. 91) correctly assumes it to be a cognate of PY **kuʔs* 'horse'.[13]

Aside from Proto-Germanic **kisa-*, the Carian pseudo-gloss γίσσα 'stone' finds good comparands in the cognate set that consists of Proto-Bulgar Turkic **kïsa*, Mongolic **kïsaɣa*, Kitan **hes*, Yeniseian **qeʔs* (< **qiaʔs*), and Xiongnu **kiat* (< **qiaʔs*).

◊ Car. pg. γίσσα (also γίσα) 'stone' (Gr. λίθος) | PBT **kïsa* 'cliff, rock, slope' (> Chuvash *xïsa* > *xïsak*) → Mo. **kïsaɣa* ~ **kiseɣe* 'precipice, steep riverbank', Kit. **hes* 'cliff, precipice (of a mountain)' → Man. *hiṣe* 'a very steep and dangerous spot on a mountainside', Evk. *hise* 'stone', Evk. *hiseɣ* 'rocky shore, rocky place; pile of stones' → Sir. *kisəɣ* 'stone'; cf. PY **qeʔs* 'sand, stone' and Xiongnu **kiat* 'stone'.

1.3. ἄλα 'horse'

Stephan of Byzantium touches on this gloss twice, first in relation to the Carian city name Ἀλάβανδα, and then to the Carian region Ὑλλούαλα. In both instances, he states that the Carians call horses ἄλα (Adiego, 2007, pp. 8, 455; Billerbeck, 2006–2017, Vol. 1, pp. 128–129, Vol. 4, pp. 372–373; Meineke, 1849, pp. 66, 648–649). See Zgusta (1984, pp. 56, 652) for further details on the toponyms. See also Brandenstein (1936, p. 35) for an etymological proposition.

Lagarde (1866, p. 269) links the Carian pseudo-gloss to Sanskrit *árvan* 'running, quick (said of Agni and Indra); low, inferior, vile; a courser, horse; N[ame] of Indra; one of the ten horses of the moon; a short span' (Monier-Williams, 1899, p. 93). Objecting to Lagarde's comparison, Kretschmer (1896, p. 377) points to the Avar word *ala* (sic) 'mare' (cited from Schiefner, 1862, p. 12) as a better candidate. The word in question is гӀалá [ʕala] 'kobyla' [mare], pl. гӀулýл [ʕulul] (Saidov, 1967, p. 188) and it also has dialectal variants in гӀулýл [ʕulul] and гӀýлил [ʕulil] (Saidova, 2008, p. 136). Bringing it together with Lak *uIl* 'cow' and Dargic forms (Akushi dialect of Dargwa *q̇Ial*, Chirag dialect of Aghul *q̇Iʷal*), Nikolayev and Starostin (1994, p. 917) reconstruct **q̇ħwĕɫV̄* (~ **q̇wĕɫħV̄*) 'large fem[inine] domestic animal (cow, mare)' for Proto-East Caucasian. However, the cognateness of these forms and therefore the reconstruction of the Proto-East Caucasian form seem questionable. Furthermore, Xajdakov (1973, p 22) compares Avar гӀала [ʕala] 'kobyla' [mare] with гӀака [ʕaka] 'korova' [cow] and argues that they both go back to the common root **гӀa*, that is, **ʕa*.

---

[13] An alternative proposal, which identifies the ethnonym of Jié 羯 with Proto-Yeniseian **keʔt* 'human', was first put forward by Vovin (2000, p. 91) and restated by Vovin, Vajda & de la Vaissière (2016, p. 126).

Hirt (1907, Vol. 2, p. 575) argues that Lagarde's etymologies cannot be used to prove the Iranian origin of the Carian glosses. Adiego (2007) does not offer any etymology for this gloss.

Tongdian 通典 (202-7a) states that the horse (馬) was called hé-làn 賀蘭 by the Turks when referring to the First Turkic Steppe Empire: Wèi mǎ wèi hè lán gù hè lán sū ní què sū ní zhǎng bīng zhī guān yě 謂馬為賀蘭故賀蘭蘇尼闕蘇尼掌兵之官也 "(They) call horse *helan*, so there are palaces for *helan suni*, *suni* are the officers in charge of the army" (see Liu, 1958, p. 498 for the German translation).[14] It should be noted that one of the Tabgač surnames is also hé-làn 賀蘭 (Eberhard, 1949, p. 310). The Middle Chinese pronunciations of these characters are given by different authorities as follows: MC *ha-lan* (Baxter & Sagart, 2014), MC *γâ-lân* (Schuessler, 2007, pp. 300, 343), EMC *γa-lan*, LMC *xɦa-lan* (Pulleyblank, 1991, pp. 123, 182). Hé 賀 renders *ha-* in Amoghavajra, which represents the Mid-Tang Chang'an dialect (Coblin, 1994, p. 126). This suggests *halan 'horse' for the Turkic language of the First Turkic Steppe Empire. Liu's (1958, p. 498) identification of hé-làn 賀蘭 with Old Turkic *kulan* 'wild ass' is unacceptable.

In Chinese sources, two other transcriptions occur, which render a similar but different word. Tongdian 通典 (205-12a) states that the Turks call a variegated horse (駮馬) hé-là 曷剌. Pulleyblank (1991, pp. 123, 181) reconstructs the pronunciation of the characters as *xɦat-lat* for Late Middle Chinese. For hé 曷, Coblin (1994, p. 308) gives the corresponding Indic syllables *rhat-* and *ad-* from Amoghavajra for the Mid-Tang Chang'an pronunciation. Thus, the Middle Tang pronunciation of hé-là 曷剌 may be reconstructed as *xɦaR-laR*. This can be equated to CT *hāla 'parti-coloured, dappled, mottled, spotted, blotchy' (Clauson, 1972, p. 126; Doerfer & Tezcan, 1980, p. 125).

Yuanhe junxian zhi 元和郡縣志 (004-17b/18a) contains another statement regarding variegated horses: Běi rén hū bó wèi hè lán 北人呼駮為賀蘭 "The northerners call variegated (駮) *he-lan*." Taiping yulan 太平御覽 (044-3b) also writes as follows: Běi rén hū jùnmǎ wèi hè lán 北人呼駮馬為賀蘭 "The

---

[14] *Suni* 蘇尼 probably renders Turkic **sun(i)*, which I cannot identify with any attested Turkic word.

northerners call variegated horse(s) *he-lan*."[15] This transcription can also be identified with CT **hāla*.[16]

In contrast to later sources, Tongdian clearly distinguishes between Turkic hé-làn 賀蘭 **halan* 'horse' and hé-là 曷剌 **hāla* 'variegated (horse)'. The gloss hé-làn 賀蘭 'variegated' in Yuanhe junxian zhi is probably a confusion or contamination of Turkic **halan* 'horse' with **hāla* 'variegated, piebald'.

In Turkic and Mongolic, there occurs a word in alternating forms *alaša ~ alača* for different kinds of horses (Doerfer, 1963–1975, §1965; Sevortjan, 1974, pp. 136–137), which certainly relates to Pre-Old Turkic **halan* 'horse', although its morphology remains obscure. The word is first attested in MNT §273 as 阿剌沙 思 *alaša.s* (pl.) 'huai-horse (淮馬)' (Kuribayashi 2009, p. 21). Although it has not survived in modern Mongolic languages, Man. *alašan* 'inferior horse, a nag' (Norman, 2013, p. 13), which is a loanword there, shows that it was once actively used in historical Mongolic. Pelliot (1959, p. 136) emphasizes that "we should separate *ala*, **alač*, *alača* 'motley' and *alaša* 'small, gelding, small-sized horse'". This distinction is justified because *alaša* denotes nowhere 'a piebald horse'.

Admittedly, there are large gaps between Pre-Old Turkic **halan*, Middle Mongol *alaša*, and Common Turkic *alaša ~ alača*. These gaps can be bridged through the involvement of Para-Mongolic. Pre-Old Turkic **halan*, which we also find as a Tabgač surname, entered Para-Mongolic as **ala*. From this, **ala+ča* was derived. The nominal suffix *+čA* is otherwise better known in the Proto-Mongolic lineage (Khabtagaeva, 2009, p. 279). The change of *č > š* in Para-Mongolic has already been touched upon by Janhunen (2003, pp. 397–398). The resulting **alaša* is the source of Middle Mongol *alaša*. This, in turn, is the source of Common Turkic *alaša*. In the given phonological context, /š/ in Middle Mongol cannot otherwise be accounted for.

One more word in the Macro-Altaic family offers a parallel for Early Common Turkic *halan* 'horse'. This is a Paekche gloss in the *Samguk sagi* reconstructed as **kərə* (**kura*, **kora*) 'horse (馬)' by To (1976, pp. 40–41). To (1989, pp. 415–

---

[15] Shanxi Tongzhi 山西通志 contains a similar statement, which Chavannes (1903, p. 56 n.) translates as "les hommes du Nord appellent Ho-lan les chevaux tachetés."

[16] According to Taiping yulan (044-3b), Hèlánshān 賀蘭山 is named after this word and some Tabgač clans are named after the mountain. Eberhard (1949, p. 310) deals with the Northern Tabgač surname 賀蘭. Based on this, Bazin (1950, pp. 290–291, 314) considers hè-lán 賀闌 a Tabgač word that means 'variegated horse (駁馬)'. Bazin (1950, pp. 290–291) and Doerfer (1985, p. 162) identify this word with Turkic **hāla* 'variegated'. Doerfer (1992, p. 45) instead proposes that the Tabgač gloss be interpreted as *halan* or *qaran* and argues that it may be identical with Turkic *hāla* or Turko-Mongolic *kara* 'black' but labels it "unklar".

416) refines this reading to **kara ~ *kŏro*. Given that the Paekche language had neither glottal fricatives nor laterals (Bentley, 2000, p. 435), **kara* 'horse' may be regarded as an indirect loanword from Turkic **hala(n)*, where /k r/ are substitutions for /h l/ respectively.

If we come back to the Avar word discussed above, it should be said that Kretschmer's comparison is not without use. One crucial point regarding this word deserves to be considered. Seeing that Turkic *alaša ~ alača* 'nag' appears as гӀалáрчa 'kljača' [nag] in Avar (Džidalaev, 1990, p. 62), it can be hypothesized that the onset [ʕ] is (at least partly) of prothetic nature in the non-native vocabulary of Avar. Thus, the donor form of гӀалá [ʕala] 'mare' may also be reconstructed as **ala*.

In summary, the Carian pseudo-gloss ἄλα 'horse' has good parallels in Pre-Old Turkic **halan* 'horse', Mongolic *alaša* 'a kind of horse', Common Turkic *alaša ~ alača* 'gelding, nag, horse, steed', and Caucasian Avar ʕala 'mare'. Nonetheless, two of these forms share a fricative onset consonant, which is not present in the Carian pseudo-gloss.

◊ Car. pg. ἄλα 'horse' (Gr. ἵππος) | ECT **halan* 'horse' → MNT *alaša* 'a kind of horse' → CT *alaša ~ alača* 'gelding, nag, horse, steed'; cf. Paekche **kara* 'horse' and Avar ʕala 'mare'.

Conclusion

The discussion above has demonstrated the obvious similarity of three Carian pseudo-glosses with "Altaic" and Xiongnu word forms. I do not claim that Turkic, Mongolic, Xiongnu, and Yeniseian words are cognate. They are only related insofar as they are all borrowed from the same unknown language; this indefinite adstrate must have been closely related to the Carian pseudo-glosses.

Let us look again at the data in the light of the scenario of two dialects (X[a], X[b]) of a single language X.

Table 1. Comparison of the Carian Pseudo-glosses and the Turkic Forms

	Carian Pseudo-gloss	**← Xª**	**Xᵇ →**	**Turkic Forms**
1	κόον/κῶν/κοῖον 'sheep'	*koon/*koyon	*kōny/*kōyn	PT *kōńĭ 'sheep'
2	γίσσα/γίσα 'stone'	*ɢisa	*kisa	PBT *kïsa 'rock, cliff'
3	ἄλα 'horse'	*ala	*h.ala	ECT *halan 'horse' Paekche *kara 'horse' (Avar ʕala 'mare')

In my view, the language X can be identified only with a non-Indo-European language within the "Scythic" culture, which originated in the Altai-Sayan in the 9th century BCE and spread westwards, reaching the Pontic steppe during the next century (Cunliffe, 2015, pp. 196–198) and entering Asia Minor through Transcaucasia in the 7th century BCE. It is commonly accepted that the Scythians played an important role in the formation of the Xiongnu Empire (Atwood, 2015, pp. 51ff.; Di Cosmo, 2011, p. 48; Pulleyblank, 2000, p. 53). The structure of the state and the ruling classes of the empire had their roots in the Scythian culture. Even the name (or epithet) of the great Xiongnu ruler Màodūn 冒頓 Old Chinese *ᵐbágătur contains the Old Iranian element *baga* 'god, lord' (Beckwith & Kiyose, 2018, p. 154). On the other hand, the Scythians and Cimmerians also terrorised the states in Asia Minor and Northern Mesopotamia with raids and invasions in the 7th century BCE. During this time, the Scythians had friendly and hostile contact with the Urartians and Assyrians.

The enormous area of land dominated by the Scythic culture cannot have been occupied by a single Iranian language and its dialects or even only by Indo-European languages. We learn from Herodotus that many peoples who spoke non-Scythian languages, for instance, the Androphagi, Melanchlaeni, and Argippaei, adopted the Scythian way of life. As Melyukova (1994, p. 102) noted, Scythia must be seen "not as an ethnic unit, but primarily as a political one, which could have included some non-Scythian tribes". Christian (1998, p. 125) remarks that "elements of this culture were shared not only by peoples speaking ancient forms of Iranian but also by groups speaking ancient forms of Turkic and Mongolian, while its symbolism may derive, at least in part from the traditions of the forest world." The language X may also be one of the languages whose speakers adopted the nonverbal elements of this culture without giving up their indigenous tongue. Some of the speakers of this language may conceivably have migrated westwards with the core elements of this culture, while the rest may have remained in their original homeland in the adjacency of Turkic-speaking peoples.

In conclusion, the similar lexical items that emerge as Carian pseudo-glosses in Asia Minor, on the one hand, and as cultural loanwords in the Altaic languages and Xiongnu on the other, are the result of the intense cultural and linguistic influence of an adstrate within the Scythic culture at the two ends of the Eurasian steppe. Regarding the Carian pseudo-glosses, two possibilities exist: either they were actual loanwords in Carian, which are by chance not attested in the extant Carian inscriptions or, more likely, they were merely labelled as being Carian by the Byzantine writers for unknown reasons.

Note

All Chinese sources are cited according to the Kanseki Repository editions unless they are cited from secondary sources.

Abbreviations

Car.	Carian
CT	Common Turkic
dial.	dialectal
ECT	Early Common Turkic (Pre-Old Turkic)
EMC	Early Middle Chinese
Evk.	Evenki
Gr.	Greek
id.	idem
Kit.	Kitan
LMC	Late Middle Chinese
Man.	Manchu
MC	Middle Chinese
MNT	Mongqolun Niuča Tobča'an (Secret History of the Mongols)
Mo.	Mongolic
n.	footnote (after page numbers)
ONWC	Old Northwest Chinese
PBT	Proto-Bulgar Turkic
pg.	pseudo-gloss
PIE	Proto-Indo-European
pl.	plural
PM	Proto-Mongolic
PPM	Pre-Proto-Mongolic
PS	Proto-Samoyedic
PT	Proto-Turkic
PTg.	Proto-Tungusic
PY	Proto-Yeniseian
Sir.	Sirenikski Eskimo
WM	Written Mongol

References

Adiego, I. J. (1993). *Studia Carica. Investigaciones sobre la escritura y lengua carias*. Barcelona.

Adiego, I. J. (2007). *The Carian language*. With an appendix by Koray Konuk. Leiden: Brill.

Ašmarin, N. I. (1994-2000). *Slovar' čuvašskogo jazyka.* Tom 1-17. Čeboksary: Russika. (Original work published 1928-1950)

Atwood, C. P. (2015). The Qai, the Khongai, and the names of the Xiōngnú. *International Journal of Eurasian Studies*, *2*, 35-63.

Barth, H.-L. (1984). *Die Fragmente aus den Schriften des Grammatikers Kallistratos zu Homers Ilias und Odyssee (Edition mit Kommentar)* [Doctoral dissertation, Rheinische Friedrich-Wilhelms-Universität zu Bonn].

Baxter, W. H. & Sagart, L. (2014). *Baxter-Sagart Old Chinese reconstruction, version 1.1 (20 September 2014)*. URL http://ocbaxtersagart.lsait.lsa.umich.edu (last accessed 15 December 2022).

Bawden, C. (1997). *Mongolian-English dictionary*. London: Kegan Paul International.

Bazin, L. (1950). Recherches sur les parlers T'o-pa (5ᵉ siècle après J. C.). *T'oung-pao*, *39*, 228-329.

Beckwith, C. I. & Kiyose, G. N. (2018). Apocope of Late Old Chinese short *ă: Early Central Asian loanword and Old Japanese evidence for Old Chinese disyllabic morphemes. *Acta Orientalia Academiae Scientiarum Hungariae*, *71*(2), 145-160.

Bentley, J. R. (2000). New look at Paekche and Korean: Data from Nihon shoki. *Language Research*, *36*(2), 417-443.

Billerbeck, M. (2006-2017). *Stephani Byzantii Ethnica* (5 vols). Berolini & Bostoniae: De Gruyter.

Boodberg, P. A. (1936). The language of the T'o-Pa Wei. *Harvard Journal of Asiatic Studies*, *1*(2), 167-185.

Brandenstein, W. (1935). Karische Sprache. In *Paulys Real-Encyclopädie der classischen Altertumswissenschaft*. *Neue Bearbeitung*. *Supplementband VI* (pp. 140-146). Stuttgart: Metzler.

Brandenstein, W. (1936). Streifzüge. *Glotta*, *25*, 27-35.

Carruba, O. (1965). [Review of the book *Untersuchungen zum Weiterleben hethitischen und luwischen Sprachgutes in hellenistischer und römischer Zeit*, by G. Neumann]. *Orientalische Literaturzeitung*, *60*, 554-559.

Chavannes, E. (1903). *Documents sur les Tou-kiue (Turcs) occidentaux*. St.-Pétersbourg.

Christian, D. (1998). *A history of Russia, Central Asia and Mongolia. Volume I: Inner Eurasia from prehistory to the Mongol Empire*. Oxford: Blackwell.

Cincius, V. I. (Ed.) (1975-1977). *Sravnitel'nyj slovar' tunguso-man'čžurskix jazykov. Materialy k ètimologičeskomu slovarju*. Tom I-II. Leningrad: Nauka.

Clauson, Sir G. (1972). *An etymological dictionary of pre-thirteenth-century Turkish*. Oxford: Clarendon Press.

Coblin, W. S. (1994). *A compendium of phonetics in Northwest Chinese.* Berkeley, California.

Csúcs, S. (2005). *Die Rekonstruktion der permischen Grundsprache*. Budapest: Akadémiai Kiadó.

Cunliffe, B. (2015). *By steppe, desert, and ocean. The birth of Eurasia*. Oxford: Oxford University Press.

Di Cosmo, N. (2011). Ethnogenesis, coevolution and political morphology of the earliest steppe empire: The Xiongnu question revisited. In U. Brosseder & B. K. Miller (Eds.), *Xiongnu archaeology: Multidisciplinary perspectives of the first steppe empire in Inner Asia* (pp. 35-48). Bonn: Vor- und frühgeschichtliche Archäologie, Rheinische Friedrich-Wilhelms-Universität Bonn.

Doerfer, G. (1963-1975). *Türkische und mongolische Elemente im Neupersischen* (4 Bde.) Wiesbaden: Steiner.

Doerfer, G. (1971). *Khalaj materials*. With the collaboration of Wolfram Hesche, Hartwig Scheinhardt, Semih Tezcan. Bloomington: Indiana University Publications.

Doerfer, G. (1985). *Mongolo-tungusica*. Wiesbaden: Harrassowitz.

Doerfer, G. (1992). Mongolica im Alttürkischen. In *Bruno Lewin zu Ehren, Festschrift aus Anlaß seines 65. Geburtstages*, *Band III, Korea* (pp. 39-56). Bochum: Brockmeyer.

Doerfer, G. (2004). *Etymologisch-ethnologisches Wörterbuch tungusischer Dialekte (vornehmlich der Mandschurei)*. Hildesheim: Olms.

Doerfer, G. & Tezcan, S. (1980). *Wörterbuch des Chaladsch (Dialekt von Xarrāb)*. Budapest: Akadémiai Kiadó.

Dorsi, P. (1979). Le glosse carie. *Incontri Linguistici*, *5*, 27-35.

Džidalaev, N. S. (1990). *Tjurkizmy v dagestanskix jazykax. Opyt istoriko-ėtimologičeskogo analiza*. Moskva: Nauka.

Eberhard, W. (1949). *Das Toba-Reich Nordchinas. Eine soziologische Untersuchung*. Leiden: Brill.

Egorov, V. G. (1964). *Ėtimologičeskij slovar' čuvašskogo jazyka*. Čeboksary: Čuvašskoe knižnoe izdatel'stvo.

Erbse, H. (1969). *Scholia graeca in Homeri Iliadem (Scholia vetera). Volumen primum, praefationem et scholia ad libros Α–Δ continens*. Berlin: De Gruyter.

Erbse, H. (1974). *Scholia graeca in Homeri Iliadem (Scholia Vetera). Volumen Tertium. Scholia ad libros Κ–Ξ continens*. Berlin: De Gruyter.

Erbse, H. (1986). Zu der Ilias-Scholien (Curae secundae II). *Hermes*, *114*(4), 385-398.

Fähnrich, H. (2007). *Kartwelisches etymologisches Wörterbuch*. Leiden: Brill.

Fähnrich, H. & Sardshweladse, S. (1995). *Etymologisches Wörterbuch der Kartwel-Sprachen*. Leiden: Brill.

Fedotov, M. R. (1996). *Ėtimologičeskij slovar' čuvašskogo jazyka*. Tom I-II. Čeboksary: Nauka.

Fortescue, M. (2016). *Comparative Nivkh dictionary*. Muenchen: Lincom.

Fortescue, M. & Vajda, E. (2022). *Mid-Holocene language connections between Asia and North America*. Leiden: Brill.

García Trabazo, J. V. (2004). Zum Namen Kizzuwatna. In D. Groddek & S. Rößle (Eds.), *Šarnikzel. Hethitologische Studien zum Gedenken an Emil Orgetorix Forrer (19.02.1894–10.01.1986)* (pp. 311-319). Dresden: Technische Universität Dresden.

Georgiev, V. (1960). Der indoeuropäische Charakter der karischen Sprache. *Archiv Orientální*, *28*, 607-619.

Georgiev, V. I. (1981). *Introduction to the history of the Indo-European Languages*. Sofia: Publishing House of the Bulgarian Academy of Sciences.

Hauer, E. (2007). *Handwörterbuch der Mandschusprache.* (2., durchgesehene und erweiterte Auflage). O. Corff (Ed.). Wiesbaden: Harrassowitz.

Hirt, H. (1907). *Die Indogermanen. Ihre Verbreitung, ihre Urheimat und ihre Kultur* (2 Bde.). Strassburg: Trübner.

Janhunen, J. (1977). *Samojedischer Wortschatz. Gemeinsamojedische Etymologien*. Helsinki.

Janhunen, J. (1998). The horse in East Asia: Reviewing the linguistic evidence. In V. Mair (Ed.), *The Bronze Age and Early Iron Age peoples of Eastern Central Asia* (Vol. I, pp. 415-430). Washington D.C.: Institute for the Study of Man.

Janhunen, J. (2003). Para-Mongolic. In J. Janhunen (Ed.), *The Mongolic languages* (pp. 391-402). London: Routledge.

Janhunen, J. (2016). Towards Pre-Proto-Turkic: Issues of definition and terminology. In I. Hauenschild, M. Kappler, B. Kellner-Heinkele (Eds.), *Eine hundertblättrige Tulpe - Bir şadbarg lāla. Festgabe für Claus Schönig* (pp. 189-196). Berlin: Schwarz.

Kane, D. (2009). *The Kitan language and script*. Leiden: Brill.

Khabtagaeva, B. (2009). *Mongol elements in Tuvan*. Wiesbaden: Harrassowitz.

Klimov, G. A. (1964). *Ėtimologičeskij slovar' kartvel'skix jazykov*. Moskva: Izdatel'stvo Akademii Nauk SSSR.

Klimov, G. A. (1998). *Etymological dictionary of the Kartvelian languages*. Berlin: Mouton de Gruyter.

Kretschmer, P. (1896). *Einleitung in die Geschichte der griechischen Sprache*. Göttingen: Vandenhoeck und Ruprecht.

Kroonen, G. (2013). *Etymological dictionary of Proto-Germanic*. Leiden & Boston: Brill.

Kuribayashi, H. (2009). *Word-index to the Secret History of the Mongols with Chinese transcriptions and glosses*. Sendai: Center for Northeast Asian Studies, Tohoku University.

Lagarde, P. de (1866). *Gesammelte Abhandlungen*. Leipzig: Brockhaus.

Lessing, F. D. (1995). *Mongolian–English dictionary*. Compiled by Mattai Haltod, John Gombojab Hangin, Serge Kassatkin and Ferdinand D. Lessing (3rd reprinting with minor type-corrections) Bloomington: Mongolia Society.

Li, Y.-S. (2013). The names for small cattle in the modern Turkic languages. In K. Juwon & K. Dongho (Eds.), *Current trends in Altaic linguistics: A Festschrift for Professor Emeritus Seong Baeg-in on his 80th birthday* (pp. 547-598). Seoul: Altaic Society of Korea.

Ligeti, L. (1970). Le tabghatch, un dialecte de la langue sien-pi. In L. Ligeti (Ed.), *Mongolian studies* (pp. 265-308). Amsterdam: Grüner.

Liu, M.-Ts. (1958). *Die chinesischen Nachrichten zur Geschichte der Ost-Türken (T'u-küe)* (2 Bde.). Wiesbaden: Harrassowitz.

Meineke, A. (1849). *Stephani Byzantii ethnicorum quae supersunt*. Berlin.

Melchert, H. C. (1994). *Anatolian historical phonology*. Amsterdam & Atlanta, GA: Rodopi.

Melyukova, A. I. (1994). The Scythians and Sarmatians. In D. Sinor (Ed.), *The Cambridge history of Early Inner Asia* (pp. 97-117). Cambridge: Cambridge University Press. (Original work published 1990)

Menovščikov, G. A. (1964). *Jazyk sirenikskix ėskimosov. Fonetika očerk morfologii, teksty i slovar'*. Moskva & Leningrad: Nauka.

Mette, H. J. (1952). *Parateresis. Untersuchungen zur Sprachtheorie des Krates von Pergamon*. Halle (Saale): Niemeyer.

Miller, V. (1897). Materialy po narěčijam inorodcev anadyrskago okruga, sobrannye N. L. Gondatti. In *Živaja starina* (vypusk II, god sed'moj, pp. 218-229). S.-Peterburg.

Monier-Williams, Sir M. (1899). *A Sanskṛit-English dictionary, etymologically and philologically arranged with special reference to cognate Indo-European languages*. Oxford: Clarendon Press.

Nikolayev, S. L., & Starostin, S. A. (1994). *A North Caucasian etymological dictionary*. Moscow: Asterisk Publishers.

Norman, J. (2013). *A comprehensive Manchu-English dictionary*. With the assistance of Keith Dede and David Prager Branner. Cambridge (Massachusetts) & London: Harvard University Asia Center, Harvard University Press.

Nugteren, H. (2011). *Mongolic phonology and Qinghai-Gansu languages*. Utrecht: LOT (Landelijke Onderzoekschool Taalwetenschap).

Olsen, B. A. (1999). *The noun in Biblical Armenian. Origin and word formation. With special emphasis on the Indo-European heritage*. Berlin & New York: Mouton de Gruyter.

Paribeni, R. (1936). Etimologie dalla lingua dei Cari (?). *Rivista di Filologia e d'Istruzione Classica N. S.*, *14*, 292-293.

Pelliot, P. (1959). *Notes on Marco Polo I*. Paris: Adrien-Maisonneuve.

Pulleyblank, E. G. (1962). The consonantal system of Old Chinese. Part II. *Asia Major*, *9*, 206-265.

Pulleyblank, E. G. (1991). *Lexicon of reconstructed pronunciation in Early Middle Chinese, Late Middle Chinese, and Early Mandarin*. Vancouver: UBC Press.

Pulleyblank, E. G. (2000). The Hsiung-nu. In H. R. Roemer & W.-E. Scharlipp (Eds.), *History of the Turkic peoples in the pre-Islamic period. Histoire des peuples Turcs à l'époque pré-Islamique* (T. 1, pp. 52-75). Berlin: Schwarz.

Ramstedt, G. J. (1935). *Kalmückisches Wörterbuch*. Helsinki: Suomalais-Ugrilainen Seura.

Räsänen, M. (1969). *Versuch eines etymologischen Wörterbuchs der Türksprachen*. Helsinki: Suomalais-Ugrilainen Seura.

Rédei, K. (1988-1991). *Uralisches etymologisches Wörterbuch* (3 Bde.). Wiesbaden: Harrassowitz.

Rix, H. (2001). *Lexikon der indogermanischen Verben. Die Wurzeln und ihre Primärstammbildungen* (Zweite, erweiterte und verbesserte Auflage). Wiesbaden: Reichert.

Saidov, M. (1967). *Avarsko-russkij slovar'*. Moskva: Sovetskaja ènciklopedija.

Saidova, P. A. (2008). *Dialektologičeskij slovar' avarskogo jazyka*. M. I. Magomedov (Ed.). Moskva: Nauka.

Sayce, A. H. (1893). The Karian language and inscriptions. *Transactions of the Society of Biblical Archæology*, *9*, 112-154.

Schiefner, A. (1862). *Versuch über das Awarische*. St. Petersburg.

Schuessler, A. (2007). *ABC etymological dictionary of Old Chinese*. Honolulu: University of Hawai'i Press.

Sergeev, L. P. (1968). *Dialektologičeskij slovar' čuvašskogo jazyka. Čăvaš čĕlhin dialektologi slovarĕ*. Čeboksary: Čuvašskoe knižnoe izdatel'stvo.

Sevortjan, Ė. V. (1974). *Ėtimologičeskij slovar' tjurkskix jazykov. Obščetjurkskie i mežtjurkskie osnovy na glasnye*. Moskva: Nauka.

Shimunek, A. (2017). *Languages of ancient Southern Mongolia and North China*. Wiesbaden: Harrassowitz.

Shimunek, A., Beckwith, C. I., Washington, J. N., Kontovas, N. & Kurban, N. (2015). The earliest attested Turkic language: The Chieh 羯 (*Kir) language of the fourth century A.D. *Journal Asiatique*, *303*(1), 143-151.

Simon, Zs. (2022). Carian βάνδα (eDiAna-ID 2141). In eDiAna. URL: http://www.ediana.gwi.uni-muenchen.de/dictionary.php?lemma=2141 (last accessed on 15 December 2022).

Skvorcov, M. I. (1982). *Čuvašsko-russkij slovar'*. Moskva: Russkij jazyk.

Steinitz, W. (1966-1993). *Dialektologisches und etymologisches Wörterbuch der ostjakischen Sprache*. Berlin: Akademie-Verlag.

Sūn, B. 孙伯君 (2004). *Jīndài nǚzhēnyǔ* 金代女真语. Shěnyáng 沈阳: Liáoníng mínzú chūbǎn shè 辽宁民族出版社 [reprint: Běijīng 北京: Zhōngguó shèhuì kēxué chūbǎn shè 中国社会科学出版社 2016].

Sūn, B. 孙伯君 & Niè, H. 聂鸿音 (2008). *Qìdānyǔ yánjiū* 契丹语研究. Běijīng 北京: Zhōngguó shèhuì kēxué chūbǎnshè 中国社会科学出版社.

Tenišev, Ė. R. (Ed.) (2001). *Sravnitel'no-istoričeskaja grammatika tjurkskix jazykov. Leksika*. Moskva: Nauka.

To, S.-h. (1976). *Paekcheǒ yǒn'gu. Étude sur la langue à l'époque de la Monarchie Baikjé*. Seoul: Asea Munhwasa.

To, S.-h. (1989). *Paekcheǒ yǒn'gu* (II). Seoul: Paekche Munhwa Kaebal Yǒn'guwǒn.

Türk Dil Kurumu (1993). *Türkiye'de halk ağzından derleme sözlüğü* (12 cilt, 2. Baskı). Ankara.

Vakhtin, N. (2000). *The Old Sirinek language: Texts, grammatical notes, lexicon*. Muenchen: Lincom Europa.

van der Valk, M. (1979). *Eustathii Archiepiscopi Thessalonicensis commentarii ad Homeri Iliadem pertinentes. Volumen Tertium, Praefationem et commentarios ad libros K–Π complectens*. Leiden: Brill.

Vovin, A. (2000). Did the Xiong-nu speak a Yeniseian language? *Central Asiatic Journal*, *44*(1), 87-104.

Vovin, A. (2015). Eskimo loanwords in Northern Tungusic. *Iran and the Caucasus*, *19*, 87-95.

Vovin, A. (2019a). Groping in the dark: The first attempt to interpret the Bugut Brāhmī inscription. *Journal Asiatique*, *307*(1), 121-134.

Vovin, A. (2019b). A sketch of the earliest Mongolic language: The Brāhmī Bugut and Khüis Tolgoi inscriptions. *International Journal of Eurasian Linguistics*, *1*, 162-197.

Vovin, A. (2021). The directionality of the earliest Turco-Mongolian language contacts revisited. The data from Mongolic Brāhmī Bugut and Khüis Tolgoi inscriptions. In I. Nevskaya, H. Şirin & F. Ağca (Eds.), *Ayagka Tegimlig Bahşı: Festschrift in Honor of Marcel Erdal. Journal of Turkish Studies / Türklük Bilgisi Araştırmaları* (Special Edition Vol. 1), 527-534.

Vovin, A., Vajda, E. & de la Vaissière, É. (2016). Who were the Kjet (羯) and what language did they speak? *Journal Asiatique*, *304*(1), 125-144.

Werner, H. (2002). *Vergleichendes Wörterbuch der Jenissej-Sprachen* (3 Bde.). Wiesbaden: Harrassowitz.

Werner, H. (2003). *M. A. Castrén und die Jenissejistik. Die Jenissej-Sprachen des 19. Jahrhunderts*. Wiesbaden: Harrassowitz.

Werner, H. (2006). *Die Welt der Jenissejer im Lichte des Wortschatzes. Zur Rekonstruktion der jenisseischen Protokultur*. Wiesbaden: Harrassowitz.

Wu, Y. & Róna-Tas, A. (2020). Khitan studies I. The glyphs of the Khitan Small Script 3. The consonants. 3.3 The oral velar and uvular consonants. *Acta Orientalia Academiae Scientiarum Hungariae*, *73*(4), 669-683.

Xajdakov, S. M. (1973). *Sravnitel'no-sopostavitel'nyj slovar' dagestanskix jazykov*. Moskva: Nauka.

Zgusta, L. (1984). *Kleinasiatische Ortsnamen*. Heidelberg: Winter.