BRILL

INTERNATIONAL JOURNAL OF
EURASIAN LINGUISTICS 1 (2019) 162–197

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A Sketch of the Earliest Mongolic Language: the Brāhmī Bugut and Khüis Tolgoi Inscriptions

Alexander Vovin
EHESS/CRLAO, Paris
sashavovin@gmail.com

Abstract

The present article deals with the earliest known sources on a Mongolic language discovered in 2014 by the international team Dieter Maue (Germany), Mehmet Ölmez (Turkey), Étienne de La Vaissière and Alexander Vovin (both France) on two inscriptions. The importance of this discovery is three-fold: first, it gives us a glimpse of the earliest Mongolic language, predating by more than six hundred years the hitherto known earliest monument in a Mongolic language; second, in spite of the fact that the language of the inscriptions is somewhat close to Middle Mongolian, it provides the evidence of certain features that were previously only suggested for reconstructed forms of Mongolic; and finally, it significantly changes our general understanding of the mediaeval ethnolinguistic history of Central Asia.

Keywords

Mongolic – Middle Mongolian – ethnolinguistic history – linguistic reconstruction – documentary evidence

1 Introduction

Until very recently it was believed that the earliest monument in Mongolic (excluding Para-Mongolic Khitan of of the tenth–twelfth centuries) was the Chinggis Stone (1224 or 1225 AD). However, in 2014 an international expedition, including Étienne de La Vaissière (EHESS, France), Dieter Maue (independent scholar, Germany), Mehmet Ölmez (Istanbul University, Turkey), and the author of these lines, assisted by a team of two experts in

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3D photography under the leadership of Tobias Reich (Germany), undertook a field trip to Mongolia to study the Khüis Tolgoi and Brāhmī Bugut inscriptions. Consequently, a thorough study of these inscriptions, including the history of their discovery and research (Mehmet Ölmez), historical context (Étienne de La Vaissière), paleography and reading (Dieter Maue), as well as the identification and interpretation of the underlying language (Alexander Vovin) was, or is, going to be published (La Vaissière 2018, Maue 2018, 2019, Ölmez 2018, 2019, Vovin 2018, 2019).

The Khüis Tolgoi inscription consists of two stones. The first, bigger stone (Plate 1) is today located in the basement of the Museum of the Institute of Archeology (Mongolian Academy of Sciences), and the second smaller stone near the entrance to the same Museum, well exposed to elements and harsh Mongolian weather. Ditto for the Bugut stone, with Sogdian and Brāhmī inscriptions found on the same stone (Plate 2), which is currently located in the courtyard of the Arkhangay provincial museum in Tsetserleg. Unlike the inscription in Brāhmī, the Sogdian Bugut inscription has been thoroughly studied (Kliashtornyi & Livshic 1971, 1972, 1972; Yoshida 1999, 2006, 2018).

We were not the pioneers who discovered these Brāhmī inscriptions ourselves. But there have been no serious attempts of reading them and attempting to identify the language, although all possible wild guesses ranging from "the language of the Huns" to "Sanskrit" were made. It is not the place to engage into the discussion of the history of discovery and exploration of these two Brāhmī inscriptions, as it has already been done by my colleague and friend Mehmet Ölmez (2018, 2019); any interested reader should address himself/herself to these two excellent articles. The Bugut inscription is dated by 584 AD (most likely), but no later than 587 AD, and the Khüis Tolgoi inscription must have been erected sometime between 604 and 620 AD. The direction of writing is the most unusual: while the normal organization of the Brāhmī script is in horizontal lines running from left to right, in these inscriptions we have vertical columns running from right to left.

It turned out that the language underlying these two Brāhmī inscriptions is Mongolic, quite closely related, although not quite identical to Middle Mongolian of the thirteenth–fourteenth centuries. Although the differences in vocabulary are sometimes tantalizing,[1] especially in the Khüis Tolgoi inscription, the Mongolic nature of the morphology now lies beyond any reasonable doubt. It seems that the language we are dealing with here can be identified as the Ruan-ruan language, the language of the steppe Empire that immediately

1 But as the reader will see below, most of the vocabulary in the Bugut inscription is reconstructed at least partially, so there might have been a case of an inevitable "Mongolization".



PLATE 1 The Brāhmī Bugut inscription
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PLATE 2 Brāhmī Bugut inscription (fragment)
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preceded the First Turkic khanate, as suggested by Étienne de la Vaissière (2018).[2] From now on I am going to adopt tentatively Étienne de la Vaissière's hypothesis and call the language of the Brāhmī Bugut, Keregentas and Khüis Tolgoi inscriptions "Ruan-ruan".

The exploration of this exciting new field has just started. This is far from being a last word on the reading and interpretation of the inscriptions: like it happened with monuments in Old Turkic, 100+ years from now the yet unborn scholars will be still discussing them and offering their interpretations. The source of materials is also far from exhausted. The reading of the second Khüis Tolgoi stone is not possible without the help of 3D-photography. In 2014 we could not perform it due to circumstances beyond our control. There are also

2 This certainly reopens the problem of identification of the traces of an unknown Central Asian language found as loanwords in Old Turkic that I have previously christened as 'Ruan-ruan' (Vovin 2004, 2010).



PLATE 3
Khüis Tolgoi inscription (stone one)
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two very short inscriptions in the same vertical Brāhmī script found on two balbals in Keregentas in Eastern Kazakhstan. It is quite clear that the last word on both inscriptions is the title *qaɣan*, which is useless for language identification. Maue and I have a difference of opinion how to explain the preceding *dar-pu* on stone one and *šim-pun* on stone two. While Maue believes that these are the names of *qaɣans*, I think that they are likely to be verbal forms ending in the past adnominal form *-pu*(*n*), related to Khitan *-boń/-bun*. At the very least, it probably shows that the Mongolic language in question was spoken or used on a much wider territory than just Central Mongolia. Finally, the possibility of further discoveries of monuments will always remain.[3]

3 A detailed discussion with references of the morphology and the vocabulary, accompanied by philological commentaries where necessary, is provided column by column of the Khüis Tolgoi and the Brāhmī Bugut inscriptions in Vovin (2018) and Vovin (2019), respectively. I will not repeat it here, concentrating instead on the representation of the Ruan-ruan language as a system.

2 Phonology

The existing material is clearly insufficient for the complete description of phonology, so only partial observations can be made.

1. Preservation of the initial PM *p-. The Ruan-ruan language has the evidence really written in stone that MM *h-* goes back to *p-*: *pa*[*ran*] 'person, people, population' (Bu 13),[4] cf. MM *haran* 'id.', *pü*[*ker*] 'ox' (Bu 9), cf. MM *hüker* 'id.', *pü*[*ne*]*ken* 'fox' (Bu 9), cf. MM *hünegen* 'id.'
2. PM initial *b- seems to be preserved intact: *bar-* 'to take' (Bu 3, KhT 1: 6), cf. MM, WM *bari-* 'id.', *bayi-* 'to be', 'to stand' (KhT 1: 3), cf. MM *bayyi-* 'id.', *bo*[*tuɣ*]*ńa* 'camel calf' (Bu 10), cf. EMM *botuqan* 'id.' and WMM *botaɣa ~ botaɣan* 'id.'
3. The fate of PM medial *-p- and *-b- seems to be much more complex, or at the very least I was not able to figure it out completely. I am able to present here only very preliminary observations.
   - 3a. PM *-p- seems to be preserved between two identical vowels: [*puru*] *pu* 'like a flood, heavily' (Bu 6), cf. EMM *huru'u* 'id.', *qapa* 'surrounding', 'enclosure' (Bu 3), cf. MM *qa'a-,* WM *qaɣa-* 'to enclose', [*šina*] *pa* 'domain' (KhT 1: 10), cf. MM *šina'a* 'id.', or becomes *-w-* when the vowels are not identical: *tuwa*, tribal name (KhT 1: 4, 1: 7, 1–9).
   - 3b. PM *-b- either stays intact or becomes *-v-*/*-w-*: *ab*[*V*]- 'to take' (Bu 8), cf. MM, WM *ab-* 'id.', *kebir* 'steppe' (Bu 13), cf. EMM *ke'er ~ keher* 'field' (MNT §56, §195, HYYY 2b.2), WMM *keyēr* 'steppe' (Mu 94), *kehēr* 'desert' (IM 439), Ašvar 'Ïšbara', p.n. (Bu 6).
   - 3c. Sequences *-aɣu- and *-apu- become just *-o-* without any traces of vowel length marked in the script: *dolu-* 'to listen' (KhT 1: 3), cf. Preclassical WM *dayula-* 'id.', MM *da'u* 'voice', *ǰilo* 'stone' (KhT 1: 4), cf. MM *čila'un*, WM *čilaɣun* 'id.', but the sequence *-egü- metathesizes and remains intact: *düge* 'younger brother' (KhT 1: 5), cf. MM *de'ü*, WM *degü* 'id.', while *-epü- contracts to *-ü-* without any traces of vowel length marked in the script: *tün-*, oblique stem of *tere* 'that' (KhT 1: 7), cf. WMM *tün-*, EMM *te'ün-* 'id.'[5]
4. There are no palatalizations *ti* > *či* and *di* > *ǰi* as in MM and all later varieties of Mongolic: *biti ~ bitig* 'inscription' (KhT 1: 1, 1: 4), cf. MM, WM *bičig*

4 For the textual addresses of the Bugut, Khüis Tolgoi, and Keregentas inscriptions the following notation is used: Bu 2 = the Bugut inscription, column two, KhT 1: 3 = the Khüis Tolgoi, first stone, column three, Ke 1 = the Keregentas inscriptions, first stone.

5 Compared to the simplistic treatment of PM *Vɣ/gV and *VpV as *VɣV in Poppe (1954: 60–76), cf. the much more appropriate analysis revealing all the complexities involved in Janhunen (2003: 7), Rykin (2018), and Khabtagaeva (2018).

'writing', 'inscription', *digi-* 'to die', 'to pass away' (KhT 1: 1, Bu 3), cf. Khitan *tege- ~ tige-* 'id.', *pügtig* 'saved' (?). KhT 1: 4, 1: 8, cf. OT *bögtäg*, Sogdian *βwɣytk* 'id.', energetic verbal suffix *-ti-* (MM *-či-*) in *ndü-t*[*i*]*-ǰü* 'created with all their strength and' (Bu 3).

5. There are very few words with initial nasals. Most likely, it is a trick played on us by the limited nature of the material, but the possibility that it is due to Turkic influence cannot be excluded, although there are no examples of *m- > *b-* and *n- > *d- > *y-* in the extant corpus.

6. There are considerable vowel elisions, including vowels in the first syllables that leads to the formation of secondary word-initial consonant clusters: *qra-* 'to look' (KhT 1: 4), cf. MM *qara-* 'id.', *drö* 'law, rule' (KhT 1: 6), cf. MM *törö*, WM *törü* 'law, principle, rule', *ndü-* 'to create' (Bu 3), cf. MM *nödü-* 'to build' (MNT §249, §265), *gle-* 'to speak', 'to talk' (Bu 3, 16), cf. MM *kele-* 'id.' (MNT §85, §229, etc.).

   6a. The sequence *CarV- becomes *Car-: *bar-* 'to take' (Bu 3, KhT 1: 6), cf. MM, WM *bari-* 'id.', *dar-* 'to defeat' (Bu 4, Ke 1), cf. MM, WM *daru-* 'id.', *ǰar-* 'to hurry' (Bu 5), cf. WMM *ǰāra-* (Mu 204) ~ EMM *yāra-* 'id.' (HYYY 18b.8), *ǰar-* 'to send' (Bu 7), cf. MM *ǰaru-* 'id.' *tar-* 'to scatter' (Bu 5), cf. MM *tara-*, *tar-* 'to scatter'. One example is attested with *Cala-: *tal-* 'to plunder, to capture' (Bu 6), cf. MM *tala-* 'id.', although a variant *t*[*ala-*] (Bu 9) also seems likely, but is impossible to determine due to the script erosion.

   6b. There are also other vowel reductions in the second syllable: *tüg-* 'to be enough' (KhT 1: 7), cf. MM *tüge-* 'id.', *tüš-* 'to entrust', 'to support'. KhT 1: 7. Cf. EMM *tüši-* 'to entrust', 'to rely upon', possibly also 'to support'. Note that the palatalization *si* > *ši* must have occurred before the vowel reduction.

   6c. There is a regular final vowel reduction in the nomen perfecti *-qs ~ -ks* in Khüis Tolgoi, but not in Bugut, cf. MM *-qsa*(*n*) ~ *-kse*(*n*) : *törö-ks* 'was born' (KhT 1: 1, 1: 8, 1: 9), *uqa-qs* 'realized' (KhT 1: 2), *ǰa-qs* 'promised' (KhT 1: 3), [*a-*]*qsa* 'was' (Bu 14).

7. Like Khitan and unlike the rest of Mongolic, the Ruan-ruan language may have been a "palatalizing" language, e.g. *-ńAr*, plural marker (KhT 1: 1, 1: 3, 1: 5, 1: 7, 1: 9), although there is also a non-palatalized variant *-nAr* (KhT 1: 4, Bu 2, 9 (twice), 17),[6] cf. MM and WM *-nAr*, *-iń*, genitive marker (KhT 9), cf. MM *-Un*, *-yin*, *-īn* and WM *-Un*, *-yin*, *qoń*[*i*]*y* 'sheep' (Bu 10), MM and WM *qonin* 'id.', *bo*[*tuɣ*]*ńa* 'camel calf' (Bu 10), cf. EMM *botuqan*

6 The equal number of examples of *-ńAr* and *-nAr* most likely suggests that we are dealing here with free graphic variation.

'id.' (MNT §78) and WMM *botaɣa* ~ *botaɣan* 'id.' (Mu 25, 122, 270) *ńele-* 'to join' (KhT 1: 4), cf. EMM *neyile-*, WMM *neile-* 'id.', Ańaqay, p. n. (KhT 1: 2), cf. *Anagwai* 阿那瓌 in the Early Middle Chinese transcription.

8. There is an internal variation between voiceless and voiced consonants in one word: *ɣačar* 'land, earth, place' (Bu 5) ~ *qaǰar* (Bu 13), cf. MM *ɣaǰar*, *qaǰar*, WM *ɣaǰar* 'id.' In addition, voiced consonants in the Ruan-ruan language may correspond to voiceless in MM and WM: *gle-*, [*ge*]*l*[*e*]- 'to talk' (Bu 3, 16), cf. MM, WM *kele-* 'to talk', 'to speak', *drö* 'law, rule' (KhT 1: 6), cf. MM *törö*, WM *törü* 'law, principle, rule', *ǰilo* 'stone' (KhT 1: 4), cf. MM *čila'un*, WM *čilaɣun* 'id.', *küǰü* 'strength' (Bu 15), cf. MM, WM *küčü*(*n*) 'id.', *ergin* ~ *irgin* (spelled *härgin*), title (KhT 1: 6), cf. OT *erkin* ~ *irkin* 'id.'
9. Although *s* and *š* are differentiated in the script, they are clearly in complementary distribution, with *š* occurring before *i* and *s* elsewhere:[7] *sa-* 'to live', 'to dwell', 'to reside' (Bu 1), cf. Khitan *sa-*, MM *sa'u-*, WM *saɣu-* 'id.', *bodisatva* 'Bodhisattva' (KhT 1: 1, 1: 8), *ksan* 'regnal year' (KhT 1: 7), cf. Tumshuqese *χsana-* 'id.', *kṣırı* 'country' (KhT 1: 2, 1: 6), cf. Tumshuqese *χšera* 'id.' *šim-* 'to die (of an illness?)' (Ke 2), cf. Khitan *s.em.ü-* 'to die of an illness', but we might expect just the meaning 'to die' in the language of Keregentas, [*šina*]*pa* 'domain' (KhT 1: 10), cf. MM *šina'a* 'id.', *šińi* 'new' (KhT 1: 1, 1: 8), cf. MM *šine* ~ *šini*, WM *šine* 'id.' Thus, there is only one phoneme, /s/.
10. The initial *y-* is not attested in the extant corpus.
11. Final *-g* shows three different reflexes: *-g*, *-Ø*, and *-v*. Examples: *biti* 'inscription' (KhT 1: 1, 1: 4), *bitig* 'inscription' (KhT 1: 9, 1: 11), cf. MM, WM *bičig* 'writing', 'inscription', *čiv* < *čig* 'time' (Bu 1), cf. MM, WM *čaɣ* 'id.', *pügtig* 'saved' (?) (KhT 1: 4, 1: 8), cf. OT *bögtäg*, Sogdian *βwɣytk* 'id.', *tüg-* 'to be enough' (KhT 1: 7), cf. MM *tüge-* 'id.', *türūg* ~ *türüg* 'Türk' (KhT 1: 5, 1: 10).
12. There are clearly seven vowels: *a*, *u*, *o*, *i*, *e*, *ü*, *ö*. The initial *ö-* is not attested in the extant corpus, and the evidence for the initial *o-* is either speculative or based on the reconstructions: *o*[*l*]- 'to receive' (Bu 14), cf. MM *ol-* 'to receive, to find', [*ordu*] 'camp' (Bu 6), cf. MM, WM *ordu* 'id.', [*o*]*ro-* 'to enter' (Bu 2), cf. MM, WM *oro-* 'id.' The Brāhmī script suggests the existence of one more vowel, *ι*, but its phonological status remains obscure.
13. There is a vowel harmony that is likely to be of a palatal nature.
14. There are two cases of lowering *u* > *o*: *qato* 'khatun' (KhT 1: 5), cf. OT *qatun*, Sogdian *xtwn* 'id.' *ǰalo-* 'to direct' (KhT 1: 10), cf. MM *ǰalu-* 'to direct', 'to make straight'.

7 One exception: Ašvar 'Ïšbara' (p.n.) (Bu 6).

15. There are sporadic changes of *i* to *a*: *ǰa-* 'to promise' (KhT 1: 3), cf. EMM and WMM *ǰa'a-*, EMM *ǰi'a-* 'to promise' (the verb may be morphologically complex in mainstream Mongolic), *taɣa* 'enemy' (Bu 4), cf. MM *dayyin* < *dayïn 'id.', *taya-* 'to worship' (KhT 1: 6), cf. EMM *tayi-* 'id.' In addition, there is also one reverse case with a change of *a* > *i*: *čiv* < *čig* 'time' (Bu 1), cf. MM, WM *čaɣ* 'id.'

3 Morphosyntax

3.1 *General Notes*

The Ruan-ruan language is clearly OV, with a clear preference for SOV, although OSV is also attested. It is agglutinative, with no prefixes and only suffixes. The argument structure is nominative/accusative. There are three major classes of words: nominals, including nouns, adjectives, pronouns, and numerals (but not a single numeral is attested in the extant corpus), verbs, and particles. Dependent clauses are linked to the main clause either directly by adnominal forms of verbs, or by constructions involving adnominal forms of verbs plus dependent nouns. There are no relative pronouns. Adjectives seem to be a subclass of nouns, as they can take plural or case marking (only genitive in our limited materials). Nouns have categories of plurality and case. Verbs have categories of tense, voice, mood, and probably aspect. Verbs differentiate between non-final forms (converbs), adnominals, and finite forms. There is a certain overlap between the last two. The tense of a converb is determined by the tense of a finite verbal form, i.e., tense markers are used only in finite forms.

3.2 *Nouns: Singular Marking*

A few words in Mongolic have a special singular form in *-n*. Already in MM it could be segmented mostly only on the diachronic level. In the Ruan-ruan language there is only one clear case in which this form can be analyzed as synchronic:

(1) … *darqa-n*[8] b[i]ti-be
… *official-SING* write-PAST
… *official* wrote (KhT 1: 11)

3.3 *Nouns: Plural Marking*

There are three plural suffixes in the Ruan-ruan language: *-nAr* ~ *-ńAr*, *-d*, and *-s*. There is a functional difference between Ruan-ruan *-nAr* ~ *-ńAr*, on the one

8 Cf. the plural form *darqa-d* on line ten of KhT.

hand, and the Mongolic plural marker *-nAr* with its Khitan counterpart *-ńər ~ -ńəń*, on the other. In both Mongolic and Khitan these suffixes are limited in usage, being reserved only for animate nouns: in MM for kinship terms and deities and in Khitan for humans (Shimunek 2017: 264). Meanwhile, in the Ruan-ruan language *-nAr ~ -ńAr* can be used with both animates and inanimates, see the following examples:

(2) [Ta]dpar *qa* *čoɣ-nar* [o]ro-[ɣa]-ǰu
Tadpar qaɣan *noble-PLUR* enter-[CAUS]-CI
Tadpar qaɣan made the *nobles* enter, and … (Bu 2)

(3) *pü*[*ker*]*-ner* Tadpar t[ala]-
ox-PLUR Tadpar capture-
Tadpar [will] capture *oxen* … (Bu 9)

(4) *te*[*mē*] *iŋi-ner* [a]č[i]-sar-ǰu
male.camel *female.camel-PLUR* load-?-CI
loading *male and female camels* … (Bu 17)[9]

(5) *biti-ńer* qaɣan
inscription-PLUR qaɣan
qaɣan of the *inscriptions* (KhT 1: 1)

(6) b[i]ti *ǰilo-nar* qra-nya-ɣuń
inscription *stone-PLUR* look-?-NML
looking at the inscription *stones* (KhT 1: 4)

(7) q[a]ɣa[n-u] *qato-ńar* düge-d
qaɣa[n-GEN] *qatun-PLUR* younger.brother-PLUR
khatuns and younger brothers of the qaɣan (KhT 1: 5)

(8) *tuwa-ńar* qaɣan törö-ks
tribal.name-PLUR qaɣan be.born-NPF
the qaɣan of *Tupas* was born (KhT 1: 9)

The plural suffix *-d* appears to be used more frequently in the Bu inscription, but among four reliable examples, two come from the KhT inscription, because

9 Note that in this example only the second (and the last) member of the list is marked with plural.

by the strange stroke of fate, in most cases in the Bu inscription nouns preceding the plural suffix *-d* are completely eroded (although the suffix itself is not). It seems that the usage of this suffix is restricted to animate nouns and may be animals. Numerous lacunae in the Bu inscription, if one analyses them contextually, invite an educated guess that this is indeed the case, but, of course, we will never know.

(9) … *nabu-d* bo[tuɣ]ńa-s qoń[i]y [i]r[e-y]
… *nabu-PLUR* camel.calf-PLUR sheep come-NP
… *nabu*, camel calves [and] sheep, which …, came, and … (Bu 10)[10]

(10) *čekēr-d* [a]-qsa
empty-PLUR [be]-NPF
[they] were *empty* (Bu 14)

(11) q[a]ɣa[n-u] qato-ńar *düge-d*
qaɣa[n-GEN] qatun-PLUR *younger.brother-PLUR*
khatuns and *younger brothers* of the qaɣan (KhT 1: 5)

(12) *darqa-d* ǰaya bi-
free.man-PLUR happy *be-*
free men were happy (KhT 1: 10)

There is also a denominal suffix *-čU-* that denotes members of a certain social group. It is used before the plural suffix *-d*. There is only one example of it in the corpus:

(13) … *+-čU-d-pAr* dar-p-ta taɣa a[y]u-?-?C[-VOICE]-ču
… X-*SGS-PLUR-INSTR* defeat-PAST-LOC enemy be.afraid-?-?-CI
… when defeated *by members* [*of a certain group*], enemies were afraid, and (Bu 4)

The plural suffix *-s* also occurs only once in our corpus:

(14) … nabu-d *bo*[*tuɣ*]*ńa-s* qoń[i]y [i]r[e-y]
… nabu-PLUR *camel.calf-PLUR* sheep come-NP
… nabu*, camel calves* [and] sheep, which …, came, and … (Bu 10)

10 *Nabu* is likely to be a name of some animal, for which there are no etymologies in other Mongolic languages.

3.4 *Nouns: Case Marking*

The nominative case is left unmarked (-Ø). The unmarked form can also fill the function of the (indefinite?) accusative case. The marked accusative case will be discussed below. I will start with unmarked examples of both the nominative and the accusative:

(15) [*Ta*]*dpar* *qa-Ø* *čoɣ-nar-Ø* [o]ro-[ɣa]-ǰu
Tadpar *qaɣan-NOM* *noble-PLUR-ACC* enter-[CAUS]-CI
Tadpar qaɣan made *the nobles* enter, and … (Bu 2)

(16) *pü*[*ker*]*-ner-Ø* *Tadpar-Ø* t[ala]-
ox-PLUR-ACC *Tadpar-NOM* capture-
Tadpar [will] capture *oxen* … (Bu 9)

(17) *te*[*mē*]*-Ø* *iŋi-ner-Ø* [a]č[i]-sar-ǰu
male.camel-ACC *female.camel-PLUR-ACC* load-?-CI
loading *male and female camels* … (Bu 17)

(18) … *qaɣan-Ø* buda qaɣan-u *uqa-qs-Ø* uqa-ǰu
qaɣan-NOM Buddha qaɣan-GEN *realize-NPF-ACC* realize-CI
qaɣan … knows lord Buddha's *knowledge*, and … (KhT 1: 2)

(19) … *darqa-n-Ø* b[i]ti-be
… *official-SING-NOM* write-PAST
… *official* wrote (KhT 1: 11)

The marked accusative appears as *-pī* in Bu, and as *-ɪ* in KhT.[11] The examples of marked accusative are as follows:

(20) … pa[ra-n] *qora-pī* kebi[r] qaǰar[-a]
… per[son-PLUR] *poison-ACC* steppe land[-LOC]
… people [received?] *poison* at the steppe lands (Bu 13)

(21) qaɣan *ksan-ɪ* ǰula-ba
qaɣan *regnal.year-ACC* shine(?)-PAST
[it] illuminated qaɣan's *reign* (KhT 1: 7)

11 Attested only in words with [+back] vocalism, therefore there was likely also a front *-i* in words with [–back] vocalism.

(22) *bod-ı* beg-ey-ńer bayyı-Ø dolu-ǰa-ǰu
tribe-ACC beg-?-PLUR be/stand-NP listen-COOP-CI
begs stand and listen to the *tribe* (KhT 1: 3)

The genitive forms in the Ruan-ruan language—as in MM—show considerable allomorphic variation depending on the last segment of the stem: *-U* after *-n* stems (two cases of *-Un* in KhT), *-Un* after consonant stems (one case of *-iń* in KhT), and *-n* after vowel stems (not attested in Bu). Examples:

(23) *Ašvar-un* [ordu]-da
Ïšbara-GEN [camp]-LOC
at *Ïšbara's* [camp] (Bu 6)

(24) *šińi-n* bodisatva
new-GEN Bodhisattva
new Bodhisattva (KhT 1: 1)

(25) … qaɣan-Ø *buda* *qaɣan-u* uqa-qs-Ø uqa-ǰu
qaɣan-NOM *Buddha* *qaɣan-GEN* realize-NPF-ACC realize-CI
qaɣan … knows *lord Buddha's* knowledge, and … (KhT 1: 2)

(26) *türūg* *qaɣan-un* drö taya-ǰu
türk *qaɣan-GEN* rule worship-CI
[they] worshiped the rule *of Turk qaɣan* (KhT 1: 5~6)

(27) *tün-ü* tüš-n[] tuwa
he-GEN entrust/support-ADN tribal.name
Tupa whom *he* supported/entrusted (KhT 1: 7)

In example (24) the genitive functions as a copula, while in example (27) it marks the subject of the dependent adnominal clause. Possession can be also expressed by simple juxtaposition without any case marking. See examples (5), (6), (8), and (21) above.

There are two locative markers attested in the corpus: *-dA* that appears in both Bu and KhT, and *-dU*, which is peculiar for Bu. Examples:

(28) … [Tad]par Muɣan qaɣan sa-nām (?) *čig-dü*
… Tadpar Muɣan qaɣan reside-PRES *time-LOC*
… *when* Tadpar and Muɣan qaɣans resided [together] (Bu 1)

(29) … +-čU-d-pAr *dar-p-ta* taɣa a[y]u-?-?C[-VOICE]-ču
… X-SGS-PLUR-INSTR *defeat-PAST-LOC* enemy be.afraid-?-?-CI
… *when defeated* by members [of a certain group], enemies were afraid, and (Bu 4)

(30) Ašvar-un [*ordu*]-*da*
Ïšbara-GEN [*camp*]-*LOC*
at Ïšbara's [*camp*] (Bu 6)

(31) qaɣan-un [*sina*]*pa-da*
qaɣan-GEN *domain-LOC*
at qaɣan's *domain* (KhT 1: 9~10)

The instrumental case marker *-pAr* is attested only in Bu. Examples:

(32) … *+-čU-d-pAr* dar-p-ta taɣa a[y]u-?-?C[-VOICE]-ču
… *X-SGS-PLUR-INSTR* defeat-PAST-LOC enemy be.afraid-?-?-CI
… when defeated *by members* [*of a certain group*], enemies were afraid, and (Bu 4)

(33) ke[n-ü] *ɣ*[*a*]*r*-[*pa*]*r*
who[-GEN] *hand-INSTR*
by whose *hands* (Bu 15)

(34) … *bül*[*e*]-*k*[*ü*]-*per* [qa]-d [qa]ɣan
… *churn-NF-INSTR* prince-PLUR qaɣan
… *by churning*, princes and qaɣan (Bu 18)

The ablative case marker *-č* is attested only in Bu. There is only one example:

(35) ken *irg*[*e*]-*č*
who *people-ABL*
who *from the people* (Bu 12)

The comitative case marker *-tU* (also known as the formative of possessive adjectival nominals) is attested only in Bu. Unfortunately, there is only one example where the noun before this marker is not eroded:

(36) *küǰü-tü* ke[n-ü] ɣ[a]r-[pa]r
strength-COM wh[o-GEN] hand-INSTR
by whose *strong* hands (Bu 15)

3.5 *Nomen Actoris*

Nomen actoris in *-či* is attested only in KhT. Unfortunately, there is only one example in which the noun before the suffix is fully readable:

(37) toɣo-ɣun *pügtig-či*
... count-NML *salvation-NA*
counting ... *those who attained salvation* (KhT 8)

3.6 *Pronouns*

There are only two pronouns attested in the corpus: the oblique stem *tün-* of the demonstrative **te-re* 'that', functioning as a third person personal pronoun, and the interrogative pronoun *ken* 'who'. Examples:

(38) *tün-ü* tüš-n[] tuwa
he-GEN entrust/support-ADN tribal.name
Tupa whom *he* supported/entrusted (KhT 1: 7)

(39) *ken* irg[e]-č
who people-ABL
who from the people (Bu 12)

(40) *ke*[*n-ü*] ɣ[a]r-[pa]r
who[*-GEN*] hand-INSTR
by *whose* hands (Bu 15)

3.7 *Adjectives*

As I have already mentioned above, adjectives in the Ruan-ruan language are essentially nouns with qualitative semantics. There are just few of them in the extant corpus, and two of them can take a case marker or a plural marker like all other nouns. In (42), the comitative form functions as an adnominal adjective.

(41) *čekēr-d* [a]-qsa
empty-PLUR [be]-NPF
[they] were *empty* (Bu 14)

(42) *küǰü-tü* ke[n-ü] ɣ[a]r-[pa]r
strength-COM wh[o-GEN] hand-INSTR
by whose *strong* hands (Bu 15)

(43) *šińi-n* bodisatva
new-GEN Bodhisattva
new Bodhisattva (KhT 1: 1)

(44) darqa-d *ǰaya* bi-
free.man-PLUR *happy* be-
free men were *happy* (KhT 1: 10)

3.8 *Verbs: General*

Verbal forms in the Ruan-ruan language can be roughly divided into three major groups: finite forms (also including adnominal forms most of which can also function as finite), converbs, and nominalized forms. Voices are expressed by suffixes that are always found in a non-final position, in other words, they must be followed by another suffix in order to create a complete grammatical word form.

3.9 *Verbs: Finite Forms*

The present tense marker in *-nam* is attested only once, but it seems to express a *praesens historicum*:

(45) … [Tad]par Muɣan qaɣan *sa-nām* (?) čig-dü
… Tadpar Muɣan qaɣan *reside-PRES* time-LOC
… when Tadpar and Muɣan qaɣans *resided* [together] (Bu 1)

Past tense in *-bA* is the most frequent past tense form in our corpus, although as a predicative it occurs only in KhT, cf. the examples below. In (48) *-bA* seems to be followed by the distant past in *-ǰ*.

(46) … darqa-n *b*[*i*]*ti-be*
… official-SING *write-PAST*
… official *wrote* (KhT 1: 11)

(47) qaɣan ksan-ı *ǰula-ba*
qaɣan regnal.year-ACC *shine*(*?*)*-PAST*
[it] *illuminated* qaɣan's reign (KhT 1: 7)

(48) ubi-ǰ *ǰalo-ba-ǰ*
?-DPAST *direct-PAST-DPAST*
[he] did X. [He] *directed* [them] (KhT 1: 10)

In contrast to MM and other Mongolic languages, where this function is preserved only rudimentarily (Vovin 2019, note 2 to column 4), in the Ruan-ruan language, besides being predicative, the past form in *-bA* can also function as an adnominal/nominalized form:

(49) … +-čU-d-pAr *dar-p-ta* taɣa a[y]u-?-?C[-voice]-ču
… X-SGS-PLUR-INSTR *defeat-PAST-LOC* enemy be.afraid-?-?-CI
… *when defeated* by members [of a certain group], enemies were afraid, and (Bu 4)

(50) tüg-ǰü *uqa-ba-r-ńar* …
be.enough-CI *realize-PAST-NML-PLUR* …
are enough and *those who realized* … (KhT 1: 7)

There are also the variants *-va-* and *-bī* (in Bu only). It is not clear whether *-bī* is a cognate of MM feminine past in *-bi*, as the preceding context is completely eroded in Bu 2.

(51) …ǰ[*ar*]-*va-r* ǰan[ti-ǰu] …
… *send-PAST-NML* hi[t-CI] …
… hit *the messengers*, and … (Bu 7)

The *nomen perfecti* (in Poppe's terminology) in *-qsa* ~ *-kse* is essentially a past adnominal form which can also function predicatively. In KhT it consistently undergoes an apocope: *-qsa* ~ *-kse* > *-qs* ~ *-ks*. There is only one example in Bu. Examples of the finite predicative usage:

(52) čekēr-d [*a*]-*qsa*
empty-PLUR [*be*]-*NPF*
[they] *were* empty (Bu 14)

(53) ksıı Ańaqay [.?.]-ıtı-n *ǰa-qs*
country Ańaqay [title/-V-ıtı-n?] *promise-NPF*
promised to country's Ańaqay [title?] (KhT 1: 2–3)

(54) tuwa-ńar qaɣan *törö-ks*
tribal.name-PLUR qaɣan *be.born-NPF*
the qaɣan of Tupas *was born* (KhT 1: 9)

Only one example of the nominalized usage is attested:

(55) … qaɣan buda qaɣan-u *uqa-qs* uqa-ǰu
qaɣan Buddha qaɣan-GEN *realize-NPF* realize-CI
qaɣan … knows lord Buddha's *knowledge*, and … (KhT 1: 2)

There are only two identical examples of the adnominal usage:

(56) šińi-n bodisatva *törö-ks* qaɣan
new-GEN Bodhisattva *be.born-NPF* qaɣan
a qaɣan, *who was born* as a new Bodhisattva (KhT 1: 1–2, 8)

The preterite *-lU*[*pA*] is attested only once in Bu in a nominalized form:

(57) qapa bar-ǰu *gle-lü*[*pe*]*-r* kü
surrounding take-CI *talk-PRET-NML* EP
shut [themselves] in and *talked* (Bu 3)

The deductive present in *-yU* is attested only once in KhT as *ki-yü* 'do-DED.PRES' from the verb *ki-* 'to do', 'to make' in a context that is significantly eroded and, therefore, resists an analysis.

The distant past in *-ǰ* is attested only in KhT. It seems to occur with three verbs, but only one of them, *ǰalo-* 'to direct' is understood, while the two others, *igbi-* (KhT 1: 6) and *ubi-* (KhT 1: 10, see the example below) are opaque.

(58) *ubi-ǰ* *ǰalo-ba-ǰ*
?*-DPAST* *direct-PAST-DPAST*
[he] *did X*. [He] *directed* [them] (KhT 1: 10)

The *nomen futuri* suffix -[*q*]*uy* ~ *-k*[*ü*], which functions as a marker of a present-future tense is attested only in Bu. The [+back] -[*q*]*uy* is attested on column 10 with the previous stem eroded, while the [-back] *-k*[*ü*] appears only once in the nominalized function:

(59) … *bül*[*e*]*-k*[*ü*]*-per* [qa]-d [qa]ɣan
… *churn-NF-INSTR* prince-PLUR qaɣan
… *by churning*, princes and qaɣan (Bu 18)

The adnominal form in *-n* ~ *-n*[] is not found as a productive form in mainstream Mongolic languages, but an adnominal *-n* is attested in Khitan.

(60) … [*di*]*gi-n* qa-n
… *die-ADN* qaɣan[12]
… the qaɣan, *who passed away* (Bu 3)

(61) … ɣačar aru tar-ǰu *ǰar-n*[]…
… land back scatter-CI *hurry-ADN* …
… *hurried* to scatter in the back of the land … (Bu 5)

In (61), as also in (62), the adnominal form is likely to be used in a predicative function, or, alternatively, there was a locative case marker *-A* after *-n* that is eroded.

(62) tün-ü *tüš-n*[] tuwa
he-GEN *entrust/support-ADN* tribal.name
Tupa *whom* he *supported/entrusted* (KhT 1: 7)

3.10 *Nominalizers*

There are four nominalizers in the Ruan-ruan language: *-r*, *-čA*, *-ɣuń ~ ɣun*, and *-ɣol*. The first one is shared by both Bu and KhT, the second one is found only in Bu, and the last two are specific for KhT.

(63) … [*q*]*u*[*ri*]*-r* ndü-t[i]-ǰU
… *gather-NML* create-*EVS*-CI
… creating *gathering* with all their strength (Bu 3)

(64) qapa bar-ǰu *gle-lü*[*pe*]*-r* kü
surrounding take-CI *talk-PRET-NML* EP
shut [themselves] in and *talked* (Bu 3)

(65) … [puru]pu *tal-u-ǰa-r*
… [heavi]ly *plunder-COOP-NML*
… *the fact that* [they heavi]ly *plundered together* (Bu 6)

(66) …*ǰ*[*ar*]*-va-r* ǰan[ti-ǰu]…
… *send-PAST-NML* hi[t-CI]…
… hit *the messengers*, and … (Bu 7)

12 In EMM *qan* 'qaɣan', 'emperor' (MNT §123, §125, §126, §127, §152, §155, §160, §174, §177 etc.) can be a phonetic variant of *qa'an ~ qaqan*.

(67) tuwa *pUrO-r* čeči-re
Tupa *sin(?)-NML* stab-CF
In order to exterminate [their] *sins*, Tupa (KhT 1: 4)

(68) tüg-ǰü *uqa-ba-r-ńar …*
be.enough-CI *realize-PAST-NML-PLUR …*
are enough and *those who realized …* (KhT 1: 7)

(69) … [qa]-d *ab*[*V*]*-ča …*
… [prince]-PLUR *take-NML …*
… *taking* [prince]s … (Bu 8)

(70) b[i]ti ǰilo-nar *qra-nya-ɣuń*
inscription stone-PLUR *look-?-NML*
looking at the inscription stones (KhT 1: 4)

(71) *toɣo-ɣun* pügtig-či
… count-NML *salvation-NA*
counting … those who attained salvation (KhT 8)

(72) ksırı ergin *bar-ɣo*[*l*]
country erkin *take-NML*
country's erkins and *collectors* (KhT 1: 6)

3.11 *Verbalizers*

The verbalizers *-lA* and *-či*[*l*]*i*[*A*]- occur only in Bu on columns sixteen and twelve, respectively, but the nominal stems preceding them are eroded. The first one is probably cognate to the general MM and WM verbalizer *-lA*, and the second to the MM and WM quality verbalizer *-čilA-*.

3.12 *Converbs*

There are several converbs in the Ruan-ruan language, the most frequent being the converbum imperfecti in *-ǰU*, which as well as the converbum praeparativum in *-rUn*, and the nomen praesentis in *-yi* (functioning only as a converb-like form in Khitan) are shared by Bu and KhT, although the last one is only reconstructed in Bu. The converbum modale in *-n* and the converbum finale in *-rA* are attested only in KhT, while the converbum perfecti in *-'Āt* occurs only in Bu. The converbum imperfecti in *-ǰU* denotes successive actions. Examples:

(73) [Ta]dpar qa čoɣ-nar [*o*]*ro*-[*ɣa*]-*ǰu*
Tadpar qaɣan noble-PLUR *enter*-[*CAUS*]-*CI*
Tadpar qaɣan *made* the nobles *enter, and* … (Bu 2)

(74) … [q]u[ri]-r *ndü-t*[*i*]-*ǰü*
… gather-NML *create-EVS-CI*
… *creating* gathering with all their strength

qapa *bar-ǰu* gle-lü[pe]-r kü
surrounding *take-CI* talk-PRET-NML EP
shut [*themselves*] *in* and talked (Bu 3)

(75) … qaɣan buda qaɣan-u uqa-qs *uqa-ǰu*
qaɣan Buddha qaɣan-GEN realize-NPF *realize-CI*
qaɣan … *knows* lord Buddha's knowledge, *and* … (KhT 1: 2)

(76) bod-ı beg-ey-ńer bayy ı-Ø *dolu-ǰa-ǰu*
tribe-ACC beg-?-PLUR be/stand-NP *listen-COOP-CI*
begs stand and *listen* to the tribe (KhT 1: 3)

(77) türūg qaɣan-un drö *taya-ǰu*
türk qaɣan-GEN rule *worship-CI*
[they] *worshiped* the rule of Turk qaɣan (KhT 1: 5~6)

The converbum modale in *-n* indicates an action that is either closely consecutive or practically simultaneous with the following action. Examples:

(78) biti-ńer qaɣan
inscription-PLUR qaɣan
The qaɣan of the inscriptions

digi-n šińi-n bodisatva törö-ks qaɣan
die-CM new-GEN Bodhisattva be.born-NPF qaɣan
passed away and qaɣan who was reborn as new Bodhisattva (KhT 1: 1–2)

(79) tuwa pUrO-r čeči-re pügtig *ńele-n*
Tupa sin(?)-NML stab-CF saved *join-CM*
In order to exterminate [their] sins, Tupa *joined* the saved, *and* (KhT 1: 4)

(80) Niri qaɣan türüg qaɣa[n] *gi̯ǐ-n*
Niri qaɣan türk qaɣan *follow-CM*
[they] *followed* Niri qaɣan, qaɣan of Türks,

ubi-ǰ ǰalo-ba-ǰ
?-DPAST direct-PAST-DPAST
and [he] directed them (KhT 1: 10)

The converbum perfecti in *-ʾĀt* is attested once (Bu 12) after a verbalized stem with a nominal root that is eroded. The converbum praeparativum in *-rUn* indicates the reason for the following action. Examples:

(81) kö[be'ü-d] [*ge*]*l*[*e*]-*r*[*ü*]*n*
so[n-PLUR] [*sa*]*y-CP*
as the sons *said* (Bu 16)

(82) darqa-d ǰaya *bi-rün*
free.man-PLUR happy *be-CP*
because free men *were* happy (KhT 1: 10–11)

The nomen praesentis in *-yi* can be reconstructed twice in Bu, and it is attested once in KhT, where it merges with the preceding *-yI* of the stem. Unlike MM, where *-(U)yi* can function as both a converb and a verbal noun, in the Ruan-ruan language *-yi* functions only as a converb, like *-i* in Khitan (Kane 2009: 149–150):

(83) bod-ı beg-ey-ńer *bayyı-Ø* dolu-ǰa-ǰu
tribe-ACC beg-?-PLUR *be/stand-NP* listen-COOP-CI
begs *stand and* listen to the tribe (KhT 1: 3)

The converbum finale in *-rA* introduces the purpose of an action: 'in order to …':

(84) tuwa pUrO-r *čečı-re* pügtig ńele-n
Tupa sin(?)-NML *stab-CF* saved join-CM
In order to exterminate [their] sins, Tupa joined the saved, and (KhT 1: 4)

3.13 *Voice Markers*

The causative voice marker *-ɣa-* can only be reconstructed on the basis of context, but the cooperative voice marker *-ǰa-* is actually attested.

(85) … [puru]pu *tal-u-ǰa-r*
… [heavi]ly *plunder-COOP-NML*
… *the fact that* [they heavi]ly *plundered together* (Bu 6)

(86) bod-ı beg-ey-ńer bayyı-Ø *dolu-ǰa-ǰu*
tribe-ACC beg-?-PLUR be/stand-NP *listen-COOP-CI*
begs stand and *listen* to the tribe (KhT 1: 3)

3.14 *Particles*

The only particle attested in the corpus (only in Bu) is the emphatic particle *kü*. Examples:

(87) … [di]gi-n qa-n ert[e] *k*[*ü*] …
… die-ADN qaɣan earlier *EP* …
… the qaɣan, who passed away, earlier … (Bu 3)

(88) qapa bar-ǰu gle-lü[pe]-r *kü*
surrounding take-CI talk-PRET-NML *EP*
shut [themselves] in and talked (Bu 3)

(89) … o[l-ɣa-ba] *kü* čekēr-d [a]-qsa
… recei[ve-CAUS-PAST] *EP* empty-PLUR [be]-NPF
… were made to receive … and were empty (Bu 14)

3.15 *Khitan-Related Specific Morphology*

Besides the adnominal *-n* ~ *-n*[] discussed above (see the examples (60)–(62)), there is also the Ruan-ruan past adnominal form that does not occur in mainstream Mongolic, but is attested in Khitan. It appears exclusively in Keregentas inscriptions: *-pu* ~ *-pun*, apparently related to Khitan past adnominal *-buń*:

(90) *dar-pu* qaɣan
defeat-PAST.ADN qaɣan
Defeated qaɣan (Ke 1)

(91) *šim-pun* qaɣan
decease-PAST.ADN qaɣan
Deceased qaɣan (Ke 2)

4 Vocabulary

A

[*a*-] 'to be'. Bu 14. Cf. MM *a*- 'id.'
ab[*V*]- 'to take'. Bu 8. Cf. MM, WM *ab*- 'id.'
[*a*]*č*[*i*]- 'to load'. Bu 17. Cf. MM *ači*- 'to load', 'to put a load on'.
Ańaqay, p.n. KhT 1: 2.
aru 'back'. Bu 5. Cf. MM, WM *aru* 'id.'
Ašvar, *Ïšbara*, p.n. Bu 6.
a[*y*]*u*- 'to be afraid'. Bu 4. Cf. MM, WM *ayu*- 'id.'

B

bar- 'to take'. Bu 3, KhT 1: 6. Cf. MM, WM *bari*- 'id.'
bayi- 'to be', 'to stand'. KhT 1: 3. Cf. MM *bayyi*- 'id.'
beg-ey 'bek-?'. KhT 1: 3. Cf. OT *beg* 'bek' < EMC *paek* 伯 'elder'.
biti 'inscription'. KhT 1: 1, 1–4. See also *bitig*. Cf. MM, WM *bičig* 'writing', 'inscription'.
biti- 'to write'. KhT 1: 11.
bitig 'inscription'. KhT 1: 9, 1–11. See also *biti*.
bod 'tribe'. KhT 1: 3. Cf. OT *bod* 'id.'
Bodisatva 'Bodhisattva'. KhT 1: 1, 1–8.
bo[*tuɣ*]*ńa* 'camel calf'. Bu 10. Cf. EMM *botuqan* 'id.' (MNT §78) and WMM *botaɣa* ~ *botaɣan* 'id.' (Mu 25, 122, 270).
buda 'Buddha'. KhT 1: 2.
bül[*e*]- 'to churn'. Bu 18. Cf. EMM *büle*- 'id.'

Č

čeči- 'to stab'. KhT 1: 4. Cf. EMM *seči*- 'to stab'.
čekēr 'empty'. Bu 14. EMM *čekēre* ~ *čekērei* 'id.' (MNT §96, §104).
čiv < *čig*, 'time'. Bu 1. Cf. MM, WM *čaɣ* 'id.'
čoɣ 'noble'. Bu 2. Cf. EMM *čoɣ-tai* (MNT §115), *čoɣ-tu* (PP 27.1) 'brilliant', 'splendid', 'magnificent'.

D

dar- 'to defeat'. Bu 4, Ke 1. Cf. MM, WM *daru-* 'id.'

darqan 'free man', 'official'. KhT 1: 10, 1–11. Cf. EMM *darqan,* PLUR *darqa-d* 'free man', 'official'.

dA + ×*ɣ* +, unclear. Bu 16.

digi-, [*di*]*gi-* 'to die', 'to pass away'. KhT 1: 1, Bu 3. Cf. Khitan *tege-* ~ *tige-* 'id.'

dolu- 'to listen'. KhT 1: 3. Cf. Pre-classical WM *daɣula-* 'id.', MM *da'u* 'voice'.

drö 'rule', 'law', 'principle'. KhT 1: 6. Cf. MM *törö* and WM *törü* 'id.'

düge 'younger brother'. KhT 1: 5. Cf. MM *de'ü*, WM *degü* 'id.'

E

ert[*e*] (spelled *hert*[*e*]) 'early', 'earlier'. Bu 3. Cf. MM, WM *erte* 'id.' < OT *erte* 'early', 'in the morning'.

ergin ~ *irgin* (spelled *härgin*), title. KhT 1: 6. Cf. OT *erkin* ~ *irkin* 'id.'

G

gle-, [*ge*]*l*[*e*]- 'to talk'. Bu 3, 16. Cf. MM, WM *kele-* 'to talk', 'to speak'.

[*g*]*iǰi-* 'to follow'. KhT 1: 10 (possibly [*k*]*iǰi-* 'to approach'). Cf. MM *giǰi-/ kiǰi-* 'id.'

Ɣ

ɣačar 'land, earth, place'. Bu 5. See also *qaǰar*. Cf. MM *ɣaǰar*, *qaǰar*, WM *ɣaǰar* 'id.'

ɣ[*a*]*r* 'hand'. Bu 15. Cf. MM, WM *ɣar* 'id.'

I

igbi- (spelled *higbi-*), unclear. KhT 1: 6.

iŋi- 'female camel'. Bu 17. Cf. WMM *ingen* 'id.'

[*i*]*r*[*e*]- 'to come'. Bu 10. Cf. MM *ire-* 'id.'

irg[*e*] (spelled *hirg*[*e*]) 'people'. Bu 12. Cf. MM and WM *irge* ~ *irgen* 'id.'

J

ǰa- 'to promise'. KhT 1: 3. Cf. EMM and WMM *ǰa'a-*, EMM *ǰi'a-* 'to promise'.

ǰalo- 'to direct'. KhT 1: 10. Cf. MM *ǰalu-* 'to direct', 'to make straight'.

ǰal[*va*]- 'to connect'. Bu 11. Cf. EMM *ǰalqa-* 'id.' (MNT §114) and WMM *ǰalqa-* ~ *ǰalɣa-* 'id.' (L 1272, Mu 200).

ǰan[*ti*]- 'to hit'. Bu 7. Cf. MM *ǰančі-* 'id.'

ǰar- 'to hurry'. Bu 5. Cf. WMM *ǰāra-* (Mu 204) ~ EMM *yāra-* 'id.' (HYYY 18b.8).

ǰar- 'to send', Bu 7. Cf. MM *ǰaru-* 'id.'

ǰaya 'to be happy'. KhT 1: 10. Cf. EMM *ǰaya'an* 'id.'

ǰilo ‘stone’. KhT 1: 4. Cf. MM *čila’un* ‘id.’
ǰula- ‘to shine’ (?). KhT 1: 7. Cf. MM *ǰula* ‘light’, ‘torch’ < WOT *ǰula (EOT *yula*) ‘id.’
ǰ[ ], unclear. KhT 1: 11.

K
kebir ‘steppe’. Bu 13. Cf. EMM *ke’er ~ keher* ‘field’ (MNT §56, §195, HYYY 2b.2), WMM *keyēr* ‘steppe’ (Mu 94), *kehēr* ‘desert’ (IM 439).
ken, *ke*[*n*] ‘who’. Bu 12, 15. Cf. MM *ken* ‘id.’
ki- ‘to do’, ‘to make’. KhT 1: 9. Cf. MM *ki-* ‘id.’
kǰi- ‘to approach’. KhT 1: 10. See *giǰi-*.
kö[*be’ü*] ‘son’. Bu 16. Cf. MM *köbe’ü*(*n*), WM *köbegü*(*n*) ‘id.’
ksan ‘regnal year’. KhT 1: 7. Cf. Tumshuqese *χsana-* ‘id.’
kṣırı ‘country’. KhT 1: 2, 1: 6. Cf. Tumshuqese *χšera* ‘id.’
kü, *k*[*ü*], emphatic particle. Bu 3, 14. Cf. MM *kü* ‘id.’
küǰü ‘strength’. Bu 15. MM, WM *küčü*(*n*) ‘id.’

M
me[*de*]- ‘to know’. Bu 8. Cf. MM *mede-* ‘id.’
Muγan, p.n. Bu 1.

N
nabu, name of some animal (?). Bu 10.
ndü- ‘to create’. Bu 3. Cf. MM *nödü-* ‘to build’ (MNT §249, §265)
Nīrı, p.n. KhT 1: 5, 1–10.

Ń
ńele- ‘to join’. KhT 1: 4. Cf. EMM *neyile-*, WMM *neile-* ‘id.’

O
o[*l*]- ‘to receive’. Bu 14. Cf. MM *ol-* ‘to receive, to find’
[*ordu*] ‘camp’ Bu 6. Cf. MM, WM *ordu* ‘id.’
[*o*]*ro-* ‘to enter’. Bu 2. Cf. MM, WM *oro-* ‘id.’

P
paγ, unclear. KhT 1: 11.
pa[*ran*] ‘person, people, population’. Bu 13. Cf. MM *haran* ‘id.’
pars tiger? Or Persia? Bu 23.
pAlksI-, unclear. KhT 1: 6.
puγan, unclear. KhT 1: 9.
[*puru*]*pu* ‘like a flood, heavily’. Bu 6. Cf. EMM *huru’u* ‘id.’

pUrO- 'to sin' (?). KhT 1: 4. No apparent Mongolic parallels.
pügtig 'saved' (?). KhT 1: 4, 1–8. Cf. OT *bögtäg*, Sogdian *βwγtk* 'id.'
pü[*ker*] 'ox'. Bu 9. Cf. MM *hüker* 'id.'
pü[*ne*]*ken* 'fox'. Bu 9. Cf. MM *hünegen* 'id.'

Q

qa, 'qaɣan', 'supreme ruler', 'emperor', see also *qaɣan*. Bu 2. Cf. EMM, Khitan *qa* 'id.'
qa, unclear. KhT 1: 11.
qaɣan, [*qa*]*ɣan* 'qaɣan', 'supreme ruler', 'emperor'. Bu 1, 11, 18; Ke 1, 2; KhT 1: 1, 1–2 (twice), 1–5 (three times), 1–7, 1–8, 1–9 (twice), 1–10 (twice).
qaǰar 'land, earth, place'. Bu 13. See also *ɣačar*. Cf. MM *ɣaǰar*, *qaǰar*, WM *ɣaǰar* 'id.'
qan, 'qaɣan', 'supreme ruler', 'emperor', see also *qaɣan*. Bu 3.
qapa 'surrounding', 'enclosure'. Bu 3. Cf. MM *qa'a-*, WM *qaɣa-* 'to enclose'.
qato 'khatun'. KhT 1: 5. Cf. OT *qatun*, Sogdian *xtwn* 'id.' Ultimately from Xiong-nu *qa-tu-n.
qońiy 'sheep'. Bu 10. Cf. MM *qonin* 'id.' ? > OT *qoń* 'id.'
qora 'poison'. Bu 13. Cf. WMM *qora* 'id.' (Mu 302) and EMM *qoro* 'id.' (MNT §67).
qra- 'to look'. KhT 1: 4. Cf. MM *qara-* 'id.'
[*q*]*u*[*ri*]- 'to gather'. Bu 3. Cf. MM *quri-* 'id.'

S

sa- 'to live', 'to dwell', 'to reside'. Bu 1. Cf. Khitan *sa-*, MM *sa'u-*, WM *sayu-* 'id.'

Š

šim- 'to die (of an illness ?)'. Ke 2. Cf. Khitan *s.em.ii-* 'to die of an illness', but we might expect just the meaning 'to die' in the language of Keregentas.
[*šina*]*pa* 'domain'. KhT 1: 10. Cf. MM *šina'a* 'id.'
šińi 'new'. KhT 1: 1, 1–8. Cf. MM *šine* ~ *šini*, WM *šine* 'id.'

T

Tadpar, [*Tad*]*par*, [*Ta*]*dpar*, p.n. Bu 9, 1, 2, 11.
taɣa 'enemy'. Bu 4. Cf. MM *dayyin* < *daɣïn 'id.'
tal- 'to plunder, to capture'. Bu 6. Cf. MM *tala-* 'id.'
t[*ala*]- see *tal-*. Bu 9.
tar- 'to scatter'. Bu 5. Cf. MM *tara-*, *tar-* 'to scatter' ? < OT *tar-* ~ *tara-* 'to scatter', 'to disperse'.
taya- 'to worship'. KhT 1: 6. Cf. EMM *tayi-* 'id.'
te[*mē*] 'male camel'. Bu 17. Cf. EMM *teme'en*, EMM and WM *temegen*, EMM *temē* (ZYYY 377), WM *temē* (IM 448).

toɣo- 'to count'. KhT 1: 8. Cf. EMM *to'o-*, WMM *tō-* 'id.'
törö- 'to be born'. KhT 1: 1, 1–8, 1–9.
tU[], unclear. KhT 1: 8.
tuwa, tribal name. KhT 1: 4, 1–7, 1–9.
tüg- 'to be enough'. KhT 1: 7. Cf. MM *tüge-* 'id.'
tün-, oblique stem of *tere* 'that'. KhT 1: 7. Cf. WMM *tūn-*, EMM *te'ün-* 'id.'
türüg ~ türüg 'Türk'. KhT 1: 5, 10.
tüš- 'to entrust', 'to support'. KhT 1: 7. Cf. EMM *tüši-* 'to entrust', 'to rely upon', possibly also 'to support'.

U
ubi-, unclear. KhT 1: 10.
uqa- 'to realize'. KhT 1: 2 (twice), 1–7.

Ü
ügbü (spelled *hügbü*), unclear. KhT 1: 3.

+/[+]/-/*X*/[]
+bakro, unclear. Bu 22.
+sA[], unclear. KhT 1: 11.
+tir, unclear, Bu 21.
[+]*ksA-či*, unclear. KhT 1: 6.
-gtīr, unclear. Bu 11.
Xa+, unclear Bu 8.
[]*IksA*[], unclear. KhT 1: 8.

5 Texts

5.1 *Brāhmī Bugut Inscription: Transcription and Glossing*

1.	... [*Tad*]*par*	*Muɣan*	*qaɣan*	*sa-nām* (?)	*čig-dü*
	... Tadpar	Muɣan	qaɣan	reside-PRES	time-LOC

2.	... + + *bī* + +*-tu*	[*Ta*]*dpar*	*qa*	*čoɣ-nar*	*o*]*ro-*[*ɣa*]*-ǰu* + +
	... + +-PAST + +-LOC	Tadpar	qaɣan	noble-PLUR	enter-[CAUS]-CI + +

3.	... [*di*]*gi-n*	*qa-n*	(*h*)*ert*[*e*]	*k*[ü] + +	[*q*]*u*[*ri*]*-r*
	... die-ADN	qaɣan	earlier	EP + +	gather-NML

	ndü-t[*i*]*-ǰü*	*qapa*	*bar-ǰu*	*gle-lü*[*pe*]*-r kü*
	create-EVS-CI	surrounding	take-CI	talk-PRET-NML EP
4.	… *+-čU-d-pAr*	*dar-p-ta*	*taɣa*	*a*[*y*]*u-*?-?C$_{[-voice]}$*-ču*
	… X-SGS-PLUR-INSTR	defeat-PAST-LOC	enemy	be.afraid-?-?-CI
5.	… + + + *ɣačar*	(*h*)*aru*	*tar-ǰu*	*ǰar-n*[ ] + +
	… + + + land	back	scatter-CI	hurry-ADN + +
6.	… [*puru*]*pu*	*tal-u-ǰa-r*/*ǰu*	*Ašvar-un*	[*ordu*]*-da* + +
	… [heavi]ly	plunder-COOP-NML/-CI	Ïšbara-GEN	[camp]-LOC + +
7.	… *-tU* + +	*-Un*	*ǰ*[*ar*]*-va-r*	*ǰan*[*ti-ǰu*]
	… -COM + +	-GEN	send-PAST-NML	hi[t-CI]
8.	… [*qa*]*-d*	[*h*]*ab*[*V*]*-ča*	*Xa* +	*me*[*de-ǰ*]*ü* + + + +
	… [prince]-PLUR	take-NML	Xa +	kn[ow-i]ng + + + +
9.	… *-nAr*	*pü*[*ne*]*ken*	*pü*[*ker*]*-ner*	*Tadpar*	*t*[*ala*]-
	… -PLUR	fox	ox-PLUR	Tadpar	capture-
10.	… -[*q*]*uɣ*	*nabu-d*	*bo*[*tuɣ*]*ńa-s*	*qoń*[*i*]*y*	[*i*]*r*[*e-y*]
	… -NF	nabu-PLUR	camel.calf-PLUR	sheep	come-NP
11.	… [*qa*]*ɣan-u*	*+-gtīr*	*ǰal*[*va-y*]	*Tadpar* +?
	… qaɣan-GEN	+-gtīr	conne[ct-NP]	Tadpar +?
12.	… *-či*[*l*]*i*[*A*]*-ʾĀt*	*ken*	(*h*)*irg*[*e*]*-č* …
	… -QV-CPF	who	people-ABL …
13.	… *pa*[*ra-n*]	*qora-pī*	*kebi*[*r*]	*qaǰar*[*-a*](?)
	… per[son-PLUR]	poison-ACC	steppe	land[-LOC](?)
14.	… *o*[l-*ɣa-ba*]	*kü*	*čekēr-d*	[*a*]*-qsa* +
	… recei[ve-CAUS-PAST]	EP	empty-PLUR	[be-]NPF +
15.	… + *-t*[*U*] +	*küǰü-tü*	*ke*[*n-ü*]	*ɣ*[*a*]*r-*[*pa*]*r*
	… + -COM +	strength-COM	wh[o-GEN]	hand-INSTR

16.	… + + *-lA*	*kö*[*be'ü-d*]	[*ge*]*l*[*e*]*-r*[*ü*]*n*	*dA* + ×ɪɣ +
	… + + -VBL(IMP)	son-PLUR	say-CP	dA + ×ɪɣ +

17.	… + *-d-*[*U*]*n*	*te*[*mē*]	*iŋi-ner*	[*a*]*č*[*i*]*-sar-ǰu*
	… + -PLUR-GEN	male.camel	female.camel-PLUR	load-?-CI

18.	… + + + *bül*[*e*]*-k*[*ü*]*-per*	[*qa*]*-d*	[*qa*]*ɣan*
	… + + + churn-NF-INSTR	prince-PLUR	qaɣan

19. Completely eroded. **20.** Completely eroded. **21.** … + *tir* + + … Glossing impossible. **22.** … + *bakro* Glossing impossible. **23.** … *ra pars*? tiger?/Persia? **24.** Completely eroded.

5.2 *Brāhmī Bugut Inscription: Tentative Translation*

1. … when Tadpar and Muɣan qaɣans resided [together] **2.** … Tadpar qaɣan made the nobles enter, and **3.** … the qaɣan, who passed away, earlier … creating gathering with all [their] strength shut [themselves] in and talked. **4.** … when the enemies were defeated by members [of a certain social group], [they] were afraid, and **5.** … hurried to scatter in the back of the land … **6–7.** … the fact that [they heavi]ly plundered together / [They heavi]ly plundered together, and at Išbara's [camp] with … [he?] hit the messengers of X-GEN. **8.** … taking princes … knowing … **9–10.** … Tadpar will capture X-PLUR, foxes, and oxen … nabu (?), camel calves [and] sheep, which …, came and **11.** … connecting to qaɣan's X, Tadpar … **12.** … after making N into V, who from the people … **13.** … people … poison at the steppe lands **14.** … were made to receive … and were empty … **15.** … by … by whose strong hands **16.** … do X! As sons said … **17.** … loading male and female camels of X-PLUR, and **18.** … by the churning, princes [and] qaɣan **19–22.** [Completely or almost completely eroded, no interpretation is possible] **23.** … tiger? / Persia? … **24.** [Completely eroded, no interpretation is possible].

5.3 *Khüis Tolgoi Inscription* (*Stone One*)*: Transcription and Glossing*

1.	*biti-ńer*	*qaɣan*	*digi-n*	
	Inscription-PLUR	qaɣan	die-CM	
	šińi-n	*bodisatva*	*törö-ks*	
	new-GEN	Bodhisattva	be.born-NPF	
2.	*qaɣan*	*buda*	*qaɣan-u*	*uqa-qs*
	qaɣan	Buddha	qaɣan-GEN	realize-NPF

	uqa-ǰu	*ksırı*	*Ańaqay*
	realize-CI	country	Ańaqay

3.

	[?]-*ıte-n*		*ǰa-qs*		
	[title-iten?] / Vite-CM		promise-NPF		
	bod-ı	*beg-ey-ńer*	*bayyı-Ø*	*dolu-ǰa-ǰu*	*hügbü* +?
	tribe-ACC	beg-?-PLUR	be/stand-NP	listen-COOP-CI	? ?

4.

	b[*i*]*ti*	*ǰilo-nar*	*qra-nya-ɣuń*
	inscription	stone-PLUR	look-?-NML
	tuwa	*pUrO-r*	*čeči-re*	*pügtig*	*ńele-n*
	tribal.name	sin(?)-NML	stab-CF	saved	join-CM

5.

	[+] *q*[*a*]*ɣa*[*n-u*]	*qato-ńar*	*düge-d*
	[+] qaɣa[n-GEN]	qatun-PLUR	younger.brother-PLUR
	nīrı	*qaɣan*	*türūg*	*qaɣan-*
	Niri	qaɣan	türk	qaɣan-

6.

	-un	*drö*	*taya-ǰu*	*ksırı*	(*h*)*ergin*	*bar-ɣo*[*l*]
	-GEN	rule	worship-CI	country	title/people	take-NML
	pAlksI-r	[+]*ksA-či*	(*h*)*igbi-ǰ*			
	?-NML	?-NA	?-PAST			

7.

	tüg-ǰü	*uqa-ba-r-ńar*	*qaɣan*	*ksan-ı*
	be.enough-CI	realize-PST-NML-PLUR	qaɣan	regnal.year-ACC
	ǰula-ba	*tün-ü*	*tüš-n*[]	*tuwa*
	shine(?)-PAST	he-GEN	support-ADN	tribal.name

8.

	[]*IksA*[]	*tU*[]	*toɣo-ɣun*	*pügtig-či*
	?	?	count-NML	salvation-NA
	šińi-n	*bodisatva*	*törö-ks*	*qaɣan*
	new-GEN	Bodhisattva	be.born-NPF	qaɣan

9.

	[+]*l*[][+]	*ki-yü*	*un*	*bitig-iń*	*puɣan*
	?	do-DED.PRES	?	inscription-GEN	? ?

tuwa-ńar	*qaɣan*	*törö-ks*	*qaɣan-un*
tribal.name-PLUR	qaɣan	be.born-NPF	qaɣan-GEN

10.	[*sina*]*pa-da*	*Niri*	*qaɣan*	*türüg*	*qaɣa*[*n*]
	domain-LOC	Niri	qaɣan	türk	qaɣan

giǰi-n	*ubi-ǰ*	*ǰalo-ba-ǰ*	*darqa-d*	*ǰaya bi-*
follow-CM	?-DPAST	direct-PAST-DPAST	free.man-PLUR	happy be-

11.	*-rün*	*bitig*	[+]*sA*[]	*paɣ* [+ +]*ǰ*[] [?]	*darqa-n*	*b*[*i*]*ti-be*	*qa*
	-CP	inscription	?	? ? ? ?	official-SING	write-PST	?

5.4 *Khüis Tolgoi Inscription* (*Stone One*)*: Tentative Translation*

1–3. Qaɣan [of] the inscriptions died and when a new qaɣan, who was [re] born as a new Bodhisattva, knows lord Buddha knowledge, and promises … the country's Ańaqay [title], begs stand and listen to the tribe together … **4.** Looking at the inscription stones, Tupa [people] in order to exterminate [their] sins joined the saved **5.** … qaɣan's wives [and] younger brothers, [and] Niri qaɣan, qaɣan [of] Türks **6.** worshiped the Law, and country's erkins and collectors … **7.** are enough and those who realized that qaɣan's regnal years were shining, and Tupa whom he supported/entrusted **8.** counting … those who attained salvation … qaɣan who was [re]born as a new Bodhisattva **9–11.** do … of the inscription … the qaɣan of Tupa was [re]born. In the qaɣan's domain, [they] followed Niri qaɣan, qaɣan of Türks and … [He] directed [them]. As the free men were happy, inscription … official wrote …

5.5 *Keregentas Inscriptions: Transcription, Glossing, and Translation*

Stone One

dar-pu	*qaɣan*
defeat-PAST.ADN	qaɣan
Defeated qaɣan	

Stone Two

šim-pun	*qaɣan*
die-PAST.ADN	qaɣan
Deceased qaɣan	

6 Conclusion

I trust that the most innovative and revolutionary linguistic part of the discovery of the Ruan-ruan language is that the first 'Altaic'-type language attested on the steppe by a continuous text is not Old Turkic, but Mongolic. It now places Mongolic as a textually attested language family in the late sixth century and makes it about ten years older than Koreanic that has the first continuous text attributed to 594 or 596 AD. For the sake of the comparison, the first Old Japanese text is dated only by 697 AD, and the first OT text by 713 AD. Tungusic Jurchen texts are not attested before the twelfth century.

Abbreviations

Languages

EMM	Eastern Middle Mongolian
MM	Middle Mongolian (both Eastern and Western)
OT	Old Turkic
PM	Proto-Mongolic
WMM	Western Middle Mongolian

Linguistic Terms

ADN	Adnominal
CAUS	Causative
CI	Converbum imperfecti
COM	Comitative
COND	Conditional
COOP	Cooperative
CF	Converbum finale
CP	Converbum praeparativum
CPF	Converbum perfecti
DED.PRES	Deductive present
DPAST	Distant past
EP	Emphatic particle
EVS	Energetic verbal suffix
INSTR	Instrumental
LOC	Locative
NF	Nomen futuri
NP	Nomen praesentis

NPF	Nomen perfecti
NML	Nominalizer
NOM	Nominative
PAST	Past tense
PLUR	Plural
PRES	Present tense
PRET	Preterite
QW	Quality verbalizer
SGS	Social group denominal suffix
SING	Singular
VBL	Verbalizer

Primary Sources

Khitan

Hsiao Hui-lian.Can	Inscription on the canopy of Hsiao Hui-lian muzhi ming, 1080 AD
Langjun	Inscription, 1134 AD
Xiao Dilu	Xiao Dilu Fushi muzhi inscription, 1114 AD
Yelü Jue	Yelü Jue muzhi ming inscription, 1071 AD
Yelü Pusuli	Yelü Pusuli muzhi inscription, 1105 AD
Yelü Xiang-wen	Yelü Xiangwen muzhi inscription, 1091 AD

Middle Mongolian

Arǰ	Wall Inscriptions from Arǰai Grotto
Aruɣ	Inscription of Prince Aruɣ, 1340 AD
Bur	Ɣayiqamsiɣ burqan-u arban qoyar ǰokiyangɣui, 14th c.
HS	The edict of Hai-shan, 1305 AD
HYYY	Hua-yi yi-yu, 1389 AD
IM	Ibn Muhannā vocabulary, 14th c. AD
Ist	Istanbul vocabulary, 14th or 15th c. AD
KMQB	Kitad Mongɣol Qarilčaɣan-u Bičig (Sino-Mongolian Documents), 14th c. AD
L	Leiden vocabulary, 1343 AD
MNT	Mongol niuča tobca'an, ca. 1240 AD
PP	'Phags-pa texts, 13th–15th c. AD
Qaz	Hamdullāh al-Qazwini, 14th c. AD
Sub	Subhāṣitaratnanidhi, 14th c. AD
YY	Yi-yu, 16th c. AD.
ZYYY	Zi yuan yi-yu, 13th c. (?) AD

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