ONCE AGAIN ON THE ETYMOLOGY OF THE TITLE qagan

Enormous amount of ink has been spilled on the etymology of the title qagan 'emperor, supreme ruler' that is found in many Inner Asian languages. The proposed etymologies most invariably tried to explain qagan on the basis of Turkic, Mongolic, or Tungusic, although suggestions involving Iranian, Korean and Chinese are also present. However, none of these attempts won the universal recognition, which probably testifies to the fact that none of them is correct. My intention here is not to review these numerous proposals, but rather to look for an alternative explanation of this title, which does not involve any of the languages mentioned above. Before doing so, however, some general observations are in order. Those readers that are interested in the history of the problem should consult an excellent article by de Rachewiltz (1989) that presents a very extensive bibliography. I will, therefore, start with some basic observations:

1) The title qatun 'qan's wife' is frequently assumed to be a loan from Sogdian xwty'n 'lady, noblewoman' (Clauson 1972: 602), although the reservations on this etymology were already expressed by Pelliot (1930: 260). Since only the titles qagan 'supreme ruler,' qan 'ruler,' and qatun 'qan's wife' appear in both Old Turkic and Middle Mongolian texts, this point of view that holds that there is no etymological connection between qan and qatun could be credible. However, there is also a title qeqatun (qeqa'tun) 'qagan's wife' apparently used by both Turks and Ruan-run, but which appears exclusively in Chinese sources (Doerfer 1967: 136). Therefore, there is a certain intimate relationship between titles qeqan 'supreme ruler,' qan 'ruler,' qeqatun 'qagan's wife,' and qatun 'qan's wife,' as was already pointed out by Doerfer (1967: 136). Even on the basis of these four words one can clearly notice a bizarre morphological pattern: qa-qa-n, qa-n, qa-qa-tu-n, qa-tu-n, not typical for any

---

1. For a detailed bibliography, see (de Rachewiltz 1989: 289-290, especially footnotes 30-32).
other Inner Asian language. In order to illustrate this point better I present these titles in a comparative chart below:

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supreme rulers</td>
<td>qa-γa-n</td>
<td>qa-γa-tu-n</td>
</tr>
<tr>
<td>Lesser rulers</td>
<td>qa-n</td>
<td>qa-tu-n</td>
</tr>
</tbody>
</table>

On the basis of Chart 1 above it is possible to make two conclusions. First, female titles include -tu-, while male titles do not. Thus, this -tu- can certainly be analyzed as a feminine gender marker. The feminine suffix (or infix) -tu- can be certainly reminiscent of Semitic, but suggesting a Semitic origin of these titles will certainly amount to no more than a wild stretch of imagination. To the best of my knowledge, this suffix is not present in Turkic or Mongolic. Second, depending on whether this -tu- is a suffix or infix, we must recognize the final -n either as another suffix or as a part of an interrupted root.

2) It is also frequently assumed that the earliest known usage of this title in the form transcribed in Chinese as 可汗 /kʰa?-yan/ goes back to Ruan-ruan, who apparently were the first among Inner Asian peoples to use this title for the designation of their supreme rulers officially (Erkes 1956: 96), and I myself committed previously the same mistake (Vovin 2004: 128). However, already Pulleyblank (1962: 261) and Doerfer (1967: 141) pointed out that Ruan-ruan borrowed the title from Xianbei, and Taskin presented overwhelming philological evidence for the fact that this title was used by Xianbei, namely that while Xianbei rulers did not call themselves qerxan, the title was in use on the popular level (Taskin 1986: 214-15). Unless de Rachewiltz’s speculation that the Xiongnu title 護干 *GaGā is a misspelling for 護于 *GaGān (de Rachewiltz 1989: 290, footnote 32) is correct, an attestation of the title qaγan transcribed as 可寒 /kʰa?-yan/ (SSh XCVI: 1a) should be considered as the oldest reliable attestation of this title among Xianbei.

3) Before attempting to etymologize the title qerxan, we should ask ourselves a question, what is a qerxan in relation to a qan. Old Turkic examples may

---

2. I am indebted to Stefan Georg for drawing my attention to this fact. I interpreted -γa- here as an augmentative suffix before (Vovin 2004: 129), which was certainly wrong as the following discussion will demonstrate.

3. In reference to the Ruan-ruan supreme rulers, this title appears for the first time in the Wei shu [History of Wei] (AD 554). There is an old attempt to connect the Ruan-ruan language with Mongolic (Boodberg 1935: 140-41), which fails on the basis of incorrect interpretation of Middle Chinese phonology, and a more recent attempt to claim that it was Tungusic (Helimskii 2005: 1) that does not provide any linguistic evidence at all. So far, the Ruan-ruan language appears to be an Inner Asian language with no apparent connections to “Altaic” (Vovin 2004).
suggest that qaγan and qan were used interchangeably, e.g. Bilgä-qaγan and Bilgä-qan (Orkun 1994: 833, 836), (Clauson 1972: 630), (Tekin 1968: 341). This might imply that these two terms are synonymous (de Rachewiltz 1989: 296, footnote 52). Regarding the Mongolic tradition, de Rachewiltz pointed out that Cinggis bore only the title qan during his life, and that the title qa’an was assumed only starting with his successor Ögedei (de Rachewiltz 2004: xli). It is nevertheless telling that in the later tradition Cinggis is given the title qa’an (presumably posthumously).4 It is also important that the title qan ‘ruler’ is not attested in the Inner Asian languages before the eighth century and in Chinese transcriptions prior to the tenth century (de Rachewiltz 1989: 296, also footnote 52 on the same page). Superficially it might seem to give some credence to Pelliot’s hypothesis that qan is a contracted form of qaγan (de Rachewiltz 1989: 293). However, there is a serious counterevidence to de Rachewiltz and Pelliot’s hypothesis: -kan is amply attested on a periphery of Inner Asia in sixth,5 and seventh centuries as a part of the titles of Silla’s kings and nobility, for example royal titles 麻立干 malip-kan (SKS III: 5b, 8b, 10b; IV: 1a-b, SKY I: 14a, 22b), 居西干 kese-kan (SKS I: 1a, 4a, IV: 1b; SKY I: 12b, 13b, 14a). Furthermore, OK kan (干) as a nobility title is attested by itself (SKS XL: 17b, 18a; XLIV: 4a; XLV: 9a-b) and in a great number of compounds, such as, e.g., 角干 kak-kan, 級干 kuyu-kan, etc., for a detailed list see (Song 2004: 224-27). It is important to note that Silla kings never had the title of ‘emperor’ or ‘supreme ruler:’ they were simply ‘kings.’ Thus, while the overlapping Old Turkic usage remains to be explained, it appears that Ögedei’s title was elevated from qan to qa’an and the latter title was also ‘granted’ posthumously to Cinggis. This approach finds its further justification in the previously mentioned fact that both Xianbei and Ruan-ruan rulers were carrying the title qaγan and not qan. Thus it becomes quite apparent that qan is a lesser ruler than qaγan, and that qaγan is a greater ruler than qan. The interpretation of the relationship between the two is then almost self-inviting: qaγan is a ‘great qan.’

Such an interpretation, although semantically very plausible, would result in suggesting an archetype *qa-qan ‘great qa-qan,’ which may face two problems. First, it might not be very plausible phonetically at first glance: both Chinese transcriptions of the title in question such as 可汗 k’a?-γan/ (found besides Wei shu also in Bei shi, Jin shu, Sui shu, Jiu Tang shu, and Xin Tang shu), 可寒 k’a?-yan/ (Song Shu), and 可罕 k’a?-xan/ (Yuan shi) and the earliest “Altaic”

---

4. The subtitle on the very first page of the Secret History says 成吉思合罕訥忽札兀兒 Cinggis qa’an-u huja’ur ‘blood lineage of Cinggis qa’an’ (MNT I: 1a), with qa’an, and not qan used.
5. The sixth century is roughly contemporary to the later period of the Ruan-ruan empire.
6. Voiceless /-γ/- rather than voiced /-g/- here can be explained that at this period Chinese already lost a distinction between voiced and voiceless.
attestations: OT \textit{qaγan}, Khitan \textit{qa`an}, MM \textit{qa`an}, and Jur. \textit{qa`an} all point to a fricative /-γ-/ rather than a stop /-q-/ in the second component. We should not, however, forget, that we are dealing with a Xianbei (or possibly even earlier) word, where all intervocalic stops might potentially undergo voicing and lenition from stops to fricatives. The second objection may be tied to the etymology of \textit{qaγan} < \textit{qa-qan} ‘great qan’ itself, since *qa- ‘great’ is not attested in any of the “Altaic” languages. But this brings me exactly to my starting point: the etymology of the title in question is not “Altaic,” and it cannot be successfully explained on the basis of any “Altaic” language.

As it was mentioned above, the title \textit{qaγan} appears for the first time in reference to Xianbei and then to Ruan-ruan rulers. It seems more than likely that the Xianbei language was Para-Mongolic (Ligeti 1970), (Janhunen 2003: 393). There is also good evidence that the Ruan-language was not “Altaic” (Vovin 2004), in spite of the frequent claims to the contrary, connecting ad hoc Ruan-ruan with Avars without any linguistic evidence presented (de Rachewiltz 1989: 294, note 46), and even further with Tungusic (Helmstedt 2005).7

If \textit{qaγan} is indeed from \textit{qa-qan} ‘great qan,’ as suggested above, the etymology of *qa- ‘great’ seems to be quite apparent: proto-Yeniseian *qε > Ket ?qe?, Yug ?χε?, Pumpokol \textit{xääse}, \textit{xeem} (Werner 2002: 58). The presence of the glottal stop in this Yeniseian word is quite reminiscent of the glottal stop also found in the Middle Chinese transcription of the word 可寒, \textit{kohan} cited above.8 The difference in vocalism also finds its good explanation since there is no phonemic opposition between [qe] and [qa] in Yeniseian (Georg 2007: 68-69).

Nevertheless, even if the above etymology of title \textit{qaγan} as ‘great qan’ is accepted, we still have to explain the word \textit{qan} ‘ruler’ itself. As it was demonstrated above, the final \textit{n} in this word is in all probability just a suffix, since feminine gender marker \textit{-tu-} can be inserted in front of it. This leaves us with another /qa/ or /γa/ to be interpreted. Before we can do so, it is necessary to review some additional evidence offered by Xiong-nu.

Pulleyblank was the first scholar to suggest that Xiong-nu 謝于 *GaGā ‘crown prince’ “could be behind Turkish \textit{qaγan} / \textit{xaγan}” (Pulleyblank 1962: 261), although he did not analyze the first syllable as going back to PY *qe? – *qa? ‘big, great’ as I propose. There might be a certain difficulty in justifying this proposal at first glance. Namely, why does the Chinese transcription of this

\footnote{Cf. cogent demonstration by E. Pulleyblank that at least the name ‘Avar’ has to be connected with Wu-huan < *a-hwan < *a-hwar of the Old Chinese sources (Pulleyblank 1983: 453).}

\footnote{The presence of a glottal stop in the Early Middle Chinese transcription is significant, because Early Middle Chinese also had an option to write a syllable /kʰa/ without a following glottal stop, e.g. character 可 has EMC reading /kʰa/.}
title use characters that have readings *hwaʔ (護) or *hwaʰ (于) with initial fricative labiolar /hw-/; while the syllables *ka or *ga were certainly available in Old Chinese of Early Han? The answer may be actually quite simple: Old Chinese did not have any uvular consonants, so typical for the Yeniseian languages, and laryngeal /h/ might have been chosen as an approximation of uvular /q/ or /G/ better than velar /k/ or /g/. In any case, our explanation of the Xiong-nu form should not be dependent on OT qaraγan and MM qa’an that are attested many centuries later. It is significant though, that the earliest EMC transcriptions 可寒 /kʰaʔ-γan/ and 可汗 /kʰaʔ-γan/ that predate both OT and MM forms both use aspirated /kʰ-/ and what is even more important, both agree with the first character 護 /hwaʔ/ of the Xiong-nu 護于 in having a final glottal stop, although a plain syllable /ka/ in the pingsheng tone certainly did exist in Early Middle Chinese. Labialization may represent a more significant problem, but we should keep in mind two aspects of the issue. First, although labialization is not present in modern Yeniseian languages either, it could have easily been lost there as a feature, because two thousand years separate Xiong-nu and other Yeniseian languages. Second, while 護于 represents a transcription of a Xiong-nu word, 可寒 and 可汗 are transcriptions of Xianbei, Ruan-ruan, and Old Turkic words.

As mentioned above, de Rachewiltz suggested that Xiong-nu 護于 *GaGā is a corruption of 護干 *GaGān (de Rachewiltz 1989: 290, footnote 32), where the character 干 (OC *kan), reflecting foreign *Gā) can have easily been confused for the character 于 (OC *hwaʰ). This suggestion faces several difficulties, apart from the fact that any argument based on a graphic corruption is always speculative. First, the character 干 has an initial stop /k/, not a fricative /γ/. None of the variants of the title qaraγan has a medial voiceless stop -k-, instead either a voiced fricative -γ- or a glottal stop -ʔ- is always present. It is of course possible to speculate that -k- > -γ-, but this again will be a speculation not confirmed by solid evidence. Second, as we can see on the basis of Chart 1, the final -n in the word qaraγan is a suffix at least historically, thus there is no need to replace the actually attested Xiong-nu 護于 *GaGā without the final suffix -n by a speculative 護于 *Gakan that is not attested. Third, and most importantly, we should not overlook the parallelism between two Xiong-nu titles: 護于 *dar-hwaʰ, ‘shan-yu, the supreme ruler of Xiong-nu’ and 護于 *GaGā ‘crown prince.’ Both of them end in 于 *hwaʰ, rendering, as Pulleyblank suggests, foreign *Gā. This could hardly be a coincidence, as both indicate some kind of rulers. 護于 ‘shan-yu’ < EMC *dan-hwaʰ, < OC *dar-hwaʰ, is believed to survive in the OT title tarqan, which was transcribed in Tang times by the Chinese as 達干 (EMC *dat-kan, LMC *tifar-kan) or 達官 (EMC *dat-kwan, LMC *tifar-kwan)

9. Some final EMC -n go back to OC *-r, as in the character 單: EMC *dan < OC *dar.
It is quite apparent, due to its Mongolic plural form tarqa-t, that the Turks borrowed this term from Xianbei, probably via Ruan-ruan, as was already pointed by Pelliot (1915). Therefore, we can make three important observations: first, -n in OT tarqan is a suffix of Mongolic origin. Since MM plural forms of qaγan and qan are also qaγad and qad respectively, we have now second independent piece of evidence that -n in qaγan is a suffix. It also seems to be safe to conclude that this suffix is of Mongolic origin. Second, the transcription 达官 (EMC *dat-kwan, LMC *ṭiṭar-kwan) shows us that the labialization that we discussed above may either still be present as a co-articulation in the title of a foreign origin as late as the Tang times, or that it represents an idiosyncrasy of the Chinese transcription, and, therefore, can be disregarded.11 Third, we can see that Early Middle Chinese transcriptions use characters 寒 and 汗/qan/, 干/kan/ and 官/kwan/ that correspond to the character 于/hwa/ in the Old Chinese transcription. This should be expected, since Middle Chinese phonology underwent significant changes since Old Chinese times, and the character 于 has EMC pronunciation *hju, therefore it could no longer be used to transcribe a syllable /qa/ or /Ga/.

We can now see that Pulleyblank was right in reconstructing Xiong-nu 護于 *hwa?-hwa, 'crown prince' and 單于 *dar-hwa, 'supreme ruler' as *Ga?-Gā and *dar-Gā respectively. The first syllable of the Xiong-nu 護于 *Ga-Gā was compared above to PY *qε? – *qa? ‘big, great.’ A reasonable question may arise of why the Xiong-nu form has a voiced uvular stop *G-, while PY *qε? – *qa? has voiceless *q-. The answer to this question is quite straightforward: the reconstruction of initial *G- in Proto-Yeniseian is dubious. Even Starostin, who reconstructs it, notes that in the initial position PY *G- occurs extremely seldom, and provides only three examples supporting it (Starostin 1982: 165-66). Werner, whose reconstruction is much superior to that of Starostin, does not reconstruct initial PY *G- at all, as his reconstruction includes only aspirated vs. unaspirated stops, with voiced stops occurring only as allophones of the latter (Werner 1990: 228-29). Thus, PY *qε? – *qa? ‘big, great’ includes unaspirated *q- with allophonic voiced *-G- that appears only in the intervocalic position. It is possible that the Xiong-nu language had initial *G-, and that it merged with *q- in Proto-Yeniseian. It is equally possible that Chinese 護/hwa/ renders Xiong-nu *qa?, and not *Ga?. Unfortunately, Xiong-nu data themselves are too fragmentary to provide evidence for any of these two solutions. I personally

10 It is moreover likely that this title also survived as EMM daruGa-la- ‘to be[come] a chief’, WM daruga ‘chief,’ with further degrading of the semantics (Pulleyblank 1962: 257).
11 Another possibility is that the character 官/kwan/ ‘official’ was used because of its meaning.
prefer the second, since it does not multiply unnecessary entities in violation of Ockham’s razor. Thus, I rewrite the reconstruction of Xiong-nu 護于 as *qa?-Gā.

As I already mentioned above, since both Xiong-nu 護于 *qa?-Gā ‘crown prince’ and 單于 *dar-Gā ‘supreme ruler’ are some kind of rulers, the common element 于 *Gā should be the word for ‘ruler.’ On the basis of previous discussion, Xiong-nu 護于 *qa?-Gā ‘crown prince’ can be literally interpreted as ‘great ruler,’ with exactly the same meaning that was established above for qaγan. We would expect that Xiong-nu 于 *Gā ‘ruler’ should be really reconstructed as *qā, due to the allophonic variation between *-G- and *q- that was mentioned above. Then we have a possible cognate in Yeniseian languages again: Ket ḍj ‘ruler,’ Yug ḍj ‘id.’ (Wemer 2002.2: 153), to which Kott ḍj ‘lord, prince,’ Assan hii, hu, ḍj ‘lord,’ Arin bikhej, birkej;¹² ‘lord,’ kej ‘boss, power,’ berkekej ‘sovereign.’¹³ Starostin offered two slightly different reconstructions on the basis of these data: *q̥je (Starostin 1982: 168, 187) and *q̥jji (Starostin 1995: 301), while Werner abstained from reconstructing a Proto-Yeniseian form pointing at the irregularities in correspondences of initial consonants (Wemer 2002.2: 153-54). Since Proto-Yeniseian roots normally tend to be monosyllabic (Gaerg, p.c), Starostin’s disyllabic reconstruction should be rejected, especially that the second syllable vowel is supported only by the Kott form ḍj ‘lord, prince.’ The reconstruction of vocalism for this word seems especially troublesome, but taking Ket and Yug vocalism at face value à la Starostin seems to be an unlikely solution. We certainly have to take into consideration the data from all languages. Ket and Yug point to a central high vowel, Kott indicates front high vowel, Assan presents a variation between high front and high back vowels, and Arin indicates front mid vowel.¹⁴ On the basis of all forms listed above, I tentatively reconstruct PY *q̥j or *q̥j̥, with mid back unrounded vowel /ỹ/. This reconstruction is comparable to Xiong-nu *qā ‘ruler,’ although the phonetic fit is not ideal. It must also be mentioned that in addition to the form qaγan ‘ruler’ there is also EMM qa ‘ruler,’ attested without a final -n in the Secret history three times (MNT I: 59a, III: 50a, IV: 31a) in the meaning ‘ruler’ and once in the meaning ‘official in charge’ (MNT XI: 9b).

Regardless of the fact whether the proposed PY *q̥j̥ or *q̥j is reconstructed correctly, there is another case when Ket and Yug ỹ correspond to Xiong-nu  possono *a. This case is represented by Xiong-nu *dar-  in 單于 *dar-Gā

¹² bi- is probably the possessive prefix bi- ‘my.’
¹³ It is worth mentioning that Pulleyblank suggested the comparison of Ket and Kott forms (the first cited by him erroneously as ḍj) with Xiong-nu *qa?-Gā ‘crown prince’ as a whole (Pulleyblank 1962: 261-62), and I myself also committed the same mistake (Vovin 2003: 392). This comparison certainly has to be rejected now due to the fact that the Xiong-nu word is a compound.
¹⁴ Arin -kekej in berkekej may be especially telling, because it can reflect the same compound as Xiong-nu *qa?-Gā.
'supreme ruler,' mentioned above. We know that Xiong-nu *dar-Gā means 'supreme ruler,' but in order to establish more exactly the meaning of the component *dar-, we should remember that Xiong-nu *dar-Gā 'supreme ruler' is just an abbreviation of a full title that appears in both Shi ji and Han shu: 拓 犁孤塗單于 ‘Son of Heaven, *dar-Gā.’ The first four characters, 拓犂孤塗 *treng-ri kwa-la, lit. ‘Heaven Son,’ clearly represent a calque from Chinese 天子 ‘Son of Heaven.’ Thus, Xiong-nu supreme rulers were calling themselves ‘Sons of Heaven’ in imitation of the Chinese tradition. But since this resulted in having two ‘Sons of Heaven,’ one in China, and the other one in the steppe, there was a need for differentiation between the two, and I presume that this is why the Xiong-nu word 擧 *dar-Gā was added to the title. We already know from the above discussion that Xiong-nu *Gā or *qā means ‘ruler.’ Then what is *dar? I believe that the simplest hypothesis about the meaning of *dar, which is crucial for differentiating between Chinese and Xiong-nu ‘Sons of Heaven,’ should take into account their respective geographical position. The Chinese empire was in the South, and the Xiong-nu empire was in the North. Thus, I think that Xiong-nu 擧 *dar-Gā simply means the ‘ruler of the North,’ with *dar meaning ‘North.’ Coming back to Yeniseian, there are Ket Ӳjij ‘lower reaches of Yenisei, North’ and Yug Ӳjir ‘id.’ It seems that Xiong-nu 擧 ‘North’ may correspond to these two Yeniseian words, demonstrating the same vocalic correspondence /a/ ~ /j/ as in the case of Xiong-nu *qā ‘ruler’ on the one hand and Ket Ӳjij ‘ruler,’ Yug Ӳjir ‘id.’ on the other. Thus, I interpret the full title of Xiong-nu supreme rulers 擧犂孤塗單于 *treng-ri kwa-la dar-Gā as ‘Son of Heaven, Ruler of the North.’

Thus, it seems to be quite likely that the ultimate source of both qaγan and qan can be traced back to Xiong-nu and Yeniseian. The scenario of the transmission of these titles in Inner Asia is probably as follows. The original Xiong-nu terms *qa?-Gā ‘great ruler’ (? *qa?-qāj) and *qāj ‘ruler’ were borrowed initially by Xianbei with further addition of the Mongolic singular -n and plural -d. Neither qatun nor qaγatun are attested in Xianbei’s usage, but they are attested for Ruan-ruan, so the addition of feminizing suffix -tu- must have been a Ruan-ruan creation. Almost nothing is known about the Ruan-ruan language, but the bits and pieces that we have allowed me previously to draw a conclusion that it was an Inner Asian language, unrelated to any other language of this area that are known to us (Vovin 2004). When Turks borrowed all four titles from their Ruan-ruan masters, they borrowed them as single units, and not as com-

---

15 Werner explains these forms as contraction from *t[J] ‘in the lower course of the river’ + -suf (ablative marker) (Werner 2002: 312), but this explanation may be problematic because it is not quite clear how ablative formant can be functionally participating in a compound meaning ‘in the lower course’ rather than ‘from the lower course.’
pounds. The same probably happened in Middle Mongolian and Jurchen lines, although those two have likely borrowed these titles directly from Khitan or some other para-Mongolic language.

Alexander Vovin
Dept. of East Asian Languages & Literatures
University of Hawai'i at Manoa
382 Moore Hall
1890 East West Rd.
Honolulu, HI 96822, USA

Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMC</td>
<td>Early Middle Chinese</td>
</tr>
<tr>
<td>EMM</td>
<td>Eastern Middle Mongolian</td>
</tr>
<tr>
<td>Jur.</td>
<td>Jurchen</td>
</tr>
<tr>
<td>LMC</td>
<td>Late Middle Chinese</td>
</tr>
<tr>
<td>MM</td>
<td>Middle Mongolian</td>
</tr>
<tr>
<td>OC</td>
<td>Old Chinese</td>
</tr>
<tr>
<td>OK</td>
<td>Old Korean</td>
</tr>
<tr>
<td>OT</td>
<td>Old Turkic</td>
</tr>
<tr>
<td>WM</td>
<td>Written Mongolian</td>
</tr>
</tbody>
</table>

References

Primary sources

Chinese
SSh Song shu, AD 488

Korean
SKS Samkwuk saki, AD 1147
SKY Samkwuk yusa, AD 1281

Mongolian
MNT Mongol niuca tobca’an, AD 1240

Secondary sources


Pelliot, Paul 1930. ‘Les mots mongols dans le 高麗史 Korye sa.’ *Journal Asiatique* CCXVII: 253-266.


Vovin, Alexander 2003. ‘Did the Xiong-nu Speak a Yeniseian Language? Part 2: Vocabulary.’ In: Alice Sárközi and Attila Rákos (eds.) Altaica Buda-
pestinensia MMII. Budapest: Hungarian Academy of Sciences, Eötvös Loránd University, pp. 389-394.


Werner, Heinrich [= Vemer, Genrikh K.] 1990. Sravnitel’naia fonetika enisei-
skikh iazykov. Taganrog: Taganrogskii gosudarstvennyi pedagogicheskii institut.