INTERPRETATION OF THE HÜIS TOLGOI INSCRIPTION

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I am going to present below a tentative reading and interpretation of the Hüis Tolgoi inscription (hereafter HT inscription). This work would not be possible without the pioneering work by Dieter Maue on the decipherment of its writing system, which was also greatly added by the efforts of the team of specialists in 3-D photography that accompanied us on our 2014 expedition to Mongolia.

Although at this stage it is not possible to provide a complete reading and interpretation of the HT inscription, slightly going ahead it seems beyond reasonable doubt that it is in some form of Mongolic. It also appears that the language of the inscription, although it can be conditionally termed as a variety of Para-Mongolic, is much closer to the mainstream Mongolic languages, such as Middle Mongolian and modern extant Mongolic languages than to Serbi-Khitan,[1] although there are some features that the language of the HT inscription shares with the latter. It is necessary to note that the HT inscription is monolingual, which certainly opens the gates for the guess-work and speculations, some of which certainly will be corrected by the following generations of scholars.

As was already mentioned by my colleagues, the HT inscription (or inscriptions?) consists of two stones, one preserved in the basement of the National Archeological Institute, and the other placed near the entrance to the building. Certain circumstances prevented us from reading and photographing the text on it.

LINE 2-1[2]

Transliteration:

bi̯tī̯-*ñ*a̯r kagan digi̯n *š*ī̯ñi̯-n bodi-satva to̯ro̯-x

Tentative transcription:

biti[g]-ńar qaɣan digin šińe-n bodi-satva törö-k

Morphemic analysis:

inscription-PLUR qaɣan tegin new-GEN Bodhi-sattva be.born-NOM.FUT

[1] There was an unprecedented growth of Khitan studies in the West alone, with three significant monographs published in the recent years: Kane 2009, Wu & Janhunen 2010, and Shimunek 2017.

[2] The first number indicates the number of the stone, and the second the number of a line on it.

Notes

1. *bịtī, kagan, digîn*, and *bodi-satva* seem to be for the most part unproblematic, but they also provide no information on the genetic affiliation of the language.

2. *-ńar* is probably the Mongolic plural marker *-nAr*, but there is a functional problem with this interpretation. In MM it is always used with either kinship terms of with deities. Khitan plural marker *-ńər*[3] ~ *-ńəń* is also used for nouns denting humans (Shimunek 2017: 264). Thus, in both Mongolic and Khitan these suffixes are limited in usage, being reserved only for animate nouns. However, crosslinguistically the functional changes in plural markers are not unknown. Thus, for example, WOJ *-ra* originally used to be a neutral plural marker, used both with animate and inanimate nouns, but virtually acquired pejorative usage with animate nouns in Middle (Classical) Japanese (Vovin 2005: 93). In the similar fashion, WOJ plural marker *-tati* for animate nouns gradually became highly restricted honorific plural marker in MJ (Vovin 2005: 100). The plural marker *-*^{n}*dömö* was restricted to animate nouns designating people in WOJ (Vovin 2005: 98), but in MJ its descendant form *-domo* is used with both animate and animate nouns (Vovin 2003: 41).

3. *šińe-n* 'new' is the second word that is highly diagnostic, clearly pointing to the Mongolic direction. Brāhmī <ị> probably stands for [i] or [ɪ], as noted by Maue, so in this case it is probably safe to transcribe <ị> as [i], although [e] cannot be completely ruled out. Even if the form is to be read *šini*, cf. EMM *šini* 失你 'new' (MNT §265), although the majority of attestations indicate *šine*, cf. *šine* 𐲎𐲀𐲉 (Qub IV: 43), WMM *šine* شينه (Mu 334). Cf. Khitan *šɛn (Langjun 7: 6), thus phonetically HT form is closer to mainstream Mongolic. The final *-n* is likely to be a genitive.

As far as I can tell, there are no clear-cut cases of the adnominal usage of genitive in MM. Thus, e.g.:

Tümet irgen-*ü* oki-t
Tümet people-*GEN* girl-PLUR (MNT §241)

can be interpreted as 'girls *who are* Tümet persons' or 'girls *of* Tümet people'. Meanwhile, in Khitan, as noted by Shimunek, a genitive case marker can be used as an adnominal marker, albeit this function is restricted to the cases when it is preceded by a numeral (2017: 260), e.g.

𘟥𘟙	𘟪𘟦
tau-*un*	u.ur
five-*GEN*	division

the Five Divisions (lit.: divisions *that are* five) (Yelü Xiang-wen 7: 15-16)

[3] Note that the onset *ń-* of this suffix is closer to Khitan, while the vocalism is identical with Mongolic.

4. Bodhi-sattva is either a given name of the Turkic *qaɣan* from the First Khanate, or Buddhist Bodhi-Sattva could also be meant here, as the text may be a historical, but with the religious overtones.
5. *t̯ǫrǫ̣-x* is likely to be Mongolic *törö-kü* 'to be born', nomen futuri, but not the transcription of the tribal name Türük (later Türk). Both *törö-k[ü]* 'will be born' and *türüg* 'Türük' appear more than once in the HT inscription, the former on lines 2-1, 2-8, and 2-9, and the latter on lines 2-5 and 2-10 in their specific contexts. What is even more important, is the fact that they have not only different vocalism, but also the difference between *-x* for *törö-k[ü]*, and *-g* for Türüg. Both these discrepancies cannot be explained as a simple free variation.
6. There are three typically Mongolic morphological markers on this line: plural *-ńAr*, nomen futuri *-x* < *kü, and genitive *-n* after vowel stems.

LINE 2-2

Transliteration:

kagan *bu̯d-ạ* kagan-u ʳuka-x ʳuka-ju xī̯rị̄ añakay

Tentative transcription:

qaɣan buda qaɣan-u uqa-qu uqa-ǰu kera Ańaqay

Morphemic analysis:

qaɣan Buddha qaɣan-GEN realize-NOM.FUT realize-CONV country Ańaqay

Notes

1. Unless *Bud-a* is simply 'Buddha', which is the simplest solution, the only other possible explanation I can think about is Khitan *bud* 刘父 'external clan' (Yelü Jue 31: 55), (Hsiao Hui-lian.Can 2: 1), (Yelü Pusuli 7: 18).[4] But this leaves final *-a* stranded: it is unlikely to be a MM dative-locative case suffix *-A*. There are no other fitting attestations either in MM or Pre-Classical WM texts to the best of my knowledge. *Buda qaɣan* is reminiscent of OT *bur-qan* 'lord Buddha'.
2. Maue suggested that *ʳuka-* may reflect either *uruqa* or *uqa*. The first one is improbable, as only EMM *uruqa* 'relatives, descendants' (MNT §11, §23, §24 etc.), a likely loanword from Turkic, comes to mind, and it neither fits the context, nor does agree with apparently verbal nature of the stem. EMM verb *uqa-* 'to realize, to know' (MNT §18, §78, etc.) fits much better. No Khitan cognates.
3. *xī̯rị̄* is probably a borrowing from Tumshuquese *χšera* 'country', as Maue has suggested. In this

[4] Shimunek glosses this word as 'external clans' (2017: 265), but the plural would probably work only if Khitan *-d* -父 is here a plural suffix.

meaning it could fit here and also on line 2-6 below. Less probably it can be equated here (but not on line 2-6) with EMM *kere-* 'to fight' (MNT §194), which is unrelated to WM *kira-* ~ *kiru-* 'to cut', and there are no attested Khitan cognates.[5]

4. Ańaqay is a name of the last Ruan-ruan qaɣan, who refused to give his daughter as a wife to Turkic Bumin qaɣan in 546 AD.

5. The most important is that this line is full of typical Mongolic morphology: MM idiosyncratic genitive *-u* after stems in *-n* as in *qaɣan-u* 'qaɣan-GEN', nomen futuri *-qu*, converbum imperfecti *-ǰU*, and possibly dative-locative *-A*, if the alternative proposed etymology for *bud-a* is correct. Once again we can see that the language of the HT inscription is much closer to mainstream Mongolic than to Khitan: a) there is no Khitan genitive *-u*, as the Khitan words with final *-n* take *-en* instead (Shimunek 2017: 253), and the Khitan word *qa* ~ *qa.ɣa* 'qaɣan' takes the genitive in *-an: qa.ɣa-an* (Kane 2009: 132); Khitan has converbum imperfecti *-ǰ* corresponding to MM *-ǰU*, and no nomen futuri in *-qu* ~ *-kü* or dative-locative case suffix *-A*.

LINE 2-3

Transliteration:

[...]ī̱ tī̱-n ja̱-x bo̱dı̱ bigiy ña̱r ba̱yı̱ do̱lu̱ ja̱ju̱ ^{h}ügbü +?

Tentative transcription:

[.?.]-ı te-n ǰa-qu bod-ı beg-ey-ńar bayy-Ø dolu ǰa-ǰu (h)ügbü +?

Morphemic analysis:

[title]-ACC say-CONV promise-NOM.FUT tribe-ACC beg-?-PLUR be/stand-IMP seven promise-CONV ? ?

Notes

1. Ańakay is supposed to have a title, and since he cannot be equated with the Ruan-ruan qaɣan Anagui as demonstrated by Étienne de la Vaissière, it is natural to suppose that unreadable beginning of the line 2-3 corresponds to this title, but not to *qaɣan*.

2. *te-* 'to say' (quotational verb) was borrowed from OT *tė-* 'id.' into Khitan (Vovin 2013: 622-623. Although there is no similar evidence for mainstream Mongolic, it is possible that the language of the HT inscription acquired the same loan.

3. *ǰa-* 'to promise' is probably a cognate to EMM and WMM *ǰa'a-* (HYYY 17b.2), (MNT §82, §84, etc.), (Mu 199)~ EMM *ǰi'a-* (MNT §121, §145, etc.) 'to report, to promise'.

[5] Shimunek's hypothesis that there must be one based on various look-alikes in the neighboring languages (2017: 406-407) is, of course, nothing but a fantasy, unsubstantiated by evidence.

4. *bod* must be a loan from OT *bod* ‘tribe’, unless the direction of loan was opposite, cf. OT *bodun* ‘population, subjects’, apparently with a Mongolic plural *-n*.
5. *beg* might be yet another OT loan (OT *beg* ‘bek’, ultimately from EMC pæk 伯 ‘elder’), but the *-ey* segment is unaccounted for. The vocalism is also problematic, since *bigiy* in HT seems to indicate [i], but there is at least one other case of e > i raising: *šine > šińi ‘new’ in line 2-1.
6. *dolu* must be a cognate to MM *dolu’an* ‘seven’, without the numerical suffix *-pan (> *-’an* in intervocalic position). Cf. Khitan *dalʊ* ‘id.’ with a different vocalism.
7. *ʰügbü* is an interesting case. The language of the HT inscription has both *p-* and *b-*, so unlike MM, *h-* or *ʰ-* cannot be a reflex of proto-Mongolic *p-. I suspect that it either denotes initial *g-* or *ʔ-*. However, there are no apparent MM cognates. The last word on this line is unreadable.
8. As in the previous two lines, there is plenty of Mongolic morphology in line 2-3: accusative *-ı* (cf. MM accusative *-i*), converbum modale *-n*, nomen futuri *-qu*, plural suffix *-ńAr* (this time following an animate noun), and converbum imperfecti *-ǰu*. The last three has been already discussed above. As for the first two, note that there are no accusative *-ı* or *-i* and converbum modale *-n* in Khitan.

LINE 2-4

Transliteration:

b[ı]tī jīḷo-nạr kra-nya-gu-ñ tụwạ pụ̱ṛọ-r cıcī-rạ pügtîg ñạḷạn

Tentative transcription:

b[i]tī[g] jīlo-nar q[a]ra-n[V]ya-ɣuń tuwa pụ̱ṛọ-r čiči-rä pügtîg ńele-n

Morphemic analysis:

inscription stone-PLUR look-?-NML tribal.name ?-NML stab-CONV ? join-CONV

Notes:

1. *jīḷo* must be related to MM *čila’un* ‘stone’ (with possible voicing of *č-* in an intervocalic position), and *-nar* is a plural suffix. Note that this time we have *n-*, not *ń-*, possibly under influence of the final *-n* of the preceding word that itself elided (however, cf. also *qato-ńar* ‘qaɣan’s wives’ < *qatun-ńar* in line 2-5). Note that the usage of the plural confirms that there were more than one stone in the inscription.
2. Some remaining individual items on this line can be probably understood, but there is no coherent reading. *kra-nya* looks very ‘un-Altaic’, but on the basis of *dro* in the line 2-6 that is likely to stand for *doro* ‘law’, we can suspect the formation of secondary clusters due to the elision

of the vowels in the first syllables here as well. I tentatively interpret this as *q[a]ra-* ‘to look’, cf. MM *qara-* ‘to look’ (MNT §5, §63, §77, §183), (Mu 292) + *-n[V]ya-*, obscure morphological marker without any obvious parallels in MM or Pre-Classical WM + *ɣuń*, a deverbal nominalizer cf. MM *-’Un* (Godziński 1985: 53) and WM *-ɣun ~ -gün* (Poppe 1964: 46), which forms nouns designating qualities or abstract nouns. An alternative, but much more inferior explanation: *q[a]ra n[o]ya* ‘black (i.e., civilian, not military) officials’. Cf. MM *qara* ‘black’ (MNT §21, §25, etc.), (Mu 227), (IM 444) and *noyan* ‘official, lord’ (MNT §8, §51, etc.), (Mu 115), (IM 443). *ɣuń* is difficult to explain. It certainly cannot be MM *-wun* or WM *-ɣun*, a deverbal nominalizer, because we have no verb preceding it. Since there is no *-ŋ* in the language of the HT inscription, it could potentially be a loan from EMC *kuŋ* 公 ‘prince, duke’.

3. *tu̯wa̧* occurs three times in the HT inscription: on the lines 2-4, 2-7, and 2-9. It is not clear what it can be, and the problem is further complicated by the fact that *-w-* occurs only in this word. The comparison with the tribal name Tabɣač ~ Taɣbač should be discarded for phonological reasons. May be EMM *to’a* ‘number’ (MNT §229, §265, §278), (HYYY 22b.2), (KMQB I: 9b.2), but note that in other cases MM *-’-* ~ WM *-ɣ-* is reflected as *-ɣ-* in the language of the HT inscription. WMM *tü’ü-* ‘to gather’ (Mu 159) is more problematic for phonological and syntactical reasons. Maue suggested tribal name Dūbō ~ Dūbò (都波 ~ 都播 EMC *tuo pwâ ~ tuo pwâ*^{C}). Since the language of the HT inscription does not exhibit -p-, he is probably right.

4. *pu̧ro̧-r* is obscure. *-r* can be a Mongolic deverbal nominalizer *-r*, as in WMM *amu-r* ‘peace, patience’ (Mu 102) < MM *amu-* ‘to rest’ (MNT §145, §201, etc.), (Mu 102), (IM 432), but the root is opaque.

5. Maue suggested Mongolian *čiči-* ‘to stab’ + *-rA*, converbum finale. The form *čiči-* appears to be Post-Pre-Classical, as it is not attested in MM or Pre-Classical WM. Cf. EMM *seči-* ‘to stab’ (MNT §127). Converbum finale *-rA* is well attested in both MM (Godziński 1985: 146) and pre-Classical WM (Poppe 1964: 98). Therefore, provisionally I accept Maue’s proposal.

6. *pügtîg* is obscure. I do not have any possible etymologies for it.

7. *ńa̧la̧-n* could potentially be EMM *neyile-* or WMM *neile-* ‘to join’, followed by the converbum finale *-n*.

8. There is some Mongolic morphology in this line as well: plural suffix *-nar*, converbum modale *-n*, converbum finale *-rA*, and possibly a nominalizer *-r*. The first two has been already discussed above. As for the converbum finale *-rA* and nominalizer *-r*, I do not think they is attested in Khitan.

LINE 2-5

Transliteration:

[+] k[a]ga[n-u? +] kato-ña̧r dügî-d nīrı̣ kagan türū̄g kagan

Tentative transcription:

[+] q[a]ɣa[n-u? +] qato-ńar düge-d nīrı qaɣan türük qaɣan

Morphemic analysis:

[?] qaɣan-GEN [?] qatun-PLUR younger.brother-PLUR Niri qaɣan türk qaɣan

Notes:

1. The first *akṣara* is unreadable.
2. In spite of the poor preservation, the next word must be *qaɣan-u* ‘qaɣan-GEN’. It is possible that the next *akṣara* indicated just *-n*, forming therefore, an alternative genitive in *-un* after *qaɣan*, see more on this in the notes to line 2-9.
3. *qato-* can be equated with EMM *qatu* (MNT §54, §55) and MM *qatun* (MNT §64, §104, etc.), (IM 444), (Mu 203) ‘qaɣan’s wife, lady, noble woman’. *-ńar* is a plural suffix already seen above.
4. *düge-d* is ‘younger brothers’, metathesized form of MM *de’ü* ‘younger brother’ (MNT §18, §46, etc.), (Mu 151), followed by a plural suffix *-d*.
5. Niri qaɣan of the Western Turkic Khaganate (r. 579-603/604) is a grandson of Bumin qaɣan.
6. The rest of the line is quite straightforward: *türūg kagan* is, of course, *türük qaɣan* ‘Turkic qaɣan’.
7. We again see typically Mongolic morphology in this line: besides the genitive case suffix *-u* (or may be *-un*) and plural suffix *-ńar* (used this time after an animate noun), we also encounter for the first time Mongolic plural suffix *-d*.

LINE 2-6

Transliteration:

ʳu*c* drọ *tạyạ*-jụ xīrı ʰärgin bar-go[l] pạlxīr [+]xạcı ʰîgbîj

Tentative transcription:

uč d[ö]rö taya-ju kera erkin bar-ɣo[l] pạlxīr [+]xạcı ʰîgbî-j

Morphemic analysis:

? law worship-CONV country title/people take-NML ? ? ?-PST

Notes:

1. *uč* is not clear. A reduction from EMM *učir* ‘chance, reason, cause’ (KMQB I: 21a.2, 21b.1, 25b.4, 26a.3, 28a.3) does not seem very probable. Even less probable would be a connection with

WMM *ūča* ‘back’ (Mu 96, 154, 371), (Ist 71), *učа* (L 1255).

2. *dörö* is ‘law, rule, principle’. Cf. EMM *töre* (MNT §208), *törö* (MNT §216). For the discrepancy between HT *d-* and EMM *t-* cf. also HT *digin* vs. *tegin* on line 2-1 as well as Manchu *doro* ‘id.’, Jurchen *doron* ‘imperial seal’, borrowed from Mongolic with initial *d-*, not *t-*.

3. *taya-* probably can be explained as EMM *tayi-* ‘to worship’ (MNT §189). *-ju* is converbum contemporale that we have already seen several times.

4. For *ʰärgin* Maue suggested OT *erkin ~ irkin* ‘title’ (p.c.), discussed by Clauson (1972: 225) and in other sources. It might be further etymologically connected to OT *erk* ‘authority, free-will, independence’ (Clauson 1972: 22). This may indicate a further connection with EMM *erkin* (sing.) ~ *erkid* (plur.) ‘important, excellent, masterly’ (de Rachewiltz 2004.1: 415), attested in MNT §105, §109, §153, etc., but not used as a title in Mongolic. It is not inconceivable, on the other hand, that we have here MM *irgen* [irgən] ‘people’ (with a metathesis of vocalism) (MNT §5, §8, §11, etc.), (HYYY 14b.1), (Mu 119, 123, 136, etc.). Both explanations have their pluses and minuses. Maue’s theory does not involve metathesis, but leaves *-g-* instead of *-k-* unexplained. Also, in the HT inscription titles have consistent plural marking when the plurality is meant. May be only one *erkin* is meant here, it is difficult to say, even if the next word is explained as ‘taker, collector’ (see below). Vovin’s explanation has a metathesis, but does not create problem with the consonant *-g-*. Also, *irgen* is never marked with plural.

5. *bar-go[l]* is probably a cognate of MM *bari-* ‘to take, to collect’ (MNT §19, §25, etc.), (Mu 199, 103, etc.) + MM *-’Ul* (Godziński 1985: 53-54), Pre-Classical WM *-ɣul ~ -gül*, a deverbal nominalizer designating occupations. Alternatively, this form can be interpreted as *bari-* + a cognate of MM *-’Ul* (Godziński 1985: 53-54), Pre-Classical WM *-ɣul ~ -gül*, a causative suffix, followed by a zero-marked imperative. Étienne de la Vaissière believes that it might be Barkul, the place of Niri’s defeat.

6. The rest of this line is opaque, although *-ǰ* in *ʰîgbî-j* can probably be equated with MM past tense in *-ǰi found in distant past *-ǰU’U(y)* and its feminine form *-ǰi’ay* (Godziński 1985: 131-132).

7. Again we have some clearly Mongolic morphology here: *-ǰu, -ǰ* and *-gol*.

LINE 2-7

Transliteration:

tüg-jü ʳuka-ba-r-ñạr kagan xạnı̣ jụlạ-bạ tụn-ụ tüg-nyä tụwạ

Tentative transcription:

tüg-jü uqa-ba-r-ńar qaɣan qan-ı ǰula-ba tün-ü tüg-n[V]yä tuwa

Morphemic analysis:

be.enough-CONV realize-PST-NML-PLUR qaɣan regnal.year-ACC shine(?)-PST that-GEN be.enough-? tribal.name

Notes:

1. *tüg-* can be compared either with EMM *tüge-* 'be enough' (§92, §187) (cf. the similar elision of the second syllable vowel reflected by MM *bari-* : HT *bar-* on the previous line) or with MM *tüge'e-* 'to give out, to distribute' (MNT §213, §232), (Mu 358), possibly a derivative of *tüge-*. Converb *-ǰU* has previously appeared on lines 2-2, 2-3, and 2-6.

2. *uqa-* 'to realize, to know' was discussed previously in conjunction with line 02. *-bA* is MM past tense suffix that appears twice on line 2-7. *-r* could be a nominalizer previously mentioned in the note 4 to line 2-4, although there might be a problem with this interpretation, since MM form in *-bA* is a final verbal form (Godziński 1985: 128-129), which has no adnominal function. But since the language of the HT inscription is not MM, I am going to propose this explanation, especially that adnominal forms in East Asia and Central Asia tend to acquire easily final predication function. Note also that Khitan past tense suffix *-bəń*[6] can be used in the adnominal function (Shimunek 2017: 271). *-ńar* is plural suffix, which we have already seen on more than one occasion. Thus, *uqa-ba-r-ńar* is 'realizations' or 'those who realized'.

3. *qaɣan* does not require any comments and *xa̧n-* according to Maue is a 'regnal year' < Tumshuquese *xšana-* 'Zyklusjahr' + accusative *-ı*. Alternatively, it may be just *qan* 'khan' (Maue, p. c.).

4. *ǰula-* can be possibly connected with MM *ǰula* 'light, candle, torch' (HYYY 10b.4), (HS 10.20), (Mu 169, 210, 325, 336), (IM 439), (Ist 39) (< WOT *ǰula, cf. EOT *yula* 'light, torch'),[7] which is a nominal root, but it is possible to suspect conversion here, so I tentatively interpret it as *ǰula-* 'to shine'. Cf. MM *to'o ~ to'a* 'number' → *to'o-* 'to count'.

5. As for *tün-ü*, *tün-* must be cognate to EMM *te'ün-* (MNT §12, §116, etc.) ~ WMM *tn̄-* (Mu 94, 97, etc.) is the oblique stem of *tere* 'that'. *-ü*, is, of course, a genitive form after stems in *-n* (see the note 5 to line 2-2).

6. *-n[V]yä* is a piece of morphology for which currently I have no explanation. The last word on this line is the enigmatic *tu̱wa̧* (see note 3 to line 2-4).

7. As before, we see a number of typically Mongolic morphological markers: converb contemporale *-ǰU*, past tense suffix *-bA*, nominalizer *-r*, plural suffix *-ńar*, and genitive suffix *-U* after *-n* stems.

[6] Kane reconstructs *-bo.ń ~ -b.uń ~ -bun* (2009: 147).

[7] Possibly from Turkic *yul- 'to catch fire, to be ignited, be kindled' (Róna-Tas & Berta 2011: 409).

LINE 2-8

Transliteration:

[+]xạ[] *tụ*[] *to*[go?]-*gun* *pügti*g-ci śī̱ṉ̃ı̣-n *bo*di-satva tǫrǫ̣-x kagan

Tentative transcription:

[ir]ge[n] *tụ*[] *to*[ɣo]-*ɣun* *pügti*g-či šińi-n bodi-satva törö-k qaɣan

Morphemic analysis:

people ? count-NML ?-NA new-GEN Bodhi-sattva be.born-NOM.FUT qaɣan

Notes:

1. The first two words on this line are unreadable, but the first one might be *irgen* 'people', judging from the context, if Maue's identification of *tụwạ* as tribal name Tupa is correct.
2. *to[ɣo]-* can be compared with EMM *to'o-* 'to count' (MNT §161), WMM *tō-* (Mu 115). *-ɣun* must be cognate to MM deverbal nominalizer *-'Un* (Godziński 1985: 53), and Pre-Classical WM *-ɣun ~ -gün* (Poppe 1964: 46), which forms nouns designating qualities or abstract nouns.
3. Enigmatic *pügti*g previously appeared on line 2-4 as *pügtîg*. Here it is probably followed by nomen actoris suffix *-či*. The only information it provides us is that *pügtîg ~ pügti*g must be a noun.
4. The rest of this line is identical to the second part of line 2-1 and the first word of line 2-2.
5. Again we see several typically Mongolic morphological markers: nominalizer *-ɣun*, genitive case marker *-n* after vowel stems, possibly nomen futuri *-k[ü]*, and nomen actoris *-či* (which is, of course, a common Turco-Mongolic marker, but it remains unclear who borrowed it from whom).[8]

LINE 2-9

Transliteration:

[+]*l*[][+] []*ɪyụ* ʳuc bitî^{h}î-*ñ* [+ +] *g*[×-+] *tụ*wạ *pạ*r kagan *tǫrǫ̣*-x kagan-un

Tentative transcription:

[+]*l*[][+] []*ɪ-yU* uč bitig-i*ń* [+ +] *g*[×-+] *tụ*wạ *p*ar qaɣan *tö*rö-k qaɣan-un

Morphemic analysis:

? ?-PRES ? inscription-GEN ? ? tribal.name person qaɣan be.born-NOM.FUT

[8] Since the HT inscription is more than one century older than the earliest OT texts, it is likely that the directionality of borrowing might have been Mongolic → Turkic, and not the vice versa.

qaɣan-GEN

Notes:
1. This line is poorly preserved. The first, second, fifth, and sixth words are unreadable, although *-yU* in the second word could be a suffix of deductive present MM *-yU* (Godziński 1985: 127), WM *-yU* (Poppe 1964: 92).
2. On enigmatic *uč* see note 1 to line 2-6.
3. *bitig-iń* is a genitive form of *bitig* 'inscription', which previously appeared as *biti[g]* on lines 2-1 and 2-4.
4. On the enigmatic *tu̱wa̱* see note 3 to line 2-4. This word also appears on line 2-7.
5. *par* is likely a cognate of EMM *hara* 'person' (MNT §246) ~ *haran* (MNT §39, §91, §100, etc.) 'person', 'persons', 'population' and WMM *haran* 'id.' (Mu 198), (Ist 31), (IM 431). Alternatively, it could be par 'ten' 'cf. MM *har-ban* and Khitan par. Note that like in Khitan, and unlike in MM numerals in HT are not followed by the suffix *-ban*~ *-'an* < *-pan, cf. HT *dolu* 'seven' on line three
6. *qaɣan* does not require commentary and *törö-k* has been treated above in the note 5 to line 2-1. It also appears on line 2-8.
7. The language of the HT inscription has alternative genitive *-un* for *qaɣan: qaɣan-un,* which is probably a result of secondary paradigmatic reanalysis, although it also could be a metathesis of a form similar to EMM alternative genitive *qaɣan-nu* (MNT §1, §48, §51, etc.).
8. Again several clearly Mongolic morphological markers are present: genitives *-un* and *-iń*, deductive present *-yU*, and possibly nomen futuri *-k[ü]*.

LINE 2-10

Transliteration:

pa̱da̱- *n*<*ī*>rı kaga*n* türüg [ka]ga[n] []*ī̱j̱ı*-n ʳubī-j ja̱*l̤o*ba̱-j darka-*d* ja̱y bı

Tentative transcription:

pada- *Ni*ri qaɣa*n* türüg [qa]ɣa[n] [k/g]*ī̱j̱i*-n ubī-ǰ ǰa*lo*-ba-ǰ darqa-*d* ǰay bi

Morphemic analysis:

be.cut-(?) Niri qaɣan türk qaɣan approach/follow-CONV ?-PST direct-PST-PST free.man-PLUR happy be

Notes:
1. There is a lacuna after *pada-*. There is WM *ada-* 'to be stubbed, to be cut', but as far as I can

tell the word is not attested most importantly either in MM (therefore, we cannot confirm the presence, or the absence of an initial *h-* < *p-) or in WM prior to seventeenth century. Therefore, this identification remains dubious.

2. We have already met Turkic qaɣan Niri in line 2-5, so *Ni*ri qaɣa*n* türüg [qa]ɣa[n] does not require any commentary.

3. []*ǐǰi*-n looks like a verbal form ending in converbum modale *-n*, but establishing the identity of the root might be difficult, although MM *[g]iǰi-* 'to follow' (MNT §253), *[k]iǰi-* 'to approach' (MNT §195) seem to be the only candidates.

4. The root *ubī-* does not have any parallels, but on distant past *-ǰ* see the note 6 to the line 2-6.

5. *ǰalo-ba-ǰ* may consist of the root *ǰalo-* (cf. WM *ǰalu-* 'to direct', 'to make straight'[9]), past tense *-bA*, and distant past *-ǰi*.

6. *darqa-d* is a plural form of *darka-n* 'free man, official'.

7. *ǰąy* looks like a cognate to EMM *ǰaya'an* 'happy, blessed' (MNT §66, §194, §248), where *-'an* is likely to be a suffix.

8. *bi* is a cognate to MM *büi* 'to exist' (MNT §18, §35, §44, etc.), (Mu 105, 110, 139, etc.).

9. There are several typically Mongolic morphological markers on this line as well: converbum modale *-n*, distant past *-ǰ*, past *-bA*, and plural suffix *-d*.

LINE 2-11

Transliteration:

[ ]ᵀ*un* b*i*tig [+]s*ä*g p*ag* [+? +?] j[] [+? +?] darka-n b[] tı *b*ą ka

Tentative transcription:

[e']*ün* b*i*tig [+]s*ä*g p*ag* [+? +?] ǰ[] [+? +?] darqa-n b[i]ti-*b*e qa

Morphemic analysis:

this inscription ? ? ? ? ? official-SING write-PST ?

Notes:

1. The last line is in a very poor state of preservation, but it looks like a signature of a scribe.

2. I substitute *e'* for the first lacuna. The resulting form is *e'ün-*, an equivalent to EMM oblique stem *e'ün-* of the demonstrative pronoun *ere* 'this'. Likely, this is a reduction of *e'ün-ü*, a genitive form of *ere*.

3. *bitig* is 'inscription', see also lines 2-1, 2-4, and 2-9

4. *darqa-n* is singular form of *darqa-* 'official, free man' that we have already seen as plural *darqa-*

[9] Not attested in Pre-Classical WM (Tumurtogoo 2006) or in MM.

d on line 2-10.

5. *biti-be* is the past tense form of *biti-* 'to write'. The rest of the line is undecipherable at the present moment.

6. Only two Mongolic morphological markers appear on this line: singular *-n* and past tense suffix *-bA*.

TENTATIVE PARTIAL TRANSLATION

1-3. qaɣan [and] prince [of] the inscriptions.[10] When qaɣan, who will be [re]born as a new Bodhisattva, knows lord Buddha knowledge, and promises to the country's Ańaqay [title], begs, stand for the tribe, and promising seven [times] … **4.** Looking at the inscription stones, Tupa [people], … in order to stab … joining … **5.** … qaɣan's wives [and] younger brothers, [and] Niri qaɣan, qaɣan [of] Türks **6.** worshiped the Law, and country's erkins and collectors … **7.** is enough and there were enough of those who realized that qaɣan's regnal years were shining. Tupa **8.** people … counting … qaɣan who will be [re]born as a new Bodhisattva **9-10.** … of the inscription … Tupa persons being cut from the qaɣan who will be [re]born as a qaɣan, [they] followed Niri qaɣan, qaɣan of Türks and … [He] directed [them]. Free men were happy. **11.** Official … wrote this inscription …

COMPARATIVE CHART OF HÜIS TOLGOI AND MONGOLIC/KHITAN MORPHOLOGY

marker	**Hüis Tolgoi**	**MM**	**Pre-Classical WM**	**Khitan**
genitive after *-n* stems	-U ~ -Un	-U ~ -nU	-U	-en
genitive after consonantal stems	-Un ~ -iń	-Un	-Un	-un, -en,
genitive after vowel stems	-n	-n	-n	-n, -on, -un
accusative	-ı ~ -i	-i ~ -yi	-i ~ -yi	-Ø
plural suffix	-ńAr	-nAr	-nAr	-ńer ~ -ńeń
plural suffix	-d	-d	-d	-d
singular suffix	-n	-n	-n	--
nomen actoris	-či	-či	-či	--
converbum modale	-n	-n	-n	--
converbum contemporale	-jU	-ǰU	-ǰU	-ǰ ~ -č

[10] This is likely to be a carry-over from the first stone.

converbum finale	-rA	-rA	-rA	--
nomen futuri	-x	-qu ~ -kü	-qu ~ -kü	--
past	-bA	-bA(i)	-bA(i)	-beń
distant past	-ǰ	*-ǰi	-ǰuqui ~ -ǰüküi	--
deductive present	-yU	-yU	-yU	--
nominalizer	-ɣuń ~ -ɣun	-'Un	-ɣun ~ -gün	--
nominalizer	-r	-r	-r	--
nominalizer	-ɣol	-'Ul	-ɣul ~ -gül	--
functionally unclear verbal suffix	-n[V]yA-	--	--	--

I believe that the chart above clearly demonstrates that the language of the HT inscription shows much more features common with mainstream Mongolic than with Khitan. This also makes sense geographically, since the HT inscription comes from the territory much more to the North than the home territories of Serbi and Khitan were.

Certainly, we have sufficient lexical difference between the language of HT and the first monuments in MM. But this also should come as no surprise, given the fact that more than half of a millennium separates these texts, as well as the hard-core reality (sorely missed by Nostraticists and other long-rangers) that the lexicon represents the most unstable part of any language.

SOME NOTES ON THE LANGUAGE OF THE NON-SOGDIAN PART OF THE BUGUT INCRIPTION

I totally agree with Maue that in spite being a bilingual text, this is a much harder nut to crack than the HT inscription. Although it is written in the same Brāhmī script, I see no similarities or no commonalities with the language of HT inscription, except may be for a converb contemporale *-ǰU*, but one similarity proves nothing. The inscription is also much shorter than the Sogdian text, so it is not a Rosetta stone by any standards. I would not be as pessimistic as Maue to call the decipherment completely hopeless. I largely suspect that the language of the non-Sogdian part of the inscription might be Ruan-ruan but I would not attempt its decipherment before I finish digging out bits and pieces of this enigmatic language from the OT sources and acquiring a good working knowledge of Sogdian that I currently do not have. The latter necessity is due to the fact that any readings of the Sogdian part of the inscription provide solely the translation, but not the morphemic analysis, which is the crucial helping part in the decipherment of any unknown bilingual portion.

CONCLUSION

I trust that the most innovative and revolutionary linguistic part of our presentation is that the first 'Altaic'-type language attested in the steppe by a continuous text is not OT, but Mongolic. Apart from the fact that it now places Mongolic as a textually attested language in the late sixth or early seventh century and makes it a contender among 'Altaic'-type languages with Korean 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.

This discovery can also potentially reverse, at least in some cases, the traditional point of view that the directionality of borrowing was always from Turkic to Mongolic, as some of them will have now more certain Mongolic origin.

Finally, it appears that the same language as in the HT inscription appears in the same script, and more importantly in the same language in much shorter Keregentas inscriptions from Eastern Kazakhstan. What polity or what tribe/nation might have possibly spoken this language is the question that should be answered by historians.

Abbreviations of languages and grammatical terms

CONV	Converb
EMC	Early Middle Chinese
EMM	Eastern Middle Mongolian
EOT	Eastern Old Turkic
GEN	Genitive
IMP	Imperative
NA	Nomen actoris
OT	Old Turkic
PLUR	Plural
PRES	Present
SING	Singular
WMM	Western Middle Mongolian
WOT	Western Old Turkic

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Khitan

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Langjun	Langjun inscription, 1134 AD
Yelü Jue	Yelü Jue muzhi ming inscription, 1071 AD
Yelü Pusuli	Yelü Pusuli muzhi beiming inscription, 1105 AD
Yelü Xiang-wen	Yelü Xiangwen muzhi inscription, 1091 AD

Middle Mongolian

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 century AD
KMQB	Kitad Mongɣol Qarilčaɣan-u Bičig (Sino-Mongolian Documents), 14th c.
L	Leiden vocabulary, 1343 AD
MNT	Mongɣol niuča tobča'an, ca. 1240 AD
Mu	Mukaddimat 'al-'Adab, 14th century AD
Qub IV[11]	Fourth edict of Qubilai qaɣan, 1280 AD

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[11] Numeration is given according to the edition by Tumurtogoo 2010, not Poppe's edition of 1957, because many more documents in 'Phags-pa were discovered after Poppe's edition.

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