KHITAN STUDIES

I. THE GLYPHS OF THE KHITAN SMALL SCRIPT

3. THE CONSONANTS, 3.2. THE DENTAL STOPS¹

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In the fourth part of this series of papers the authors investigate the way how the Khitan Small Script rendered the dental stops in initial position. They conclude that the main opposition was between the postaspirated and not postaspirated dental stops.

Key words: Khitan, Khitan Small Script, Khitan dental stops.

In this paper² we continue our former investigations³ on the Khitan Small Script (KSS). To begin, we accept the readings of Chinggeltei, Wu Yingzhe and Jiruhe (2017, hereafter CWJ) as they are presented in their recently published three-volume monograph. However, we also include the significant earlier readings and comments on cases where the readings of CWJ are—or may be—problematic. Our procedure is the same as in our earlier papers. First we give examples of the Khitan transcription in KSS of Chinese words (titles, personal names, geographical names). This is followed by Chinese loanwords in Khitan and finally some examples are introduced from the Khitan original lexical stock.

¹ This paper has been written within the framework of the Silk Road Research Group of the Hungarian Academy of Sciences, the Eötvös Loránd University of Budapest and the University of Szeged. Moreover, this is the second paper written under the special co-operation between the above Research Group and the Khitan Research Group of the People's Republic of China, led by Professor Wu Yingzhe (Höhhhot, PRC). It is supported by the key program of Philosophy and Social Science 'Collation and Study of Handed-down Documents in Khitan and Jurchen' (14JZD036) of China's Ministry of Education. For 3.1 (Labial Stops), see Wu and Róna-Tas 2019.

² We offer our sincere thanks to the anonymous reviewers, many of their suggestions were of great help.

³ Róna-Tas 2016 and 2017, Wu and Róna-Tas 2019.

𐰇𐰏𐰍𐰆 (335.274.197 311.168 277 222 162.341). Here we have <ia.iá ai₂ b.qo> and it is clear that 𐰇 (310.1) stands in Gu25-17 for or is here a miswriting of 𐰇 (311) . On the photo (p. 657) the glyph is well readable and the dot is absent. The word <b.qo> is well known, it is one of the most frequent words in the corpus and occurs 442 times. It has the meaning ‘son’. Thus we have to read here ai baqo, ‘son of the elder brother, the nephew’. In other cases, however, the reading <du> for 𐰇 (310.1) may be correct.

The word <ia-iá> occurs in plural as <ia.iá.ń.er> in the inscriptions Nan6-7, Zhi10-26, Han10-6, Hui7-1.

Finally, 𐰇 (369) is the logograph for ‘FOUR’ and is read by CWJ as <dur>.

Glyphs with Initial <T>

The very frequent glyph for <t> is 𐰇 (247) with an alloglyph 𐰇 (260) <t₂₂.ur> five times, and seems to be practically identical with (247).

The glyph for <ta> is: 𐰇 (229) and the glyph 𐰇 (234) may be an alloglyph, but for (234) CWJ gives no reading.

The glyph for <tai> is 𐰇 (374). The glyphs 𐰇 (029) and 𐰇 (030) are read as <tau>; the second is a dotted alloglyph, and both are logographs for ‘FIVE’. The dot is an indicator of masculine gender.

For <te> we find 𐰇 (323), formerly read as <qī> and 𐰇 <te₂

Dentals occur in transcriptions of Chinese words, for instance, in the following cases:

Khitan Transcriptions of Chinese Dental Initials

Romani- sation	Glyph	Chinese	LMCh	EMCh ⁷	LCh	Source
<d.ie.ēn>	𐰇 𐰇 𐰇 (254.327.073)	<i>dian</i> 殿 ‘rear of the army’	<i>tian</i>	<i>tēn</i>	<i>tien</i>	K262, 7.009, 7.010 ⁸
<t.ie.ēn>	𐰇 𐰇 𐰇 (247.327.073)				<i>t’ien</i>	K262, 7.017 ⁹
<d.ém>	𐰇 𐰇 (254.270)	<i>dian</i> 點 ‘point’	<i>tiam</i>	<i>tēm</i>	<i>tem</i>	K262: 7011 ¹⁰

⁷ We omitted tones in the case of LMCh and EMCh.

⁸ Zhong20-23, 33-39, Xu3-20.

⁹ 15 times in the following inscriptions: Lang, Yu, Guang, Hong, Tu, Tai, Song, Wu, DiX, Hu and Jue.

¹⁰ Five times in the following inscriptions: Zhong (twice), Song, Liang and Jue.

Romani- sation	Glyph	Chinese	LMCh	EMCh	LCh	Source
<du>	𠂇 (237)	<i>du</i> 都 ‘capital, chief’	<i>tuǎ</i>	<i>tɔ</i>	<i>tu</i>	K262: 7.009, 7.011
<tu> in <sī tu>	𠂇𠂇 (083.202)	<i>tu</i> 徒 ¹¹	<i>tʰuǎ</i>	<i>dɔ</i>	<i>t‘u</i>	DiX19-10/11, Xiang24-26
<tu.uŋ>	𠂇𠂇 (202.345)	<i>tong</i> 統 ¹²	<i>tʰəwŋ</i>	<i>tʰawŋ</i>	<i>t‘uŋ</i>	DiX10-13/14
<t.uŋ>	𠂇𠂇 (247.345)	<i>tong</i> 通 ‘open’	<i>tʰəwŋ</i>	<i>tʰəwŋ</i>	<i>t‘uŋ</i>	K64
<d>	𠂇 (254)	<i>dai</i> 大 ‘big, great’	<i>tʰaj</i>	<i>daj</i>	<i>taj</i>	Gu6-30
<d.ai>	𠂇𠂇 (254.122)					Jue10-43
<da.ai>	𠂇𠂇 (171.122)					Dao2-11, Xuan2-11, Zhong19-35, Xu11-10, Zhen22-16, 23-6, 46-10, Wu5-27
<da.ai.i>	𠂇𠂇𠂇 (171.122.339)					K263, 7.021 ¹³ ,
<d.ai.i>	𠂇𠂇𠂇 (254.122.339)					K264, 7.062 ¹⁴
<t.ai>	𠂇𠂇 (247.122)					Yu59-53, Yong16-18, Cha20-20
<t.ai.i>	𠂇𠂇𠂇 (247.122.339)					Gu25-18, Yu41-6, Gung14-23, 33-21, Hong2-27, Nu15-18, Di4-35, Qing22-22,22-40 DiX13-26
<tai>	𠂇 (374)					K264, 7.051 361 times in the Index
<tai>	𠂇 (374)	<i>tai</i> 泰 ¹⁵	<i>tʰaj</i>	<i>tʰaj</i>	<i>t‘aj</i>	DiX20-1

¹¹ In: *situ* 司徒 ‘master of the foot soldiers’.

¹² In: *tongjun shixiang* 統軍使相 ‘military governor’.

¹³ Zhong21-5.

¹⁴ Zhong27-11, Tu9-12, Jue34-35.

¹⁵ In the name of the Taizhou prefecture, ‘great, excessive’.

Romani- sation	Glyph	Chinese	LMCh	EMCh	LCh	Source
<dau>	𐰇 (119)	<i>dao</i> 道 ¹⁶	<i>thaw</i>	<i>daw</i>	<i>tau</i>	K49
<tau>	𐰇 (029)	<i>tao</i> 討 ¹⁷	<i>t^haw</i>	<i>t^haw</i>	<i>t'aw</i>	DiX5-5
<d.ey>	𐰇 𐰇 (254.020)	<i>de</i> 德 'vir- tue' ¹⁸	<i>tǎk</i>	<i>tək</i>	<i>tej</i>	16 times, among them: Xiang3-19
<t.ey>	𐰇 𐰇 (247.020)					K64, ten times

As a rule Khitan <d> transcribes a non-aspirated Chinese dental stop and <t> a post-aspirated dental stop. But where we have enough material, Khitan <t> and <d> are almost in free variation. The Chinese originals of the Khitan transcriptions in the case of *dai* 大 and *tai* 太 are not always clear and we plan to deal with them in a separate paper.

Khitan Words with Initial d-

The glyphs <d> 𐰇 (254) and <d₂> 𐰇 (350) are heteroglyphs. The first occurs in a few Khitan words as:

- ◆ **dur** 𐰇 (368) 'four' | Mo *dörben*, Da *durube* 'four', DaE *durb^w*, *durbun*. The word occurs as an ordinal number with another writing:
- ❖ **durer** 𐰇 𐰇 𐰇 (254.236.341) <d.ur.er> 'fourth, *masc.*' (Zhong6-45, Xu49-11 Zhuo9-2, Zhi8-19, Jue32-36, in Hai4-13 <d.ur.oi> has to be read as <d.ur.er>), and
- ❖ **turer** 𐰇 𐰇 𐰇 (247.236.341) <t.ur.er> 'id.' 26× in the Index
- ❖ **duren** 𐰇 𐰇 𐰇 (254.236.361) <d.ur.én> 'fourth, *fem.*' (Hu52-30, Zhi12-22)
- ❖ **turen** 𐰇 𐰇 𐰇 (247.236.131) <t.ur.én> 'id.' 7× in the Index.

A form

- ❖ **turuḡ** 𐰇 𐰇 𐰇 (247.236.172) <t.ur.uh> occurs only once in Yu66-33.

The heteroglyph <d₂> 𐰇 (350) is rare and occurs, according to Index, only in the words <d₂.bir> (2×), <d₂.bi.r₂> and <d₂.u.ji>.

The three glyphs for <da> are: <da> 𐰇 (171), <da₂> 𐰇 (214), <da> 𐰇 (215)¹⁹ which all look like alloglyphs. Some words with <da> 𐰇 (171):

- ◆ **dalu** 𐰇 𐰇 <da₃.lu₃> (214.312) 'seven' (K72, 115) | Mo *dolugan*, Da *doloo*, DaE *dɔɔɔ*, *dɔɔɔ:n* 'seven', see further Mo *dalan*, (<**daluan*) 'seventy'. There exists a logogram 𐰇 (141.1). A numeral with <da> 𐰇 occurs only in the ordinal form:

¹⁶ In the name of the Emperor Daozong 道宗.

¹⁷ In the title *zhaotao* 招討 'punitive commissioner'.

¹⁸ Among others in the name *Dezu* 德祖, father of Abaoji/Taizu' written as 𐰇 𐰇 𐰇 (254.020.258.018) <d.ei z.in>, genitive case.

¹⁹ There is no word beginning with (215) in Index; it is practically deleted.

❖ **daluer** 六升尔 (214.312.341) <da₃.lu₃.er> (Yong3-1, Guo7-19, Qing4-22, Liang2-7, 4-29, Xian3-24, Jue4-33, Hui2-32²⁰, also 六升尔 (214.313.341) <da₃.lo.er>²¹ (DiX3-3, see also K72, 115) ‘seventh, masc.’ | Mo *dolodugar*.

❖ **daluen** 久升与 (171.312.361) <da.lu₃.én>. According to Index only in: Dao14-5, ‘seventh, fem.’²²

***dağa-** 久立 (171.051) <da.ha>. This is a very productive stem in Khitan. It is also written 六立 (214.051) <da₃.ha>. The basic meaning is unknown²³, but it may be in past perfect tense in:

❖ **dağa’ar** 久立尔 (171.051.123) <da.ha.ar>, past tense in **-ar** (Index 24×). The word is written also as 六立尔 (214.051.123) <da₃.ha.ar> (Index 12×).

It is frequent in the verbal phrase **dağar ol-**

✓ **xomur dağa’ar olğa’aju** 类行尔 久立尔 及子立为艾 (057.220.341 171.051.123 186.149²⁴.051.189.386 <xo.mú.er da.ha.ar o.l₂.h.a.aju> ‘the coffin (xomu+acc -r) had been closed’ (DiX39-14/16).

Further derivations are: <da.ha.ar o.ón> (DiX47-17), <da.ha.ar o.ho> (DiX50-19), <da.ha.ar n.an> (Xiang44-16), <da₃.ha.ar o.ju.ha.ar> (Xiang33-40).

The syllable <dau> written with 尺 (119) occurs in the transcription of a Chinese name:

◆ **Dawu Suņ hoņdi** 尺及今当主王 (119.131 241.346 075.037) <dau.u s.uņ hoņ.di> ‘the Emperor Daozong 道宗’ (K49).

Furthermore it appears as a verbal stem. Though in the latter case its meaning is yet unclear, it may be of interest to see some of the derivations:

◆ ***dawu-** which occurs with a causative extension:

***dawul-** 尺平 (119.366) <dau.ul-> (Index 1×), causative stem; a further derivation is:

***dawulğa-** 尺平立 (119.366.051) <dau.ul.ha> (K148), factitive stem with further derivations:

❖ **dawulğa’ai** 尺平立尔 (119.366.051.122) <dau.ul.ha.ai> (Xiang25-13, Index 5×), a converbal form in **-ai** of **dawulğa-** a verb with the double factitive suffix **-UlgA-**²⁵,

❖ **dawulğa’ar** 尺平立尔 (119.366.051.123) <dau.ul.ha.ar> past tense (Index 3×),

❖ **dawulğa’a’ar** 尺平立为尔 (119.366.051.189.123) (Index 3×), same as above,

²⁰ Index has also <da₃.lu₃.oi> (214.312.347), but <oi> is a mistake for <er>.

²¹ Index has <da.313.er>. Observing the photo on p. 806 the glyph is written in cursive handwriting, and the strokes are not certain. (313), which does not occur as initial, may be read as <lo> or <lu>, see also K72, WJ268.

²² On the details, see Róna-Tas 2016: 128.

²³ Its functions are reminiscent of Old Turkic *yap-* ‘to cover, to put together’.

²⁴ The glyph (149) was earlier read as <ju>, but it is read now by CWJ as <1₂>.

²⁵ See **au’ulgai** <au.ul.ha.ai> in Róna-Tas 2017: 143.

- ❖ **dawulga'an** 𐰇𐰺𐰍𐰏 (119.366.051.290) <dau.ul.ha.an> participle (Index 2×),
 - ❖ **dawulga'aju** 𐰇𐰺𐰍𐰏𐰇 (119.366.051.189.386) <dau.ul.ha.a.aju>,
 - ❖ **dawulga'a'an** 𐰇𐰺𐰍𐰏𐰇 (119.366. 051.189.290) <dau.ul.ha.a.án>, same as above,
 - ❖ **dawulga'a'angu** 𐰇𐰺𐰍𐰏𐰇𐰏 (119.366.189.051.290.151) <da.ul.ha.a.án.hu> converb of the participle (?),
 - ❖ **dawulga'al-** 𐰇𐰺𐰍𐰏𐰇 (119.366.051.098) <dau.ul.ha.al>,
 - ❖ **dawulga'algu** 𐰇𐰺𐰍𐰏𐰇𐰏 (119.366.051.098.151) <dau.ul.ha.al.hu> (Index 3×), perhaps 'assign' or 'announce',
 - ❖ **dawulga'algu'an** 𐰇𐰺𐰍𐰏𐰇𐰏𐰇 (119.366.051.098.151.011) <dau.ul.ha.al.hu.an> deverbial noun in -an,
 - ❖ **dawulga'aliñ** 𐰇𐰺𐰍𐰏𐰇𐰏 (119.366.051.098.222) <dau.ul.ha.al.hu.ñ>,
 - ❖ **dawulo** 𐰇𐰺𐰍 (119.366.090) <dau.ul.ó>,
 - ❖ **dawuloğa'aliñ** 𐰇𐰺𐰍𐰏𐰇𐰏 (119.366.090.051.098.222) <dau.ul.ó.ha.al.ñ> genitive case,
 - ❖ **dawuloji** 𐰇𐰺𐰍𐰏𐰇 (119.366.090.152) <dau.ul.ó.ji> (Index 2×),
 - ❖ **dawuloji** 𐰇𐰺𐰍𐰏𐰇𐰏 (119.366.090.153) <dau.ul.ó.ji₂> has to be the same as the former,
 - ❖ **dawulojid** 𐰇𐰺𐰍𐰏𐰇𐰏𐰇 (119.366.090.152.254) <dau.ul.ó.ji.d> (Index 1×),
 - ❖ **dawulo'or** 𐰇𐰺𐰍𐰏𐰇𐰏 (119.366.090.186.076)²⁶ <dau.ul.ó.o.or> (Xiang16-3, 20-29) 'a name',
 - ❖ **dawulo'on** 𐰇𐰺𐰍𐰏𐰇𐰏𐰇 (119.366.090.186.322) <dau.ul.ó.o.ón> (Index 4×),
 - ❖ **dawulo'ui** 𐰇𐰺𐰍𐰏𐰇𐰏𐰇 (119.366.090.262) <dau.ul.ó.ui> (Index 3×).
- *dawulu** 𐰇𐰺𐰍𐰏
- ❖ **dawuluji** 𐰇𐰺𐰍𐰏𐰇𐰏 (119.366.131.337) <dau.ul.u.ji₃> (Xiang32-22) is a converbal form in -ji, see K153-154,
 - ❖ **dawulgu** 𐰇𐰺𐰍𐰏 (119.366.151) <dau.ul.hu> (Index 2×),
 - ❖ **dawulgu-an** 𐰇𐰺𐰍𐰏𐰇𐰏 (119.366.151.011) <dau.ul.hu.an> (Xiang29-2). This form looks like a noun in genitive case ending in -an. If this is the correct interpretation, then <hu> must be the nominaliser
- *dawull-**
- ❖ **dawullga'ai** 𐰇𐰺𐰍𐰏𐰇𐰏𐰇 (119.366.261.051.122) <dau.ul.l.ha.ai> (Index 2×),
 - ❖ **dawulloji** 𐰇𐰺𐰍𐰏𐰇𐰏𐰇 (119.366.261.090.337) <dau.ul.l.ó.ji₃>, Index 1× must be the same as **dawuloji** above.
 - ❖ **dawullgeli** 𐰇𐰺𐰍𐰏𐰇𐰏𐰇𐰏 (119.366.261.349.080) <dau.ul.l.ge.li₂> (Index 1×)
Further derivations may be <dau.a.ai>, <dau.a.do.er>, <dau.a.án>, <dau.a.án.er>, <dau.a.aju>.
- The glyph occurs also in a loanword:

²⁶ The glyph (076) was earlier read <ho>, the word as <dau.ul.ó.o.ho>.

- ◆ **daw** 𠂔 (119) <dau> ‘grief, to grieve, mourn’ ← Chinese *dao* 悼 to grieve, mourn’ (Index 12×).
 - ✓ **daw-in oyirio’ulgu** 𠂔伏 𠂔升平列 (119.222 107.235.090.366.151) <dau.in oi₂.ri.ó.ul.hu> ‘the mourning ceremony of the grief’ (Xuan27-5).
 - ✓ **daw’ar-** <dau.a.ar> 𠂔为𠂔 (119.189.123) ‘with grief’ (DiX30-12)²⁷ (Index 10×).

Finally the glyph occurs in Khitan words such as:

- ◆ **dawur** 𠂔安 (119.097) <dau.úr> ‘middle’ (Index 4×), 𠂔安 (029.097), <tau.úr> (Index 1×), 𠂔安𠂔 (029.097.273) <tau.úr.un> (Index 1×). WJ 87, Sh2 *dawur* Mongolian has *dumda*, Da *duande* ‘middle’, DaE *dwand*, *dwannə*. Its connection with Khitan **dawur** is unclear. *Dawur* has the same meaning as Ch *zhong* 中, as middle, the Middle, China 中國. On *dagur* = *Khitan*, see Kane 162–165²⁸. This word occurs in the expression <GREAT dau.úr.ún xu.rá 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 may be the origin of the ethnic name Dagur, Dahur, Daur. Ivanovski (1894) registered the form *Dayür*, Poppe (1930) *Dagūr*, *Dayūr*, Muromskij (Kałużyński 1969–1970) *dahuru*, Martin (1961) *Daure*. In the Dagur language the Common Mongolic *-āgu-* bisyllable became *-au-*, see LM *daḡu* ‘voice’ > Da *dau*. The ethnic name is written in the Uyghur-Mongolian script as 𐰇𐰆𐰏𐰏 but maybe, this is 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 Dagur 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 we cannot decide whether the sequence <u.u> in <dau.úr> denoted a long vowel or not, i.e. we have to reconstruct *dawur* or **dawūr*.
 - ❖ **dawur-ir ü’ül** 𠂔安𠂔𠂔𠂔𠂔𠂔 (119.097.144 131.366) <dau.úr:ir₂ u.ul> ‘mid winter (month)’ (K:3, 22, 107, 49, 189 L11, DiX30-4, Xiang42-7). Index read (144) as <ir₂>, the earlier reading was <ún>, it occurs 23×.
 - ❖ **dawuruji** 𠂔安𠂔𠂔𠂔𠂔 (119.097.131.152) <dau.úr.u.ji> (Jue46-22).

It looks as if the final *-r* would disappear in some declined forms:

In the dative-locative case:

- ❖ **dawdu** 𠂔𠂔 (119.249) <dau.dū> ‘in the middle, the middle one, etc.’²⁹ with the loss of *-r*, or at least without an overt <ɾ> (Index 35×),
 - ✓ **dawdu ai** 𠂔𠂔𠂔 (119.249 122) <dau.dū ai> ‘the middle uncle’ (DiX13-6. 16-23, Xiang1-4),

²⁷ *-ar* is here not past tense marker, but the suffix of the instrumental case.

²⁸ A similar idea was formulated by G. Kara in one of his lectures at the Hungarian Academy of Sciences.

²⁹ According to Shi Jinmin and Yu Zemin (2001), 𠂔𠂔 (119.249) <dau.dū> means ‘middle’. According to Jishi (2012) 𠂔𠂔 (119.249) <dau.dū> corresponds to Mongolian *ded* ‘second’. This is possible if there are three items, and the middle is then the second.

- ✓ **dawdu baqo** 𐰇𐰏 𐰇𐰏 (119.249 311.168) <dau.dū b.qo> ‘the middle sibling’ (Hong2-17/18)
- ✓ **dawdu ku** 𐰇𐰏 𐰇𐰏 (119.249 178) <dau.dū.ku> ‘the middle person (sibling)’ (Xiang2-23).
- ❖ **dawduḡu** 𐰇𐰏 𐰇𐰏 (119.249.151) <dau. dū.hu> (Zhi11-17), seems to be an adjective.
- ❖ **dawduin** 𐰇𐰏 𐰇𐰏 (119.249.222) <dau.dū.ń> (Zhong15-10), perhaps in the genitive case ‘of those in the middle’.

We suppose that the final **-ur** in **dawur** is the same petrified locative suffix as in **u’úr** ‘north’, and **omur** ‘east’. This may have the same origin as the suffix **-r** in Mongolian in: *gadar* ‘outside’ cf. *gadaga* ‘outside’, *gadana* ‘outer’ etc. and perhaps an element of the suffixes in *degere* ‘on above’, *dотора* ‘within’, *inaru* ‘before’, *činaru* ‘after’ (Poppe 1964: 59).

The glyphs for <de> are: <de> 𐰇 (204)³⁰, <de> 𐰇 (205)³¹. There are yet no lexical units beginning with <de> with an identifiable meaning.

The glyph <deu> 𐰇 (101) may have an alloglyph 𐰇 (072), but this is uncertain.³² The glyph (101) is used as a logograph, the reading of which we know:

- ◆ **deu** 𐰇 (101) <deu> ‘younger brother’ (K104, 119, Xiang2-20, 3-14, 8-8, 9-2, 9-33, Index 90×) | Mo *degü*, Da *deü*, DaE *dəu* ‘younger sibling’. The word occurs many times in phrases like:
 - ❖ **ya deu** 𐰇𐰏 (335.101) <ia deu> ‘elder and younger brother’ (Index 89×).
 - ❖ **deu ay** 𐰇𐰏 (101.122) <deu ai> ‘uncle, younger brother of the father’ (K124).
 - ❖ **dew-un** 𐰇𐰏 (101.273) <deu.un> ‘genitive case of deu’ (DiX12-20, 13-5, 16-22, 16-31, 24-8, 26-11, many times in the expression 𐰇𐰏𐰏 (335.101.273) <ia deu.un> ‘XY of the junior brother(s)’ (e.g. in Zhong12-33, 28-39) (Index 69×).
 - ❖ **dew-ur** 𐰇𐰏 (101.097) <deu.úr> ‘in association with’ *dew* ‘younger brother’ and the instrumental-sociative **-Úr** (Index 50×), e.g. in:
 - ✓ **dewur** **MANAGE** 𐰇𐰏𐰏𐰏 (101.097 142.339) <deu.úr MANAGE.i> (K47, WJ75) perhaps ‘to manage in association, co-manage “with the siblings”’ (DiX14-11), and
 - ✓ **dewli** **MANAGE** 𐰇𐰏𐰏𐰏 (254.067.206 142.261.051.189.290) <d.eu.li MANAGE.l.ha.a.án> (DiX8-7/8) in: <m.ci.e2 d.eu.li MANAGE.l.ha.a.án> (DiX8-7) with a similar meaning.

The glyph <do> 𐰇 (217) occurs as initial in Index in a geographical name:

- ◆ **Dou** 𐰇𐰏 (217.131) <Do.u> ‘name of an unidentified city’ in:

³⁰ Identified as an allograph of (205) by Zaycev 2015, Aisin Gioro 2012: shi ?, but reading is unknown according to Index.

³¹ There occur a few words beginning with (205) in Index, <de.i> 10×.

³² The glyph (072) looks like an alloglyph of (101), but Index read <dor>.

- ✓ **Dou-un em** 朱爻火金 (217.131.273.257) <do.u.un em> ‘The region of Dou’ (DiX14-13).

The glyph 𠂔 (218) SEAL was read by Kane (2009, 61) as <doro>, by Aisin Gioro (2012) as <dor>.

- ◆ **dor** 𠂔 (218) ‘SEAL’, read by Index as <dor>. Its meaning may be ‘rite, ritual, official’ | Mo *tōrō* ‘law, order, government’³³, occurs in Index 131×.
- ✓ **dor xomur** 𠂔 𠂔 𠂔 (218.057.220.341) <dor xo.mù.er> ‘the official coffin’ (DiX39-13).

The glyphs for **du** are: <du> 𠂔 (237), <dú> 𠂔 (179)³⁴, <dū> 𠂔 (249)³⁵, the second and the third glyphs are rare as initials in the material. The glyph for du 𠂔 (237) <du> occurs as the transcription or loan for Chinese *du* 都 ‘capital, main etc.’, LMCh *tuō*, EMCh *tō* (Index 51×), the glyph occurs in transcriptions as in:

- ◆ **dugiaém** 𠂔 𠂔 𠂔 (237 335.334.270) <du g.ia.ém> ‘the title *dujian* 都監’ ‘chief supervisor’ (Xiang 10-3, WJ 159),
- ◆ **Du-ung** 𠂔 𠂔 (237.345) <du.ung> ‘a part of the personal name of the Grand Preceptor [M.ri.g.ún] Du ung Ge’ (Xiang15-13, Index 7×).

Khitan Words with Initial t-:

The two glyphs for <t> are: 𠂔 (247), <t₂> 𠂔 (260), they are alloglyphs, the second is, according to Kane (K66) only found in <t. úr.er/en> ‘fourth’. According to Index, <t₂> 𠂔 (260) occurs once alone, once in <t₂.ji> and 5× in <t₂.úr>.

The glyph <t> 𠂔 (247) is one of the most frequent graphs used as initial. As we have seen in the section on the vowels (Róna-Tas 2017: 148) the plural of the demonstrative pronoun *e-* is *et*, but written with a simple <t>:

- ◆ **et** 𠂔 <t> (247) ‘these’ (Index 32×). A few examples:
- ✓ **et iriser** 𠂔 𠂔 𠂔 𠂔 (247 339.235.244.341) <t i.r.i.s.er> ‘with these titles’ (DiX20-17)
- ✓ **et iriser olir** 𠂔 𠂔 𠂔 𠂔 𠂔 𠂔 (247 339.235.244.341 186.149) <t i.r.i.s.er o.l₂.ir₂> (Xiang12-2) ‘[he was] with these titles rewarded’.³⁶

A few words with <t> 𠂔 (247):

- ◆ **tabu** 𠂔 𠂔 (247.196) <t.abu> (Index 9×), CWJ read 𠂔 (196) <abu>, earlier <bu>,
- ◆ **Tabuy** 𠂔 𠂔 𠂔 (247.196.020) <t.abu.y> a name Tabuye, in the Liaoshi *Tabuye* 撻不也 and the like³⁷ (K59) (Index 14×).

³³ On possible Turkic parallels, see Róna-Tas and Berta 2011: 944–947.

³⁴ K read <úd>, Aisin (2012) <du, ud>, Wu <dú>. Index has <dú>, <dú.i> 3×, <dú.iau> seemingly in transcriptions of Chinese.

³⁵ Index has <dū> 2×, <dū.u>, <dū.i> and <dū.er>.

³⁶ The text was also published in WJ on p. 164, but there with 𠂔 (347) <oi> instead of 𠂔 (341) <er>, a misprint corrected in CWJ on p. 1475. The glyph 𠂔 (149) was earlier read as <un> now it is read by CWJ as <l₂>.

³⁷ WF 424 mentions a person with that name of the royal clan who surrendered to the Jurchen in 1116.

- ◆ **tabuyer** 令生万𐰽 (247.196.020.269) <t.bu.y.er> ‘tiller of fields’ according to the *Jinshi* glossary (K59, Index 17×).
- ◆ **tado’or** 令𐰽及𐰽 (247.099.186.076³⁸) <t.ad.o.or> ‘fifth, *masc.*’ (Index 10×), Mo *tabudugar*, also:
 - ❖ **todo’or** 令𐰽及𐰽 (247.016.186.076) <t.od.o.or> (Index 10×),
 - ❖ **dodo’or** 𐰽𐰽及𐰽 (254.016.186.076) <d.od.o.or> (Index 1× in Xu5-15³⁹)
- ◆ **tado’on** 令𐰽及𐰽 (247.099.186.322) (Index 5×) <t.ad.o.ón>,
 - ❖ **todo’on** 令𐰽及𐰽 (247.016.186.322) <t.od.o.ón> (Index 6×) ‘fifth, *fem.*’. As we can see also here TA-, TO-, DO- initials render the same Khitan initials.
- ◆ **tar** 令𐰽 (247.123) <t.ar> ‘next, later’ in:
 - ✓ **tar ojuha’ai** 令𐰽及子𐰽𐰽𐰽 (247.123 186.149.051.189.122) <t.ar o.ju.ha.a.ai> ‘[the tomb] later having been closed’ (K131), cf. Mo *dara(ga)*, Khalkha *daraa* ‘late, next’. Index has only this one case, Yu60-49.
- ***te-** 令 (247) <te> ‘to say’ in the form
 - ❖ **tegu** 令𐰽 (247.165) <te.gu> ‘(the inscription) says, introducing a quotation as Chin *yue* 曰’ (K54, Index 55×) | ← OT *te-* ‘to say’ (Vovin 2013: 622–623), perhaps honorific, cf. Mo *ge-*, *keme-*, *kele-*. Some examples:
 - ✓ **usug tegu** 𐰽𐰽𐰽𐰽 令𐰽 (068.334 247.165) <us.g t.gu> ‘the scripture says:’ (Xiang35-5/6).
 - ✓ **RECORDgen tegu** 𐰽𐰽𐰽𐰽 令𐰽 (052.1-334.361 247.165.1) <RECORD₂.g.én t.gu₂> ‘the text (or poem) says [poem follows]’ (DiX42-1/2).
- ◆ ***tege-** 令𐰽 (247.349) <t.ge> ‘moving upwards, die’ in:
 - ❖ **tege’er** 令𐰽𐰽𐰽/𐰽 (247.349.269/341) <te.ge.er> ‘went up, died *masc.*’ (Index 24×, among them: DiX11-8, 23-5, 35-8), | cf. Mo **dege-* ‘to go, move upwards’, see *degedü* ‘upper, previous etc.’, *degere* ‘on, above, high’, DaE *də:r* ‘above, upper’, also:
 - ❖ **dege’er** 𐰽𐰽𐰽𐰽 (254.349.341) <de.ge.er> ‘what is above, former, late’ (once in: Jue1-6)
 - ❖ **tege’en** 令𐰽𐰽𐰽 (247.349.361) <te.ge.én> ‘deceased (*fem.*)’ (K41, 64, 90, Index 26×, among them Xiang32-18),
 - ❖ **dege’en** 𐰽𐰽𐰽𐰽 (254.349.361) <d.ge.én> (Index 6×).
 - ❖ **tegey** 令𐰽𐰽𐰽 (247.349.020) <te.ge.y> ‘having deceased’ (Index 14×),
 - ❖ **degey** 𐰽𐰽𐰽𐰽 <d.ge.y> ‘having deceased’ (Index 5×).
- ◆ **teqo’a** 令𐰽𐰽 (247.168.189) <t.qo.a> ‘chicken’ (K55, 58, 64, 88, Index 15×), also 令𐰽𐰽 (247.169.189) <t.qó.a> (Index 18×), 令𐰽𐰽 (247.169) <t.qó> (Index 43×)⁴⁰. | Mo *takiya*, Da deest || The initial Khitan graph (247) may be read

³⁸ The glyph <076> was earlier read as <ho>.

³⁹ See Róna-Tas 2016: 128, who read with Kane there <t.od.o.ho>.

⁴⁰ Index has also <t.qó.a.as> (247.169.189.174), in Yu65-57,61-43 both occur.

as **t-**, or **te-** or **ti-**. A simple **t-** can be here excluded, and only **te-** or **ti-** are possible. The final **-o'a** is reflecting a diphthong, resulting from an earlier **-*agu**, the **-o'a** later changed to **-ō**. The aberrant vowel sequence **e-a** is going back to an earlier ***tiqō** <***tiqagu**. The three reconstructed forms PKhitan ***tikagu**, PMo ***takiga**, PT ***takigu** <***tikagu** are old variants by partial metathesis. ***tikagu** is also reflected by Jurchen **tixo** (← Khitan ***tikō** <***tikagu**) and Manchu **čoko** (< **tiqo**). The word is further reflected by the original West Old Turkic form of the Hungarian **tyük** (t'ük) < Old Hungarian **tik** and **tiuk** (see Róna-Tas and Berta 2011: 965–967) which goes back to a West Old Turkic ***tiyuk** <***tigaguk** <***tikagu-k**, that is the same as the PKhitan form with an additional diminutive **-k** (see in the Addenda of Róna-Tas and Berta 2011: 1493). The Mongolic word is either of Old Turkic origin (***takigu**), or both are rooted in a very early Eurasianic word.

- ◆ **tem-** 令𠂔 (247.133) <t.m> (Index 12×), 令𠂔 (247.257) <t.em₂> 'to grant a title' (K100 earlier only ; the latter in Index occurs only in derivations and in conjugated forms), **dem** 𠂔𠂔 (254.133) <d.m> (Index 2×), also 𠂔𠂔 (254.257) <d.em₂>. In Index only in derivations and conjugated forms | cf. Mo *temdeg-*, Ma *temgetu* 'sign', *temgetule-* 'confer a mark of distinction', Da *temedehe* 'a mark, a spot'.
 - ❖ **temei** 令𠂔𠂔 (247.257.020) <t.em₂.ei>, **demei** 𠂔𠂔𠂔 (254.257.020) <d.em₂.ei> 'having granted' converb in *-ei* (Di37-6, 40-2, 50-16, Xiang39-32, Index 25× with <t->, and 18× with <d-> as in):
 - ✓ **mod-en te mei RECORD.g-un uyil** <mo.d₂.en t.em₂.ey RECORD.g.ún ui.l> 'the case of the recording of the grant given to the ladies' (DiX40-2),
 - ❖ **temer** 令𠂔𠂔 (247.257.341) <t.em₂.er> 'appointed to, got the title', past tense in *-er* (Index 15×), **demer** 𠂔𠂔𠂔 (254.257.341) <d.em₂.er> (Index 2×).
 - ✓ **tai ba temer** 𠂔𠂔𠂔𠂔 (374.311 247.257.341) <ta.ba t.em₂.er> 'was appointed as *taibao* 太保 'Grand Guardian' (DiX20-9), see also Xiang25-32.
 - ❖ **temji** 令𠂔𠂔 (247.257.087) <t.em.ji> 'having been awarded' with the marker of the verbal *-ji* (X30-17).
 - *temle-/demle-** 令/𠂔𠂔𠂔𠂔𠂔 (247/254.257.261.112.020) <t/d.em.le.g.ei> 'to be enfeoffed, to be awarded an honorary title' causative stem (K21) in:
 - ❖ **temlegei** 令𠂔𠂔𠂔𠂔𠂔 (247.257.261.112/349.020) <t.em.le.ge₂/ge.ei> converbal suffix *-ei*, (DiX10-18, 10-22, 14-3, 14-8, 14-23, Xiang27-11). In Index 14× with 𠂔 (112) <ge₂> and 52× with 𠂔 (349) <ge>.
 - ❖ **demlegei** 𠂔𠂔𠂔𠂔𠂔 (254.257.261.349.020) <d.em₂.l.ge.ei> (Index 15×).
 - ❖ **temleger** 令𠂔𠂔𠂔𠂔𠂔 (247.257.261.112.341) (Index 12×),

Some Khitan words with **taw**:

- ◆ **taw** 𐰇 (029) <tau> 𐰇 (030) ‘five’ (K19, 24, 38, 98) (Index 111×) | Liaoshi *tao* 討, LMCh, EMCh *thaw*, Mo *tabun*, Da *taau*, DaE *ta:wu(n)*.⁴⁶ | For details, see Róna-Tas 2016: 130–131. See also <ta₂.ún> 𐰇𐰏 (234.144) (Xiang29-17).
- ◆ **tawlia** 𐰇𐰏𐰤 (029.206.189) <tau.li.a> ‘hare, rabbit’ (K2, 19, 20, 38, 58, 101, 112, Index 10×), | Liaoshi *taoli* 陶里 **tauli*, Mo *taula*, DaE *taulʰ*, *tu:li:*.
- ◆ ***tawsu-** 𐰇𐰤 (029.041) ‘to advance’ | Mo *dabsi-* ‘to advance’, *dabsigul-* ‘caus. of *dabsi-*’ in:
 - ❖ **tawsuoui** 𐰇𐰤𐰆𐰏 (029.041.090.262) <tau.su.ó.ui> ‘advancing’ (Xiang2-14, 3-17, 24-6) |
 - ❖ **tawsuo’ulgai** 𐰇𐰤𐰆𐰏𐰤𐰆𐰏 (029.041.090.366. 51.122) <tau.su.ó.ul.ha.ai> ‘to let advance’ (DiX9-20, 11-5).
 - ✓ **tawsuo’ulgai awulgai püres-e ui-de** 𐰇𐰤𐰆𐰏𐰤𐰆𐰏 𐰆𐰏𐰤𐰆𐰏 𐰆𐰏𐰤𐰆𐰏 𐰆𐰏𐰤𐰆𐰏 (DiX9-20/23).
 - ❖ **tawsuo’ulgu** 𐰇𐰤𐰆𐰏𐰤𐰆𐰏 (029.041.090.366.151) <tau.su.ó.ul.hu> (Xiang37-23).

The glyph 𐰇 (074) <tir> was read by C as <tel>, by A as <tael> and as <tir> by Index. It occurs, among others, in such names as:

- ◆ **Tirbir** 𐰇𐰏 (074.288) <tir.bir> ‘a name, Tirbir’ (DiX12-9) (read by C and A as Taelbun, WJ Tirbun), Wu read (288) as <bir>, in this case **Tirbir** (Index 5×). Also **Tirbir** 𐰇𐰏𐰤 (074.311.144⁴⁷) <tir.bir₂> 2×.

The glyph 𐰆 (213) <to> occurs 29 times. The glyph 𐰆 (287)⁴⁸ was former read as <to₂> now by Index as <har₄>. The glyph (213) occurs in such names as:

- ◆ **Tooniñ** 𐰇𐰏𐰤 (213.154.222) <to.on.ñ> ‘a part of a name of a Grand Prince (daiwang), a common ancestor of Xiao Dilu and Xiao Tuguci’ (DiX3-19), perhaps Chin *tuoning* 駝寧 (Index 7×).

The glyph <tu> 𐰇 (202) occurs among others in the name:

- ◆ **Tu Nu taiši** 𐰇𐰏𐰤𐰆𐰏𐰤 (202.251.131 374.) <tu.n.u tai ši> ‘the Grand Preceptor Tu Nu’ (DiX24-14), as a part of name it occurs in the Index 34×.

The glyph occurs in Khitan words such as:

- ***tu’ur-** 𐰇𐰏 (202.097) <tu.úr> ‘to pass away, die’ | Mo *dügür-* ‘to expire, finish, end’, Da *duure-* ‘to be full’, DaE *du:r-*⁴⁹.
 - ❖ **tu’urbir-** 𐰇𐰏𐰤𐰆𐰏𐰤 (202.097.311.144⁵⁰) <tu.úr.b.ir₂> (Index 4×), 𐰇𐰏𐰤𐰆𐰏𐰤 (202.097.288) <tu.úr.bir> (Index 23×) ‘died, passed away’ (also K59, 91, 204),
 - ❖ **tu’urboñ** 𐰇𐰏𐰤𐰆𐰏𐰤 (202.097.311.222) <tu.úr.b.ñ> (Index 7×), past time,

⁴⁶ There exists a unit <ta.u> 𐰇𐰏 (229.131), also <ta.u.en> the meaning of which is not clear to us (D29-16, X32-26, 34-3, X4-8). According to Index, the reading of (229) is unknown.

⁴⁷ The glyph <144> was earlier read as <un>.

⁴⁸ Read by A as <qa>.

⁴⁹ Sh17, 374 suggested to compare it with Mo *törü-* ‘to be born’, this is hardly acceptable.

⁵⁰ Glyph (144) was earlier read as <un> by WJ, <ir, r> by A, <ñ> by Sh17.

- ❖ **tu'urboñer** 劣安𐰇伏𐰇 (202.097.311.222.341) <tu.úr.b.ń.er> (Index 1×),
- ❖ **tu'ursii** 劣安𐰇𐰇 (202.097.244.080) <tu.úr.s.ii> 'after he had died' (K150,-151, WJ 73) in:
 - ✓ **tu'rbir udur tu'ursii** 劣安𐰇𐰇𐰇𐰇𐰇 (202.097.288 092.097202.097.244.080) <tu.úr.bir ud₃.úr tu.úr.s.li₂> 'he died [and the] first [moment] he had died...[was the will of Heaven and Earth]' (DiX7-15/17).

Two glyphs were earlier read as tum: <tum> 𐰇 (406, new number 310.1), and 𐰇 (312). The second is a dotted variant of the first. The glyph 𐰇 (310.1) was read by Index as <dus> (see above) and 𐰇 (312) is read now as <lu₃> instead of the former <tum>. It is interesting to see that we have three similar glyphs: 𐰇 (310.1) , 𐰇 (311) and 𐰇 (312) <lu₃>. Further research is needed to clear up the situation.

A logograph the reading of which we now know and has to be read with *t*- is:

- ◆ **tum** 𐰇 (187) 'TEN THOUSAND, myriad, read by Index as <tum>' | *Mo tūmen*, *Da tume*, *DaE tum* || Only Dahur has the word without final *-n*. In the Index it occurs 55× as an independent word. See further:
tumen 𐰇𐰇 (187.140) in:
tumen ewur 𐰇𐰇𐰇𐰇 (187.140 067.097) <tum.en eu.úr> 'ten thousand years' (Liang15-5) and
tumun emu boden orezir 𐰇𐰇𐰇𐰇𐰇𐰇𐰇𐰇𐰇𐰇 (187.273 026 309.100 076.020.144) <tum.un emu bod.en or.y.ir₂> (Zhong45-25) 'thousand and one times....(?)'.

Summary

As we can see from the above material, in Khitan the graphical representation of the dental stops is alternating between <d> and <t>. The same word is sometimes written with <t>- and in other cases with <d>-. This is an orthographical problem and is not representing a phonological one. If we look into the Khitan representations of the Chinese contemporary phonemes, we can see the following:

Khitan phoneme	Khitan glyph	Middle Chinese phonemes	Modern Chinese pinyin
/tʰ/	<t>	/tʰ/, /tʰi/	<t>
/t/ [D]	<d>	/t/, /d/	<d>

In general, we can state that Khitan <d> may reflect a non-aspirated dental stop, maybe /t/. There is no direct indication for its voiced character, it may also have been either an unvoiced lenis /D/ or a voiced variant /d/. Khitan <t> is signalling a postaspirated dental stop /tʰ/. The main opposition was between *postaspirated* and *not post-*

aspirated stops. Yet we find many words in which the initial <d> and <t> alternate. This may mean that the aspiration was not very strong or this alternation may be due to the inability of the Khitan Small Script to articulate this opposition. In any case, the situation is the same as with the bilabial stops (Wu and Róna-Tas 2019).

(To be continued)

Signs used

- ◆ Independent base
- ❖ Derived morpheme
- ✓ Example

Abbreviations

- A = Aisin Gioro (2012)
- CWJ = Chinggeltei, Wu Yingzhe and Jiruhe (2017)
- Da = Dahur, according to Martin 1961
- DaE = Dahur, according to Enkhbat 1984
- EMCh = Early Middle Chinese according to Pulleyblank (1991)
- Index = The Index of CWJ
- K = Kane (2009)
- KSS = Kithan Small Script
- LCh = Liao Chinese
- LMCh = Late Middle Chinese according to Pulleyblank (1991)
- Ma = Manchu
- MMo = Middle Mongolian
- Mo = Mongolian
- Sh17 = Shimunek (2017)
- WJ = Wu and Janhunen (2010).
- WOT = Róna-Tas and Berta (2011)

The sigla of the inscriptions can be found in Wu and Róna-Tas (2019) and Apatóczky and Róna-Tas (2019).

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