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KHITAN STUDIES I. THE GRAPHS OF THE KHITAN SMALL SCRIPT

2. THE VOWELS^{*}

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In the second part of this series of papers the author investigates the way how the Khitan Small Script rendered the vowels of the Khitan language. The graphic system was tailored to the contemporary Chinese language, nevertheless, it is possible to make conclusions concerning the system of vowels. Three illabial vowels /a/, /e/ and /i/ can be identified, the back vocalic /ī/ can only be supposed. The vowel /o/ is dominant, for traces of /ö/ no sure data can be given. The phoneme /u/ can be clearly detected, the phoneme /ü/ can be supposed. The former opinion that the Khitan had a front:back vowel harmony can be confirmed. The paper presents a few newly deciphered Khitan words. The system of the Khitan word formation is emerging and a few earlier readings have been corrected.

Key words: Khitan, Khitan Small Script, Khitan word formation, vowel harmony, illabial vowels, Mongolic languages.

Technical Remarks on the Presentation of the Khitan Material

In the following presentation I have used and followed the two main works on Khitan published in English: Kane (2009) and Wu–Janhunen (2010). Five inscriptions (L, X, EX, D, Y^1) are included in these two works, which I call the Smaller Corpus. I have also used the index of the work of Wu (2012), which contains the material of the

* This paper is the second part of a series, for the first part see AOH 69 (2016), pp. 117– 138. In that paper a few disturbing misprints appeared, such as the graphs for the numerals (p. 127) the correct graphs for three are: 1(166), 1(167), \bigstar (259), for third masc. $\nexists \And \bigstar$ (151.236.269), <hu.u.er>, $\bigstar \bigstar$ (259.269) <hur.er>, for third fem. $\nexists \And \image$ (151.236.219) <hu.ur.én> $\bigstar \between$ (259. 219) <hur.én>, $\divideontimes \And$ (340.236.219) <x.ur.én>, for four \oiint (368), \oiint (369), (p. 128): for five $\Huge{1}(2029)$, $\Huge{2}(030)$, six $\Huge{5}(085)$, $\Huge{5}(086)$, seven $\Huge{F}(141)$, $\Huge{F}(441)$, eight $\Huge{E}(007)$, $\Huge{E}(008)$. On p. 134 the correct Khitan graphs for 'sixty' are \bigstar (266) and $\Huge{2}(267)$, \bigstar (424), for seventy \varPi (300) and \varPi (301), for thousand $\Huge{5}(207)$, for 'ten thousand, great amount' $\Huge{E}(187)$ \oiint (312) and \oiint (406).

See the Abbreviations on pp. 185–186.

inscriptions JU, KC, KL, HU, PC, PU. The Romanised transcription of the Khitan graphs follows the List in Wu–Janhunen 2010, pp. 259–272. Where I differ or I am uncertain, I give the Romanised transcription of others, mainly of Chinggeltei (2002b) adding the letter C to the numeral, or Aisin Gioro (2012), adding the letter A to the numeral or in a few cases my own, adding the letter R to the numeral. A Khitan item usually has a reading² which I give in **bold**, followed by the graph(s). Then follow the three-digit numbers of the List (in round brackets) and the Romanisation in angle brackets < >, the English translation in single quotation marks ' ' if it exists, or a question mark if the structure of the word is clear, but its meaning is unknown. After a perpendicular stroke | I quote a possible cognate from Mongolic, using as symbol the Literary Mongolian form of Lessing (1960), to which I usually add the reconstructed Mongolic form as given by Hans Nugteren (2011). From the modern Mongolian I quote as a rule only the Dahur form(s). The items beginning in **bold face** are from my unpublished Khitan–English Wordlist.

Introduction

This paper will deal with the representations of the vowels in the Khitan Small Script (KSS). The reconstruction of the Khitan vowel system has to surmount special difficulties. Khitan is a dead language, and though it has some connections with spoken Mongolian languages and especially with Dahur³, due to their distance in time and in relation, they give only limited help. The KSS consists of drawings, signs or graphs which have no inherent connection with any class or subclass of phonetic units, not to speak of phonemic ones. The Khitan graphs, as to our present knowledge, are arbitrary⁴. The Romanisation of the graphs is not more than a convention, mainly based on the value of the given graph in transcribing contemporaneous Chinese words. The conventional Romanisation, built up step-by-step by the Khitan Research Group working in the People's Republic of China, turned out to be a good point of departure, but we should not forget that it is a convention and not a system describing the original Khitan phonic values. Thus in the following I will try to look behind the letters of Romanisation.

For some syllables there exists one, for others more different graphs. The types of the sound structures represented by the graphs are the following (V = vowel, C = consonant): V, C, VC, CVC, CVV, VVC, VCV. In cases of VV sequences we have to distinguish V1V1 and V1V2 types. V1V1 occur only in two graphic units [<a a.> etc.], while V1V2 may occur in one or two graphic units [<au>, <a.u.> etc]. The V1V2 units are, or may be diphthongs (D). To the V1V1 sequences I will return on pp. 176–184).

² Of course, this is an idealised reading, reflecting my prelimiary view about how the graph was read by the Khitan scholars.

³ For a long time we have known that Dahur has a special relationship with Khitan. The only question is whether Dahur is a Khitanised Mongolian language or a strongly Mongolised Khitan. In all cases where possible I quote relevant data from Dahur.

⁴ There are some graphs which have a regular connection with some others, e.g. the dotted and undotted ones, some allographs and so on, but none of the graphs has any overt reference to a phonetic unit.

Graphs for Simple Vowels⁵

a: <a>	为 (189),
e: <e></e>	<u>券 (348)</u> , <u><e_2< u="">> <u>券 (109)</u>,</e_2<></u>
i: <i></i>	★ (339), $\langle i \rangle$ ★ (352) ⁶ , $\langle p \rangle$ 本 (114), $i: \langle i \rangle$ 삼 (353), $\langle i_2 \rangle$ 本 (113),
0: <0>	$\mathcal{R}(186)^{7}, <\bar{0}>\underline{\land(252)}, <\bar{0}_{2}>\underline{\land(253)}^{8}, <\bar{0}_{2}>\underline{\land(253)}^{8}, <\bar{0}_{2}>\underline{\land(253)}^{8}, <\bar{0}_{2}>\underline{\land(090)}^{9}, <\bar{0}_{2}$
u: <u></u>	★ (131), $<$ ú> ♀ (245) ¹⁰ , $<$ ū> (372) ¹¹ , $<$ ü> 伸 (226) ¹² .

Let us first look at the graphical side. $\langle e \rangle \not \otimes (348)$ and $\langle e_2 \rangle \not \otimes (109)$ are typical allographs, in the inscriptions the two dots or the horizontal stroke at the same place are not always possible to distinguish. It is the same as in the case of $\langle i \rangle \not \otimes (352)$, $\langle \overline{1} \rangle \not \otimes (114)$ and $\langle \overline{1} \rangle \not \otimes (353)$, $\langle \overline{i}_2 \rangle \not \otimes (113)$. Clear allographs are also: $\langle \overline{0} \rangle \not \otimes (252)$ and $\langle \overline{0}_2 \rangle \not \otimes (253)$. If we count these allograph pairs as only one each, 12 graphs remain to denote vowels. For the vowel /a/ of whatever phonetic shade (labial, illabial etc.) there existed only one graph $\not \approx (189)$. For /e/ of whatever phonetic shade (open, closed etc.) only one graph existed with two allographs $\underline{\langle e \rangle} \not \otimes (348)$, $\underline{\langle e_2 \rangle} \not \otimes (109)$. For the vowel /i/ there existed two graphs, one of which occurs with two allographs: $\langle i \rangle \not \approx (339)$ and $\underline{\langle i \rangle} \not \otimes (352)$, $\overline{i} \not \otimes (114)$, / \overline{i} is represented by two allographs: $\underline{\langle i \rangle} \not \otimes (353)$ and $\underline{\langle i_2 \rangle} \not \otimes (113)$.

At the labials we find the following: in the case of $\langle o \rangle$ which may or may not represent one phoneme, we have three graphs, one with an allograph: $\langle o \rangle \not a$ (186), $\langle \dot{o} \rangle \not t$ (090), $\langle \underline{o} \rangle \not \dot{a} (252), \langle \underline{o}_2 \rangle \not \dot{a} (253)$, and in the case of $\langle u \rangle$ also three graphs: $\langle u \rangle \not a$ (131), $\langle \dot{u} \rangle \not a$ (245), $\langle \overline{u} \rangle \not \kappa$ (372) with no allograph, all three are heterographs, finally $\langle \ddot{u} \rangle$ with one graph: ($\mathbf{4}$ (226).

We have to keep in mind that the whole system was tailored to the stock of the Chinese vowels appearing in Khitan transcription. The allographs $\langle \tilde{i}_2 \rangle \not a$ (113) and $\langle \tilde{i} \rangle \not a$ (353) were used after Chinese sybillants (*s*, *z*, optionally *sh*, *ss*) to denote a retracted $\langle \tilde{i} \rangle$ vowel (K48, 77). In the KSS we find $\langle \tilde{s} \rangle \not a$ (083) and $\langle sh \tilde{i} \rangle \not R$ (180) only in transcriptions of Chinese. There is no sign that these graphs were used to denote Khitan original vowels. Thus we can exlude them from the group of graphs denoting Khitan vowels. This, however, does not necessarily mean that the Khitan vocalic system did not have a back vocalic $\langle \tilde{i} \rangle^{13}$.

 5 In the following I will give the Romanisation of the graphs according to Wu–Janhunen (2010), but add in footnotes other suggestions, mainly from Chinggeltei (2002a,b) and Aisin Gioro (2012). The diacritics on the vowel letters serve only for differentiation.

⁶ Aisin Gioro (2012) also <yi>.

⁷ C also <u>.

⁸ Aisin Gioro (2012) <os>.

⁹ C u; Aisin Gioro (2012) <o>, <u>.

¹⁰ Aisin Gioro (2012) o, u.

¹¹ C u, iu; Aisin Gioro (2012) u, ö.

¹² Aisin Gioro (2012) yu, yo.

¹³ The Uighur script also had only one graph, the *yod*, which represented both the front and the back i-sounds.

There existed one graph for \ddot{u} : $\langle \ddot{u} \rangle$ **(**226). The phoneme / \ddot{u} / existed in Liao Chinese¹⁴ as a medial [-y-] or / \ddot{u} /, and in fact e.g. *yuan* $\overrightarrow{\pi}$ is written in KSS as **(** 4^{+} **(**264.226.251**)** <ng. \ddot{u} .n> (K259). Kane used in his List of graphs for **(**082**)** the Romanisation <y>. He remarked (K44) "...used to transcribe Chinese medial - \ddot{u} -.... see also < \hat{u} > **(** 4^{+} 2.226". The letter < \hat{u} > here has to be changed to < \ddot{u} >. There exist other syllables with < \ddot{u} > in the system of WJ: < \ddot{u} e> **(**082 K: <y>), < \ddot{u} en> **(**324, K: < \dot{u}) and < \ddot{u} n> **(**329). All were used only for transcribing Chinese \ddot{u} -sounds.

Making one step forward we have to state that excluding the graphs which denote only Chinese vowels, the *single graphs* representing Khitan vowels are the following: **a**: <a> π (189), **e**: <<u>e> $\stackrel{<}{\times}$ (348), <<u>e</u>₂> $\stackrel{<}{\times}$ (109), **i**: <i> $\stackrel{<}{\times}$ (339), <<u>i> $\stackrel{<}{\times}$ (114), <<u>i> $\stackrel{<}{\times}$ (352)</u>, **o**: <o> $\stackrel{<}{\times}$ (186), <<u>i> $\stackrel{<}{\times}$ (090), <<u>i> $\stackrel{<}{\times}$ (252)</u>, <<u>i</u>₂> $\stackrel{<}{\times}$ (253), **u**: <u> $\stackrel{<}{\times}$ (131), <<u>i</u>> $\stackrel{<}{\times}$ (245), <<u>i</u>₂> $\stackrel{<}{\times}$ (372).</u></u></u>

If we consider the allograph pairs as one each, ten different graphic representations remain for Khitan vowels: one for [a], one for [e], two for [i], three for [o] and three for [u]. Kane writes: "Kitan was exceptionally rich in rounded vowels" (K28). From other sources we know that in Khitan there existed a kind of vowel harmony. On the other hand, the vocalic assimilation of vowels in suffixes seems to have been more complicated. We have to depart from the fact that if there existed a series of front vowels opposed to the back vowels, this is not systematically reflected in the Khitan Small Script¹⁵.

I will now investigate the graphic representations of Khitan vowels in initial positions.

The Representations of a- Initials

The graphic representations of [a] in initial position are the following:

V a: <a> 为 (189). D ay: <<u><a> \pm (122), <<u>>ai></u> \pm (395), <ai₂> \pm (049); aw: <au> \pm (161), < $a\bar{u}$ > \pm (125), < $a\bar{u}$ > \pm (210). VC ad: <ad> \pm (099), <ad> \pm (016A)¹⁶, ah: <ah> \pm (197) (= a γ , aģ), al: <al> \pm (098), ali: <al> \pm (069)¹⁷, am⁶: <u><am> π (184), <u> β <am^6> (185)</u>, <am> \pm (026)¹⁸, an: <an> \pm (011), <an₂> \pm (127), <án> \pm (290), ang: <án₃> \pm (280), <an₃> \pm (199), ar: <ar> \pm (123), as/sa: <sa> \pm (174).</u></u>

- ¹⁵ The same as it is in the Turkic Runic or the Uighur script.
- ¹⁶ <od>, according to Aisin (2012) also <ad>.
- ¹⁷ <ri>, according to Aisin (2012) <ali>, which does not seem to fit into the system (al or li?).
- ¹⁸ ONE, **mas**, according to Aisin (2012) <am>.

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¹⁴ I use the term Liao Chinese following Kane (K227-265), this is the Chinese reflected by the Khitan transcriptions and spoken in the territories ruled by the Khitans from the 10th to the first part of the 12th centuries.

Further there exist cases where the graphic representation begins with a consonant, but it may be read with a preconsonantal vowel a (a+C), see Róna-Tas (2016, p. 118).

Here we have to note that graphs for initials with $\langle a \rangle$ + gutturals as *ag, *ak, *ax are absent, while $\langle ah \rangle$ does not occur in word initial position, but exists in codas. I will deal with this problem later in connection with the long vowels, see below, pp. 176–184.

Words with Initial *a*- Written with the Single Graph *★* (189) <a>

Khitan $\langle a \rangle$ **为** (189) appears in transcriptions of Chinese in place of the Middle Chinese glottal stop+a, e.g. Khitan **为 犬** (189.011) $\langle a.an \rangle$ Ch an 安 LMCh, EMCh ?an 'peaceful' (K262).

*a stem of the pronoun of the third person plural 'they' | cf. Mo *a.

- ani 未 (011.339) <an.i> 'their (genitive case)' (Y24, 25, 26, HU15-30) | Mo *anu* || originally the gentive case of the obsolate pronoun **a*, in LM it has the function of a deictic particle.
- *a- オ (189) <a> 'to be at, to be present (somewhere)' (K58) | Mo *a* 'to be', Da *aa*-, HN *a*-, DaE *a*:- 'to stay, to live', HN remarks that the vowel may have been long. This is the case in Dahur. The semantics of the extended base includes meanings like 'to place (somebody somewhere) (as an official), to appoint somebody somewhere' and the like. It has also to be noted that all extensions, known to me, have the structure <a.aC>, but not all words beginning with <a.aC> are derivatives of 'to be'. Some derivatives were used as auxiliary verbs.

Extended Forms of the Verb of Existence *a*-:

a'ai *オ* **+** (189.122) <a.ai> 'converbal form of *a*-, being, having been, was' (D6-18, 7-11, 10-6, 13-18, 17-9, X6-2, 15-7, 17-19, 22-22, 39-33, HU4-36, 8-21, 12-18, 13-42, JU4-14, 5-47, 7-52,10-37, 12-50, 16-5 22-15, 25-23, 25-54, 34-48, 36-22).

jüren iri-de a'ai <ci.ur.én i.ri.de a.ai> 'was by the second name...' (D6-18), **taiši šari a'ai** <tai si ś.a.ri a.ai> 'being *taishi langjun*, having the title *t.l.*' (Y10),

kem so'or a'ai <kem so.or a.ai> 'an edict being sent (received, heard, observed)'¹⁹ (Y11, K199, 200) $(2\times)^{20}$,

¹⁹ so'or- 雨소 (017.255) -in: <k.em so.or> 'received the edict, or the edict was issued' (K69, Y16, 17, K199, 200), 市时 (017.304) <so.go> 'to receive' (K200), <so.or> 'received' (K199) | Mo sur- 'to learn', Da sore-, HN sur- 'to learn', Da sore- || according to WJ (017) reading unknown.

²⁰ Further examples: <a.an:un te.bu.ei a.ai> (Y17), <hor.se au.o.ju x.ui.ci hu.rí 232.i a.ai> (X17), <te xe.ri.s:er a.ai> (Y20), aú.ui ś.ia KNOW.er c.eu a.ai (Y28), <eu.e BORN.i a.ai> (Y32), <s.iaŋ g.ung a.ai> (Y35),<mó:t au.ui.i a.ai> (Y38), <cu.ur.ge.ei qudug.er a.ai> (EX11).

HEAVEN mo-t awui-i a'ai <HEAVEN mó:t au.ui.i a.ai> 'the heaven(ly) ladies having brought (*aw*-) there' (Y38).

- *a'ad- 为币 (189.016) <a.ad> 'placed there' || passive form with the suffix -d. a'adlaġa'ar 为币小立本 (189.016.261.051.123) <a.od.1.ha.ar> 'a finite past tense predicate after a noun ending in the locative-dative -de'²¹ || Hüende a'adlaġa'ar <hu.üen.de a.od.1.ha.ar> (D27-11), '[to the place] Hüen, [he] was placed...'.
- a'adbań- 肉亦 付伏 (189.099.311.222) <a.ad.b.ń> 'given' || <ba.ń> past tense.²²
 - suHEAVEN a'adbań <su.Heaven a.ad.b.ń> 'given by the majestic heaven' $(D45-18)^{23}$.
- a'an 为出 (189.290) <a.án> 'deverbal noun (participle) in *an* of *a*-' (D7-21, 36-2, 37-1, X34-42, 35-24, 37-42, 46-21, KL6-13, 12-4, 6-10, JU 43-9, 10-16, 40-40, PU10-35, 22-21, 21-39, 21-15, 11-36) || cf. Mo -*gAn*

usg-en RECORD.gsii a'an <us.g.en RECORD.g.s.ii a.án> 'being recorded in letters/by letters' (X46-21).

a'an-er 为出 次 (189.290.341) <a.án.er> (D13-25) instrumental case of *a'an* in *-er* of the deverbal noun *a'an*,

ŠaġaTENT a'aner <š.ha.TENT a.án.er> '[he went] together with ShagaTENT [into battle]' $(D13-25)^{24}$.

*a'an-ben 为出业当 (189.290.295.361) <a.án.p.én> -pen/ben has to be here a suffix²⁵

<COMPOSE.l.a jin a.án.p.én²⁶ xi.a.al RECORD.g.ei na.as.hu.al.ún qi> (Y35).

a'andei 为出友关 (189.290.205.339) <a.án.de.i> '?' || may be a prolative-ablative in <de.i> of a'an (K138).

amiń a'andei gi 356 <a.am.ń a.án.d e.i gi 356> (X28-40).

a'al 肉方 (189.098) <a.al> 'having been conferred, given (title)',

uniq-uń iris-er a'al <uni.qu.ń i.ri.s.er a.al> 'after the *uniquń* titles were conferred on him' (D14-6),

COMPOSE a'an mg mg a'al 冈为出 交九 文九为ち (308.189.290 133.334 133.334 189.098) <COMPOSE.a.án m.g. m.g a.al> 'having been composed MGMG was given to her' (EX14)²⁷, see further: JU33-31, HU10-40, HU32-9, HU27-6, HU19-39.

²² Kane (2009, p. 141) quotes only <-bo. \hat{n} >, -<b. \hat{u} > and <-bun> as suffixes of the past tense, all his examples are after labials. After illabials the suffix may have been -
-
bań/beń>.

²³ Cf. Mo *suu* 'superior, genius'. Most probably *su tengri*.

²⁴ The name I read as ***Shaġager** occurs in D30-16 in \langle š.ha.TENT al.a.ar \rangle 'having killed Shaġager' and in X17-24 \langle ai.de ku.ū.su.ūr š.ha.TENT al.a.go.de o.oi \rangle 'to the father, as favour, because of killing Shagager, was given'. Is this connected to \langle š.ha.ad.en \rangle (X36-14) which seems to be a genitive of a plural of Shaga-?

 25 The function of the suffix p.én> is not clear, it may be the reflexive-possessive suffix which is in Mo after -n finals -bAn.

²⁶ K has <er> in error, the graph is <én> (361), see also Cinggeltei (2002b, p. 230).

²⁷ K read <mo.gi mo.gi>, but in fact <m.g m.g> is written.

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 $^{^{21}}$ Aisin Gioro (2012) read for (016) <ad>, which seems to be here the correct reading, see the next item.

aġa'al タ 立 ち (189.051.098) <a.ha.al> 'having been conferred, given (title)' || converb in -al:

te iris-er aġa'al <t i.ri.s.er a.ha.al> 'after these (*te*) titles (*iris*) were conferred on him, after he was decorated with these titles' $(D20-19)^{28}$,

elemġua aġa'al <l.em.hu.a a.ha.al> 'having been given the [title] *linya*' (JU19-36),

pu shiu aġa'al <pu sh.iu a.ha.al> 'having been given the [title] *pushiu*' (JU20-61), xizu aġa'al <x.i zu a.ha.a.al> 'having been given the [title] *xizu*' (KL10-18),

|| *a'al* and *aġa'al* have to have the same meaning and function.

ayd-en baqai em-en Bu'ur a'alġa'ai <ai.d.en ba.qa.i em.en b.ū.ur a.al.ha.ai> 'he was put in charge of (installed into) region (*em*) of Buur of the childhood (*baka+i em*) of the fathers (*ayden*)' (X23-31) (see WJ186).

- a'algu タウジ (189.098.151) <a.al.hu> 'a nominal form in -*gu* of the causative verb *a'al-'* **TENTuġur a'alġu tegebu'u MOUNTAIN.de** <TENT.uh.ur a.al.hu t.ge₂.bu₂.u MOUNTAIN.de> 'The TENTugur [tribe] was placed at the Mountain Tegebuu' (X33-30). See further: KL18-21, JU24-46, HU30-24, HU12-28, HU15-3, PU17-25.
- a'ar オネ (189.123) <a'ar> 'was there' past tense in -*ar* of the verb *a* (Y32, KL32-8, JU17-42, JU37-7, JU 8-55, JU44-2, HU12-1, HU34-26, PU10-35, PU22-21, PU21-39, PU21-15, PU11-36).

eci tegei a'ar <e.ci te.ge.ei a.ar> 'Eci²⁹ has died, was dead' (Y32).

a'arun 为本 (189.123.144) <a.ar.ún> a'a- and a suffix *-run* ? past participle? Poppe (1964, p. 98) converbum preparativum, see Mo *ögülerün* etc.

tawsuo'ulġa'ai a'arun semier teger <tau.su.ó.ul.ha.ai a.ar.ún s.emii.er t.ge.er> 'having been advanced to the post, fell ill and died' (D11-6)³⁰.

dür-en tadi en a'arun

dur:én t.ad.i ēn a.ar. \hat{u} > 'the fourth (feminine)having been' (Y31)³¹. See further: JU32-18, KL24-20, HU14-36.

There exist further Khitan words and names with initial $\langle a \rangle \not a$ (189), which will be dealt with in the Wordlist.

Initials with Diphthongs Containing Initial a-: ay- and aw-

<u>ai <ai> ≠ (122)</u>, <u><ai₃> ∓ (395)</u>, <u><ai₂> ∓ (049)</u>

The graphs (122) and (395) are allographs. $\langle ai_2 \rangle \neq (049)$ is not present as initial in the texts D, X, Y, L, EX, JU, KL, KC, HU, PC, PU.

³¹ tadi must be a Chinese title.

²⁸ te demonstrative pronoun, *iri-s-er* 'with names' -*s* plural, -*er* is instrumental, *aġa*- causative of a_{-s}^{-s} *aġal* deverbal noun (on the instrumental of the plural in -*s*, see WJ98).

²⁹ Eci may be connected with Mo *ečige* 'father'.

The Khitan graph $\langle ai \rangle \neq (122)$ is used in transcriptions of Chinese $da \pm as \langle d\dot{a}.ai \rangle$, $\langle d.ai.i \rangle$, $\langle t.ai.i \rangle$ and for other Chinese finals as in *kai 'open' or pai 'plate, tablet'. In KSS $\neq (122)$ represents two homophonous words with the meanings 'year' and 'father' resp. Their plural forms are different. The two homophonous words ay^1 and ay^2 occur together 50 times in the texts D, X, L, Y, EX and 67 times in the texts JU, KC, KL, HU, PC, PU.

ay¹ * (122) 'year' <ai> (K128), Pl. **ayis * ¢** (122.244) <ai.s> <SIX ai.s> 'six years' (K204), (D38-12, 39-3, 47-16, 51-4, X1-28, 14-24, 28-11, 30-31, 33-24, 35-22, 44-25, 48-4, Y26, 27), Sh2 | Mo *oi* 'full year, anniversary, birthday', the 'calendric year'³²:

qi ay 'the same year, that year' (X33-23),

Hongdi-in podo ay-en gi < hong di:in po:do ai:en gi> 'during the time of the Emperor, in the gi (of the) year' (Y9)³³.

ayde¹ $\neq \not\equiv$ (122.204) <ai.de> 'in the year' (X23-23, 26-26, 7 times in JU, 11 times in PU, once in HU)³⁴.

HEAVEN udulġa'ar 20 ayde <HEAVEN ú.dū.l.ha.a.ar TWENTY ai.de> 'in the twentieth year of the Chongxi period' (= 1051) (X23-23).

ay² ≠ (122) <ai> 'father' (K97, D2-12 2-18, 2-27, 3-6, 3-12, 3-18, 19-4, 21-15, 26-17, 43-20, X2-10, 3-25, 7-6, 7-34, 8-30, 11-11, 16-37, 19-23, 22-14, 24-30), pl. ayid + ☆ (122.254) <ai.d> (C107, X3-29, 6-16, 14-29, 17-33, 19-15, 32-34, Y22, PU18-34, 5-26, JU9-33, 25-21, KL9-29, HU15-36, 31-38, 30-18)³⁵, u'ur(u) ay 'ancestor' (D2-11, 2-17 passim, X7-5, 7-15 passim), ay mon <ai mo.n> 'parents' (D17-10),

bu ay 'grandfather' (X19-22, Y5) most probably ebu ay, see below, p. 155,

ay Teisu hongti <ai t.ei s.ú hong.di> (Y6) 'the father De Zu 德祖 the Emperor',

ebü ay sengün sa'ar <bu ai s.eng.un s.a.ar> (X19-22) '[when] his grandfather was holding the title (appointed) Field Marshal',

HEAVEN hongti-in ebu ay <HEAVEN hong.di:in bu ai> (Y4) 'the grand-father of the Heavenly Emperor'.

ay-un ceu-un udur pusuwulgi <ai.ún c.eu.un ud₃.úr pu.kå.û.ul.gi> 'the first prefect of the ancestral district' $(EX10)^{36}$.

ayde² \neq 矢 (122.204) <ai.de> 'to the father (dative)'

ayde küsü'ür <ai.de ku.ū.su.ū.úr> 'to the father in/the favour (...was given)' (X17-20).

³² Mo *on* is in Khitan *po* with the basic meaning 'time, year' (see in detail K122).

³³ K read (146) **3** giu, but WJ correctly $\langle gi \rangle$ (157, 301). This word may be a Khitan transcription of Chinese *ji* \supseteq 'the sixth heavenly stem', LMCh, EMCh *ki*'.

³⁴ The two homophonous words **ayde**¹ and **ayde**² are not distinguished yet.

³⁵ WJ109 <ai.s> 'fathers' in error | Da $ac\bar{a}$ 'father, own', ecihe 'father, other person's', HN only ecige DaE aciy.

³⁶ ceu-un is Chinese zhou 'province' |h||, udur 'first', Kane has $\langle yu \rangle$. $\langle pu.kå. \tilde{u}.u| \rangle$ or $\langle pu.su. \tilde{u}.u| \rangle$ is the name of an office, perhaps it may be connected with the office of watering. The Mo word usun 'water' has hitherto had no *h*- data in MMo, but Monguor has *fudzu*, and East Yugur *qusun*, while DaE *ss*, see HN p. 536.

*avi- + (122) <ai> 'to fear' | Mo avu-, avi- 'to fear', Da ai- 'to fear, be afraid', HN avu-, all modern forms derive from avi-, DaE ai-.

*ayilga- 半田立 (122.302.051) 'to frighten, threaten' causative/passive in -lgA. | Mo ayulga- 'to frighten, to threaten', Da ailegaa- 'frighten, scare, startle'.

threatened' (Y12) || converbal form in -ai of avilga.

cawur ui(l)de avilga'ai tüšien iriser <cau.úr ui:de ai.il.ha.ai tū.śi:en i.ri:s:er> (Y12) 'for his offensive/frightening deeds in the battle he got the title dushi 都事,37

- **au**: $\Rightarrow (125) < a\overline{u} > , \Rightarrow (161) < au > , \Rightarrow (210) < au > (161) and (210) are interchangeable$ (K54).
- aw 考 (125) <aū> abbreviated form of awui 'elder sister' (K95, WJ167), see awui.
- *aw- 央 (161) <au>, 尓 (210) <aú> 'to take, get, to grasp, to get hold of' | Mo ab-'to take, get, to grasp, to get hold of', HN ab-, DaE au-, aw-, cf. WJ213.
- *awul- 央平 (161.366) <au.ul> 'let somebody take (a title), to appoint' | factitive of **ab*- 'to take', the suffix is -*Ul, $*aw+ul^{38}$.
- **abul*+*lga*, the suffix is -*lgA*

awulġa'a'ar 夾平立肉本 (161.366.051.189.123) <au.ul.ha.a.ar> (JU37-15), also awulga'ar 央平立本 (161.366.051.123) (KL11-21) past tense in -ar of awulga-.

21, 32-14, JU18-35, 13-3, HU 17-8, PU 19-6) converbal form in -ai of the factitive of aw-.

Para Ugurde awulġa'ai < p.ra ú.g.úr.de au.ul.ha.ai> '[the Emperor] let him to be appointed to the Ten Ogurs' (D32-14), see my previous paper, AOH 2016, p. 129.

tawsuoulgai awulga'ai <tau.su.ó.ul.ha.ai au.ul.ha.ai> 'having advanced him [and appointed]' $(D9-21)^{39}$.

- awulga'alun 央平立方灵 (161.366.051.098.144) <au.ul.ha.al.ún> 'has been appointed' (K54, KL 9-19) 'past tense in -lun of the factitive stem of aw-.
- awulga'ul 夾平 亚平 (161.366.051.366) <au.ul.ha.ul> deverbal noun in -ul, of the factitive stem of aw-

³⁷ cawur uyi(l) 'war affair', +de locative, tuši 'dushi'+gen, iri 'name, title' +s plural, er instrumental case marker.

³⁸ As in Mo sagu- 'to sit' > sagul- 'to set', ugu- 'to drink' > ugul- 'to give drink' (Poppe

^{1964,} p. 61). ³⁹ See for tawsuo 天卡井 犬 (029.041.090.262) <tau.su.ó.ui> 'to advance' (X2-14, 3-17, 24-6) | Mo dabsi- 'to advance', dabsigul- 'caus. of dabsi-', sagal tawsu'o'ui awui <s.a.ha.al tau.su.ó.ui au.ui> 'Sagal has been advanced to (the post)' (X24-7), tawsuo'ulgai 乏卡井平立中 (029.041.090.366.051.122) <tau.su.ó.ul..ha.ai> 'to let advance' (D9-20, 11-5), tawsou'ulgu 无卡 卅平 (029.041.090.366.151) <tau.su.ó.ul.hu> 'to be advanced' (X37-23). On Sagal 全力立ち (244.189.051.098) <s.a.ha.al> (X4-15, 24-5) and sa'a'al 今为方 (244.189.098) <s.a.al t.ge.er> 'Sagal died' (D23-4).

ho:de tawsuwui awulga'ul <ho:de tau.su.u.ui au.ul.ha.ul> 'to him [as] an advancement an appointment was given' (Y17).⁴⁰

- awliġalġa'ai 夾反 並坐並半 (161.206.051.261.051.122) <au.li.ha.l.ha.ai>
 - **MOUNTAIN awligalga'ai** <MOUNTAIN au.li.ha.l.ha.ai> 'was placed in the tomb/mountain' (X33-18).
- awoi 考太 (125.107) <aū.oi₂>? read <aū.er> 考 太 (125.269). The verb aw- may have here the meaning 'beginning with, from, since' as in the Mo expressions *ekineče abun* 'from the beginning', *örlüge-eče abugad* 'since morning' (L). The expression <BORN.i/yi aū.oi> had then the meaning 'from his birth on'. In the preceding sentence we read about the death of the Field Marshal:

e saadi BORN awoi <e s.a.ad.i BORN.i aū.oi₂> (X40-18), <e₂ s.a.ad.i BORN.yi aū.er> (Yongqing Gongzhu Inscription line 28) 'since his birth there' (WJ214).'

HEAVEN mo-t awui-i a'ai \langle HEAVEN mó:t au.ui.i a.ai \rangle 'the heaven(ly) ladies [and] miladys being there' (Y38)⁴¹.

moku Doloer awui naġaner mo TENT-en te <mó ku dolo.er aú.ui na.ha.án.er m.o TENT:en te> 'Those of the wife, Doloer milady, the maternal uncle, the great lineage' (Y11),

senggün Bu Cang shi-en moku Owii Esen awui TWO-en bahuan TWO mo. <s.iang g.ung b.u ca.ang ś.i:en mó ku ó.ui.i s.en aú.ui TWO:en bo.hu.án TWO° m.o> 'To the wife of the *senggün* Fu changshi, the milady Owii Esen two sons and two daughters [were born]' (Y13).

Initial a- Written with Graphs of the Type VC-

<u>ad: <ad> 5 (099)</u>, <u><ad> / <od> 币 (016)</u>

- Ada'an 5 为天 (099.189.011) <ad.a.an> 'of Dong Dan, Eastern Dan Ch 東丹 in Adan guren 'Kingdom of Adan' (D8-3) || Adan or Dan (WF112-113, note 9, WJ74), the fomer Bohai. There is no hint in the Chinese sources that the proper name Dan had an a- initial. The Chinese used here the same character 丹 as for the second syllable of the Chinese transcription of Khitan.
- <u>**ah**</u>: <ah> \ddagger (197) (= a γ , ag) yet no example as initial, only in codas, see below.

⁴⁰ K has <ka> instead of <su>.

⁴¹ **awui**¹ is here the same as **awui**².

<u>**al** > 5 (098)</u> appears in the suffix <....-ha.al.hu> (K46) '<-galgu> in opposition to <-ge.l.gi>' and can be compared with the Mo causative suffix -(ga)lga, -(ge)elge.

In word initial position:

- *ala- ち肉 (098.189) <al.a> 'to kill' | Mo *ala* 'to kill', HN *ala* 'to kill', DaE *al*-.
- ala'ar- ちカネ (098.189.123) <al.a.ar> past tense masculine form of ala- (D5-15, 30-16, 43-14).

Sudgey ala'ar <s.ud₃.ge.y al.a.ar> '[he] killed Sudgey' (D5-15),

ŠaģaTENT ala'ar <ša.ha.TENT al.a.ar> '[he] killed ShahaTENT (Shaha-ger?)' (D30-16), cf. *sudurgeer* below (D48-18),

Ciriń gi ala'ar <ci.ri.ń gi₂ al.a.ar> '[he] killed the Ciriń' (D43-13/14).⁴²

Tümür Ceu ala'ar üsgi tsar <tůmu.úr ci.eu al.a.ar us.gi ts.ar> 'has killed Tümür Ceu⁴³ and an inscription was raised / a note was written' (Y38).

*alal- ala- 'to let kill, with the factitive/passive suffix -l.

ay-iń gi alaluji yara <ai₃.ń gi al.l.u.ji₃ ia.ra> 'the murder of the father' (X34-29),

pojiġ-an gi alaluji nera-en TEXT.u <p.o.ji.ha.án gi al.l.u.ji ne.rå:en TEXT.ú> 'The tomb inscription on how Pojig was murdered' (Y35).

aluji 方 太 玢 (098.131.152) <al.u.ji> '?' (D48-18), 方 太 汋 (098.131.153) <al.u.ji> 'having been killed' | converbal form of *ala* ?' (D38-18) [written with two different types of <ji>]

sudurge'er aluji <s.ud₃.ur.ge.er al.u.ji RECORD.e nai> 'was ruined and killed' (D48-18)⁴⁴,

ho bayilga'ar aluji < ho bai.l.ha.ar al.u.ji₂> 'he was removed and killed' (D38-18),

amulġa'ar aluji jin kem ja'alġa'ai <am.ul.ha.ar al.u.ji jin k.em ja.al.ha.ai> '?' (Y22).

*alalġu 'battle' | Khitan +ġu is a deverbal nominal suff., cf. Mo -gu in yadagu 'poor'
 < yada- 'to be unable', this is more probable than Mo -qu, the suffix of the nomen futuri.

alalġu-an 专 中 列 夹 (098.261.151.011) <al.l.hu.an> 'battle + genitive'.

RECORD alalgu-an pulug <RECORD e al.l.hu.an p.ul.uh> 'in the record the battle detachment ...' $(X2-26)^{45}$.

⁴² gi cannot be here the negation particle, I suppose that after nasals it replaced qi \square (323) 'that, that very'. In other context gi may denote a negative particle, see Mo *ügei* 'no, not' > Mo *güi* 'privative marker'.

 $^{^{43}}$ <ci.eu> is a transcription of the Chinese name of the 'province' ||| *zhou*, but also figures as a part of name e.g. in X20-25.

⁴⁴ See <s.ud₃.ur.ge.y al a.ar> (D14-15). **sudurge-** may be connected with Mo *süyidge-* 'to ruin'.

⁴⁵ *puluģ* has been identified by Kane as 'intercalary month' from the verb *pulu-*. **puluģ** 业平久 (295.366.173) <p.ul.uh> (K103, X2-27, 41-9, WJ142), | MMo *hülewü*, Mo *ülegü*, *ilegüü* (<

alalġuer ちサガス (098.261.151. 269) <al.l.hu.er> 'battle + instrumental?' (Y5)

alalġuer ńowur 048iń iride <al.l.hu.er ńi.ō.úr 048.iń i.ri:de> 'battle circuit XXX⁴⁶ title [was given?]⁴⁷

*?alagode 方 肉 肉 矢 及 次 (098.189.305.205.186.347) <al.a.305.de o.oi> (X17-24), if 冈 (305) is an allograph of 闲 (304) <go> and not <ro> as suggested by K71, then it may be read alagode, as below

ay-de küsü'ür ŠaġaTENT alagode o'oi <ai.de ku.ū.su.ūr ša.ha.TENT al.a.go.de o.oi> 'to the father (*aide*) as favour (*kuusuur*) *Sha.ġa.TENT al.a.go.de* was given (*o.oi*)' (X17-24)⁴⁸,

ali ち ★ (098.339) <al.i> 'a superlative particle' | cf. Mo *ali* in *ali sayin* 'best'. ali ciisen moer <al.i ci.i.is.en mo.er> 'with the ladies of the highest/best blood relation' (D36-19).

ayri-un ali mu.158 <ai.ri.ún al.i mú.158> (Y39).

- *amu 'peace, rest' | Mo amur 'peace, rest', Da amare 'peace'.

*amul- 'to put into rest, make peace' | Mo amugul- 'to put into rest', amugulang 'peace'.

*amulga- 'to let make peace, to pacify' factitive in -ga of amul-.

amulġa'ai 乃中立中 (184.261.051.122) <am.l.ha.ai> 'making peace, happiness, pacifying' converb in *-ai* of amulga-.

kuw-un amulġa'ai <ku.ū.n am.l.ha.ai> 'the pacification of the people' (X26-11).

amulga'ar 乃平立本 (184.366.051.123) <am.ul.ha.ar> 'having made peace' (Y22):

kuw-un ewurge-un amulga'ar <ku.ū.un eu.ur.ge.un am.ul.ha.ar> 'having pacified the people and the officials'⁴⁹ (Y22).

cawur Tiantz amulga'ar <cau.úr t.ian.tz am.ul.ha.ar> 'the army pacified Tianzhi' (Y24)

amse 乃全 (184.244) <am.se> 'because of' (K187n, JU15-2, JU16-57), 全 also /s/.

Mo *üle-* 'to be left over'), Da *hüledee-* 'remain behind', HN *hüleü*, *hileü* 'surplus', Ma *fulu* 'surplus' | Sh *pulu*, *puluh*. This is possible, but in this context I suggest instead a word to be connected with Mo *bülüg* 'group, division, detachment' because in the phrase **alalgu-an puluģ** 'battle detachment' fits better into the context. The following expression does not pertain to *puluģ*: 生平表 \pm 平本 (295.366.131 295.366.144.348) <p.ul.u p.ul.ún.e> (X44-20).

⁴⁶ The graph \neq (048) is mnemnonic for Chinese *nian* \mp , is this a part of a title here?

⁴⁷ **ňour**, **ňūr** 公(伏刻/卅/公英 (251/222.138/090/253.097) <n.iū.úr>, <n.ó.úr>, <ńi.ô.úr></i>

⁴⁸ See also <sha.ha.TENT al.a.ar> in D48-18.

car amse REGIONa-an <c.ar am.se REGION.a.an> 'because for a time in the region' (L2).

- <am> 烙 (185) 'the same as (184) but with dot. It occurs in X34-20, JU33-27, KL17-16, HU39-27, HU39-12 isolated. According to Wu (2012) 'river'. It occurs sometimes after MOUNTAIN.
- <u><an> 釆 (011)</u>, <u><an₂> 柔 (127)</u>, <u><án> 出 (290)</u>.

The graphs $\langle an \rangle \not\in (011)$ and $\langle an_2 \rangle \not\in (127)$ were considered as allographs, while (290) as a heterograph. (127) and (290) do not occur as initials.

<[tu] x.i an> 'Tu Xian, an unknown Chinese name' (D33-2, WJ113).

*anla- $\mathbf{X} \mathbf{\Psi}$ (011.261) <an.l.> 'to hunt' | Mo angla-/angna- 'to hunt'.

šari-d cicien so'or anlagai <š.a.rí.d ci.ci:en so:or an.la.ha.ai> 'the *langjuns* and others... (and) were called/invited to hunt ?' (Y10)

šarid anlagar <š.a.rí:d an.la.ha.ar> 'the *langjuns* went to hunt ?' (Y28).

<u><ang> 尧 (199)</u>, <u><áng> 兆 (280)</u>

★ (199) does not occur in word initial position.

áng 北 (280) in:

dagar o'on xas ang <da.ha.ar o.ón x.s áng> '[the coffin] was closed and....?' (D47-20).

angra 业存 (280.084) <áng.ra>

<SMALL.qu.de.i s.ho.ii áng.ra THIRTYo 066.én eu.ur o.od.077> 'since his childhood until he reached 30 years' (X29-4/10).

<-én> may be here the genitive case suffix, the graph \pm (066) is not deciphered yet. According to Aisin (2012) <mə>, it occurs sometimes in place of \pm <ha> (WJ195). The personal pronoun 'he' was in Khitan <hó> \boxplus (309) (WJ143), its genitive case may have been <ha-en>. The graph \pm (077) has to be read according to Aisin (2012) as <bur, bor>. I suggest that it is an allograph of \pm (088) <ii> and functions here as the marker of the converb. If the equation \pm (066) with \pm <ha> is correct, then we can decipher (066) and read it as ga(r).

*ga(r)- \pm (066) <066> recte <ha> 'to go, or come out, to appear, to reach' | Mo gar-'to go or come out', HN gar- 'to come out, appear', DaE gar-⁵⁰.

Initial *a*- Not Written

⁵⁰ If the correct reading of (066) is **ga(r)**, we have: **30 ga(r)-en ewür odii** <THIRTYo ha.én eu.ur o.od.ii> 'when he reached 30' (X29-8) as in: **sengün 30 ga(r)lun 2 ayis** <s.eng.un THIRTYo ha.lun TWO ai.s > 'after the sengün reached 30, [he spent] two years...' (X35-18). **ġa(r)iy** $\pm \pm$ (066.080) (066.ii) the converbal form of ġa(r)- <s.eng.un 017.or 291.oi.uni.qu.de ha.ii> 'the Field Marshal appeared at the...?, **ġa'arilġu** $\pm \not{\pi} \neq \not{\pi}$ (066.189.069.261.151) <ha.a.rí.l.hu> (X36-34) a deverbal noun of the factitive verb **garil**-. Another word is: ***garla**- 'to handle' | Mo *garla*- 'to handle' from **gar**- 'hand', **ġa(r)laun** $\pm \not{\pi} \not{\pi}$ (066.261.122) <ha.l.ún> (X35-20) **ga(r)laci** $\pm \not{\pi} \not{\pi}$ (066.261.162) <ha.l.ci> (D8-2), a converbial form in *-ci* of the verb *garla*-.

ANDRÁS RÓNA-TAS

If we distinguish, which is not always easy, word formative suffixes and inflectional suffixes, we can state that if the first syllable contains /a/ it can be followed by $\langle a \rangle$, $\langle i \rangle$, $\langle o \rangle$ and $\langle u \rangle$. However, inflectional suffixes may also contain $\langle e \rangle$ as in **alalguer** 方 中 **为** \bigstar (098.261.151. 269) $\langle al.l.hu.er \rangle$ 'battle + instrumental?' (Y5) or **ay-de** \Rightarrow \bigstar (122.205) $\langle ai.de \rangle$ 'to the father', **ay-en** \Rightarrow \hbar (122.140) $\langle ay-en \rangle$ 'of the father', **ayis-en** $\Rightarrow \Delta \pi$ (122.244.140) $\langle ai.s.en \rangle$ 'of the years', **ayid-en** \Rightarrow \bigstar π $\langle 122.244.140 \rangle \langle ai.s.en \rangle$ 'of the years', **ayid-en** \Rightarrow \bigstar π $\langle 122.244.140 \rangle \langle ai.s.en \rangle$ 'of the years', **ayid-en** \Rightarrow % π $\langle 122.244.140 \rangle \langle ai.s.en \rangle$ 'of the years', **ayid-en** \Rightarrow % π $\langle 122.244.140 \rangle \langle ai.s.en \rangle$ 'of the years', **ayid-en** \Rightarrow % π $\langle 122.244.140 \rangle \langle ai.s.en \rangle$ 'of the years', **ayid-en** \Rightarrow % π $\langle 122.244.140 \rangle \langle ai.s.en \rangle$ 'of the years', **ayid-en** \Rightarrow % π $\langle 122.244.140 \rangle \langle ai.s.en \rangle$ 'of the years', **ayid-en** \Rightarrow % π $\langle 122.244.140 \rangle \langle ai.s.en \rangle$ 'of the years', **ayid-en** \Rightarrow % π $\langle 122.244.140 \rangle \langle ai.s.en \rangle$ 'of the years', **ayid-en** \Rightarrow % π $\langle 122.244.140 \rangle \langle ai.s.en \rangle$ 'of the years', **ayid-en** \Rightarrow % π $\langle 122.244.140 \rangle \langle ai.s.en \rangle$ 'of the years', **ayid-en** \Rightarrow % π $\langle 122.244.140 \rangle \langle ai.s.en \rangle$ 'of the years', **ayid-en** \Rightarrow

The Representations of *e*- Initials

The graphic representations of [e] in initial position are the following: **V** e: $\underline{\langle e \rangle} \not \otimes (348), \underline{\langle e_2 \rangle} \not \otimes (109),$ **D** eu: $\langle eu \rangle \not \Rightarrow (067), ey/y: \langle y \rangle \not a (020).$ **VC** el: $\langle el \rangle \not t (080A), em: \underline{\langle em \rangle} \not a (257), \underline{\langle em_2 \rangle} \not a (256), \langle \acute{em} \rangle \not a (270), en:$ $\langle en \rangle \not a (140), \underline{\langle \acute{en} \rangle} \not a (361), \underline{\langle \acute{en}_2 \rangle} \not a (100), \underline{\langle \acute{en}_3 \rangle} \not a (219), \underline{\langle \acute{en}_4 \rangle} \not a (399),$ $\langle \acute{en} \rangle \not a (073), eng: \langle eng \rangle \not a (175), er: \underline{\langle er_2 \rangle} \not a (269), \underline{\langle er \rangle} \not a (341).$

Initial *e*-Written with Simple <e>

The two graphs are allographs, from a systematic point of view, there exists only one $\langle e \rangle$.

e 券 (109) <e₂>, 券 (348) <e> 'this, demonstrative proximal pronoun' (D21-17, X22-26, 25-29, 28-3, 40-15, +WJ100, JU17-20, HU26-18, JU24-35, JU26-19, HU22-2) ∥ The original root **e* was lost in the Mongolic languages, but see the derivates: Mo *ede*, *ene*, *egün*- 'stem of *ene*', Da *ene* 'this', *ede* 'these', HN *ene*, oblique stem *eün*, pl. *ede* <**e*, see **et** 'these'.

e iride sa'ai <e₂ i.ri.de s.a.ai> 'while being in this position' (D21-17).⁵¹

e iride geri xüyrigei <e i.ri.de g.ri x.ui.ri.ge.y> 'to this position he was promoted' $(X28-3)^{52}$.

e sa'adi BORNi awer/awoi <e s.a.ad.i BORN.i aū.er> 'to this place he was born' (X40-15).

^et $\diamondsuit < t > (247)$ 'these' the plural of e 'this' written with a single < t >.

et iriser aġa'al <t i.ri.s.er a.ha.al> 'these titles having been conferred upon him' $(D20-17, WJ98)^{53}$.

et iriser oju'un 'with these titles he was awarded/these ranks he entered' (X12-2).

⁵¹ The verb may perhaps be connected with Mo *sagu*- 'to sit, stay, be (copula), become', see below <s.a.ad>.

⁵² According to WJ194 <x.ui.ri.ge.y> has the meaning 'to be promoted'.

⁵³ The demonstrative distant pronoun is $\langle qi \rangle \square$ (323) or $\langle qi.hu \rangle \square 34$ (323.151). Aisin (2012) reads $\langle ta \rangle$.

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Initials with Diphthongs Containing Initial e-: ey- and ew-

ey/y: <y> 万 (020)

The graph represents a /y/ in initial position in most cases and will be dealt with among the *y*- initials. But it may also stand for /ey/. In the transcriptions of Chinese it represents -*ei* finals (K37). In Khitan morphology it represents a converb as -**ay**, -**iy** and -**oy** do.

In word initial position:

*ey- 7 (020) <ei> 'the copula, to have, to exist, to be present' (K156) || The relationship of Khitan *a- and <ei> is not clear. It may be an extended base of *a-/a+y/ and under the influence of /y/ it may have been palatalised. In this case it is perhaps to be read as /äy/, that is, with a palatalised /a/. The graph is Roman-ised normally as <y> but in this case as <ei> or <ey>.

eyye $\mathcal{F} \bigstar (020.327)$ <ey:ie> 'being somewhere, to be present somewhere'. MagaTENT eyye <ma.ha.TENT ey.ie> 'MagaTENT being (there)' (D40-9), got eyye <go:t ey:ie> 'remained/was at home/in the lineage' (K156), got Ü eyye <go:t ü ey.ie> 'he was/remained in the lineage of Ü' (Y3), pa'ad eyye <p.a.ad ey:ie> 'was in the *bagas*...' (X8-19)⁵⁴.

Further occurrences: JU32-52, JU36-7, PU23-14, PU16-30.

- ew <u> ち (067) <eu></u>
- *ew- ち (067) <eu> 'to not exist' (L2, Sh2) | cf. Mo *eb 'not exist', see ebde- 'to destroy, annihilate, to cause to not exist'.⁵⁵, HN ebde- 'to break, to destroy', Da erede-, ?DaE ərd-, DaM erde (< *ebdere-).
- ewiń ち伏 (067. 222) <eu.ń> '? the state of not being' (D38-20) an extended form of ew-:

 $\mathbf{\ddot{u}yi(l)} ewin < ui eu.n > (L2)$ has to mean 'the matters [of the region] were neglected, did not exist',

Ewińer ち伏茶 (067.222.341) <eu.ń.er> 'no existence, death, memorial of a passed person' (D36-15),

riuijien ewińer tulu'ur jawulġa'ar <ri.u.ji.en eu.ń.er t.ul.u.úr jau.ul.ha.ar> 'at the Riujien [mountain]⁵⁶ a "no existence" [memorial] pillar⁵⁷ was erected' (D36-15).

ewji ち移(067.152) <eu.ji> '?converbal form of *ew-, not being?' (D39-19) in line final position:

 54 *ba'a 生为 (295.189) <p.a> 'a small territorial unit' | cf. Mo *bag* 'the smallest administrative unit' < bag 'bunch, group'. ba'a-d 上为 (295.189.099) <p.a.ad> 'plural of ba'a' (X8-18).

⁵⁵ The relation of *eb > ebde with Mo *ese* the negation particle and *ese*- the negative verb will not be treated here. See Brosig (2015) on Mongolian negation.

⁵⁶ In the preceding line Riujien MOUNTAIN.

gi qa'aloji ewji \leq gi₂ qa.al.ó.ji eu.ji \geq '[the coffin was placed and....] not closed (gi qa.al) ?'⁵⁸

ewüni ち杏 (067.059) <eu.uni> '? some category of official' (WJ200)

muji-en ewuni <mu.u.ji3:en eu.ni> 'the Ewuni of the region' (X32-5).

- ewül キギ (067.366) <eu.ul> 'cloud' (K42, 89, also X44-15, 45-22) | Mo egüle 'cloud', HN eülen 'cloud', Da eulen, DaE əulən || In lines 44 and 45 of X it is yet impossible to identify the meaning of the word. Cf. Tabgach *üglen, Ligeti (1970, p. 304), Vovin (2007, pp. 197–198) reads gülen or yülen.
- ewül **ち**平 (067.366) <eu.ul> 'name of a region'.

sengün Ewül tequshi <s.eng.un eu.ul t.qu.sh.i> [in the capacity of] Field Marshal [he was also] the Governor General of the Ewül region' (X11-21),

I have to deal here with the Khitan word for 'winter', because certain derivatives begin with *e*-:

ü'ül え干 (131.366) <u.ul> 'winter' (K3, 79, 126, D47-12, JU37-42, JU28-17, JU20-50, HU7-13, PU11-11, PU10-3, PU13-16, Sh2), <u'ul> (C107, Sh 104) | MMo übül, Mo ebül, HN übül, ?ebül, Da ugul, DaE uyul, uwul, u:l, Sh uul/uwul.
 dawur-un üwül 14 DAY <dau.úr.ún u.ul TEN FOUR DAY> 'on the 14th day

of the middle winter [month]' (L11).

The denominal verb is:

- *ewüle- 'to spend the winter'.⁵⁹
- ewülere ち卒茶芬 (067.366.107.348) <eu.ul.[oi₂]er.e>

temügeyi-en ewülere MOUNTAIN Am yewrüji-en cier <t.mu.ge.ii.en eu.ul.er (= oi_2).e MOUNTAIN am^o y.eu.ru.ji₃.en ci.er> 'while he spent the winter at the mountain Am... he wrote' (X34-18).⁶⁰

ewülüji 与平泵药 (067.366.131.152) <eu.ul.u.ji> (D22-8), here the context excludes the meaning 'to be given in mariage', it is a converbal form, perhaps 'after having spent the winter': tüdlege'er ünenen ewülüji 令火平 公ぶ 全当力 古平 灵药 (247.344,261.349.341 245.361.140 067.366.131.152) <t.ud.le.ge.er ún.én.en eu.ul.u.ji> (D22-8).⁶¹

A similar case is the verb **üw**-, which has derivatives with *e*-

*ü(w)- 'to give, to provide' | Mo ög- 'to give', Da uke-, HN ög-, DaE ukw-.

üwüi- 只失 (372.262) <ū.ui> 'giving, providing' (K66, 67, 99) converbal form of üw-

⁵⁹ In WM *ebülji*- 'to pass the winter', the Khitan word **ewüle**- comes from *ebül-le-.

⁶¹ After a causative verb in past tense the next word has to be *ünen+-en. The word occurs in D32-16 <ün.en.de> and D34-26 <pu.i un.én>. It recalls Mo *ünen* 'truth, truthful', but may be something different. It is not a genitive case marker, because after -*n* finals it is -*i*. More probably it is a deverbal noun or a modal form.

⁵⁸ To Mo *qaga*- 'to close'. The structure -*ji* -*ji* is remarkable.

⁶⁰ The sentence in which the word occurs ends with the block <ci.oi> * (162.347) 'wrote', most probably <ci.er> * (162.341) 'wrote'. It is preceded by a verbal noun in -en (**yewrüjien**), then a name of a place (Mountain Am) and the latter is preceded by <eu.ul.oi₂.e> which has to be read <eu.ul.er.e>.

- üwür- 兄友<û.úr> (372.097) 'gave' past tense of üwayde küsü'ü üwür <ai.de ku.ū.su ū.ur> 'to the father in favour was given...' (X17-22)⁶², but:
- *ewül- causative of üw- 'to give'.
- ewülgey 与平态方 (067.366.112.020) <eu.ul.ge_{2.}y> a causative+converbal form of *ewül* 'was given (a consort from the Imperial clan)' Wu and Janhunen (WJ70) suggested that here the word would be the same as <ū.ul.ge> 'to be given in marriage'. The context does not exclude this possibility.

holboń ONE-i ewülgey <hó.l.b.ń ONE.i eu.ul.ge₂.y> 'to him (a lady from) the first Eliben 訛里本 (clan) was given (as a wife)' (D6-13).

- See further: JU11-13, HU14-38, HU18-6, HU18-36.

See further: JU35-22, KL10-15, KL15-4, HU12-22.

ewülgen 与平九丸 (067.366.334.140) <eu.ul.g.en> the final <en> here looks like a modal suffix, see Mongolian -*n* the suffix of the modal converb (Poppe 1964, p. 97) and not the marker of the genitive case.

ewülgen so'or 与平九有 雨소 $(067.366.334.140 \ 017.255)^{63}$ <eu.ul.g.en so.or> '...given was received' $(X31-5)^{64}$.

- See further KL15-13, PU21-41.
- ewülge'e 与平弦芬 (067.366.349.348) <eu.ul.ge.e> is a nominal form, like Mo *ög-gülge* 'debt', *öglige* 'alms' in the following sentence the word before it is in genitive case:

una'an-en ewülge'e u'un sa'ar <un.a.án.en eu.ul.ge.e u.un s.a.ar> '?' (X18-2)

ewür 58-de <eu.úr FIFTY.EIGHT.de> 'in his 58th year' (X12-13).

ewür 67-de <eu.úr SIXTY SEVEN:de> in his 67th year' (Y26).

- ewürge'en 与化态与 (067.236.112.100) <eu.ur.ge₂.én₂> is a verbal noun in -én of ewürge.

⁶² küsü *Λ* 𝔭 ★ (178. 372.041) <ku.ū.su> '(in) favour' (D3-29, 27-9, X39-35) | cf. Mo *küse*-'to wish, desire', HN *küse*-.

⁶³ According to Aisin Gioro (2012) graph (017) has to be read <do>, but I suggest <so>.

⁶⁴ Also **pomufei-i ewülgen KNOWii** sia'aġ <eu.ul.g.en ś.iá.ah> (EX8).

⁶⁵ The word may be etymologically connected with Mo *ebüge* 'ancestor', see *ebügere*- 'to become old, age', HN *ebügen*, DaE *auka* (form of address). See Kh \leq bu> \leq (195) "ebü(ge)" 'grandfather'. soi-en HEAVEN ewurge'en temei <s.oi.en HEAVEN eu.ur.ge₂.én₂ t.em.y>⁶⁶ 'having been granted the passing away by the Heaven?' (D50-15). The passage relates to the death of the owner of the epitaph.

- ewüni ち 杏 (067.059) <eu.uni> 'some category of official':

muji-en ewüni <mu.u.ji₃.en eu.uni> 'the Ewuni of the region'⁶⁷ (X32-5) <ETERNAL.il.ha.ar eu.uni> '?' (Y29). See further: JU10-5.

- *ewü- 'to die' | Mo ükü- 'to die', HN ükü- 'to die'. The initial h- in one MMo source, the Rasulid Hexaglot, may be secondary. Though Monguor, Baoan and Dungxian have reflexes of *p-, Dagur has none: DaE uyw-. The Da datum is important, because it shows that the -*k- was voiced, as in all other GQ Mongol languages, see the details in HN 540. According to WJ this word is somehow connected with Mo ügei, ügüi '(there is) not'. HN ügei (?ügüi), in all Shirongol languages it can take verbal suffixes. DaE *uwai*, this is less probable.
- SMALLqudu ewüi <SMALL.qu.dú eu.ui> 'he died when he was young/in his childhood^{,68} (D9-9).
- **RECORD** e kü ewüi> <RECORD.e ku eu.ui> 'In the record [was noted that] the person died' (X4-28).
- See further: JU27-31, JU7-54, JU33-48, JU33-44, HU 6-15,
- ewge 与 ((067.349) < eu.ge> (Y3) may be another writing for ü'e 只 ((372.348)) $\langle \bar{u}.e \rangle$ 'a title' (K130, X2-13, 5-9, 8-15) | Mo **üge* \leftarrow T *öge*, see **üwe** below, p. 167.

morid-en ewge oju'un <m.r.i.d:en eu.ge o.ju.un> (Y3). According to K182 <m.ri> is either the tribal unit (Chinese mili 彌里) or the Khitan word mori 'horse', 'he was appointed Üge of the Tribal Unit/Horses'.⁶⁹

Ewgeńug ち九伏久 (067.334.222.172) <eu.g.ń.uh> 'a male personal name' (X18- $23)^{70}$.

Initial e- Written by Graphs of the Type VC-

 $\langle el \rangle$ **t** (080A). According to Aisin Gioro (2012) (080) which is usually read as $\langle ii \rangle$, may also be read as <el>.

⁶⁶ tem- 令金 (247.257) <t.em> 'to grant title' (K100), 令金万 <t.em.y> or <t.em.ei> (247.257.020) converb (D37-6, 40-2, 50-16, X39-32), 今 金 茶 (247.257.341) <t em.er> 'appointed to, got the title' (D20-9) | cf. Mo temdeg-, Ma temgetu 'sign', temgetule- 'confer a mark of distinction', $\mathbf{\overline{7}}(020)$ may be either -y, or -ei.

⁶⁷ muji has here the meaning 'region' and not emperor as WJ suppose (WJ200).
 ⁶⁸ -qu is a suffix of adjectives, -du is locative/temporal.

⁶⁹ mori 永儿 (133.235) <mo.ri> 'horse' (K50, 102), <mori> (C107), Sh2 read for (235) <ir>, thus <m.ir> 'horse' and refers to Old Koguryo mero what is unnecessary. | Mo mori(n), Da mori, HN morin, DaE $m \gamma^{v}$.

⁷⁰ The sufix -*hug* may be a deminutive, which I can trace back only in Old Turkic, see WOT146. If this can be supported by other data, then it would be the Small Üge, the minor Üge.

<u>em: Δ (257), <em₂> Δ (256), <ém> Δ (270)</u>

The graph $\overline{\langle em_2 \rangle} \triangleq (256)$ is an allograph of $\triangleq (257)$, $\triangleq (270)$ is a heterograph. That means that we have two graphs for [em].

*em (257) 'place, city'.

em-en $\Delta \hbar$ (257.140) <em.en> 'local, of city' (K66, X11-21) Sh2 in L4:7-13 translated *om* 'city', in *em-en naid* '[with his younger brothers the] local officials'. In the Chinese version 'the prefect of Liyang'. It occurs in one case as **em**, in most cases as **emen**.

Dowun em Tamun emen \leq do.u.un em t.am.ún em.en> 'of the region of Dow [and] of the region of Tamun' (D14–13-16), only the second *em* is in genitive case.

Gewun emen sa'ai ġorun MANAGE.un <g.eu.un em.en s.a.ai hor.ún MANAGE.ún> 'being in the region of Geu while he administered/organised the people' (D15-4).

Gewun emen oju'un <g.eu.un em.en o.ju.ún> 'he was installed to the region of Geu'(X28-1).

sengün Ewül emen tequshi <s.eng.un eu.ul em.en t.qu sh.i> 'Being Field Marshal [*sengün*] he was the Governor General [*tequ shi*] of the Ewul region' (X11-22).

ayden baqai emen Buur a'alġa'ai <ai.d.en ba.qa.i em.en b. \bar{u} .úr a.al.ha.ai> 'he was put in charge of (installed into) the childhood region (*baka+i em*) of Buur of the ancestors' (X23-33).

moden emen gi awur <mo.d₂.en em.en gi aú.ur...> 'The maternal (*mo-d-en*) region was not (*gi*) ? taken' (X39-27).

Tamar emen tušien <t.am.ar em:en t.ú ś.i.en> 'Tuxian(?) of the Tamu 塌母 district' (Y25).

emen nayid \leq em:en nai:d> 'the officials of the region' (L9).⁷¹

*em- 茶 (270) <ém> 'to drink' (K67, 93, Sh2)⁷² | cf. T *em*- 'to suck', Mo *eme* 'woman', Mo *emkü*-, *ümkü*- 'to put or hold in mouth', HN *emkü*- 'to hold in the mouth', acc to Sh Ch honorific 飲 *yin*, LMCh ?*im*. || As Kane (K67) remarks, the graph is found with back or front vowels.

em-en nayi-d dew-ur WINE.bo emji <em:en nai:d deu.úr WINE.bo ēm.ci...> 'after he drank (*emji*) wine with the local officials (*emen nayid*) and his younger brothers (*deu*+sociative)...'.

ema 茶 ★ (270.189) <ém.a> 'goat, mountain goat' (K66, 99), <ema> (C107) | Mo *imaga*, Da *imaa*, HN *imaan* 'goat', DaE *ima*: || acc to Vovin (2013, p. 622) ← OT *imga*.

siauqu taulia 11 MONTH YELLOW ema holebun 3 DAY WHITE teqoa <s.iau.qú tau.lí.a TEN ONE MONTH YELLOW êm.a ho.le.bun THREE DAY

⁷¹ Also **Pogoliń emen cim pojuģa'ai** <p.o.go.l.iń em:en ci.m p.o.ju.ha.ai> (Y9).

⁷² The graph 270 is Romanised by Kane as <êm> (in my transcription <ēm>), by WJ as <ém>, by Chinggeltei (2002b) , by Aisin Gioro (2012) <æm, jam>, I accept the form given by WJ.

WHITE te.qo.a> 'in the blue hare [year], [in the] first period (*holebun*) of the eleven[th] month, of the yellow goat on the third day, white chicken' (EX4).

aylun dabun emra mo'on-de <ay.l.un d.bun ēm.ra m.o.ón.de> '?' (KL24-13) emrai 本 午 关 (270.084.339) <ēm.ra.i> '?'

qutug emra'I <qutug ēm.ra.i> 'good fortune ?....' (Y3)

- en: $\langle \bar{en} \rangle = \frac{1}{5} (073), \langle en_2 \rangle = \frac{1}{5} (100), \langle en_3 \rangle = \frac{1}{5} (219), \langle en_2 \rangle = \frac{1}{5} (361), \langle en_4 \rangle, = \frac{1}{5} (399), \langle en_4 \rangle = \frac{1}{5} (399), \langle en_4 \rangle = \frac{1}{5} (399), \langle en_4 \rangle = \frac{1}{5} (100), \langle en_4 \rangle =$ $\langle en \rangle \hbar$ (140). The graphs (100, 219, 361, and perhaps 399) are allographs. From the systematic point of view there exist only two independent graphs, (140) is used mostly in suffixes.
- **Ense** \neq (073.244) < \overline{e} n.se> according to WJ182 the unit < \overline{e} n.se> in X is a name. **Xurse Ense sa'adi** <x.úr.s ēn.s s.a.ad.i> 'spent the time in Xurse Ense' (D49-3) **GREAT Ense awui** <GREAT ēn.se au.ui> (X21-7) 'the elder daughter (*auui*) was mylady 'Én.se'
- The graph $\mathbf{5}$ (100) <én₂> occurs in:
- enever 与万必 (100.020.141) <én₂.ey.er> '?' (D36-23).
- *enur 与夾 (100.097) <én₂.úr> (X11-30) ? a mistake for 方夾 (101.097) <deu.úr>? 'in assistance to'.
- enü 与录 (100.131) <én₂.u> in: mi'in iši enü 灭关雨忝与承 (133.339.018.033.100.097) <m.i.in iši én₂.u> 'nine tombs...?' (X4-22)⁷³,
- -en¹ \hbar (140) <en> is among others the marker of the genitive case, mostly after consonants (K132-133). After <u> jur:en 'of two', <g.úr:en> 'of the state', after <i><c.i.is.en> 'of the blood (relations)', after <o> <da.lo n.on:en> 'of the seventh generation', after <e> <g.er:en> 'of the house'.
- -en² 当 (361) \leq marker of the feminine gender after numerals and adjectives, <c.ur.én> 'second', <hu.ur.én> 'third' etc., see Róna-Tas (2016, p. 131).
- eng 各 (175)

Engli 各 (175.206) < eng.li> 'a name' (X25-21)

- todo'on engli <t.od.ó.on eng.li> 'the fifth Engli'.
- er: $\langle er_2 \rangle \leq \langle 269 \rangle$, $\langle er \rangle \leq \langle 341 \rangle$, sometimes interchanged with $\langle oi \rangle \leq \langle 347 \rangle$ and $<oi> > \bigstar$ (107).
- $-er^1 < er > \times$ (269), $< er > \times$ (341), suffix of the past tense after < e >: temleger <d.em.le.g:er> 'was awarded (with the title...)', after <i>: jier <ci:er> 'wrote',
- $-er^2 < er_2 > \bigstar$ (269), $< er > \bigstar$ (341), suffix of the accusative, after < ai >: < nai.d:er > 'the officials (acc)', after <a> <TWO qa.ha.ad:er> 'two kagans (acc) (served)' (K132),
- $-er^3 < er_2 > \bigstar$ (269), $< er > \bigstar$ (341), suffix of the instrumental, Sung usgier < s.ungus.gi:er> 'with the letters of the Song'.
- -er⁴ 茶 (269), =r in: GREAT xomur 又 茶行茶 (373) <Great xo.mu:er> 'the great catalpa coffin' (K131). A mistake in the Romanisation <ho> recte <xo> and the final *-er* pertains to the word and is not the suffix of the accusative $\frac{1}{4}$.

⁷³ To <m.i.in>, see: **min-i** 及 雨 关 (133.018.339) <m.in.i> 'tomb+gen' (X46-13) cf. WJ221, this has to be in the genitive case which is after -n [i]. ⁷⁴ **xomur** 柔行荟 (057.220.269) <xo.mú.er> 'coffin of an emperor' (K87, D39-14), <GREAT

ho.mú.er> 'the great catalpa coffin' (Y28, K205) | qomur < PPMo *kobur, cf. Mo kayirčag \leftarrow

eńe see üne ere see iri

Initial e- Not Written

ebü **±** (196) 'grandfather, old man' (X7-33, 19-22, 38-33 9 times in KL, 5 times in JU, once in HU | Mo *ebüge* 'ancestor, grandfather', HN *ebügen* 'elderly man', DaE *auka*.

^ebü ay 生平 (196.395) <bu> 'grandfather', <bu.ai> (K33, 100, Y5), <bu'ai> (C107),

^ebü ^ebü ay 生生平 (195.195.395) <bu bu ai> 'great grandfather' (K100).

- esen **今**考 (244.073) <s.ēn> 'long life, also used as a name' (X37-12, Y13), *Liao shi Yixin* 義信 (K32, 198) | Mo esen 'healthy'.
- elema 中 本 为 (261.270.189) <1.ém.a>, elemġa 中 本 刘 为 (261.270.151.189) <1.ém.hu.a> 'a title' (K 104) ← OT alïmga ~ ilimga (Vovin 2013, p. 621), Clauson s.v. ïmga has el ïmga 'treasurer, secretary' || Liao shi 林牙 linya 'an official in charge of the academy', formerly known as xueshi, LMCh limnja | ← OT el ïmga. See ilbun below, p. 157.

The Khitan vowel rendered by various kinds of $\langle e \rangle$ may reflect a closed /e/, in some cases even /i/ as in $\langle e.ma \rangle$ 'goat' ***imā** or in $\langle te.qo.a \rangle$ ***tiqoa** 'chicken'.

It is possible that as an allophone also [ä] was present, mainly before /y/as in **ey 7** (020) <ei> 'the copula' which may be in fact $\mathbf{\ddot{a}y}$ - <a+y>.

The Representations of *i*- Initials

V i: <i> ★ (339), <u><i> 眷 (352)</i></u>, <u>ī 春 (114)</u>, <u><i> 眷 (353)</i></u>, <u><i₂< u="">> 春 (113),</i₂<></u></i>
D ia: $ \neq$ (335), iang: iang $#$ (314), $ \pm$ (062), ie [= yä]: $ \neq$ (326),
<u> </u>
<ii ung=""> 角 (181), <u>ii: <ii> 北 (080)</ii></u>, <u><ii> 北 (077)</ii></u>,</ii>
VC ih: $\langle ih \rangle$ 酒 (338), $\langle ih_2 \rangle$ 氧 (455) [=iy], il: $\langle il \rangle$ 冊 (302), in: $\langle n, in \rangle$ 伏 (221),
伏 (222), in: \leq in> 病 (018), \leq in ₂ > 病 (454), ing: \leq ing> 用 (303), ir: \leq ir> 利 (137)
$(or < ren>), \underline{iši^{0}}: < is> or < iš(i)> \underline{x} (033), \underline{x} (034).$

There exist three types of rising diphthongs /ia/, /ie/ and /iu/. They figure as initials and their value is /ya/-, /ye/- and /yu/-. Therefore they will be dealt with among the consonants in one of the next parts of this series of papers. The two allographs representing $\langle ii \rangle$: $\langle ii \rangle$ th (080) and $\langle ii_2 \rangle$ th (077) are descending diphtongs /iy/ and will be considered in this part.

WOT *kapurčaγ*, EOT *kapiz*, cf. *kogur* 'der Sarg' (ChulR), *kuorčax* 'jaščik dlja vloženie trupa, grob' (Y), etc., see all data in WOT562–566.

Initial *i*- Written with the Single Graph <i> ★ (339)

- iri ★ 1 (339.235) <i.ri> 'name, title' (K76, 108, Sh2, D2-5-6, 9-14 passim, X1-22, 12-26, 42-5, L12, Y4, 5, 7, 9, 11, 18bis, 26, 33, JU 22 times, KL 3 times, HU 3 times, PU 5 times), pl. iris ★ 1 年 (239.235.244) <i.ri.s> (X36-4, KL6-17, JU43-6, JU18-34), pl. acc. <i.ri.s.er> (D14-5, 20-18, X 12-3, Y12, HU8-20, HU3-22, JU22-56, PU7-39), dat-loc. <i.ri.de> (D6-17, 10-5, 21-18, X25-9, 28-4, Y28, 31) ?read ere || ? Mo nere, pl. neres, Da nere, HM nere || The loss of *n* is curious, but Mo has the same plural -s as Khitan.
- $\leq i \geq 4$ (352) not in initial position, an allograph of $\leq \overline{i} \geq 4$ (114) which is neither in initial position.
- <u><i> 谷 (353)</u>, <u><i2</u> 谷 (113), both are allographs and occur only in Chinese words after sibilants.

The Graph for ii-

According to Chinggeltei (1992) (K44) the graph may have the same function as *-ai* and *-ei*. According to Kane (K44) <ii> is one of a series of converbal suffixes used in subordinate clauses. This may be accepted if it occurs as a suffix where we have to read /iy/. Otherwise, as initial it has to be read as /yi/. In the EX inscription the second part of the name of the Empress Xuanyi: *-yi* 懿, EMCh *2ih*, LMCh *2i* is written in lines 1 and 5 as <i.i> \bigstar Later in the same inscription an extended form of the name occurs as **Newe Mo Xiń Yi-wui** <neu.e mó x.iń ii.ū.ui> 'Earth Mother Xuanyi-wui' (EX21). The extension <ū.ui> is an abbreviation of **awui** \bigstar \bigstar (210.262) <au^i >imilady', as in Mo *abugai* > *guai* after names, as title of respect, *Qara-guai* 'Mr. Qara'. See also <tumu.úr rí.l.iń ii.ń mó te> 'the lady Yin of Tumur Ril' (Y32)⁷⁵. As we have seen in the case of <ai^a> also here in the case of <ii> the Khitan graph represents a MCh glottal stop + vowel. The graph also occurs as an isolated word where it has to be read as **yi** and will be dealt with among the y- initials in one of the next parts of this series.

Initial *i*- Written with Graphs of the Type VC-

<u>ih: <ih> 酒 (338), <ih₂> **筣**(455)</u>

The graph \Im (338) <ih \rightarrow occurs in transcriptions of Chinese, frequently as final, but also as a yi- initial:

Yicieu-un sishi <ih ci.eu.un sï shï> 'the Prefect of the 懿州 Yi Prefecture'(X25-4),

Yicieu-un tequshi <ih.ci.eu.un t.qu sh.i> 'The Governor-General of Yi Prefecture' (X27-26).

Ch 懿 yi was in EMCh $2i^h$, LMCh 2i, see <ii> 比 (080) = Yi above.

 75 <te> is written in a separate block.

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il: <il>Ħ (302)

il ℜ (302) <il> 'state, empire' (JU41-2, HU32-5) according to WJ perhaps a personal name in:

il üwe-de 田 只 答 友 <il ū.e.de> 'Il üge + dative' (X8-14)⁷⁶,

K (80) suggests that Chinese *yuyue* 于 越 [is] 'possibly derived from Tu(rk) *ögüt* 'counsel'. Chinese *yuyue* (EMCh *wuă*, LMCH *yă*, EMCh *wuat*, LMCh *yat*) may reflect an OT *ögüt*, but Khitan < $\overline{u.e}$ has to be an equivalent of Mo *üge* \leftarrow OT *öge*, that is the singular of *ögüt* which itself is a plural. Mo *üge* occurs in the SHM (*Temüjin üge* par. 59, also Rachewiltz 2004, Vol. I, p. 319). The first part i.e. <il> has to be here the OT word *el* and the full title is *Il üwe* \leftarrow **El öge* 'cancellor of the empire'. WJ may be right when they suppose that we have to do here with a name. Names derived from titles are frequent.

ilbun 关化 (302.288) <il.bun>, also 关行 え (302.311.144) <il. b.ún> 'tribal judge' (D10-8), gen. ilbun-en 用4カ (302.288.140) <il.bun.en> 'tribal judge + gen' (X8-27. 13-13, 18-14, PU16-17).

According to WJ79, 156 < Chin yilibi 夷離畢 MCh *jilipjit. They suggest as a final source OT *el begi*. This is problematic; **ilbun** may be < *il abun. See Mo abun 'who takes' < ab- 'to take' +n deverbal suffix. Similar OT names *El tutmiš*, *El yaratmiš*, *El toģmiš* (Hamilton 1955, p. 151). Even more similar in meaning is Almiš, the name of the Bulgar ruler Almiš ibn Shalkay, noted by Ibn Fadlan⁷⁷, see OT *al-* 'to take'. One would expect *Ilawun*, but it may be that /lb/ was preserved after the disappearence of /a/. The connection with Chinese yilibi 夷離畢 < MCh *jilipjit was suggested by Sun Bojun and Nie Hongyin (2008) quoted by WJ79. The first two Chinese characters may represent Khitan *il* ← OT *el.* However the third Chinese character bi 畢 had in MCh a final dental (*pjit*) and not a nasal. Some occurrences:

ilbun-en baqa <il.bun.en ba.qa> 'the son of the Ilbun' (X8-27),

ilbun-en baqa-i baġuan <il.bun.en ba.qa.i b.hu.án> 'The grandchildren of the Ilbun' (X13-13),

Taguan ilbun-en goi-en Sabuġarde üwülge'en <t.hu.a.án il.bun.en go.i.en s.bu.ha.ar.de ū.ul.ge.én> '(She) was given in marriage to Tagu'an Ilbun of the house Sabuġa'ar' (X18-14, WJ176).

<u>iń: <ń, iń> 伏 (221), 伏 (222)</u>. In most cases as initial it represents ń-. See in the section on the consonants.

in: $\langle in \rangle$ 雨 (018), $\langle in_2 \rangle$ 雨 (454). Not yet identified as initial.

⁷⁶ **üwe** 只 答 (372.346) < \bar{u} .e>, also 只 答 < $u.e_2$ > (372.109) 'counsellor' a title as in: Abogiń **üwe** 为九伏只务/务 (189.334.222.372.346/109) <b.g.ń $\bar{u}.e_2$ > 'Abogin üge, counsellor, the founder of the Liao dynasty' (X4-30).

⁷⁷ See Ibn Fadlan in Togan (1939) and the name *Almuš*, the father of Árpád, founder of the Hungarian Kingdom. On *Almuš*, see Róna-Tas–Berta (2011, pp. 1171–1172).

⁷⁸ On **elema** see above, p. 155.

<u>ir: <ir> 利 (137) (or/also <ren>)</u>.

*iri(y)- 矛方 (137.020) <ir.y> 'to write, put down'. In WOT459 I suggested that Hungarian *ir*- 'to write' is a loan from OT *ir*- 'to make a notch or breach, to make an incision in wood, to carve' hence 'to carve (runiform) signs'. To this word-family pertains also OT *irk* 'dice, sticks etc. for casting lots, omen etc.' and Mo *irua, iroa* 'bad omen etc.' (in detail Róna-Tas 2004). The base of Khitan *iriyiy, iriyil*- may have been the same word, even if the formation of the actual words is yet unclear. According to Wu and Janhunen (WJ138) more or less equal to *ci.er* 'wrote'.

iriyiy 月百比 (137.020.080) <ir.y.ii> converbal form of iriy- in:

COMPOSElaġai iriyiy <COMPOSE.1.ha.ai ir.y.ii> '(he) let compose and writing down' (X10-15).

RECORDe yu-n iryiy <RECORD.e ū.n ir.y.ii> 'in the record of the *yuye* was written' (X39-42, 40-5). See further JU13-40, PU10-39.

iriyilga'ar 刃万用立本 (137.020.302.051.123) <ir.y.il.ha.ar> past tense of iriyilga-

bud naġa'aner SMALL.qó TENTen pu'u iriyilġa'ar <budy na.ha.án.er SMALL.qó TENT.en pú.u ir.y.il.ha.ar> 'written by [a person] of the junior maternal uncles of the other clan' (X1-17).

*iri- 'to beg, to request' | Mo *eri*- 'to seek, beg, request', HN *eri*- 'to look for, to request', DaE ∂r^{ν} .

irilgey 尹 本 咨 (137.261.349.020) <ir.l.ge.y> 'to beg, request' (causative + converb with the converbal suffix -ey) (X36-3).

muji-en qaġayu irilgey iris <mu.u.[ji3.en] qa.ha.iú ir.l.ge.y i.ri.s> 'titles requested from the sacred king' (X36-3).

iremed 利 茶 茶 (137.270.254) <ir.ém.d> '?' (D29-20)

su HEAVEN tau xesegel iremed tabuyi <s.u HEAVEN ta.u x.s.ge₂.l ir.ém.d t.bu.y.i> 'the Supreme Heaven five region ... Tabuye'.

 $iši^{o}: <is> 素 (033), 素 (034) <iš(i)>$

- iši 茶 (033) 'nine, fem.', the masc. form is ズ (034) (K24, 109), <is> (C107) | Mo yisün, Da ise, HN yesün < *yersün, DaE is, Sh: *iši, see the details in Róna-Tas (2016, p. 129).
- išider 'ninth' 委 公 (033.254.341) <iši.d.er> (D2-15) išider nonen u'ur ay <iši.d.er n.on.en u.ur ai> 'His forefather of the ninth generation'.
- Išiuiġ <iš.iú.ih/ih₂> 素 穴 酒/ 菊 (033.289.338/455) 'Išiuiġ' (D1-15, 51-10) as the name of the scribe of the Xiao Dilu inscription. According to WJ53 "the possibility can not be ruled out that it is a question of a non-Chinese name". The name may be of Biblic origin and perhaps Nestorian. The name occurs in Uighur documents as Išug 'Jesus, Josuah', see Raschmann (2015, pp. 410–411), also in U 5795 (Raschmann 2009a, VOHD13,22 #279) and U5832b (Raschmann 2009a, VOHD13,22 #439). The name, as Raschmann (2015, p. 411) stated, is also present in Sims-Williams (1992, p. 55), Rybatzky (2004,

pp. 277–278), Sims-Williams–Durkin-Meisterernst (2012, p. 228) and Sertkaya (2013). See also Lurje (2010). The name of the scribe shows that he was a member of the Yelü clan (*Yarud*, see Róna-Tas 2016, p. 121) and his personal name was Išiuig Nu. The personal name Nu & (251.131) occurs 13 times in the inscriptions D and X, 3 times in the Y, 6 times in the HU, once in the PU, twice in the JU and once in the KL inscriptions as a name or a part of a personal name. In the *Liao shi* the last part of the name of Han Jia Nu (WJ172) is rendered by Chinese *nu* i, LMCh *nuž*, EMCh *nz*.

Cie MOUNTAIN.o Yaraud Išiuiģ Nu <ci.e MOUNTAIN.o y.ra.u.ud iši.iú.ih₂ n.u> (D1-15).

Išiuiġ Nu jier <iši. u.ih n.u ci.er> 'was written by Išiuiġ Nu' (D51-10-12).

Išiy 素 谷 (033.353) <iši.ï> 'part of a female name' (X21-11)

juren Ngin Išii awui <ci.ur.én ng.ing iši.ï aú.ui> 'the second [daughter] was Lady Ngin Išii'.

In fact we have the following initials with i: $\mathbf{i} < \mathbf{i} > \mathbf{K}$ (339), \mathbf{i} ! $<\mathbf{i}$!> \mathbf{H} (302), \mathbf{i} r: $<\mathbf{i}$?> \mathbf{A} (137) (or/also <ren>), \mathbf{i} si⁰: $<\mathbf{i}$ s> \mathbf{K} (033), \mathbf{K} , (034). Further we have the following syllables: \mathbf{y} a: $<\mathbf{i}$ s> \mathbf{K} (335), \mathbf{y} ä: \mathbf{i} e^o: $<\mathbf{i}$ e> \mathbf{X} (326), $<\mathbf{i}$ e^o> \mathbf{X} (327), \mathbf{y} i ii: $<\mathbf{i}$ > \mathbf{H} (080), \mathbf{y} u: $<\mathbf{i}$ > \mathbf{H} (019), \mathbf{y} ung: \mathbf{i} ung: $<\mathbf{i}$ (\mathbf{i})= \mathbf{H} (181). The last five have to be dealt with the y- initials. Only [i], [il] and [ir] remain, /i/ and I + one of the two sonants (r, l) and /iši/. As I asumed (Róna-Tas 2016, p. 129) /iši/ goes back to **irsi*.

Initial *i*- Not Written

In the following case we have an initial ¹r-:

ya Namuqu irgen <ia ń.mú.qu ri.g.en> '[his] elder brother [was] Namuqu *irgen*' (X3-7/9, WJ142).

Though the Romanisation contains a letter $\langle i \rangle$ and a letter $\langle i \rangle$, the second is not used for Khitan words. On the other hand, the letter $\langle i \rangle$ is used in front and in back vocalic words. See **iriyilga'ar** $\mathcal{A}\mathcal{T}\mathcal{H} \oplus \pm \bigstar$ (137.020.302.051.123) $\langle ir.y.il.ha.ar \rangle$ 'to write, put down', equal to $\langle ci.er \rangle$ 'wrote' (X1-17) and **irilgey/irlegey** $\mathcal{A} \oplus \bigstar \mathcal{T}$ (137.261.349.020) $\langle ir.l.ge.y \rangle$ 'to beg, request' (causative + converb) (X36-3). From such doublettes we may conclude that Khitan had a front and a back closed illabial sound: /i/ and /i/, but the KSS did not reflect it⁷⁹.

⁷⁹ Same as in the Uighur script. Further arguments will be given in connection with the rendering of the gutturals.

Analysing the Khitan texts written in KSS we can conclude that the Khitan language had the following illabial vowels: /a/, /e/, /i/ and /ï/. /a/ was illabial, /e/ was rather closed and may have sometimes been interchanged with /i/. An opposition of short and long vowels in the cases of /a/:/ \bar{a} / and /i/:/ \bar{i} / could be observed. There existed secondary long vowels, and probably also primary ones. At least in the case of the verb of existence **a**- we can suppose a primary length. This may have several origins, but at present we cannot go beyond this general statement. To the length of the vowels I will came back below, pp. 176–184.

The Representations of o- Initials

Initial o- Written with a Single Graph o

The first two (090) and (186) are interchangable, the last two graphs (252) and (253) are allographs.

In the materials of WJ <ó> # (090) does not occur as initial, but it occurs in Y, JU, KL and PU.

From the two allographs (252) and (253) only (253) does occur in one case, just where there is a special phonetic context: $\langle \bar{o}_2.ur.h\delta \rangle$ treated in Part I (Róna-Tas 2016, pp. 129, 132), as one possible transcription of Ogur, with the disappearence of -g-. If we put aside for the time being this single case, we see that the "normal" representation of /o/ in word initial position is $\langle o \rangle \not B$ (186). It occurs in the inscriptions D and X in 18 different cases, some of them are frequent, up till 5 occurrences as $\langle o.ju.ún \rangle \not B \not F \not I$ (186.149.144) in D and X, four times in KL, JU and PU, and the stem of which is *oju*-. The converbal form $\not E \not K$ (186.107) $\langle o.oi_2 \rangle$ occurs in D and X four times, in PU, JU, HU, KL 21 times.

The graph \mathcal{A} (186) may be followed by syllables containing <a>, <o>, <u> and <i>, there is one exception <o.or.én> (D6-7), where <én> is a suffix.

Some Khitan words beginning with <o>:

- *o- 及 (186) 'verbal stem with the meaning to come, to become, to come there, to finish, to close' | cf. Mo *oro* 'to enter, to go or come into a place, space, a state or condition', HN *ora* 'to enter', DaE *war*-. || I will come back to the absence of /r/. In some cases the verb or the verbal base is written as 及及 <0.0>.
- o-go \mathcal{B} the (186.076) <0.ho> o.ho has to be a finite form, perhaps past tense of o-.
 - **daġar oġo** <da.ha.ar o.ho> 'the coffin was closed' (D50-20).

This is almost the same as:

o-on 及南 (186.322) 'finite past tense form of *o*-' (WJ99). According to K155 -(*o*)*n* forms verbal nouns in:

daġar o'on <da.ha.ar o.ón> 'the coffin having been closed' (D47-17),

taqoshi o'on <t.qó sh.i o.ón> 'having got the title Governor General'. (D21-12), (WJ163).

One has the impression that <0> and <0.0> are equivalent, or may be only two orthographic variants.

o'oai 及及 + (186.186.122) < o.o.aí> converbal form of o'o

sengün 305en o'o'ai <s.eng.un 305.en o.o.ai> 'the Field Marshal...arrived' (X24-15).

The following two verbal forms are read in the same way, but written with different graphs (107=347), they are converbal forms:

o'o-i 及太 (186.107) <0.0i₂> 'got there, came, became (frequently in sentence final position)'

REGIONayu o'oi <REGION.a.iú o'oi> 'arrived in the region' (D17-14)

Kimsiugün o'oi < g.m s.iu g.ün o.oi> 'arrived in Jinsujun' (D19-17)

sien hong-en po-do ku'usu'u sujide 'o'oi <s.ie.én hong.en po.do ku. \bar{u} .su \bar{u} .ji₃.de o.oi₂> 'In the time of the former Emperor the favour of donation was given' (X11-6).

- - TEN ONE ayde süni DAYi nai o'oi そ モ 半英 今杏 天 大 穴 及太 (240 026 122.205 244.059 159 339 332 186.107) <TEN ONE ai:de s.uni DAY.i nai o.oi> 'in the eleventh year he was given the title/entered the office of the head (nai) of the Night- and-Day-guard' (K150).
- **o'od** 'to go to, to arrive' | Mo *od* 'to go to, proceed to', HN *od* 'to go', not in Da, only in EYu where it is used as an auxiliary verb.
- o'od.077 及币北 (186.016.077) <0.od.077> (077) 北 may be the same as (080) 北 <ii>, its meaning is uncertain (X29-10), and in fact we find:
- o'odii 及市北 (186.016.080) <0.od.ii> '?' (X35-42) both in a context with the meaning of a date or age to which the tomb owner arrived. The suffix <ii>, read -iy (see above) is a converbal suffix used in subordinate clauses (K44). ewur od.077 <eu.ur 0.od.077> 'having reached the age' (X29-10). ayur odii <ai.ur 0.od.ii> 'being aged?' (X35-42).
- odulġa'a'un サ合サキカ支 (090.249. 261.051.189.144) <ó.dū.l.ha.a. un> (JU13-29) has to be a converbal form of the factitive form of the verb od/o'od-.

***oju**¹- 及子 <0.ju> (186.149) 'to close, cover' (K89, 131, D4-2), *-ju* may be a converbial suffix as Mo *-ju*-, same as **o'oju** 及及子 (186.186.149) <0.0.ju> 'converbal form in **-ju** of **o'o**'.

udur o'oju <ud₃.úr o.o.ju> 'first arrived' (D18-19).

- oju-ga- 及子立 (186.149,051) factitive in -ga- in:
- ojuġa'ar 及子立本 (186. 149. 051.123) <o.ju.ha.ar> 'finite past tense of the factitive extension of oju- in:

daġar ojuġa'ar <da.ha.ar o.ju.ha.ar> 'the coffin was closed (he was buried)' (X33-41).

ojuga'aTENT 及子立为艾 (186.149.051.189.379) <o.ju.ha.a.TENT> in:

xomur dagar ojuga'aTENT <xo.mú.er da.ha.ar o.ju.ha.aTENT> 'the coffin was closed' (D39-16).

- oju'un 及子爻 (186.149.144) <o.ju.ún> a modal converbal form in -n: mot oju'un <mo.t o.ju.ún> 'after the ladies arrived' (D22-10), followed by <ONE BORN.én₂.de>.
- oju²- 及子 <o.ju> (186.149) 'to serve in an official position, to enter a position' (K115). The material is not sufficient to decide whether the two words 'to close, cover' and 'to serve' are the same or two homophonous verbs. The Mongol verb *oro*- has the meaning 'to enter' but also 'to obey, to be dependent on, etc.' **taishi YOUNG-qú ewur Hüende oju a'ai** <tai shï YOUNG.qú eu.ur hu.üen.de o.ju a.ai> 'The Grand Preceptor, when young,⁸⁰ had served at (the) Hüen' (D13-17). **nayri-en moritz ojuĝa'ai** <n.ai.ri.en m.ri.tz o.ju.ha.ai> 'he has served as the horsman of the celebrations'⁸¹ (EX9)
- oju a'ai and ojuġa'ai seem to have the same function.
- oju-un 及子爻/伏 (186.149.222/144) <0.ju.ún>, <0.ju.iń> 'to appoint, to present with' (K58, D15-2, 22-10, X6-12, 12-4, 28-2) in:

tai ong-on cun oju'un <tai ong:on cu:n o.ju.ún> 'he was appointed to the office of the Grand Prince (Tai Ong)' (D15-2),

te iriser oju'un <te i.ri.s.er o.ju.ún> 'with those (*te*) titles (*iriser*) he was rewarded, he got those titles' (X12-2-4),

Geu-eun emen oju'un <g.eu.eun em.en o.ju.ún> 'he got the region of Geueun, he was installed to the region Geu-eun' (X28-2),

morid-en ewge oju'un <m.ri.d:en eu.ge o.ju.ún> 'having got the title the Ewge $(\ddot{U}ge)$ of the Horses/Region' (Y3) (see above, p. 152).

ojuġa'an 及子立为出 <o.ju.ha.a.án> 'having served' (186.149.051.123) past participle causative, in:

230ad ojuga'an 保亦及子立为出 <230:ad o.ju.ha.a.án> 'having served at 230.ad' (D5-22).

ojuģa'alun 及子立ち本 (186.149.051.098.144)<o.ju.ha.al.ún> 'served (past tense)' (X17-8, 19-29),

305de ojugalun 肉友 及子立ち本 <305.de o.ju.ha.al.un> 'served at 305' (X17-7), see <305.de o'oi> (X17-25-26).

⁸¹ **nayri-en moriči** 'horsemen of the celebration'.

⁸⁰ -qu is an adjectiviser.

In a few cases instead of <o> we find <o.o.>:

o'o 及及 (186.186)<0.0> '?' (X25-15).

The graph $\langle 6 \rangle$ # (90) occurs once isolated in PC1-3, and also in

ojulġa'ai 升 马 平 本 (090.148.261.051.122) <ó.ju.l.ha.ai> (KL18-18),

It may be supposed, but has to be either confirmed or disproved that the extended stem **ojulga**- is the same as **ojuga**- above.

I found a word written with initial $\langle \bar{o}_2 \rangle$ ☆ (253): ☆化目 <0.ur.hó> (253, 236.309) (X43-11), which has been dealt with in Part I (Róna-Tas 2016, pp. 129, 132). See further: ☆化村え <0.ur.b.un> (253.236.311.144) (JU7-11), ☆ふ☆太 <0.on.s.er> (253.154.244.269) (JU25-22), ☆目 <0.hó> (253.309) (PU21-29).

From these examples we can conclude that $\langle o \rangle \not \in (186)$ and $\langle o \rangle \not \neq (90)$ have the same value, reflect the same original sound, most probably /o/, and that the relation between $\langle o \rangle$ and $\langle o \rangle$ has to be the same as between $\langle a \rangle$ and $\langle a \rangle$, $\langle i \rangle$ and $\langle ii \rangle$.

Initials with Diphthongs Containing Initial o-: oy- and ow-

The two graphs are allographs and have to be read as oy.

*oyi- 'mourning, sorrow' | Mo uy 'mourning, sorrow', HN uila- 'to cry', DaE wail-. oyiro'ulġu 次化サギ列 (347.235.090.366.151) <oi.ri.ó.ul.hu>, a noun with the deverbal nominiser -ġu (Mo -gu, Poppe, 1964, p. 46) of the passive verb in -l, itself a verb with the deverbal nominal suffix -ri (Mo -ri, Poppe 1964, p. 49) 'the mourning ceremony'.

awui-en oyiro'ulġu 夾火 与 次 化 十 平 列 (161.262.361 347.235.090.366.151) au.ui.en.oi.ri.ó.ul.hu 'the mourning ceremony of the milady' $(EX6)^{82}$.

daw-iń oyiro'ulġu <dau.iń oi.ri.ó.ul.hu> Khitan *dau* may be a transcription of Chinese *dao* 悼 'to grieve, mourn' (EX27) 'mourning ceremony of the grief'.

oyišiġa'ar 次 委 立 为 本 (347.033.051.189.123) <oi.ši.ha.a.r> the word is a past tense form of the verb ***oyišiga-** which itself is a verb with the factitive suffix *-ga* (Poppe 1964, p. 61), and the resultative *-ši-* (Poppe 1964, p. 65) 'having performed the mourning ceremonies' (D23-13).

There is no $\langle ou \rangle$ in initial position in the material, though we found $\langle au \rangle$, $\langle eu \rangle$ and $\langle iu \rangle$.

Initial o- Written with oC-

od $\overline{\boldsymbol{\sigma}}$ (016) od- same as o'od- above odu 币 $\boldsymbol{\lambda}$ (016.131) <od.u> 'to go to, arrive', see also o'od above

⁸² Kane (2009, p. 216) read <.en ô.> in error.

taw SOUTH no odu <tau SOUTH n.o od.u ci.s.b.e> 'a spouse (*no*) from the Five Tribes (*tau* SOUTH)⁸³ arrived' (X41-2).

- odulġa'a'un サ余仲キ肉支 (090.249. 261.051.189.144) <ó.dū.l.ha.a.un> (JU13-29), written with サ余 <ó.dū> modal converb of *odulga'a, itself a deverbal noun of the factitive base of odu-, see above.

***on-** $\overline{\mathcal{F}}$ (154) 'to ride' | Mo *unu*- 'to mount (as a horse)', Da *one*- 'to ride', in:

mori onsiy 及化 不全地 <m.ri on.sii> 'while riding on horseback' (X12-20). ong 杰 (071)

ong 羔 (071) 'king, prince, transcription of or loan for Chinese *wang* 王' (D3-22, 9-13, X2-18, 7-8, 9-9, HU17-3, HU6-8, HU3-35, PU7-22, PU3-18, KL3-25, JU19-43), occurs also in *tai ong* 조杰 (174.071) 'the grand prince' 大王 | MMo *ong* 'id.' (SH).

ong-on 杰尔 (071.154) <ong.on> 'the genitive case of *ong*' (D8-16, 10-20, 12-4,14-26, 24-12, 25-9, JU20-53, KL21-4).

- or <or> ☆ (255), the graph (255) does not occur in the inscriptions D, X, L, Y, EX, JU, KC, KL, HU, PC, PU in initial position, but appears as the marker of the past tense in p.o.or> 'made, caused to be (promoted to a postion)' (K65, 146).⁸⁴
- ordu <ordo> 米 (355), also <udu>, used as a logograph, also 米全 (355.245),
 <ordo.ú>, 及米及 (186.355.131) <o.ordo.u> and 及米全 (186.355.245)
 <o.ordo.ú> (K2, 58, 65, 77), see also WJ87 | The word is of Old Turkic origin, its earliest form occurs in the Köl Tegin inscription (AD 732) as ordu 'royal residence, palace' (Clauson 1972, p. 203). The final origin of the word is uncertain. It is highly probable that the pronunciation of the word in Khitan was ordu. The graph 米 (355) was also used as a phonogram with the value of udu in place of ♀ ☆ (245.249) <ú.dū> (K77). This may point to a change ordu > urdu > udu in the spoken Khitan language.
- uduwur 米 え 化 (355.131.236) <udu.u.ur> 'pertaining to the court' *.wur is a suffix, in:

uduwur ġuru
 udu.u.ur húr.ú> 'Court Commander, the person in charge of the Ordu' (D10-9).

All words or word forms beginning with <o> are clearly back vocalic. Does this mean that Khitan did not have the front vocalic labial phoneme $/\ddot{o}/?$ I do not think so. This situation emerged due to two causes. First, it was tailored to the Chinese system of vowels where $/\ddot{o}/$ was absent, second, in the inscriptions the word with the

on ふ (154)

 $^{^{83}}$ The graph \clubsuit (294) has two meanings, 'south' and 'tribe', perhaps two homophonous words.

⁸⁴ The graph \sharp (076) was read by Chinggeltei as g, γ , by Kane (2009) and WJ as <ho>, but Aisin Gioro (2012) suggested to read it as <ur>

meaning 'to get a title, to give a rank, to enter an office etc.' is highly overrepresented and most word forms go back to the same verbal base o-, or \bar{o} -. There may be words with front vocalic labial vowels in the category of vowel initial not written, as in **ölü**- see **ülü**-:

In sum, the investigated material is not enough to decide whether in Khitan there existed an $o:\ddot{o}$ opposition. All clear examples beginning with $\langle o \rangle$ are back vocalic, followed by back vocalic suffixes, with the exception of the genitive case. The only example $\ddot{o}l\ddot{u}$ - or $\ddot{u}l\ddot{u}$ - is of interest, but the question remains open for further investigation.

The Representations of *u*- Initials

V u: $<$ u> $𝔅$ (131), $<$ ú> $𝔅$ (245), $<$ ū> $𝔅$ (372),	
D ui: $\leq ui > \Re$ (262), $\leq ui^{\circ} > \Re$ (263), $\leq ui_2 > \Re$ (265), (= üyi(l))	
VC ud: <u><ud> 火 (344)</ud></u> , <u><ud<sub>2> 大 (105)</ud<sub></u> , <ud<sub>3> 大 (092), udu: <udu> 米 (355) also</udu></ud<sub>	
<ordo>, uh: <a href="mailto:<a a="" href="mailto:<a href=" mailto:<="" mailto:<a="">, <a a="" href="mailto:<a href=" mailto:<="">, <a a="" href="mailto:<a href=" mailto:<="" mailto:<a="">, <a a="" href="mailto:<a href=" mailto:<="" mailto:<a="">, <a href="mailto:<a href=" href<="" mailto:<a="" td=""></ordo>	
umu: <umu> π (092A), un: <ún> Ξ (144), <un> μ (273), ung: <<u><ung> κ (345)</ung></u>,</un></umu>	
<u><ung₂> 太 (106)</ung₂></u> , <u><ung> ※ (346</ung></u> , WJ also ung₂), <úng> 当 (357), uni: <uni> 杏 (059),</uni>	
ur: <ur> 化 (236), <úr> 夾 (097), <ur> 床 (063A) 北 <ur> (076A), <ur> 达 (115A),</ur></ur></ur></ur>	
us: $\underline{\langle us \rangle}$ 丸 (068), $\underline{\langle us_2 \rangle}$ 丸 (103), 术 $\langle us \rangle$ (041A).	

Initials Written with Simple Graphs for Intial u-

As we have seen, there existed three graphs for rendering a closed labial vowel and all three are heterographs: $\langle u \rangle \not\equiv (131), \langle \bar{u} \rangle \not\equiv (372)$ and $\langle \dot{u} \rangle \not\cong (245)$. Let us see first (131) and (372):

<u><u> え (131), <ū> パ (372)</u>

- *uji え う (131.337) 'craftsman, master' (L6, Y16, 39bis, Sh2) | Mo uran 'craft', HN uran, DaE warən (cf. OT uz) || The basic word may have been *uran 'craft', with the suffix +či > *ura+či > *urji > uji + plural + d > ujid え う 公 (131.337.254) <u.ji.d> 'craftsmen, masters pl.' (L 6). The disappearence of the /r/ in preconsonantal position is important and I will come back to this feature.
- **uji-en** <u.ji:en> 'of the master' uji + gen marker (Y3, 22).
- u'ur¹ 表 化 (131.236) <u.ur> 'first, upper, previous' | Mo **uri* in: *urid*, *urida* 'before', *urji edür* 'day before yesterday', HN *urida*, DaE *ward*, 'before' and *urijï üdür* 'the day before yesterday', all from **urï*.
- u'ur ay 表化+ (131.236 122) <u.ur ai> 'ancestor' (K84, 193, D2-11, 2-17, 2-26, 3-5, 3-11, 3-17, 14-10, 25-3, 26-4, 27-15, X7-5, 7-15, 11-26, 18-22, WJ57, Y4), u'ur ay 尺化+ (372.236 122) <ū.ur ai> 'id.' (X2-9).

The graphs \mathbf{A} (131) $\leq u >$ and \mathbf{K} (372) $\leq \overline{u} >$ are interchangeable and of the same phonetic value.

- u'ur² **λ** (131. 236) <u.ur> 'administrative district, ? Ch yuan 院' (K93⁸⁵). <SIX u.ur> (Y4, 6), <UPPER u.ur> (Y15), <NORTH u.ur> (Y17, 20), <SOUTH u.ur> (Y20), <cig.en u.ur> 'the left district' (EX2), <l.iang.an go.er u.ur> 'the district of the Liang house' $(EX11)^{86}$.
- ü'ül 表平 (131.366) <u.ul> 'winter' (K3, 79, 126, D47-12, Sh2), <u'ul> (C107, Sh 104) | MMo übül, Mo ebül, Da ugul, HN übül, ?ebül, DaE uyul, uwul, u:l, Sh *uul/uwul*.

daur-un ü'ül <dau.ún u.ul> 'the mid winter [month]'(L11),

po-on möci-e udur ü'ül <po.on m.ci.e ud₃.úr u.ul> 'in a second of time the beginning of winter (came), (D47-12)⁸⁷.

- U'uli え 平 关 (131.366.339) <u.ul.i> 'a tribal name, perhaps Chinese Aoli 奥里 LMCh awli (Liao shi, WF89)' (X11-34) || ? to Mo agula 'mountain'.
- * $\ddot{u}(w)$ $\Re < \bar{u} > (372)$ 'give, provide' (K66, 67, 99) | Mo $\ddot{o}g$ 'to give', Da *uke*-, HN $\ddot{o}g$ -, DaE uk^{w} - || The Khitan basic word had to be either $/\bar{u}$ -/, or $/\bar{u}w$ -/ representing a front vocalic syllable. The structure is the same as in **kü(w)**- 'man'.
- in -ui of u- in:

küsü üwüi 几只卡 只火 (178.372.041 372.262) <ku.ū.su ū.ui> 'was given in favour' (D3-29, 27-9)⁸⁸.

avde küsü üwür 中矢 几尺卡 尺夾 (122.205 178.372.041.097) <ai.de ku.ū.su $\bar{u}.\dot{u}r$ 'to the father was given in/the favour' $(X17-22)^{89}$.

- üwer ℜ ★ (372.341) < \overline{u} .er> 'given, bestowed upon' past tense: **HEAVEN üwer** <HEAVEN ū.er> 'heaven bestowed, given by the Heaven', (D3-23-24, 27-9, X39-35).
- **üwülge-** R/**ゑ 平** Δ (372/131.366.112) < \bar{u} /u.ul.ge> 'to marry (of a woman), to give as wife' (K80, 105, D24-17, WJ93-94, Sh | Mo öggülge 'the act of giving, debt' to $\ddot{o}g$ - 'to give'. The verb is a passive secondary stem of $\ddot{u}w$ - 'to give' > *üwülge*- 'was given'. The two graphs (372) and (131) are equal and interchangeable.

<ū.ul.ge.én> 'was given in marriage to' (X18-17, 18-31, 19-9, D25-11),

üwülgeliń 只平 本 伏 伏 (372.366.349.221.222) < ū.ul.ge.le.(i)ń> 'married (of a woman)' (K105, 106, Renxian 8).

⁸⁵ Kane (2009, p. 93) has for the second graph <úr>, but **1**k (236) should be transcribed as <ur>
 Also in: <qi.oi2 ū.ui> '?' (X39-35).

⁸⁶ See <te/de.ge ging> 'lower, south capital' (K104, 119, 198). ⁸⁷ po 'time', möce 又本芬 (133.162.348) <m.ci.e> 'a section of time' ! cf. Mo *möče, möči* 'a quarter of an hour'.

⁸⁸ küsü <ku.ū.su> '(in) favour' (D3-29, 27-9, X39-35) | cf. Mo küse- 'to wish, desire', HN küse-.

⁸⁹ **uwur**- 尺夾 < \bar{u} , \hat{u} > (372.097) is according to Kane (K148) 'to sit', but correctly 'gave' in (X17-22).

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- riage (to)' (D17-1, WJ93-94).
- **üwülge'ev** 只平咨万 (372.366.349.020) < ū.ul.ge.ei> 'having been married to' (K105, Dilie 31).
- üwülge'er 只平么茶 (372.366.349.341) <ū.ul.ge.er> 'was given in marriage' (Y27, Y30, Y31bis)
- **üwüley** 只平丙 (372.366.020) < ū.ul.ei> 'given' converb in -ey (Y31)
- **üwülün** R 平 え (372.366.144) <ū.ul.ún> 'was given' past tense in -lun (D47-4,49-6)⁹⁰. As can be seen, \mathbf{X} (131) and \mathbf{R} (372) are interchangeable, both can be used in the same word in the same position instead of each other.
- **üwe** 尺 券 (372.348) <u.e> 'a title' (K130, X2-13, 5-9, 8-15), see also ewge above, p. 152 | Mo üge, OT öge'. K (80) suggests Chin yuyue 于 越 'possibly derived from Tu(rk) ögüt 'counsel'. Chinese yuyue (EMCh wuă, LMCh yă, EMCh wuat, LMCh yat) may reflect an OT ögüt, but Khitan <ū.e> has to be an equivalent of Mo $\ddot{u}ge \leftarrow$ OT $\ddot{o}ge$ that is the singular of $\ddot{o}g\ddot{u}t$ which is a plural. In (X8-14) 用尺勞友 <il ū.e.de> 'to the Il Üge'. Mo üge occurs in the SH (Temüjin üge par. 59, see also Rachewiltz 2004, Vol. 1, p. 319). The OT öge 'Councellor, Wise' is formed from the OT verb ö- 'to think'.

Both graphs $\mathbf{\mathfrak{R}}$ (131) and $\mathbf{\mathfrak{R}}$ (372) representing $\langle u \rangle$ may occur in the same word. On the other hand, they occur in different words which have in Mongolian front vocalic (ög-, ebül > übül, üge) and back vocalic (uran, urida) parallels. This suggests that the compilers of the KSS could not distinguish, or did not make a difference between the front and back closed labials /u/ and $/\ddot{u}/^{91}$. <ú>全ú>全(245)

- **utur*, DaE rt, rt^{w} . The /r/ disappeared in Kalmuck and Buriat, in the Shirongol languages it is *utur.
- uduo'on 辛务及不/肉 (245.249.186.154/322) <ú.dū.o.ón/on> '?' (X6-22, 30-29, 44-23, 48-2) 'a reign period', <GREAT ú.du.o.ó/on>, Chinese Da'an 大安 'Great Peace' (1085–1095) (WJ151) || The first part may be the Khitan equivalent of the Mongol urtu 'long'. Is the second part a Khitan rendering of Chinese an? 'Lasting Peace?' See LMCh, EMCh ?an.
- udulġa'ar 全分平立为本 (245.249.261.051.189.123) <ú.dū.l.ha.a.ar> also written <udu.l.ha.ar> in:

HEAVEN udulgaar <HEAVEN ú.dū.l.ha.a.ar> Chinese Chongxi 重熙 'Repeated Splendour' (X23-21, 23-28). Perhaps also here is *udu < urtu* 'long'. <qudug ú.dû.u.ul.hu.án> 'everlasting fortune?'⁹² (EX23).

⁹⁰ See also <x.ie.én MR al.ha.a.ar ci.iluh.ji.a.an ū.ul.un> '?' (D47-4), <BORN.u ū.ul.ún t.ud po:ho> (D49-6).

¹ Of course, we do not know how they *read* the graphs, Mo *oru*- 'to enter' and *uru*- 'to tear, rip' are written in the same way but read differently in the Uighur-Mongolian script. My readings with **ü** and **u**, respectively, reflect an etymological reading and not necessarily the reading of the Khitans. ⁹² According to Kane (2009, p. 221) 'good fortune, peace'.

Initial *u*-Written with Graphs Containing the Diphthong <ui>

 $\leq ui >$ (262), $\leq ui^{\circ} >$ (263), $\leq ui_2 >$ (265). The three graphs are allographs $\leq ui >$ (262)

- **üyi(l)¹ 火** (262) <ui> 'matter, affair' (K106, 111, D5-1, 17-15, 32-3, 34-4, 37-20, X3-4, 5-23, 14-21, 26-14, 37-1, 44-6, Sh2) | Mo *üyile* 'work, act, deed, action', Da *uile*, HN *üile*, DaE *wail* || It is not clear whether the loss of the final *-l* is a phonetical or only an orthographical feature.
- üyi(l)-eń 失伏 (262.222) <ui.ń> 'a genitive of <ui>' tatar diayu yi üyiń <t.ad.ar t.ia.iú ii ui.ń> 'of the yi (?) affairs of the Tatar enemies' (X22-20).

ay-en üi(l)de <ai.én₂ ui.de> 'in the matters of the forefathers' (D4-10).

purus-en üi(l)de <p.úr.s.en ui.de> 'in the matters of P?' (D9-23).

uyi(l)-er/oi 火 太 (262.107) <ui.oi₂> in:

ciis-en üyi(l)-er <ci.i.is.en ui.oi (\bigstar <oi> = \bigstar er (269))> 'in matters of the blood relatives' (*-er* = instrumental) (X39-24).

üyil 失用 (262. 302) <ui.il> '?same as <ui>?' (D34-21, 40-4) || in the second text the word is preceded by a noun in genitive case, thus it is most probably the same as <ui>.

mod-en temey RECORDg-un üyil <mo.d₂.en t.em.ey RECORD.g.ún ui.l> 'the matter of the recording of the ladies....' (D40-4).

uyi² 火 (262) same as oyi- 'mourning, sorrow'.

uyi-un $\times \mathfrak{Z}$ (262.144) <ui.ún> 'duty, etiquette, what has to be done (in case of mourning)'.

mo ku Üwenem-an uyi-un <mo ku üe.ēn.m.an ui.ún> 'of [his younger] wife Üwenem's mourning ceremony' (D35-12).

- <u>ui^o \bigstar (263)</u> is a dotted variant of (262), used as word initial only in Chinese transcriptions.
- ui-de 次友 (263.205) <uio.de> 'transcription of Chinese wei in the title taiwei 太尉 'grand commandant + de locative' (X18-30).
- <u>ui2 🛠 (265)</u>
- ui₂ 茶 (265) '?' (X10-29, 17-28, 20-26) in: awui <au ui₂> 'milady', ci ui siau <ci.iu ui₂ s.iau> the title *zhu wei xiao* 諸衛小 (X23-2).

Initial *u*-Written with Graphs of the Type *uC*-

<u>ud \mathcal{K} (344), <u>ud</u>₂ $\mathbf{\star}$ (105) and <u> \leq ud</u>₃ \geq $\mathbf{\star}$ (092) are allographs and interchangeable.⁹³</u>

- udunlig 火灵中亢 (344.144.261.334) <ud.un.l.g> ""bovine", occurs before GOLD" (D34-4), perhaps a tribal name, cf. Turkic Ud adaglig in Tibetan transcription, "with bovine (feet)". As Ligeti (1971, p. 182) called attention, we have a witness who describes people having human body but bovine legs. This is related by Hu Jiao who visited the Khitans in the middle of the 10th century. The people with bovine feet used boots made of bovine hide and a type of short ski and lived in a very cold region. The word form udun may be an extended Mongolian form of OT ud 'bovine, ox'.
- üdür¹ 大/火 ϕ /化 (105/344.097/236), $<ud_2/ud.ur/úr> (K94)$, 太 ϕ (092.097) $<ud_3-úr>$ 'east (originally south < noon)' (K196⁹⁴, D4-1, 7-16, 18-18, 47-11, X7-12, 7-18, Y11) | Mo üde 'noon', edür, MMo üdür 'day'. According to HN in the Shirongol languages there is some confusion between *üde 'noon' and *üdür 'day', in Dgx they both have the word shape *udu*, in Kgj both are represented by udər, cf. also the confusion in BaoN udərgu 'daytime, noon', Namcarai and Khaserdeni (1983) have Dahur udur as 'day, noon', suggesting the same confusion which is, however, not confirmed by Enkhbat (1984). Enkhbat has udur *amal* 'before noon' and *udur* x^{w} *aina* 'after noon' based on **üdür* rather than *üde. DeSmedt and Mostaert (1933) derive MgrH dur in the meaning 'noon' from *düli 'middle' [....]. This would be semantically fitting but not phonetically (see HN537-538). Muromskij (Kałużyński 1969, p. 140) has udur 'Tag', and udur duandä, uduri duańda 'Mittag'. Tumurdej and Cybenov (2014) have udur 'den', udur duand 'polden', obed' || *üdür had to mean 'south' (see semantically Hung dél 'noon, south' WOT291-296), then 'south' changed to 'east', the "Mongol" orientation changed to the "Uighur-Turkic". According to WJ63-64 udur¹ and udur² are two different words⁹⁵

üdür ging 大化 九冊<ud2.ur g.ing> (105.236 334. 303) 'eastern capital' (K76, Y19),

- üdür-un ging-en xubu ling <ud2.ur g.ing:en xu.u b.u l.ing> 'director of the ministry of revenue of the eastern capital⁹⁶.
- **üdür ging liusheu** <ud.ur g.ing l.iu ś.eu> 'the *liushou* of the eastern capital' (K47, 76, 94).
- day (in the field)'.

⁹³ Takeuchi (2015, p. 455) read \mathbf{t} (092) as <um>, but this is not acceptable, all three graphs have the same value, and are interchangeable.

⁴ Kane (2009) read $vu^{?}$.

⁹⁵ There exists a long list of papers on the names of the directions in Khitan. The last paper was written by Yasunori Takeuchi (2015). According to Takeuchi \star and \star have to be read as <um>.

⁹⁶ On xū.ū b.ū 'ministry of revenue', see K39.

sengun SMALL.qu.du sen awa üdürlün B316-de <s.eng.un SMALL.qu.du s.en au.a $ud_3.\dot{u}r.l.\dot{u}n$ b.316.de> 'when the Field Marshal was young his health (*esen*) being taken (*awa*), he spent the time at B316'.

- **üdür² 九** (092.097) <ud₃.úr> 'first' (K45: <yu> corrected by WJ63 to <ud>) (D4-1, 7-16, 18-18, 47-11, X7-12, 7-18)⁹⁸.

po-on möcie üdür uwul <po.on m.ci.e ud₃.úr u.ul> 'within a short time the first winter[day entered]' (D47-11),

- <u>udu: $\langle udu \rangle$ ***** (355)</u> also $\langle ordo \rangle$ see above, p. 164.
- udu, u(r)du 米 (355) <udu> see o(r)du 皮米及 (186.355.131) <o.udu.u>, 谷分 (245.249) <u.dū> 'palace' etc. above, p. 164.
- *udu- (355) = (245.249) < ú.dū >

udulġar 米平立本 (355.261.051.123) <udu.l.ha.ar> 'the *Chongxi* 重熙 reign period 'Repeated splendour' (K77, 78). Also

udulgar 辛务平立 肉本 (245.249.261.051.189.123) <ú.dū.l.ha.a.ar>

HEAVEN udulġa'ar 20 ayde <HEAVEN ú.dū.l-ha.a.ar TWENTY ai.de> 'in the twentieth year of the Chonxi reign period (1051)' (X23-21).

HEAVEN udulga'ar hongdi RECORDge.d <HEAVEN ú.dū.l.ha.a.ar hong.di RECORD.ge.d> '(his merits were) recorded in the Imperial Chongxi period' (X23-28) and ...

Though we do not know the meaning of the basic word, the graphs $\ast <$ udu> and $2 \approx <$ ú.dū> reflect the same Khitan syllables.

<u>uh <uh> (172), (173)</u> frequent in final syllables.

 $\underline{un \boldsymbol{\xi}}$ (144). Suffix of the genitive case after stems with -u-:

ngitien hongtay heu-un <ng.i t.ie.én hong.tai heu:un> 'of the empress dowager Yitien' (K135).

üne え (144.348) < un.e> 'now' (X32-1, 36-23, 38-18, 39-17)¹⁰⁰,

⁹⁹ According to WJ110 the word is perhaps based ultimately on *udu* 'court, palace'.

¹⁰⁰ According to Kane (2009, p. 109) 'now, present', cf. Mo *önü in: LM önü, önüge 'now', see further önüdür, önügedür 'now, today', Sh2 reads *ehe* and equates it with Mong *ene*, but (144)

⁹⁷ On **möce** see above, the function of **yara** is not clear.

⁹⁸ See also **masku** in Róna-Tas (2016, p. 126).

üne ciisdebci bağuan cara <ún.e ci.i.is.d.b.ci b.hu.an car.a> 'now the filial children, Cara [and others]' (X38-18).

ünen え☆ (144.251) <ún.n>, **ünen** え当 (144.361) <ún.én> 'true, authentic, veritable' (D31-10) | Mo *ünen* 'true, truth, genuin, authentic', HN *ünen* 'true', DaE *unun*.

ünen ger <ún.én go.er> 'the Veritable House' (D32-16),

ünen muji HEAVEN min <ún.n mu.u.ji:en HEAVEN m.in> '(during the) reign period Daozong (HEAVEN min) the Veritable Sacred (Emperor)' (Y16). <ur> ☆ (273)

Mostly used as genitive case marker after stems with /u/

<u>ung: $\langle ung_2 \rangle$ 太 (106)</u>, $\langle ung \rangle$ <u>× (345)</u>, $\langle ung_3 \rangle$ <u>× (346, WJ also ung_2 </u>), $\langle ung \rangle$ <u>× (357)</u>. The first three graphs are allographs.

<ung₂.a> (106.189) '?' in:

sengün elbü ayur o'odii unga <s.eng.un l.bu ai.ur o.od.ii ung₂.a> 'Field Marshal Elbü...' (X35-43).

ungsu ★ **+** (345.041) < ung.su> 'a name?'¹⁰¹

<te.le.yo te.le.yo ung.su> '?' (EX16).

ungsu-en in:

basa po ungsu-en šid <b.as po ung.su.en shïd> 'at the same time (*basa po*) the *shi*-s (plural) of the Ungsu' (D33-8).

- <u>uni 杏 (059) <uni></u>
- üni 杏 (059) <uni> 'ox, zodiac animal' K (110) suggests Mo üniye rather than üker | Mo üniye 'cow', HN ünien, DaE üńe || Mo üniye may go back to an earlier *ünige.

*uniqu 杏余 (059.246) <uni.qu> '?' (PU8-26, JU40-8, JU4122, KL22-21),

uniquji 杏余药 (059.246.152) <uni.qu.ji> (X43-17, HU19-20),

uniquń 杏余伏 (059.246.222) < uni.qu.ń> (D14-4, KL18-8),

In the above cases -qu may be a suffix, forming adjectives. -ji may be a suffix forming converbs, -n may form verbal nouns, -en is the marker of the gentitive case, but as a whole, the structure and the meaning of the words are not clear. ur **1** (236)

*ürü'ü- 'to set in order, to put in line' | Mo örü-, ürü- 'to set in order, to put in line'.

ġord ürü'ülge'en <hor.d ur.u.ul.ge.én> 'the people were set in order, put in line, organised' (X29-13).¹⁰²

xezüge-en tanayu ürüdbün üġ a'alġu <xe.zů.ge.én te.n.a.iú ur.d.bun uh a.al.hu> '?' (EX23).

is <ún>. Kane (2009) forwarded good arguments to read **un** on pp. 51–52. The word occurs as an adjective. It could be 'the present', but also 'the true, veritable, authentic'.

¹⁰¹ For 041 read \langle su \rangle and not \langle ka \rangle .

¹⁰² See **uróuy-én uru u'urlegey** in <s.on.le.ha.ai a.án úr.ó.ui.én úr.u u.úr.le.ge.ei> (EX15).

<

- *ur(a) a verbal base with unknown meaning, occurs in:
- urayu 夾 肉 穴 (097.189.289) <úr.a.iú> a converbal form of *ura- in -yu

pin shau urayu mod \leq p.in sh.au úr.a.iú mo.d₂> (X14-15) Pin Shau may be a Chinese name, *mod* 'ladies'.

uroi jaw-en yo baqa <úr.oi₂ jau.en yo b.qo> '?' (X44-1).

- uru 交え (097.131) <úr.u> '?' uygiu uru <ui giu úr.u> (X44-8, see further JU9-4, JU9-9, JU32-17, HU27-25, HU28-7).
- uri 夾犬 (097.339) <úr.i> '? prince, lad, young man' | ← OT *urï* 'male child, son' (Clauson 1972, p. 197, WOT969–974).

mo kü erü uri Dawuģiń <mo ku er.u úr.i dau.uh.iń> '?' (Y7), **mo kü** 'wife' **Dawug** 'a name'.

- <ur>
 <u>水</u> (063A), ETERNAL, according to Aisin Gioro <ur>, the logogram is surely used also as phonogram.
- <ur>
 <u>distant</u> (115A) SOME, according to Aisin Gioro <ur>.
- $\underline{\langle us \rangle$ 丸 (068), $\underline{\langle us_2 \rangle}$ 丸 (103), $\underline{ \langle k \rangle} \langle us \rangle (041A)$. The first two graphs are allographs.
- <u><us> 丸 (068)</u>,
- üsgi 兆九 (068.334) <us.gi> 'letter, language' (K 22, X9-23, 35-5) | Mo üsüg, üzüg 'letter', HN üjüg, üsüg 'letter, writing', DaE usuyw 'word, speech' || ← OT üjeg ← Sogd 'wj'y. The Khitan word also has the meaning 'language, speech' as is the case in Dahur.

qitan-i gür-en üsgi <qid.ún.i g.úr:en us.gi> 'the script of the Khitan State' (K127, 136)

cauqui üsgi <c.iau.qú.ui us.gi> 'the Chinese script' (L13)

cau üsgi-de <c.iau us.gi:de> 'in the Chinese script' (Y3).

Sung üsgi-er <s.un us.gi.er> 'with the script of the Song' (K132),

üsgi ġuru'un <us.gi hur.ú.un> 'of the person in charge of the script' (Y2, EX2).

GREAT ordoo'on EIGHT yoiu poo ay EIGHT MONTH SEVEN DAY üsgi siang gung <GREAT ordo.ó.o.ón EIGHT yô.iú p.o.o ai EIGHT MONTH SEVEN DAY us.gi s.iang g.ung> 'in the Daan reign period, in the monkey year, 8th month seventh day the writing [was done] by the Xianggong' (Y40)¹⁰³.

üsgi-de <us.gi.de> [.de LOC] 'in the writing, script' (K22, 42, 127, 192)

bas üsgi-de tegü
bas us.g.de t.gu> 'also as it was said in the script' (X37-27)
üsgidü 'in the writing, in the language'

üsgidü neney COMPOSEcener <us.gi.dú něn.ei COMPOSE.cěn.er>(Y29). üsgi-en 共九内 (068.334.140) 'of the script' (genitive).

¹⁰³ See also **ģo-en üsgi dawui shiqu temlegey** <ho.én us.gi dau.ui śi.qu t.em.le.ge.ei> (Y36), **alar üsgi tsar a-en** <al.a.ar us.gi ts.ar a:en> (Y38), **youn üsgi asyooui dawo'on** <yo.ún us.gi as.yo.ó.ui dau.o.ón> (EX13).

TOMB üsgi-en RECORD.g.s.ii a'an <MOUNTAIN/TOMB us.gi.en RECORD.g.s.ii a.án> 'the tomb inscription has been recorded/compiled' (X46-19).

 $\leq us_2 \geq tt (103)$ not as initial in Y, L, EX, D, X, and the inscriptions in Wu (2012). $\leq us \geq tt (041A)$ not as initial in Y, L, EX, D, X, and the inscriptions in Wu (2012).

Initial u- Not Written

*ula- in "laqu 'red' 牛 考余/夫 (261.362.246/118) <1.iau.qu> <1.iau.qu> (K36, 66, 113), <1iau'ai> (C 107) | Mo ulagan, Da hulaan, HN hulaan || (362) <iau> may be <io> (K78), in Khitan no trace of initial h-. All words have p- which later appear with initial h- in MMo. In this word there is no sign of either p- or h-. The final -qu/qú has to be a suffix, forming adjectives and signalising male or female gender, see masqu 及冬余/丈 (133.174.246/118) <m.as.qu/qú-> 'first' etc. Thus the basic word is *ula. See similar cases with <1> and a vowel to be read before it above s.v. "lem(x)a 牛 太 肉 (261.270.189) <1.ém.a> (D10-7), 牛 太 利 肉 (261.270.151.189) <1.ém.hu.a> 'a title'. In the Liao shi one comes across (see WJ156) the name Luo Han Nu 羅 漢 奴 which can be reconstructed as MCh La Xan Nu. Nu is the clan name and the personal name is Laxan. The name occurs in the Inscription X, line 8 as Laqa Nu 牛肉本公友 (261.189. 053.251.311) <1.a qa.n.u>. He was by name Ulaqa from the clan Nu, on which see p. 153 above.

As can be seen, KSS did not make difference in transcribing /u/ or / \ddot{u} /, in many cases the front or back vocalism of the word can be ascertained by its etymology, but these etymologies may point to an earlier phase, and at the time of use of the KSS the phonemes /u/ and / \ddot{u} / may have merged. Though this is a possibility, at the present time I opt for the case that /u/ and / \ddot{u} / were distinguishable phonemes, but had not been distinguished by the writing system.

The Representation of *ü*-Initials

V ü: <ü> 体 (226), D üe: <üe> 茨 (082), üen: <üen> 业 (324) VC ün: <ün> 亦 (329)

Initials Written with the Simple Graph *ü*: <ü> (# (226)

In D and X there is no example of *ü*- in initial position, but it exists in Y3, and KL14-6, JU39-20, HU39-19:

jürgeer got ü eye <cu.ur.ge.er go:t ü ei.e> (Y3).

The first word is a verb in past tense (?from $j\ddot{u}r$ 'two' > $j\ddot{u}rge$ - 'to double'?), *got* is 'tent, house' plural, *ei.e* is the verb $\ddot{a}y$ - 'to be'.

Initials with *ü*+V

üen <u>**u**</u> (324)

üen oui 些井犬 (324.090.262) <üen.ó.ui> '?' (D17-22) seems to be a transcription of a Chinese name.

Initials with *ü*+C

<u>ün 亦 (329)</u>

This graph is used in Chinese transcriptions for *-un* finals as in \equiv *jun* 'army' MCh *kun*, EMCh *kun*, written in KSS as <g.un> (K74).

u'uruni MYRIAD ay-en üne <u.úr.u.uni MYRIAD ai.en ün.e>

mu'uruni iši taw minde <mū.ru.uni iši tau m.in.de>

Huas oju'un <hu.as o.ju.ún> (X6-6)

.....since innumerable years (Chinese Wansui 萬歲)

....on the (occasion of the) nine-five (the accession to the throne *jiuwu* 1/2) (see WJ149), him was given (the rank) Huas'.

In D29-7/9 we find <hu.as m.in>. The words **u'uruni** – **mu'uruni** may pertain to an old locution or saying, **minde** is locative, thus **üne** may also be a locative form. **üne** $\mathbf{\xi} \mathbf{k}$ (144.348) <ún.e> 'now'

<ún.e ci.is.d.b.ci ba.hu.án car.a MR ci.ci> now 'the filial children Mr. Cici of Cara' (X38-18), W-J translated here <ún.e> as 'now', see also X32-1, 36-23, 39-17.

ünde 亦 (329. 205) <ün.de> '?at present' in:

tux-t ünde šülegsen ayde <t.uh.t ün.de š.ul.eg.s.en ai.de> 'in the ??? month (*ayde*) when in the presence of the banners' $(tux+d \ unde)^{104}$ (X26-24).

üniń 亦伏 (329.222) <ün.iń>

ünede üniń uur ay-en tasha'am holebońer \leq ún.e:de ün.iń u.ur.ai:en t.as.ha.am hó.le.boń.er> (Y4)¹⁰⁵

The following three words are differently written, but may be the same:

ünen亦 与(329.100) < $\sin.en_2$ > 'true, veritable?'

ünen cirier <ün₂.én ci.ri.er> '?' (D18-6)

ünen ńilulier shïde yey <ün₂.én ń.l.ú.li.er shï.de ie.i> '?' (D31-4)

ünen 亦当 (329.361) <ün.én> 'true, veritable?'

awtum-en ünen hulbu'u <aú.tum.en ün.én hu.ul.bú₂.u> '?'(X22-7)

 104 <tub> is the banner, the royal emblem in Uighur (Clauson 1972, p. 454), itself a loan from Chinese du' \bar{a}_{5} , 'yak-tail banner'.

¹⁰⁵ <u.ur.ai:en> 'of the former fathers', <hó.le.boń> 'imperial clan, imperial line'.

tiwjiy-en ünen mo rier <t.iu.ji₃.y.én ün.én mo rí.er> '?' (X25-34). In both places the respective words before **ünen** are in genitive case, therefore **ünen** has to be a noun or adjective.

ünen え☆ (144.251) <ún.en> 'true, veritable?' ünen ger <ún.en go:er> 'The Veritable House?' (D32-16) ünende 赤岑友 (329.361.205) <ün.én.de> 'after y.au.ul.hu' ünende Para Ogurde awulġai <ün.én.de p.ra ú.gur.de au.ul.ha.ai> '....was placed to the Para Ogur' (D32-10)

ünge-ün 亦 公 爻 (329.349.144) <ün.ge.ún> '?'

xas nad ho üngeün <x.s n.ad hó ün.ge.ún> '?'(X29-39).

Initial ü Not Written

There is a word which may contain a front labial vowel:

- *ülü- 牛丙 (261.019) <1.iu> 'to die' | cf. OT öl- 'to die', Mo ölüs- 'to suffer starvation', ölüng 'starvation', ölber- ölmer-, ölmü-r 'to suffer extreme hunger, starve' cf. öl 'food, hunger', HN öles- 'to be hungry', in the Baoan dialects *öler- which may be from *öles-, but everywhere we find the meaing 'to be hungry'. It is possible that in Khitan *ölü- became through assimilation *ülü-. The reduction of a closed labial is more probable than that of a mid-closed. Old Turkic originally had *ölü see ölür- 'to kill'. The semantics of the Khitan word is nearer to the Turkic original: the word may be honorific, and a loan from Uighur^{,106}
- ⁸lüriner 牛丙刃爻 (261.019.137.269) <l.iu.ri/rén.er> '(she) died (hon)' (K66, 216, EX5)¹⁰⁷ | *ren* 刃 (137) was read as *ir* in WJ299. The first vowel can also be read as ö- or ü-, and the word as ölüriner or ülüriner.

nadbudi ülürüner 公亦 生公兴 平丙刃均 (251.099.195.254.339 261.019. 137.361) <n.ad.bu.d.i iu.ren.én> 'died in the camp'¹⁰⁸ (EX5).

ülü'üi 牛丙炔 (261.019.262) <l.iu.ui> 'having died' (X33-2) converbal form in -ui of ülü-.

Most of the word forms beginning with $un: \mathbf{\xi}$ (144) $\langle \hat{u} n \rangle$ and $\ddot{u}n$: $\mathbf{\hat{\pi}}$ (329) $\langle \ddot{u}n \rangle$ have to pertain together and **ünen** $\mathbf{\hat{\pi}} \mathbf{\hat{\beta}}$ (329.361) $\langle \ddot{u}n.\acute{e}n \rangle$, **ünen** $\mathbf{\xi} \mathbf{\hat{\beta}}$ (144. 361) $\langle \hat{u}n.\acute{e}n \rangle$ and **ünen** $\mathbf{\xi} \mathbf{\hat{\alpha}}$ (144.251) $\langle \hat{u}n.n \rangle$ have to be the same word written in different ways. Perhaps they can be connected with Mo *ünen* 'truth, faithfulness, justice, genuin, etc.', but at present we have no univocal evidence. According to HN *ünen* does not occur in the GQ languages. Some other words may pertain to Khitan

¹⁰⁶ Not to Mo *ülü*, the negation verb.

¹⁰⁷ The word is used for the death of the Empress Xuanyi, and thus it may be not only a honorific word, but even an Uighur word, used here as honorific.

¹⁰⁸ *nadbu* is 'camp, travelling place'. It occurs with final *-ad* or *-d*, which is not a plural, but most probably a locative. In this case *-di* may also be a locative.

une 'now' or to the Khitan equivalent of Mo *üne* 'price, value'. From the above we can conclude that at least Khitan *ü and *u are interchangeable, or were so near to each other that they could have been interchanged. In any case, the KSS did not systematically distinguish /u/ and /ü/.

With due caution it is possible to state that the Khitan graphemes reflect the following vocalic phonemes |a|, |e|, |i|, |o|, |u| and perhaps $|\ddot{u}|$. For $|\ddot{i}|$ and $|\ddot{o}|$ we have not enough material, but in any case, the oppositions i/i : i/i / o/ : i/o/ are not reflected by the KSS. This may be due to the shortcomings of the KSS graphs. In the case of numerals we have for the feminine form of the ordinal numeral 'third' guren written as 灸与 (269.361) <hur.én>, 列化与 (151.236.361) <hu.ur.én>, ズ化与 (340.236.361) <x.ur.én>, while for the feminine form of 'fourth' we find *duren* that we have to read guren and düren, see Mo gurban and dörben, but numerals are most likely subjects of partial assimilation, and the Khitan numerals may already have been on the way of this assimilation: guren and duren < *düren. In any case, (236) \mathcal{K} <ur> ised language. The name for 'sun' and 'day' is transcribed in the Liao shi nie-vi-er 捍 咿兒 which reflects a Khitan när, perhaps näyir, this has to be the reading of the graph \mathcal{R} (159) DAY. The name of the 'moon' and the 'month' is written in the *Liao* shi sai-vi-er 寒 咿 唲 which reflects a Khitan sär or sävir. This is the reading of the Khitan graph \bigstar (081) MONTH and also for 'moon'. It has, however, to be mentioned that the same graph with dot \mathbf{x} (082) has been read as $\langle \mathbf{u} e \rangle$ or $\langle y \rangle$ with the value [ü] (K44)¹¹⁰. The word for spring also shows a kind of palatalisation 介 ϕ (250.097) <heu.úr> 'spring' (see Mo *qabur*). This may be read as xäwür. As I suggested in Part I of this paper, the clan name of the Khitan Emperors Yelü 耶律, is also likely to be read **Yärüd** rather than **Yarud**. Nevertheless, at the present time we have to suppose that [\ddot{a}] is only an allophone of /a/, mostly written by <e>.

Graphs with Identical Vowels. Long Vowels in Khitan?

There exists a controversy about primary long vowels in Mongolian, which I will not touch upon in my present paper. On the other hand, all experts believe that there existed and exist secondary long vovels in the past and present Mongolic languages. The most typical case of secondary long vowels is when a consonant in intervocalic position disappeared and the neighbouring vowels merged. The type VCV > VV > \bar{V}

¹⁰⁹ Janhunen (2012, p. 17) has also called attention to the neutralisation of the opposition of the first vowels in the case of numerals. His suggestions of a possible vowel rotation in Khitan, which is present in North East Asia, need further corroboration. He himself is aware of the difficulties, as he wrote: "Although the vowel letters contained in the Romanizations should not be taken at face value…" (Ibid.).

¹¹⁰ There is no connection with *yue* \exists , the Chinese word for 'moon' and 'month', which was EMCh *yuat*, but the fact that 'moon' and 'month' are reflected by the same name may be of Chinese influence.

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is common. The different types of changes depend partly on the quality of the vowels, partly on the quality of the consonant, as it has been adequately described several times. The fact that there are secondary long vowels in several Mongolic languages raises the question when they appeared? It is also clear that the vowels resulting from sequences containing identical vowels, V_1CV_1 e.g. *-aġa-*, appeared earlier than long vowels resulting from different vowels: V_1CV_2 e.g. *-agu-*. All types and the main processes have been described by Poppe (1955, pp. 59–73). Looking at the Middle Mongol material, we can see that the process is observable and in *statu nascendi*¹¹¹. A detailed discussion of Modern Mongolic vowel length can be found in Nugteren (2011, pp. 134–195). Now, our question is whether secondary long vowels appear in the hitherto published Khitan material? As was seen, in the graphic system there is no graph which would denote a long vowel.

In a series of cases we can find *identical vowels* (**IV**) written by two different graphs, one occurring at the end of the first and one at the onset of the second graph $\langle (C)\underline{V}.\underline{V}(C) \rangle$. My aim of this section is to find out what kind of phonetic reality is behind these graphic forms. First we have to study the Khitan transcriptions of Chinese (see Kane 2009, pp. 243–259).

1. Before Nasal Finals

Kane (2009, pp. 248–251) dealt with the Khitan transcriptions of Chinese nasal finals.

- jung.ging 子 次 九 司 (149.145.334.303) <ju.ung g.ing> 'the central capital' (Y18, K200) ← Ch Zhongjing 中京, LMCh *triwŋ kiajŋ*, Liao Chinese **zhung ging* (K264), no sign of length in the Chinese original, but the Khitan may render a diphthong [iu].
- tang 13 え (229.199) <t<u>a.a</u>ng> in Tang Qianling (tomb) (L4) Chinese *Tang* 唐 LMCh *than*, EMCh *dan*. The word is written with <ta.> 13 and not with <t> 今 (247). In this case there is no sign of length in Chinese.
- **lang** 本 え (261.199) <l.ang> Chinese *lang* 郎 (K257) as part of the title *libu shilang*, LMCh, ELCh *laŋ*, no sign of Chinese length.
- lan 牛肉夹 (261.189.011) <1.<u>a.a</u>n> (K257), Chinese *lan* 籲, EMCh, LMCh *lan*. No sign of length in Chinese¹¹².
- šan *又为* 夭 (028.189.011) <š.<u>a.a</u>n> (K258), Chinese *shan* 山 'mountain, hill', LMCh *şa:n*, EMCh *şəin/şɛ:n*, here LMCh has long vowel, EMCh a diphthong.
- sam キカバ (244.189.184) <s.a.am> Chinese san 'three' 三 LMCh, EMCh sa:m. Length is present in Middle Chinese.

 $^{^{111}}$ A very detailed investigation of the so-called 'hiatus problem' was published by R. A. Miller (2002).

Though Kane does not give the source of the data on p. 257, this may be a part of a female name, occurring in several inscriptions also as $<1.an_2>44$ \clubsuit (261.127) (X13-33), the Chinese name of the orchid.

More data could be added, but even from the sample above one can see that writings as CV.VC or even CV.V.VC occur in cases where the Chinese original did not have long vowel, and also in cases where the Chinese had a diphthong or a long vowel.

2. Before Oral Finals

It may be interesting to cast a glance at cases where Chinese had originally a final oral stop. First let us see two cases in detail:

- pu, bu 出 (297.131) <pú.u> (X1-16, 18-24, 18-33) 出 表 几 (297.131.178) <pú.u ku> (297.131.178) (K115, 247) also 日女 (311.172) <bub> 'servant' (K55) | Ch pu 僕 'servant', EMCh bawk, bawk, LMCh phawk || Some of the Chinese finals in *-k are transcribed by KSS with different types of vowels or diphthongs, others are transcribed by Khitan graphs of the type -Vh <.ah>, <.oh>, <.uh> (see Kane 2009, p. 253), never by $\langle eh \rangle$ or $\langle ih \rangle$. In this case we find $\langle puu \rangle$ and $\langle b.uh \rangle$. The Chinese word lu 'blessings' 籙 has two Khitan transcriptions, <lu.u> and u.uh>. These writings may demonstrate that the earliest system reflected the disappearing final γ (< -k), but the later one did not, and in a given inscription the two writings may have occurred side by side. It is possible, but not sure, that in the process of disappearence of the final guttural, the coda vowel was long. In any case, Λ <ku> here is not representing a Chinese final -k, and has here the meaning 'man, person' (see ku in the wordlist), further that <pu.u> may reflect a long $/\bar{u}/$, but not necessarily.
- pu'uv in: pu'uvidaw 业井火关 ズ (295.090.262.339 119)¹¹³ <p.u.ui.i dau> 'bandits and robbers' (L5, Sh2) ← Ch fei 非 EMCh puj, LMCh fiyi/fii, dao 盜 EMCh daw^h LMCh thaw || Either a loan or a foreign word from Chinese. Neither the EMCh nor the LMCh had long vowels in this case, thus the graphic representation <.u.ui.i> does not seem to represent a long vowel, it is rather the way of reflecting the Chinese final diphthong, something like /-ui/ rather than /-ui/. In the following table I am giving a selected material of cases of different Chi-

Khitan	Chinese	Pinyin	Tone	Meaning ¹¹⁴	LMCh ¹¹⁵	EMCh ¹¹⁶	Final ¹¹⁷
pu 分 (241)	福	fú	2	blessing	fjywk/fuwk	puwk	-juwk
p.u 业及 (295.131)	僕	pú	2	servant	pəwk	pəwk	-uwk
pú.u 出え (297.131)	僕	pú	2	servant	pəwk	pəwk	-uwk

nese finals reflected by their respective Khitan transcriptions:

¹¹³ Graph (090) # was read by Kane (2009) and Wu–Janhunen (2010) as $\langle 6 \rangle$, by Chinggeltei (2002a) as v and by Aisin Gioro (2012) as o and u. Shimunek (2011) read <u>.

¹¹⁴ The Khitan items are quoted after Kane (2009). The meaning serves here only for differentiation and is based on the meaning given in Pulleyblank (1991).

¹¹⁵ Late Middle Chinese according to Pulleyblank (1991). ¹¹⁶ Early Middle Chinese according to Pulleyblank (1991).

¹¹⁷ Final according to Baxter - Sagart (2014).

b.uh 母久 (311. 172)	僕	pú	2	servant	pəwk	pəwk	-uwk
p.ah 业条 (295.197)	伯	bó	2	uncle	pa:jk	paɨjk/pɛ:jk	-aek
b.u 日え (311.131)	部	bù	4	part, section	phuə́	'cd	-uw
b.ū.u 日只え (311.372.131)	部	bù	4	part, section	phuə́	'cd	-uw
p.u.u 业ええ (295.131.131)	部	bù	4	part, section	phuə́	'cd	-uw
pu.u 今ゑ (241.131)	副	fù	4	aide, assistant	fjyw`/fuw`	puwh	-uw
pu 分 (241)	副	fù	4	aide, assistant	fjyw`/fuw`	puwh	-uw
pu 分 (241)	輔	fũ	3	assist	fhjyə̈`/fhuə̈`	buð	-ju
p.u.ui.i 业 	非	fēi	1	bandit	fjyj/fji	puj	-əj?

It can be seen from the table above that the KSS rendering of Chinese finals is far from being consistent, many different types can be observed, CV, C.V, C.V.V, C.V.Vh and C.V.Vi.i and so on. The only conclusion which can be drawn is that KSS tried to render Chinese finals in different ways and that writings with identical vowels do not reflect long vowels, but may render diphthongs.

Now we can turn to the cases where the KSS used identical vowels in Khitan words. The following types can be distinguished:

Type One

Khitan has IV where there is no sign of disyllables in Mongolian:

- **gur** � (259) <hur> 'three' **对**化 爻 (151.236.269) <h<u>u.u</u>r.er>, � 爻 (259.269) <hur.er> 'third, masc.', **对**化 笃 (151.236. 219) <h<u>u.u</u>r.én>, � 笃 (259.218) <hur.én>, **X 化** 笃 (340. 236. 219), <x.ur.én> 'third, fem.' (K53, 54-55, 66, 121, 143, D9-5) | Mo gurban, Da guarebe, HN gurban, DaE g^warbə, g^warbən, g^warəb.
- jun 3 体 (147.273) <ju3.un> 'summer' (K119, X28-12, 30-36) | Mo *jun*, HN *jun* only in EYu and Mgr, no sign of length in the Mongolic languages, and Khitan also has to have a short vowel. [Da *najire*].
- ńūr, ńour 谷/伏 利/卅/公 夾 (251/222.138/090/253.097) <n.iū.úr>, <n.ó.úr>, <ńi.ô.úr>
 <ń.ó.úr> 'tribe, division, circuit' (K51, 124, 208, D4-13, D4-20, 5-12, 27-25, X25-11, 25-25, 31-14), ńogo 伏 公北 (222.253.076) <ńi.o.ho> 'circuit, route' (K88) | perhaps to Mo *nurgan, see Kalm nutug nurgan 'Land und Volk' (Ramstedt 1935, p. 281b). This is a good example for the Khitan sequence /ńi/

which may be written as $\langle n+i \rangle$, or $\langle ni \rangle$ or $\langle ni \rangle$. The word denoting an important unit of administration occurs in various forms and is frequent in the inscriptions. Its Chinese equivalent is $bu \oplus i$ 'part, section, department', an abbreviation of *bu-luo* $\oplus i$'s and the history of the word is reflecting the settling of the nomadic tribes (WF47), 'tribe' \rightarrow 'local unit'. Here we can see that in one case we find $\langle u.u \rangle$ which has to be the equivalent of $\langle o.u \rangle$.

- so'or- 雨소 (017.255) in: <k.em <u>so.or</u>> 'received the edict, or the edict was issued' (K69, Y16, 17, K199, 200), 雨雨 (017.304) <so.go> 'to receive' (K200), <<u>so.or</u>> 'received' (K199) | Mo *sur*- 'to learn', Da *sore*-, HN *sur*- 'to learn'¹¹⁸ || WJ017 reading unknown.
- po, po'o 生 及(及) (295.186.186) <p.o, p.<u>o.o</u>> 'monkey' (K107), <p<u>o'o</u>> (C107) | cf. Mo bečin, Da monioo, HN bečin, Ma bonio, monio.
- u'ur 柔化 (131.236) <<u>u.ú</u>r> 'first, upper, previous', u'ur ai 柔化 **+** (131.236 122) 'ancestor', (K84, 193, D2-11, 2-17, 2-26, 3-5, 3-11, 3-17, 14-10, 25-3, 26-4, 27-15, X7-5, 7-15, 11-26, 18-22, WJ57), u'ur ai 宋化 **+** (372.236 122) <<u>u.ur</u> ai> 'id.' (D2-9) u'ur ging 柔化九司 (131.236.334.303) <<u>u.ur</u> g.ing> 'supreme capital, Ch *Shangjing* 上京' (K119, 204, 208) | Mo *urid*, *urida* 'before', *urji edür* 'day before yesterday', HN *urida*, DaE *ward* 'before' and *urijï üdür* 'the day before yesterday', both from **urï*.

Type Two

IV where an /r/ disappeared:

o'oju- 及及子 (186.186.149) 'to enter' <0.0.ju> (X18-19) | Mo oro- 'to enter', HN ora-, DaE war-.

Type Three

IV in place of Mo disyllables V₁CV₁

- ü'ül 及平 (131.366) <u.ul> 'winter' (K3, 79, 126, D47-12, Sh2), <u'ul> (C107, Sh 104) | MMo übül, Mo ebül, Da ugul, HN übül, ?ebül, DaE uyul, uwul, u:l, Sh uul/uwul || PhK ügül.

¹¹⁸ The word is a polite expression.

¹¹⁹ Shimunek (2001) quotes Da tur- 'be born', Mo törü-, this is hardly acceptable.

Type Four

IV in place of V_1CV_2

- *dawul-/dau'ul- ス 干 (119.366) <da<u>u.ul</u>-> 'to lead', Mo *daga* 'to follow', *dagagul*-'to cause or to let follow', HN *daga*- 'to follow' || The Khitan word may go back to an earlier **dagugul*- where -*gul*- is the factitive suffix, that is, **dagu*-> **dau*- is the basic word. It occurs in past tense as **dawu'ar**- <dau.<u>a.ar</u>> スカネ (119.189.123) (D30-12) 'lead'. In this case <dau> has to represent /dau/ which can be transcribed as *daw*.
- The word **dawul** occurs in the following forms:
- dawulġa'ai ズ平立 キ (119.366.051122) <dau.ul.h<u>a.a</u>i> (X25-13), a converbal form in -ai of dau'lga-, a verb with the double factitive suffix -UlgA-, see above au'ulgai <au.ul.ha.ai>.
- dawulji \mathcal{R} 平 表 讷 (119.366.131.337) <da<u>u.u</u>l.u.ji₃> (X32-22) is a converbal form in *-ji* with the meanining 'after having followed', see K153-154.
- dawulgu'an ス平列天 (119.366.151.011) <da<u>u.u</u>l.hu.an> (X29-2). This form looks like a noun in genitive case *-an*. If this is the correct interpretation, then *<*hu> must be the same, or have the same function as *<*ho> and is a nominaliser
- dawur 尺夾 (119.097) <dau.úr> 'middle', WJ87, Sh2: dawr | cf. Mo dumda, Da Daure 'Dagur', duande 'middle', HN dumda, DaE dwand, dwanna, see Ch zhong \ddagger as middle, the Middle, China \ddagger , on dagur = Khitan see Kane $(2009, pp. 162-165)^{120}$. This word occurs in the expression <GREAT dau.úr.ún xu-ra qid.ún.i> 'The great Central Liao State-GEN'. Thus <dau.úr> denoted not only the word 'middle' in space or time, but also the centre of the world, and thus the Central Empire, the Empire of the Middle, as *zhong* in Chinese zhongguo. This is the origin of the ethnic name Dagur, Dahur, Daur. Ivanovskij (1894) registered the form Dayúr, Poppe (1930) Dagūr, Dayūr, Muromskij (Kałużyński 1969) dahuru, Martin (1961) Daure. In the Dagur language the CM -agu- bisyllable became -au-, see LM dagu 'voice' > Da dau. The ethnic name is written in the Uvgur-Mongolian script as mod, but this may be a modern form of the ethnic name. Enkhbat (1984) is cautious, though in all other similar cases he gives a written Mongolian form, in the case of Daur he does not. The modern Chinese transcription is dawoer 达斡尔 which represents a pronunciation [dawur] or [dawor]. Though we have to pay attention to the notions of Muromskij and Poppe respectively, for the time being I cannot decide

¹²⁰ A similar idea was formulated by G. Kara in one of his lectures at the Hungarian Academy of Sciences.

whether the sequence $\langle u.u \rangle$ in $\langle da\underline{u.\dot{u}}r \rangle$ denoted a long vowel or not, i.e. we have to reconstruct *dawur* or **dawūr*. The word occurs in the genitive case:

dawdu \mathcal{R} $\hat{\sigma}$ (119.249) < dau.du \hat{u} > 'in the middle, the middle one, etc.' with the loss of -r, or at least without an overt <r>.

dawdu ai ス含本 (119.249 122) <dau.du ai> 'the middle uncle' (D13-6. 16-23, X1-4).

dawdu ku $\mathcal{R} \Rightarrow \mathcal{R}$ (119.249.178) <dau.du ku> 'the middle person (sibling)' (X2-23).

- ewül ちモ (067.366) <e<u>u.u</u>l> 'cloud; name of a region' (K42, 89, X11-21, 44-15, 45-22) | Mo *egüle* 'cloud', Da *eulen*, HN *eülen* 'cloud', DaE *əulən*.
- xäwür 介交 (250.097) <heu.úr> 'spring' (K46, 119, 211, X29-23), <xαwur> (C107) | Mo qabur, Da haure 'spring', HN kabur, DaE xaur || The word is a strongly palatalised pair of Mo qabur. The first <u> ending <xeu> has to represent a /u/.
- ***ü**(w)- $\Re < \bar{u} >$ 'to give, provide' || Mo *ög* 'to give', Da *uke*-, HN *ög*-, DaE *uk*^{*w*-} || The basic Khitan verb *u*- may have had a long vowel, but this is not reflected in the KSS. Forms as $< \bar{\underline{u}}.\underline{u} >$ converb, $< \bar{\underline{u}}.\underline{u} r >$ past tense, have the usual form -V-V in:

ü'ülge'en ゑ平太ち/岑 (131.366.112.100/361) <u.ul.ge₂.én₂/én> (D24-19, D25-11). Judging from the context the word has the meaning 'was given in marriage', i.e. the word is a derivation from **ü**- 穴 (372.262) < \bar{u} > 'give, provide' and not from **ゑ**干 (131.366) <u.ul> 'winter'. The morphological segmentation is *ü'ü-lge-en*, may be *ü'ü-lege-en* where *-lge/lege* is the causative-passive suffix, and *-en* is a nominaliser.

ü'ülgelci え 千 本 个 れ (131.366.349.261.162) <u.ul.ge.l.ci> (D17-1) 'was given (in marriage)'. The morphological segmentation is *ü'ü-lge/lege-l-ci* where to the basic verb *ü*-, the suffix of passivity *-lge* or *-lege*, the suffix of the causative or factitive *-l*- (Mo *-l*-, Poppe 1964, p. 61) and the converbal suffix *-ci/-ji* was added.

Type Five

IV in non first syllables

ala'ar ★ (098.189.123) <al.<u>a.a</u>r> 'killed' (D5-15, 30-16, 43-14) || The past tense masculine of ala- 'to kill'. The suffix is -Vr, the vowel is assimilated to the last vowel of the word, if it is an open syllable.

- **muģo ff t t g** (224.076.186) <mu.h<u>o.o</u>> 'snake' (K58, 60, 118), <moyo> (C107) | Mo *mogai*, **mokai*, HN *mogai*, Da **moga* > $m \gamma^{\psi}$, only Khitan and Dagur lost the final -*i*. Here the question is: does a long vowel in Khitan correspond to the final Mongol diphthong -*ai*? As we can see Dagur lost its final -*i*, and we may suppose the same for Khitan. This makes it very probable that the <u>o.o</u> in the word <mu.h<u>o.o</u>> does not represent a long vowel, it has to be read as *mugo* and not **mugō*. Why is it then written <ho.o>? I suppose that **t** (076) should be read here only as <h>, i.e. <mu.h.o>.
- naġa'an 力 ± 出 (139.051.290) <na.h<u>a.á</u>n> 'maternal uncle', 力 ± 出 仝 (139.051. 290.254) <na.h<u>a.á</u>n.d> plural (K25, 51, 106, 124, 206, D1-1/2) | Mo *naga* 'relatives on the mother's side' (Lessing 1960, p. 1207), *nagaču*, SH *naqačunar*, HN *nagaču* 'maternal uncle, relatives on the mother's side' | <**nagagan*, perhaps -(g)An is a dimin. suff. Mo *nagaču* is used for the maternal lineage, *n. aqa* 'elder brother of the mother', *n. bergen* 'wife of mother's brother' etc., perhaps originally 'those on this, on our side (in a matrilineal structure of relationship)', see *nagana* 'nearer, on this side', also *inagsi = nagasi* 'hither'.
- ona- ふカ (154.189) 'to descend' | Mo una- 'to fall down', Da uane-, HN una-, DaE wana-.
- ona'an- ふカ: 出 (154.189:290) <on.a.án> '[sweet dew] descended, came down, fell (past)' (K20, 53) || The graph (154) occurs also as marker of the genitive case. It follows words with /o/, but from this it cannot be concluded that it has to be read as /on/, it may also be /un/. The suffix -an 天 (011) is the marker of the genitive case, but here we have 出 <án> (290) the suffix of the verbal noun, following a verb ending in -a (cf. K155). The pronunciation behind the sequence <.a.á> could be either /a'a/ or /ā/. I would call here attention to the fact that Khitan had two verbs on- ふ (154) 'to ride' and ona- ふカ (154.189) 'to descend' which in Mo correspond to *unu* and *una* respectively. If this can be generalised, we can conclude that the Proto-Mongol final -u disappeared in Khitan, unlike -a which did not.

(K149) and has to be translated 'falling ill'; the word occurs in a sentence where it is said that the person fell ill and died. On the other hand, in D11-7/8 we read **全**金北茶 **令**塔茶 <s.em.ii.er t.ge.er>. The marker *-er* is the suffix of the past tense and it occurs twice: fell ill, died. A combination of converb + past tense marker is curious. The graph \pm which looks very similar to (076) <ho> \pm alone represents a converbal suffix, in the series <ai, ei, ii, oi, ui> (K149-15). But all allomorphs occur after the respective vowels, i.e. *-a-ai*, e-ei etc. Thus *semii-* has to be *semi+i*, but written *sem+ii-*. Why do we find then *semiier*? Is this a graphic misspelling or a curiosity or does it reflect a long / \bar{n} /?

tege- 令 答 (247.349) <te.ge> 'to die (hon)', cf. Mo *dege- 'to go, move upwards', see degedü 'upper, previous etc.', degere 'on, above, high', degde- 'to rise, to float, to fly up', cf. HN deere, DaE do:r 'above, upper'.
tege'er 令 答 答/答 (247.349.269/341) <te.ge.er> 'deceased, died' (masc. past tense in -er).
tege'en 令 答 笃 (247.349.219) <te.ge.én> 'deceased, died' (fem. past tense in -én) (K41, 64, 90, D11-8, 2-5, 35-8, X32-17).

Conclusion

The writing of identical vowels is of course only a description of the situation from our Western linguistic aspect. For the Khitan scribe a graph had one or more readings and he was not aware of its phonetic structure and value. He learnt to write suffixes with separate graphs and wrote Khitan finals with the same graphs, since the morphological borders were not always clear. Graphs denoting single vowels were also used for secondary long vowels (see e.g. \ddot{o} - above), but also identical vowels were written for short vowels (see **gur** and **ġu.ur** 'three' above). The writing of identical vowels in the transcription of Chinese words was only an adaptation to the Khitan writing system. pu.ui> had the value /pui/ a diphtong and thus adapted to the system of the Khitan -ui finals.

In brief, the KSS does not reflect vowel length directly, but in some cases we can identify long vowels behind the script. These long vowels are secondary. Secondary long vowels may have had two origins. They could be the result of bisyllables of the type of VCV after the consonant disappeared, and the length of a vowel may have been the result of compensation and stress. The length of the verbal base **a**- may have pertained to the second group.

*

The investigation of the rendering of the Khitan vowels by the Khitan Small Script shows that the system was far from being suitable for reflecting the contemporary vocalic system. However, it is important to state that the limits of the KSS system were not narrower than those of the Uighur script. I have the impression that the graphs were partly borrowed, partly invented by the Khitans, but the system itself was modelled after the Uighur script. This would be in line with the record in the *Liao shi* on the creation of the Khitan Small Script – quoted in WF243.

(to be continued)

Abbreviations

BaoD = Dahejia (or Jishishan) Baoan (after HN) $Bao\dot{N} = \dot{N}antoq$ subdialect of Tongren Baoan (after HN) C = Chinggeltei (2002a)Ch = ChineseD = Xiao Dilu inscription (AD 1114) (WJ) Da = Dagur according to Martin (1961) DaE = Dagur according to Enkhbat (1984) (after HN) DaM = Dagur according to Muromskij in Kałużiński (1969-1970) DaTC = Dagur according to Tumurdej – Cybenov (2014) Dgx = Dongxian (after HN) Dilie = The Epitaph of Yelü Dilie (AD 1092), cited after K EMCh = Early Middle Chinese according to Pulleyblank (1991) EX = Eulogy for Empress Xuanyi (AD 1101) (K214-223) EYu = Eastern Yugur GQ = Gansu Qinghai Mongolian HN = H. Nugteren (2011) HU = The Xiao Hudujin inscription (1091) (Wu 2012) Hung = Hungarian JU = The Yelu Jue inscription (AD 1071) (Wu 2012) K = Kane(2009)KC = The cover of the Xiao Huilian inscription (AD 1080) (Wu 2012) Kgj = Kangjia (after HN) Kh = Khalkha Mongol (Luvsandendev 1957) KL = The Xiao Huilian inscription (AD 1080) (Wu 2012) KLS = Khitan Large Script KSS = Khitan Small Script L= The Langjun inscription (AD 1134) (K186-189) L2 = The Langjun inscription according to Sh2 List = List of KSS graphs as in WJ LMCh = Late Middle Chinese according to Pulleyblank (1991) Ma = Manchu Mgr = Smedt - Mostaert (1933)MgrH = Huzhu dialect of Monguor (after HN) MgrM = Minhe dialect of Monguor (after HN) MMo = Middle Mongolian Mo = Literary Mongolian according to Lessing (1960) PC = The cover of the Yelu Pusuli inscription (AD 1105) (Wu 2012) PKh = Proto Khitan PU = The Yelu Pusuli inscription (AD 1105) (Wu 2012) QG = The Qinghai and Gansu Mongol languages according to HN

Rykin = Rykin (2014) Sh = Shimunek (2011) Sh2 = Shimunek (2014) SH = The Secret History of the Mongols (cited after Rachewiltz 1972, 2004) SJL= Sun Bojun-Jing Yongshi-Li Yang (2010) Tib = Tibetan TMR = Tibeto-Mongolica Revisited (Róna-Tas 2014) WF = Wittfogel-Fêng (1949) WJ = Wu-Janhunen (2010) WOT = Róna-Tas-Berta (2011)

X = The Yelü Xiangwen inscription (AD 1091) (WJ)

Y = The Yelü Dilie inscription (AD 1092) (K191-211)

References

- Aisin Gioro (2012): Reconstruction of Phonetic Values of Khitan Small Scripts and Concerning Problems (in Japanese). *Ritsumeikan bungaku* No. 7, pp. 1–28.
- Baxter, W. H. Sagart, L. (2014): Old Chinese: A New Reconstruction. New York, cited after the same author's Chinese Reconstruction, 20 September 2014, Version 1.1.
- Berta, Á. (2004): Szavaimat jól halljátok ... A türk és ujgur rovásírásos emlékek kritikai kiadása [Listen well to my words... Critical edition of the Türk and Uighur runic inscriptions]. Szeged.
- Brosig, B. (2015): Negation in Mongolian. JSFOu Vol. 95, pp. 67-136.
- Chinggeltei (1992): Qidan xiaozi zhong de dongci fujia chengfen [Verbal suffixes in the Khitan Small Script]. *Minzu yuwen* No. 2, pp. 1–14.

Chinggeltei (1997): Qidanyu shuci ji Qidan xiao zi de yanjiu [Khitan numerals and graph combinations in the Khitan Small Script]. *Neimenggu daxue xuebao* No. 4, pp. 1–9.

- Chinggeltei (2002a): On the Problems of Reading Kitan Characters. AOH Vol. 55, pp. 99-114.
- Chinggeltei (2002b): *Qidan xiao zi shidu wenti* [Problems of the decipherment of the Khitan Small Script]. Tokyo.
- Clauson, G. (1972): An Etymological Dictionary of Pre-Thirteenth-Century Turkish. Oxford.

Csongor, B. (1952): Chinese in the Uighur Script of the T'ang-Period. AOH Vol. 2, pp. 73-121.

Csongor, B. (1954): Some More Chinese Glosses in Uighur Script. AOH Vol. 4, pp. 251–257.

DeSmedt-Mostaert (1933) see Smedt, A. de-Mostaert, A. (1933)

Enkhbat (1984): Dayur kelen-ü üges [Dagur-Chinese dictionary]. Kökekota.

- Hamilton, J. R. (1955): Les Ouïghours. A l'époque des Cinq Dynasties d'aprés les documents chinois. T. 1–3. Paris (Bibliothèque de L'Institut des Hautes Etudes Chinoises X).
- Ivanovskij, A. O. (1894): Mandjurica I. Obrazcy solonskago i dahurskago jazykov. Sanktpetersburg.
- Jacques, G. (2010): Review on Kane (2009). Diachronica Vol. 27, pp. 157-165.
- Janhunen, J. (2012): Khitan: Understanding the Language Behind the Script, SCRIPTA Vol. 4, pp. 1–36.
- Kałużyński, St. (1969–1970): Dagurisches Wörterverzeichnis. Nach F. V. Muromskis handschriftlichen Sprachaufzeichnungen. RO 33/1, pp. 103–140; 33/2, pp. 109–143.
- Kane, D. (2009): The Kitan Language and Script. Leiden-Boston.
- Lessing, F. D. (ed.) (1960): Mongolian-English Dictionary. Berkeley-Los Angeles.

- Ligeti, L. (1950–1951), Mots de civilsation de haute Asie en transcription chinoise. *AOH* Vol. 1, pp. 141–185.
- Ligeti, L. (1961): Sur quelques transcriptions sino-ouïgoures des Yuan. UAJb Vol. 33, pp. 235-244.
- Ligeti, L. (1970): Le tabgatch, un dialecte de la langue sien-pi. In: Ligeti, L. (ed.): *Mongolian Studies.* Budapest, pp. 265–308.
- Lurje, P. B. (2010): Personal Names in Sogdian Texts. In: Schmitt, R. Eichner, H. Fragner, B. G. Sadovski, V. (eds): *Mitteliranische Personalnamen*. Vol. 3, Faszikel 8. Wien.
- Luvsandendev, A. (1957): Mongol'sko-russkij slovar'. Moskva.
- Martin, S. E. (1961): Dagur Mongolian Grammar. Texts and Lexicon. Bloomington.
- Miller, R. A. (2002): The Middle Mongolian Vocalic Hiatus. AOH Vol. 55, pp. 179-205.
- Moriyasu, T. (1980): La nouvelle interprétation des mots *hor* et *ho-yo-hor* dans le manuscrit Pelliot tibétain 1283. *AOH* Vol. 34, pp. 171–184.
- Mostaert, A. (1977): Le matériel mongol de Hua I I Yu 華夷譯語 de Houng-ou (1389). In: Rachewiltz, I. de-Schöhnbaum, A. (eds): *Mélange chinois et bouddhiques* XVIII, I-XXII, pp. 1–142.
- Namcarai-Khaserdeni (1983): *Dayur kele Mongyol kelen-ü qaričagulul* [Comparison between Dahur and Mongolian]. Hohhot.
- Nugteren, H. (2011): Mongolic Phonology and the Qinghai-Gansu Languages. Utrecht.
- Pelliot, P. (1929): Neuf notes des questions d'Asie Centrale. T'oung Pao Vol. 26, pp. 201-265.
- Pelliot, P. (1959): Notes on Marco Polo. Paris.
- Poppe, N. N. (1930): Dagurskoe narečie. Leningrad.
- Poppe, N. (1955): Introduction to Mongolian Comparative Studies. Helsinki (MSFOu).
- Poppe, N. (1964): Grammar of Written Mongolian. Wiesbaden.
- Poppe, N. (1979): Jurchen and Mongolian. In: Schwartz, G. H. (ed.): Studies in Mongolia. Proceedings of the First North American Conference on Mongolian. Washington, pp. 30–37.
- Pulleyblank, E. G. (ed.) (1991): Lexicon of Reconstructed Pronunciation in Early Middle Chinese, Late Middle Chinese and Early Mandarin. Vancouver.
- Rachewiltz, I. de (1972): Index to the Secret History of the Mongols. Bloomington.
- Rachewiltz, I. de (1974): Some Remarks on the Khitan Clan Name Yeh-lü ~ i-la. Papers on Far Eastern History Vol. 9, pp. 187–204.
- Rachewiltz, I. de (2004): The Secret History of the Mongols. A Mongolian Epic Chronicle of the Thirteenth Century. Vols 1–2. Leiden–Boston.
- Ramstedt, G. J. (1935): Kalmuckisches Wörterbuch. Helsinki.
- Raschmann, S.-Ch. (2009a): Alttürkische Handschriften, Teil 14: Dokumente, Teil 2. Stuttgart.
- Raschmann, S.-Ch. (2009b): Traces of Christian Communities in the Old Turkish Documents. In: Zhang Dingjang-Abdurished Jakup (eds): *Tujue yuswenxue yanyiu, Geng Shimin jiao-shou bashi huadan jinian wenji* [Studies in Turkic philology, Festschrift in honour of the 80th birthday of Professor Geng Shimin]. Beijing, pp. 408–425.
- Raschmann, S.-Ch. (2015): "Verloren" und doch bewart: Ein Dokument aus dem Arat-Nachlass in Istanbul. In: Ragagnin, E. – Wilkens, J. (eds): Kutadgu Nom Bilig. Festschrift für Jens Peter Laut zum 60. Geburtstag. Wiesbaden, pp. 407–422.
- Róna-Tas, A. (2004): Some Notes on Old Turkic irq. Turkic Languages Vol. 8, pp. 53-61.
- Róna-Tas, A. (2011): Recent Trends in Mongolic Studies. AOH Vol. 64, pp. 221-238.
- Róna-Tas, A. (2014): *Tibeto-Mongolica Revisited, with a New Introduction and Selected Papers on Tibetan Linguistics.* Leiden–Boston.
- Róna-Tas, A. (2016): Khitan Studies. I. The Graphs of the Khitan Small Script, 1. General Remarks, Dotted Graphs, Numerals. *AOH* Vol. 69, pp. 117–138.

- Róna-Tas, A. Berta, Á. (2011): West Old Turkic. Turkic Loanwords in Hungarian. I–II. Wiesbaden.
- Rybatzki, V. (2004): Nestorian Personal Names from Central Asia. In: Juusola, H. Laulainen, J. Palva, H. (eds): Verbum et Calamus. Semitic and Related Studies in Honour of the Sixtieth Birthday of the Professor Tapani Harviainen. Helsinki (Studia Orientalia 99), pp. 269– 291.
- Rykin, P. (2014): Middle Mongol Affricates and the Reconstruction of (Pre-)Proto-Mongolic Affricates. AOH Vol. 67, pp. 425–452.
- Sertkaya, F. (2013): Zu den Namen türkischer Christen in verlorengegangenen altuigurischen Urkunden. In: Pang, T. – Raschmann, S.-Ch. – Winkelhane, G. (eds): Unknown Treasures of the Altai World in Libraries, Archives and Museums. Proceedings of the Permanent International Altaistic Conference, St. Petersburg, July 2010. Berlin, pp. 284–395.
- Shimunek, A. (2011): Review of Kane (2009). AOH Vol. 64, pp. 101-111.
- Shimunek, A. (2014): A New Decipherment and Linguistic Reconstruction of the Kitan–Chinese Bilingual Inscription of 1134 A.D. AOH Vol. 67, pp. 97–118.
- Sims-Williams, M. (1992): Sogdian and Turkish Christians in the Turfan and Tuan-huang Manuscripts. In: Cadonna, A. (ed): *Turfan and Tun-huang. The Texts. Encounter of Civilisations* on the Silk Road. Firenze, pp. 43–61.
- Sims-Williams, M. Durkin-Meisterernst, D. (2012): Dictionary of Manichean Texts. Vol. III: Texts from Central Asia. Part 2: Dictionary of Manichean and Sogdian. Turnhout.
- Smedt, A. de-Mostaert, A. (1933): La dialecte Monguor parlé par les Mongols du Kansou Occidentale, IIIe partie: Dictionnaire monguor-français. Peip'ing.
- Sun Bojun Jing Yongshi Li Yang (2010): Preliminary Proposal for Encoding Khitan Characters in 1UCS, ISO/IEC JTC/SC2/WG2.
- Takeuchi, Yasunori (2015): Direction Terms in Khitan. Acta Linguistica Petropolitana: Transactions of the Institute for Linguistic Studies Vol. 11, Part 3, pp. 453–464.
- Tekin, T. (1969): A Grammar of Orkhon Turkic. Bloomington.
- Togan, Z. V. (ed.) (1939): Ibn Fadlān's Reisebericht. Leipzig.
- Tokio Takata (1988): A Historical Study of the Chinese Language Based on Dunhuang Materials. The Hexi Dialect of the Ninth and Tenth Centuries. Tokyo (in Japanese).
- Tumurdej, G.-Cybenov, B. D. (2014): Kratkij dagursko-russkij slovar'. Ulan Udė.
- Vovin, A. (2011): A Modest Proposal on the Decipherment of the Khitan–Jurchen Bilingual Text of the 1134 (the Langjun) Inscription. In: Knüppel, M.–Tangerloo, van A. (eds): Life and Afterlife & Apocalyptic Concepts in the Altaic World. Wiesbaden, pp. 123–130.
- Vovin, A. (2013): Old Turkic Loanwords in the Khitan Language. In: Hatice Şirin User-Bülent Gül (eds): Yalım Kaya Bitigi. Osman Fikri Sertkaya Armağanı. Ankara, pp. 621–625.
- Wittfogel, K. Fêng Chia-shêng (1949): History of Chinese Society: Liao (907–1125). Philadelphia.
- Wu Yingzhe (2012): Interpretation Problems of the Newly Discovered Khitan Small Script Materials. Tokyo (in Japanese).
- Wu Yingzhe Janhunen, J. (2010): New Materials on the Khitan Small Script, A Critical Edition of Xiao Dilu and Yelü Xiangwen. Folkestone.