

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.

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

Glyphs with Initial <D>

There exist three glyphs for <d>: 𠂇 (254), <d₂> 𠂈 (350) and <d₃> 𠂉 (089). Glyph (350) is an alloglyph of (254), nevertheless, CWJ did not give a reading. It is clear, however, from similar cases, that 𠂈 (350) should be read as <d₂>. Similar pairs are, among others: <e> 𠂊 (109) and 𠂋 (348), <en> 𠂌 (100) and 𠂍 (361), <ge> 𠂎 (112) and 𠂏 (349). The glyph (089) was read by WJ⁴ as <zu> with question mark, and as <de> by Aisin Gioro (2012).

The glyphs for <da> are 𠂐 (171), 𠂑 (215) and <da₃> 𠂒 (214). The glyphs (171) and (215), as it was already remarked by WJ, are identical, and the second is already absent from CWJ. The glyph (214) is transcribed as <da₃> which should be <da₂>, but for the time being we will not change the Romanisation.

The glyph for <dai> is 𠂓 (017), the one for <dau> is 𠂔 (119). The glyph 小 (294) was known as the logograph for ‘SOUTH’, and is now read as <dele>. This is one of the very few glyphs which represent a bisyllable⁵.

For <deu> there existed four glyphs: 𠂕 (072), 𠂖 (101), 𠂗 (361.1) and 𠂘 (129). 𠂕 (072) is now read by CWJ as <dor₂>, the glyph 𠂖 (101) as <deu> and 𠂗 (361.1) as <deu₂>. The glyph 𠂘 (129) was renumbered as <129.1> and has no reading in CWJ.

The syllable <di> is represented by 𠂙 (037), the syllable <do> by 𠂚 (091) <do₂> and 𠂛 (217). The glyph 𠂛 is the logograph for ‘SEVEN’ and read as <do>. As we have seen, 𠂕 (072) was read by CWJ as <dor₂> and is the logograph for ‘EAST’. There exists another logograph 𠂜 (218) with the meaning ‘SEAL’ and read by CWJ now as <dor>.

There exist more glyphs for <du>: 𠂝 (179) <dú>, 𠂞 (237) <du>, 𠂟 (249) <dū>, 𠂠 (304) <du₂>, (304) was formerly <go₂>.

The glyph 𠂡 had earlier the number (406) and was suggested to be read as <tum⁰>, CWJ renumbered it as (310.1) and read it as <dus>. According to Index, it occurs only once as initial in the inscription Gu25-17 in the word <dus.qo>. The context is:

Yaya ai dus.qo Taai Du Ngierie094 cier 𠂢 𠂣 𠂤 𠂥 𠂦 𠂧 𠂨 𠂩 𠂪 𠂫 𠂬 𠂭 𠂮 𠂯 𠂰
 𠂱 𠂲 (335.274.122 310.1.168 247.011.339 264.339.341.327.094 162.341) <ia.iá ai
 dus.qo t.ai.i dú ng.i.er.ie.094 ci.er>. (Gu25-17). The expression <ia.iá ai> occurs in
 the name of the person who wrote <cier> the Gu Inscription. On p.1022 CWJ glossed
 the word as *xiongzi* 兄子 ‘the son of the brother’, the term <ia.iá ai> occurs once more
 in Jue26-66 where it is glossed on p. 1549 as *xiongdí* 兄弟 ‘elder and younger brother,
 sibling’. This term of relationship occurs also in the form 𠂢 𠂣 (335.274.197)⁶
 <ia.iá ai₂> in the following places: Di8-16, Tu26-9, Liang16-1. In our case especially
 Tu26-9 is of relevance. The expression also occurs here in the name of the person who
 wrote the Tu inscription. It runs as <ia.iá ai₂ b.qo Ia.LUCK.ń ci.er> 𠂢 𠂣 𠂤 𠂥 𠂦 𠂧 𠂨 𠂩 𠂪 𠂫 𠂬 𠂭 𠂮 𠂯 𠂰

⁴ See the Abbreviations.

⁵ See 𠂡 (355) the logograph for ‘ORDO’, and read as <udu>.

⁶ (197) was earlier read as <ah>.

𠵹 伏 𠵹 𠵹 (335.274.197 311.168 277 222 162.341). Here we have <ia.iá ai₂ b.qo> and it is clear that 𠵹 (310.1) stands in Gu25-17 for or is here a miswriting of 𠵹 (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 <duš> for 𠵹 (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, 𠵹 (369) is the logograph for ‘FOUR’ and is read by CWJ as <dur>.

Glyphs with Initial <T>

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

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

The glyph for <tai> is 𠵹 (374). The glyphs 𠵹 (029) and 𠵹 (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 𠵹 (323), formerly read as <qi> and 𠵹 <te₂

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

Khitan Transcriptions of Chinese Dental Initials

Romanisation	Glyph	Chinese	LMCh	EMCh ⁷	LCh	Source
<d.ie.ēn>	𠵹 𠵹 𠵹 (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>	𠵹 𠵹 𠵹 (247.327.073)				<i>t’ien</i>	K262, 7.017 ⁹
<d.ém>	𠵹 𠵹 (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.

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

Romanisation	Glyph	Chinese	LMCh	EMCh	LCh	Source
<dau>	𠬪 (119)	<i>dao</i> 道 ¹⁶	<i>thaw</i>	<i>daw</i>	<i>tau</i>	K49
<tau>	𠬫 (029)	<i>tao</i> 討 ¹⁷	<i>t^haw</i>	<i>t^haw</i>	<i>t'aw</i>	DiX5-5
<d.ey>	𠬬 𠬭 (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>	𠬮 𠬯 (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> 𠬬 (254) and <d₂> 𠬮 (350) are heteroglyphs. The first occurs in a few Khitan words as:

- ◆ **dur** 𠬮 (368) 'four' | Mo *dörben*, Da *durube* 'four', DaE *durb^w*, *durbun*. The word occurs as an ordinal number with another writing:
- ❖ **durer** 𠬮 𠬯 𠬰 (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** 𠬮 𠬯 𠬰 (247.236.341) <t.ur.er> 'id.' 26× in the Index
- ❖ **duren** 𠬮 𠬯 𠬰 (254.236.361) <d.ur.én> 'fourth, *fem.*' (Hu52-30, Zhi12-22)
- ❖ **turen** 𠬮 𠬯 𠬰 (247.236.131) <t.ur.én> 'id.' 7× in the Index.

A form

- ❖ **туруг** 𠬮 𠬯 𠬰 (247.236.172) <t.ur.uh> occurs only once in Yu66-33.

The heteroglyph <d₂> 𠬮 (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> 𠬱 (171), <da₂> 𠬲 (214), <da> 𠬱 (215)¹⁹ which all look like alloglyphs. Some words with <da> 𠬱 (171):

- ◆ **dalu** 𠬲 𠬳 <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 𠬴 (141.1). A numeral with <da-> 𠬲 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 𠬬 𠬭 𠬮 𠬯 (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** 六卅𠂇 (214.312.341) <da₃.lu₃.er> (Yong3-1, Guo7-19, Qing4-22, Liang2-7, 4-29, Xian3-24, Jue4-33, Hui2-32²⁰, also 六卅𠂇 (214.313.341) <da₃.lo.er>²¹ (DiX3-3, see also K72, 115) ‘seventh, *masc.*’ | Mo *dolodugar*.

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

***daġa-** 久卅 (171.051) <da.ha>. This is a very productive stem in Khitan. It is also written 六卅 (214.051) <da₃.ha>. The basic meaning is unknown²³, but it may be in past perfect tense in:

❖ **daġa’ar** 久卅𠂇 (171.051.123) <da.ha.ar>, past tense in **-ar** (Index 24×). The word is written also as 六卅𠂇 (214.051.123) <da₃.ha.ar> (Index 12×).

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

✓ **xomur daġa’ar olġa’aju** 类行𠂇 久卅𠂇 及子卅为𠂇 (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 ní.an> (Xiang44-16), <da₃.ha.ar o.ju.ha.ar> (Xiang33-40).

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

◆ **Dawu Suŋ hoŋdi** 𠂇及今𠂇主𠂇 (119.131 241.346 075.037) <dau.u s.uŋ hoŋ.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-** 𠂇𠂇 (119.366) <dau.ul-> (Index 1×), causative stem; a further derivation is:

***dawulġa-** 𠂇𠂇卅 (119.366.051) <dau.ul.ha> (K148), factitive stem with further derivations:

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

❖ **dawulġa’ar** 𠂇𠂇卅𠂇 (119.366.051.123) <dau.ul.ha.ar> past tense (Index 3×),

❖ **dawulġa’a’ar** 𠂇𠂇卅𠂇𠂇 (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 <l₂>.

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

- ❖ **dawulga'an** 仄平出 (119.366.051.290) <dau.ul.ha.an> participle (Index 2×),
- ❖ **dawulga'aju** 仄平出为女 (119.366.051.189.386) <dau.ul.ha.a.aju>>,
- ❖ **dawulga'a'an** 仄平出为出 (119.366.051.189.290) <dau.ul.ha.a.án>,
same as above,
- ❖ **dawulga'a'angu** 仄平出为出列 (119.366.189.051.290.151)
<da.ul.ha.a.án.hu> converb of the participle (?),
- ❖ **dawulga'al-** 仄平出方 (119.366.051.098) <dau.ul.ha.al>>,
- ❖ **dawulga'algu** 仄平出方列 (119.366.051.098.151) <dau.ul.ha.al.hu>
(Index 3×), perhaps 'assign' or 'announce',
- ❖ **dawulga'algu'an** 仄平出方列央 (119.366.051.098.151.011)
<dau.ul.ha.al.hu.an> deverbial noun in *-an*,
- ❖ **dawulga'aliń** 仄平出方伏 (119.366.051.098.222) <dau.ul.ha.al.hu.ń>>,
- ❖ **dawulo** 仄平升 (119.366.090) <dau.ul.ó>>,
- ❖ **dawuloğa'aliń** 仄平升出方伏 (119.366.090.051.098.222)
<dau.ul.ó.ha.al.ń> genitive case,
- ❖ **dawuloji** 仄平升药 (119.366.090.152) <dau.ul.ó.ji> (Index 2×),
- ❖ **dawuloji** 仄平升药 (119.366.090.153) <dau.ul.ó.ji₂> has to be the same
as the former,
- ❖ **dawulojid** 仄平升药谷 (119.366.090.152.254) <dau.ul.ó.ji.d> (Index
1×),
- ❖ **dawulo'or** 仄平升及扎 (119.366.090.186.076)²⁶ <dau.ul.ó.o.or>
(Xiang16-3, 20-29) 'a name',
- ❖ **dawulo'on** 仄平升及雨 (119.366.090.186.322) <dau.ul.ó.o.ón> (Index
4×),
- ❖ **dawulo'ui** 仄平升央 (119.366.090.262) <dau.ul.ó.ui> (Index 3×).

***dawulu** 仄平升彖

- ❖ **dawuluji** 仄平彖药 (119.366.131.337) <dau.ul.u.ji₃> (Xiang32-22) is a con-
verbal form in *-ji*, see K153-154,
- ❖ **dawulgu** 仄平列 (119.366.151) <dau.ul.hu> (Index 2×),
- ❖ **dawulgu-an** 仄平列央 (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 inter-
pretation, then <hu> must be the nominaliser

***dawull-**

- ❖ **dawullga'ai** 仄平升中平 (119.366.261.051.122) <dau.ul.l.ha.ai> (Index 2×),
- ❖ **dawulloji** 仄平升升药 (119.366.261.090.337) <dau.ul.l.ó.ji₃>, Index 1× must
be the same as **dawuloji** above.
- ❖ **dawullgeli** 仄平升谷北 (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** 𠂇 (119) <dau> ‘grief, to grieve, mourn’ ← Chinese *dao* 悼 to grieve, mourn’ (Index 12×).
 - ✓ **daw-ín oyirio’ulgu** 𠂇伏 忒升平列 (119.222 107.235.090.366.151) <dau.ín oi₂.ri.ó.ul.hu> ‘the mourning ceremony of the grief’ (Xuan27-5).
 - ✓ **daw’ar-** <dau.a.ar> 𠂇为尔 (119.189.123) ‘with grief’ (DiX30-12)²⁷ (Index 10×).

Finally the glyph occurs in Khitan words such as:

- ◆ **dawur** 𠂇安 (119.097) <dau.úr> ‘middle’ (Index 4×), 𠂇安 (029.097), <tau.úr> (Index 1×), 𠂇安火 (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 Uygur-Mongolian script as 𐰉𐰺𐰽 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** 𠂇安及及平 (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** 𠂇安及弱 (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** 𠂇分 (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** 𠂇分尔 (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), 𠂇分 (119.249) <dau.dū> means ‘middle’. According to Jishi (2012) 𠂇分 (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** 尺分 符力 (119.249 311.168) <dau.dū b.qo> ‘the middle sibling’ (Hong2-17/18)
- ✓ **dawdu ku** 尺分 几 (119.249 178) <dau.dū.ku> ‘the middle person (sibling)’ (Xiang2-23).
- ❖ **dawduǰu** 尺分 列 (119.249.151) <dau. dū.hu> (Zhi11-17), seems to be an adjective.
- ❖ **dawduiń** 尺分 伏 (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’, *datora* ‘within’, *inaru* ‘before’, *činaru* ‘after’ (Poppe 1964: 59).

The glyphs for <de> are: <de> 矢 (204)³⁰, <de> 矢 (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** 𐰇𐰇 (335.101) <ia deu> ‘elder and younger brother’ (Index 89×).
- ❖ **deu ay** 𐰇𐰇 (101.122) <deu ai> ‘uncle, younger brother of the father’ (K124).
- ❖ **dew-un** 𐰇𐰇 (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 𐰇𐰇𐰇 (335.101.273) <ia deu.un> ‘XY of the junior brother(s)’ (e.g. in Zhong12-33, 28-39) (Index 69×).
- ❖ **dew-ur** 𐰇𐰇 (101.097) <deu.úr> ‘in association with’ *dew* ‘younger brother’ and the instrumental-sociative **-Úr** (Index 50×), e.g. in:
 - ✓ **dewur** **MANAGE** 𐰇𐰇𐰇𐰇 (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** 𐰇𐰇𐰇𐰇 (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** 𐰇𐰇 (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 𠄎 (218) SEAL was read by Kane (2009, 61) as <doro>, by Aisin Gioro (2012) as <dor>.

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

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

- ◆ **dugiaém** 𠄎 𠄎 𠄎 (237 335.334.270) <du g.ia.ém> ‘the title *dujian* 都監’ ‘chief supervisor’ (Xiang 10-3, WJ 159),
- ◆ **Du-ung** 𠄎 𠄎 (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: 𠄎 (247), <t₂> 𠄎 (260), they are alloglyphs, the second is, according to Kane (K66) only found in <t. úr.er/en> ‘fourth’. According to Index, <t₂> 𠄎 (260) occurs once alone, once in <t₂.ji> and 5× in <t₂.úr>.

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

A few words with <t> 𠄎 (247):

- ◆ **tabu** 𠄎 𠄎 (247.196) <t.abu> (Index 9×), CWJ read 𠄎 (196) <abu>, earlier <bu>,
- ◆ **Tabuy** 𠄎 𠄎 𠄎 (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 𠄎 (347) <oi> instead of 𠄎 (341) <er>, a misprint corrected in CWJ on p. 1475. The glyph 𠄎 (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** 令生百𠂔 (247.196.020.269) <t.bu.y.er> ‘tiller of fields’ according to the *Jinshi* glossary (K59, Index 17×).
- ◆ **tado’or** 令𠂔及𠂔 (247.099.186.076³⁸) <t.ad.o.or> ‘fifth, *masc.*’ (Index 10×), Mo *tabudugar*, also:
 - ❖ **todo’or** 令𠂔及𠂔 (247.016.186.076) <t.od.o.or> (Index 10×),
 - ❖ **dodo’or** 𠂔𠂔及𠂔 (254.016.186.076) <d.od.o.or> (Index 1× in Xu5-15³⁹)
- ◆ **tado’on** 令𠂔及𠂔 (247.099.186.322) (Index 5×) <t.ad.o.ón>,
 - ❖ **todo’on** 令𠂔及𠂔 (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** 令𠂔 (247.123) <t.ar> ‘next, later’ in:
 - ✓ **tar ojuha’ai** 令𠂔及子𠂔为𠂔 (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** 令𠂔 (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** 𠂔𠂔令𠂔 (068.334 247.165) <us.g t.gu> ‘the scripture says:’ (Xiang35-5/6).
 - ✓ **RECORDgen tegu** 𠂔𠂔与令𠂔 (052.1-334.361 247.165.1) <RECORD₂.g.én t.gu₂> ‘the text (or poem) says [poem follows]’ (DiX42-1/2).
- ◆ ***tege-** 令𠂔 (247.349) <te.ge> ‘moving upwards, die’ in:
 - ❖ **tege’er** 令𠂔𠂔/𠂔 (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** 𠂔𠂔 (254.349.341) <de.ge.er> ‘what is above, former, late’ (once in: Jue1-6)
 - ❖ **tege’en** 令𠂔𠂔 (247.349.361) <te.ge.én> ‘deceased (*fem.*)’ (K41, 64, 90, Index 26×, among them Xiang32-18),
 - ❖ **dege’en** 𠂔𠂔 (254.349.361) <d.ge.én> (Index 6×).
 - ❖ **tegey** 令𠂔𠂔 (247.349.020) <te.ge.y> ‘having deceased’ (Index 14×),
 - ❖ **degey** 𠂔𠂔 (247.349.020) <d.ge.y> ‘having deceased’ (Index 5×).
- ◆ **teqo’a** 令𠂔 (247.168.189) <t.qo.a> ‘chicken’ (K55, 58, 64, 88, Index 15×), also 令𠂔 (247.169.189) <t.qó.a> (Index 18×), 令𠂔 (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-** 令爻 (247.133) <t.m> (Index 12×), 令金 (247.257) <t.em₂> ‘to grant a title’ (K100 earlier only ; the latter in Index occurs only in derivations and in conjugated forms), **dem** 令爻 (254.133) <d.m> (Index 2×), also 令金 (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** 令金 百 (247.257.020) <t.em₂.ei>, **demei** 令金 百 (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** 令金 爻 (247.257.341) <t.em₂.er> ‘appointed to, got the title’, past tense in *-er* (Index 15×), **demer** 令金 爻 (254.257.341) <d.em₂.er> (Index 2×).
 - ✓ **tai ba temer 爻 卩 令金 爻** (374.311 247.257.341) <tai.ba t.em₂.er> ‘was appointed as *taibao* 太保 ‘Grand Guardian’ (DiX20-9), see also Xiang25-32.
 - ❖ **temji** 令金 爻 (247.257.087) <t.em.ji> ‘having been awarded’ with the marker of the converbal **-ji** (X30-17).
 - ***temle-/demle-** 令/令金 卩 爻 百 (247/254.257.261.112.020) <t/d.em.l.e.g.ei> ‘to be enfeoffed, to be awarded an honorary title’ causative stem (K21) in:
 - ❖ **temlegei** 令金 卩 爻 / 令金 卩 爻 百 (247.257.261.112/349.020) <t.em.l.e.ge₂/ge.ei> converbal suffix **-ei**, (DiX10-18, 10-22, 14-3, 14-8, 14-23, Xiang27-11). In Index 14× with 爻 (112) <ge₂> and 52× with 爻 (349) <ge>.
 - ❖ **demlegei** 令金 卩 爻 百 (254.257.261.349.020) <d.em₂.l.ge.ei> (Index 15×).
 - ❖ **temleger** 令金 卩 爻 爻 (247.257.261.112.341) (Index 12×),

- ❖ **demleger** 𐰇𐰏𐰢𐰣𐰤𐰥 (254.257.261.112.341) (Index 10×) ‘having granted, enfeoffed’ with the past tense marker **-er** (K64, 66, 100, Xiang12-27⁴¹).
- ❖ **temlegen** 𐰇𐰏𐰢𐰣𐰤𐰥/𐰇𐰏𐰢𐰣𐰤𐰥 (247.257.261.349.361/100) (Index 8×) <t.em.le.ge.én>
- ❖ **demlegen** 𐰇𐰏𐰢𐰣𐰤𐰥 (254.257.261.112.361) (Index 1×) <d.em.l.ge.én>, with **-en** marker of the participle ‘having been awarded’ (Xiang 2-15).
- ❖ **temlegelir** 𐰇𐰏𐰢𐰣𐰤𐰥𐰦 (247.257.261.112.261.144⁴²) (Index 14×), <t.em.l.ge₂.l.ir>, 𐰇𐰏𐰢𐰣𐰤𐰥𐰦 (247.257.261.349.261.144) (Index 8×), <t.em.l.ge.l.ir>.
- ❖ **demlegelir** 𐰇𐰏𐰢𐰣𐰤𐰥𐰦 (254.257.261.349.261.144) (Index 1×) <d.em.l.ge.l.ir>.

We can see that the **te-** and **de-** are in free variation.

- ◆ **tuǰ** 𐰇𐰏 (247.172) <t.uh> ‘flag’, | Mo *tug* ‘flag, standard’ ← OT *tug* ‘standard, flag’ ← a loan from Chinese *du* 纛, ‘yak-tail banner’, LMCh *thəwk*, EMCh *dawk* or vice versa⁴³.
 - ❖ **tuǰut** 𐰇𐰏𐰢𐰣 (247.172.247) <t.uh.t> (Xiang26-23, Qing29-5) plural.
 - ❖ **Tuǰuči**, the owner of the inscription No. 22 Tu: Ch. *Xiao Tuguci* 蕭圖古辭, written <tu.qu.s₂.ir₂>.
 - ❖ **tuǰli** 𐰇𐰏𐰢 (247.172.080⁴⁴) <t.uh.li> (Index 52×).
- ◆ **tulu’ur** 𐰇𐰏𐰢𐰣𐰤 (247.366.372.097) <t.ul.ū.úr> (Ling26-5, Yu68-45, Di27-24, Qing27-20, Chao22-1), **tulu’ur** 𐰇𐰏𐰢𐰣𐰤 (247.366.131.097) <t.ul.u.ur> (Qing22-19, Chao27-9, DiX36-16, Jue42-37) | Mo *tulgaguri*, *tulgur* ‘pillar’, DaE *twa:ləγ*, *tu:lga*.
 - ✓ **riujien ewiñer tulu’ur jawulǰa’ar** 𐰇𐰏𐰢𐰣𐰤𐰥𐰦𐰧𐰨𐰩𐰪𐰫𐰬𐰭𐰮𐰯𐰰𐰱𐰲𐰳𐰴𐰵𐰶𐰷𐰸𐰹𐰺𐰻𐰼𐰽𐰾𐰿 𐰇𐰏𐰢𐰣𐰤𐰥𐰦𐰧𐰨𐰩𐰪𐰫𐰬𐰭𐰮𐰯𐰰𐰱𐰲𐰳𐰴𐰵𐰶𐰷𐰸𐰹𐰺𐰻𐰼𐰽𐰾𐰿 ‘at the Riujien [mountain]⁴⁵ a “not existence” [memorial] pillar was erected’ (DiX36-15).

The two glyphs <ta> 𐰇𐰏 (229) and <ta₂> 𐰇𐰏 (234) may or may not be two alloglyphs, the first with a dot, the second with a dash. According to Index, 𐰇𐰏 (234) has yet no reading, while 𐰇𐰏 (229) is frequent and occurs isolated 30 times.

- ◆ **taǰa** 𐰇𐰏𐰢 (229.051) <ta.ha> ‘tent, lineage, clan’, as in:
 - ✓ **FOUR taǰa’aden sengun po’or** 𐰇𐰏𐰢𐰣𐰤𐰥𐰦𐰧𐰨𐰩𐰪𐰫𐰬𐰭𐰮𐰯𐰰𐰱𐰲𐰳𐰴𐰵𐰶𐰷𐰸𐰹𐰺𐰻𐰼𐰽𐰾𐰿 (368 229.051.099.140244.175.273 295.186.255) <FOUR ta.ha.ad.en s.eng.un p.o.or> ‘was appointed/became the Field Marshal of the Four Tents’ (Xiang27-34/37).

The glyphs for <tau> are 𐰇𐰏 (029) and 𐰇𐰏 (030), the second is a dotted variant. It is also the logograph for the number five. According to Index, the glyph (029) occurs isolated 111 times, while the dotted variant only 10 times.

⁴¹ <er> instead of (347) <oi>.

⁴² The glyph (144) was earlier read as <un>.

⁴³ Is the word a loan in Chinese?

⁴⁴ The glyph (080) was earlier read as <ii>.

⁴⁵ In the preceding line Riujien <MOUNTAIN>.

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** 𐰇𐰏𐰊 (029.206.189) <tau.lí.a> ‘hare, rabbit’ (K2, 19, 20, 38, 58, 101, 112, Index 10×), | Liaoshi *taoli* 陶里 **tauli*, Mo *taula*, DaE *tau^l*, *tu:li:*.
- ◆ ***tawsu-** 𐰇𐰏 (029.041) ‘to advance’ | Mo *dabsi-* ‘to advance’, *dabsigul-* ‘caus. of *dabsi-* in:
 - ❖ **tawsuoui** 𐰇𐰏𐰊𐰏 (029.041.090.262) <tau.su.ó.ui> ‘advancing’ (Xiang2-14, 3-17, 24-6) |
 - ❖ **tawsuo’ulgai** 𐰇𐰏𐰊𐰏𐰏𐰏 (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** 𐰇𐰏𐰊𐰏𐰏𐰏 𐰏𐰏𐰏𐰏 𐰏𐰏𐰏𐰏 <tau.su.ó.ul.ha.ai au.ul.ha.ai p.úr.s.en ui.de> (DiX9-20/23).
 - ❖ **tawsuo’ulgu** 𐰇𐰏𐰊𐰏𐰏 (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** 𐰇𐰏𐰏 (074.311.144⁴⁷) <tir.bir₂> 2×.

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

- ◆ **Tooniń** 𐰏𐰏𐰏 (213.154.222) <to.on.ń> ‘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> 𐰏 (202) occurs among others in the name:

- ◆ **Tu Nu taiši** 𐰏𐰏𐰏𐰏 (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-** 𐰏𐰏 (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-** 𐰏𐰏𐰏𐰏 (202.097.311.144⁵⁰) <tu.úr.b.ir₂> (Index 4×), 𐰏𐰏𐰏𐰏 (202.097.288) <tu.úr.bir> (Index 23×) ‘died, passed away’ (also K59, 91, 204),
 - ❖ **tu’urboń** 𐰏𐰏𐰏𐰏 (202.097.311.222) <tu.úr.b.ń> (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, <ń> by Sh17.

- ❖ **tu'urboñer** 劣安𠂇伏𠂇 (202.097.311.222.341) <tu.úr.b.ń.er> (Index 1×),
- ❖ **tu'ursii** 劣安全𠂇 (202.097.244.080) <tu.úr.s.ii> 'after he had died' (K150,-151, WJ 73) in:
 - ✓ **tu'rbir udur tu'ursii** 劣安中尤安劣安全𠂇 (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> 𠂇 (406, new number 310.1), and 𠂇 (312). The second is a dotted variant of the first. The glyph 𠂇 (310.1) was read by Index as <dus> (see above) and 𠂇 (312) is read now as <lu₃> instead of the former <tum>. It is interesting to see that we have three similar glyphs: 𠂇 (310.1) , 𠂇(311) and 𠂇 (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** 𠂇 (187) 'TEN THOUSAND, myriad, read by Index as <tum>' | *Mo tümen*, *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** 𠂇和 (187.140) in:
 - tumen ewur** 𠂇和𠂇安 (187.140 067.097) <tum.en eu.úr> 'ten thousand years' (Liang15-5) and
 - tumun emu boden oreyir** 𠂇𠂇𠂇𠂇𠂇𠂇𠂇𠂇 (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 <i>pinyin</i>
/t'/	<t>	/t ^h /, /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 /t'/. 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 Khitian 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).

References

- AISIN GIORO, Ulhicun [Yoshimoto, Chieko] 吉本智慧子 2012. ‘Kittan shōji no onka suitei oyobi sōkan mondai 契丹小字の音価推定及び相關問題 [Reconstruction of phonetic values of Khitai Small Scripts and concerning problems].’ *Ritsumeikan bungaku 立命館文學* 627: 157–129 (100–128). (Online version: <http://www.ritsumei.ac.jp/acd/cg/lt/rb/627/627PDF/yosimoto.pdf>, last access: 10 December 2018.)
- APATÓCZKY, Ákos Bertalan and András RÓNA-TAS 2019. ‘Review Article on Chinggeltei – Wu Yingzhe – Jiruhe (2017).’ *AOH* 72/2: 259–268.

- CHINGGELTEI (QINGGERTA) 清格尔泰, WU Yingzhe 吴英喆 and JIRUHE 吉如何 2017. *Qidan xiaozi zai yanjiu I–III*. 契丹小字再研究 [Further research on Khitan Small Script]. Beijing: Neimenggu Daxue Chubanshe.
- ЕНКХВАТ 1984. *Dagur kelen-üüges* [Dagur–Chinese dictionary]. Kökekota.
- IVANOVSKIJ, A. O. [ИВАНОВСКИЙ. А. О.] 1894. *Mandjurica I. Образцы солонского и дахурского языковъ*. Санкт-Петербург.
- JISHI 即實 2012. *Mitian gengyuan—qidan xiaozi jiedu xu* 謎田耕耘—契丹小字解讀續 [Cultivation of mysterious field — continued deciphering on Khitan Small Script]. Shenyang: Liaoning Minzu Chubanshe.
- KALUŻYŃSKI, Stanisław 1969–1970. ‘Dagurisches Wörterverzeichnis. Nach F. V. Muromskis handschriftliche Sprachaufzeichnungen.’ *Rocznik Orientalistyczny* 33/1: 103–140, 33/2: 109–143.
- KANE, Daniel 2009. *The Kitan Language and Script*. Leiden and Boston: Brill.
- MARTIN, Samuel E. 1961. *Dagur Mongolian Grammar, Texts and Lexicon*. [Indiana University Publications. Uralic and Altaic Series, Vol. 4.] Bloomington: Indiana University.
- POPPE, Nikolaj Nikolajevič [Николай Николаевич Поппе] 1930. *Дажурское наречие*. Ленинград.
- POPPE, Nicholas 1964. *Grammar of Written Mongolian*. Wiesbaden: Harrassowitz.
- PULLEYBLANK, Edwin George 1991. *Lexicon of Reconstructed Pronunciation in Early Middle Chinese, Late Middle Chinese and Early Mandarin*. Vancouver: UBC Press.
- RÓNA-TAS, András 2016. ‘Khitan Studies I. The Graphs of the Khitan Small Script. 1. General Remarks, Dotted Graphs, Numerals.’ *AOH* 69/2: 117–138.
- RÓNA-TAS, András 2017. ‘Khitan Studies I. The Graphs of the Khitan Small Script. 2. The Vowels.’ *AOH* 70/2: 135–188.
- RÓNA-TAS, András and Árpád BERTA 2011. *West Old Turkic. Turkic Loanwords in Hungarian. Vols. I–II*. Wiesbaden: Harrassowitz.
- SHI Jinmin 石金民 and YU Zemin 於澤民 2001. ‘Qidan xiaozi yelü nu muzhiming kaoshi 契丹小字耶律奴墓誌銘考釋 [Interpretation of epitaph of Yelü Nu in Khitan Small Script].’ *Minzu Yuwen* 2001/2: 61–68.
- SHIMUNEK, Andrew 2017. *Languages of Ancient Southern Mongolia and North China. A Historical-Comparative Study of the Serbi or Xianbei Branch of the Serbi-Mongolic Language Family with an Analysis of the Northeastern Frontier Chinese and Old Tibetan Phonology*. [Tunguso-Sibirica, Band 40.] Wiesbaden: Harrassowitz Verlag, 520 pp.
- VOVIN, Alexander 2013. ‘Old Turkic Loanwords in the Khitan Language.’ In: Hatire Şirin USER and Bülent GÜL (eds.) *Yalın Kaya Bitigi. Osman Fikri Sertkaya Armağanı*. Ankara: Türk Kültürünü Araştırma Enstitüsü Yayınları, 621–625.
- WU Yingzhe 吴英喆 and Juha JANHUNEN 2010. *New Materials on the Khitan Small Script. A Critical Edition of Xiao Dilu and Yelü Xiangwen*. Folkestone: Global Oriental.
- WU Yingzhe 吴英喆 and András RÓNA-TAS 2019. ‘Khitan Studies I. The Glyphs of the Khitan Small Script. 3. The Consonants, 3.1 Labial Stops.’ *AOH* 72/1: 47–79.
- ZAYCEV, V. P. [ЗАЙЦЕВ, В. П.] 2015. ‘Идентификация киданьского исторического сочинения в составе рукописной книги кодекса Nova H 176 в коллекции ИВР РАН и сопутствующие проблемы.’ *Acta Linguistica Petropolitana* IX/3: 167–208.

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